Chapter 7

Summary and Discussion
**SUMMARY**

In many countries immigrant youths are overrepresented in crime figures (Engen et al., 2002; Komen, 2002). Delinquent behavior often co-occurs with mental health problems (Moffitt, 1990; Loeber et al., 1999; Junger et al., 2001; Vermeiren, 2003; Vreugdenhil et al., 2004). Delinquency and mental health problems, affect both the immigrants, as well as the host society. In the Netherlands, Dutch-Moroccan youths belong to one of the largest migrant groups and they are overrepresented in crime figures (Blom et al., 2005; Statistics Netherlands, 2012). Our main focus is on behavioral problems, since these problems are particular problematic because their characteristics (e.g. delinquency, aggression, lying, high levels of hyperactivity) not only affect the individual, but also the family and the wider community.

Many factors may play a role in the development of behavioral problems in Dutch-Moroccan youths. Some general risk factors such as poverty and low neighborhood SES are more often disproportionally present in immigrant populations (Fergusson & Horwood, 1995; Gorman-Smith et al., 1998; Chung & Steinberg, 2006; Hoeve et al., 2009). However, it remains unclear whether risk factors for behavioral problems found in general populations also hold for Dutch-Moroccan youth. Moreover, it is not known whether the impact of risk factors for problem behavior are universal (cultural equivalence model), or whether there are differences in impact of risk factors for problem behavior (cultural value model) (Lamborn & Felbab, 2003). In addition, specific migration-related factors might be associated with behavioral problems among Dutch-Moroccan youths. For instance, problems and challenges that come along with acculturation, such as discrimination, may influence immigrants youths’ well-being, but also cultural factors may put immigrant youths at risk to developing problems (Berry, 2005; Berry et al., 2006; Stevens & Vollebergh, 2008).

The aim of this thesis was to explore behavioral problems in Dutch-Moroccan youths. In order to do so, several risk factors that are generally known to put youth at an increased risk for developing behavioral problems were investigated in various samples of Dutch-Moroccan youths. Also differences between Dutch-Moroccan and native Dutch youth in impact of risk factors for behavioral- and mental health problems were studied. In addition specific migration-related factors and their associations with behavioral and mental health problems were explored.

In chapter 2 we started to investigate methodological issues regarding the assessment of behavioral problems in immigrant youths. Considering the small amount of methodological research conducted among specific migrant groups, we broadened our view to all immigrant ethnic minority youths living in Western countries. We addressed one of the main issues in assessing behavioral problems in immigrant ethnic minority youths: the limited information...
Summary and discussion

about reliability and validity of instruments for the assessment of externalizing problem behavior. By conducting a systematic review we accumulated all information on the reliability and validity of such instruments. One of the main findings was that the majority of instruments for the assessment of behavioral problems in immigrant minority youth that are currently used have not yet been validated sufficiently for this population. Moreover, the review revealed that scores on these instruments may have a different meaning in minority groups as compared to majority groups. Consequently, this could seriously hamper the interpretation of the assessment results. The lack of knowledge on reliability and validity of instruments signifies the need for investing in research on such instruments, since this would mean an important progression in obtaining more valid and reliable results in both the assessment of and the research on behavioral problems in minority youth. Also, self-report measures seemed more valid than teacher and parent reports. Throughout this thesis, self-report measures, complemented with other recourses, were used to measure various behaviors and attitudes.

In chapter 3, we explored what factors contributed to the risk of offending and re-offending among Dutch-Moroccan childhood offenders. We compared one-time offending, re-offending, and a control group of non-offending Dutch-Moroccan boys from comparable low SES neighborhoods. As expected, we found most boys to have characteristics that are generally acknowledged as being risk factors for offending (Loeber et al., 2008). The re-offending boys showed most problems and the controls showed least problems. However, many risk factors were also present among the non-offending boys. Problems at school, as well as family risk factors such as single parenthood, financial problems, family member arrest, and domestic violence, were often present regardless of the level of offending. Risk factors differentiating between offenders and non-offenders, were found within the family domain. Risk factors differentiating between re-offenders and one-time offenders were found in the individual domain. In sum, most important risk factors for re-offending were reading problems, having an older brother, having financial problems or having a parent with Dutch friends. In the chapters 5 and 6, more in-depth studies on how siblings and acculturation issues are related to behavioral problems are described.

Results presented in chapter 3 signify the high-risk profile of Dutch-Moroccan youths. Since Dutch-Moroccan families often do not seek or find their way into child and mental health care themselves, a police contact may provide an opportunity to detect problems that co-occur with delinquent behavior (Zwirs et al., 2006b). At the same time, the non-offending boys had considerable problems as well. Since parents might have a lower detection rate of problems (Zwirs et al., 2006b), and they also remain out of sight from the police, these children are especially hard to reach. Outreaching and culturally sensitive mental health care is necessary to lead those children in need of help to mental health care.
In chapter 4, we explored whether the strength and course of co-occurrence between externalising and internalizing problems differed between Dutch and Dutch-Moroccan adolescents. Results from previous studies showed that internalizing and externalising problems often co-occur. Adolescents with such co-occurring problems are at high risk of experiencing problems in various other life domains, including school failure, violent behavior and adult psychiatric illness (Capaldi, 1992; Capaldi & Stoolmiller, 1999; McCarty et al., 2006). Since risk factors for co-occurring problems are more often present in Dutch-Moroccan adolescents (Oland & Shaw, 2005; Stevens & Vollebergh, 2008; Anderson & Mayes, 2010) and because of the lower treatment rates among immigrant youths (Angold et al., 2002; Guevara et al., 2006; Zwirs et al., 2006a), we expected to find stronger associations between internalizing and externalizing problems in Dutch-Moroccan youths as compared to native Dutch youth. However, in contrast to what we expected, the average longitudinal co-occurrence between internalizing and externalizing problems did not differ between Dutch and Dutch-Moroccan adolescents, except for the association between depression and externalizing problems among girls: Dutch-Moroccan girls showed a stronger longitudinal association between depression and externalizing problems as compared to native Dutch girls, stressing the high risk for serious mental health problems in Moroccan girls. Interestingly however, the co-occurrence of internalizing and externalizing problems increased during the course of adolescence among Dutch-Moroccan adolescents only, while the strength of the association remained stable in native Dutch youth. The increase of co-occurring problems may be a result of undertreatment and increasing complexity of problems in Moroccans during adolescence. Investigating processes leading to co-occurring problems in immigrant youths is needed to optimize prevention and intervention efforts in this high risk group.

In chapter 5, we investigated whether the impact of the sibling relation on behavioral- and mental health problems differed between Dutch-Moroccan and native Dutch adolescents. Chapter 3 revealed a relation between siblings and re-offending among the Dutch-Moroccan childhood offenders. From previous studies we know that, in the general population, the sibling relationship strongly affects psychosocial functioning. It is assumed that positive sibling relationships stimulate healthy emotion regulation skills (Kennedy & Kramer, 2008) and pro-social behavior (Pike et al., 2005) and may therefore decrease the risk for developing emotional and behavioral problems. Negative sibling relationships, on the other hand, may form a risk factor for emotional and behavioral problems. In our study, we found similar associations between sibling relations and behavioral- and mental health problems in Dutch-Moroccan adolescents as compared to Dutch adolescents. These results are in line with the cultural equivalence model that assumes universal associations between risk factors and outcomes (Lamborn & Felbab, 2003).

In chapter 6, we investigated associations between mental health, discrimination and self-esteem among the different acculturation strategies found in a sample of Dutch-Moroccan
adolescents. Results from chapter 3 showed that one of the risk factors for (re)offending among Dutch-Moroccan youth was related to acculturation. Acculturation is the process of psychological and behavioral adaption to a new environment (Berry, 2005). Previous studies have related acculturation strategies to the level of mental health problems in migrant youths.

It is generally assumed that integration has the best overall outcomes. However, results from studies attempting to link acculturation strategies to mental health outcomes reported ambiguous results. Discrimination and self-esteem may be important factors in explaining these ambiguous results.

In our study we found an integrated group that reported least problems and highest levels of self-esteem, a marginalized group that reported most problems and lowest levels of self-esteem, and a separated group that reported intermediate levels of problems and self-esteem. Perceived personal and group discrimination as well as self-esteem were all related to mental health problems in the integrated group, while only perceived personal discrimination and self-esteem were related to mental health problems in the separated group. No associations with mental health problems were found in the marginalized group. We concluded that, supposedly, integration results in the best mental health outcomes. However, integration may make migrant youths more vulnerable to the negative effects of discrimination. Since a high self-esteem is expected to form a buffer against the negative effects of discrimination (Crocker & Major, 1989; Ruggiero & Taylor, 1997), intervention efforts should focus on increasing resilience of these youth.

**GENERAL DISCUSSION**

This dissertation clarifies important issues about factors associated with behavioral and mental health problems among Dutch-Moroccan youths in the Netherlands. Dutch-Moroccan youths can be considered a high-risk group in several ways. Risk factors usually found for behavioral- and mental health problems, were also found in our study among Dutch-Moroccan youths. Although our findings do not give reason to believe that there are large differences in risk factors and their associations with behavioral- and mental health problems between Dutch-Moroccan and native Dutch adolescents, there are additional risk factors that may play part in the development of mental health and behavioral problems in Dutch-Moroccan youth. The presence of migration related risk factors make them more vulnerable for developing behavioral and mental health problems. In addition parents, teachers, youth care, police and other important actors often do not recognize problems, which may add to the risk for developing or persevering behavioral and mental health problems among these youths. In the following we will discuss our main findings.
Regardless the level of offending, all Dutch-Moroccan children in our sample in chapter 2 had considerable problems that could hamper a healthy development. Not only individual problems such as emotional or behavioral problems, but also problems within the family, at school and in neighborhood domains were often present. Based on results of previous studies, we expected risk factors known for putting children at risk for offending, also to be present in Dutch-Moroccan boys. Indeed, we found these risk factors in the (re)offending Dutch-Moroccan children. Moreover, we also found many of these risk factors to be present in children without police encounters. This means that a large proportion of the Dutch-Moroccan boys in low SES neighborhoods can be considered having a high-risk profile for developing behavioral and mental health problems. The fact that Dutch-Moroccan families do not seem to find their way into regular youth mental health care (Zwirs et al., 2006b; De Haan et al., 2012), is an additional risk. For those children who encounter the police, this police contact may be useful in reaching out to those families who are in need of help. However, children without police contact from comparable neighborhoods were also shown to grow up in stressful social environments and they reported high levels of emotional problems. These children are especially hard to reach. Outreaching and culturally sensitive mental health care is necessary to lead those children in need of help to mental health care.

Several aspects may complicate the identification of problems in Dutch-Moroccan youths. First, there are methodological problems in the assessment of mental health and behavioral problems. In order to be able to identify problems, reliable and valid instruments are necessary. Researchers, clinicians, schools and police officers often work with standardized screening assessments, which have not been validated for the population in which they are used. This means that scores may not necessarily reflect actual problems. Many screening and assessment tools that are currently used, are based on teacher reports, since they are in the opportunity to observe behavior in social and structured learning situations and in interaction with peers (Verhulst et al., 1994). However, teachers often attribute externalizing behavior more easily to migrant youths as compared to their native counterparts (Sonugabarke et al., 1993; Youngstrom et al., 2000; Lau et al., 2004; Javo et al., 2009). A bias in the assessment of problems may lead to (further) stigmatizing of immigrants. On the other hand, self-reports and parent reports may under-assess problems (Sonugabarke et al., 1993; Youngstrom et al., 2000; Stevens et al., 2003; Lau et al., 2004; e.g., Javo et al., 2009). Gratuitous use of such instruments and cut-offs may therefore be inadequate for Dutch-Moroccan youths.

The absence of validated instruments for Dutch-Moroccans in the Netherlands may have also affected outcomes in our studies. For instance, among the Dutch-Moroccan childhood offenders we expected to find more behavioral problems as compared to the non-offending boys. However, in our study we did not find higher levels of reported mental health and behavioral problems at all. Despite the lower than expected reported levels of problems, many childhood offenders did receive mental health care within a juridical framework. This
may indicate that the reported behavioral and mental health problems by the parents and children themselves did not reflect the actual problems, which again signifies the difficulty of identifying chose children who are in need of help. There may be many reasons for this under-reporting, including perceptual differences regarding problem behavior, social desirable responses and discrepancies between the child’s behavior at home and outside the home (Stevens et al., 2003; Zwirs et al., 2006b; Veen et al., 2010).

However, not only the lack of valid and reliable assessments makes it difficult to identify problems in Dutch-Moroccan youths. Although we did not find reasons to believe that processes leading to problems differed between Dutch-Moroccan and native Dutch youths, the presentation of problems may differ and may therefore be difficult to recognize. In our adolescent sample we saw that, despite the fact that mean levels of problems remained moderately stable and mean levels did not exceed worrisome levels, associations between internalizing and externalising problems increased among the Dutch-Moroccan adolescents. The co-occurrence of internalizing and externalising problems itself is a strong risk factor for future problems in various life domains (Capaldi, 1992; Capaldi & Stoolmiller, 1999; McCarty et al., 2006). Even when initial individual problems do not seem to be alarming, it is important to be extra alert on problems on various life domains.

In addition, specific migration related risk factors contribute to the risk of developing behavioral and mental health problems in Dutch-Moroccan youths. Although it is known that perceived discrimination is related to mental health and behavioral problems, our results show that the impact of discrimination is particularly perceptible among those who are characterized by an integrative acculturation strategy. The paradox is, that in general, Dutch-Moroccan youth who wish to integrate, have the best mental health outcomes. However, as our findings indicate, for these youths integration may also be a risk factor for developing behavioral and mental health problems. Since a high self-esteem is likely to buffer against the negative effects of discrimination (Crocker & Major, 1989; Ruggiero & Taylor, 1997; Umana-Taylor & Updegraff, 2007), intervention efforts should focus on increasing resilience of these youth, while at the same time discrimination against Dutch-Moroccan youth should be acted up against. A policy of solely stimulation integration of immigrants is not profitable as long as the mainstream society is not supportive towards immigrants.

LIMITATIONS

There are several limitations of the studies in this thesis that need to be considered. First, the instruments that we used for assessing behavioral problems have not been thoroughly validated for Dutch-Moroccan youths. However, there are as of yet no instruments available that are fully validated for this specific group. In our studies we used self-reports, and in our
review self-reports were found to be more reliable than parent or teacher reports. In addition, we used within-group comparisons as often as possible, and instead of looking at levels of problems, we investigated associations. Second, we were not able to establish clinical diagnoses concerning behavioral and mental health problems. Instead we used continuous measures of several behavioral and mental health problems. As mentioned before, valid and reliable measures are lacking, so using clinical cut-offs that are not validated for the Dutch-Moroccan population would, in our opinion, not have been useful in our study. Third, even though we used some longitudinal data we cannot draw conclusions about causality. Larger longitudinal samples with longer follow-up and specific study designs on causalities is needed to make such statements. Fourth, we used several samples, sometimes small or very specific and differences between the samples were large. Results from each separate study are therefore hard to generalize. However, by using such a diversity of samples, patterns found across the samples are more likely to be generalizable for Dutch-Moroccan youths in the Netherlands. And finally, although gender differences were found, the relatively small and sometimes specific samples, made it impossible to further investigate these gender differences.

**IMPLICATIONS**

This dissertation confirms that Dutch-Moroccan youths in the Netherlands are a group that is vulnerable for developing mental health and behavioral problems. In addition to the presence of risk factors found in general population studies, there is the difficulty to identify those youths who are in need of help. On the one hand parents do not seem to find their way to child and mental health care, while on the other hand, child and mental health care agencies do not seem to find those youths who are in need of help. A major challenge of social and mental health care agencies is first to identify and then to reach high-risk children before escalation of problems occurs. An early police contact may be a strong signal for the risk of escalation of problems. Therefore, a police contact can be used as an opportunity to screen children and adolescents who are in such need. A uniform, national and collaborative system of police and social work agencies is therefore needed. It is important for the police to register and follow-up when they encounter offending youths. Currently, in the Netherlands promising steps in this direction are taken. For instance, in 2009 ProKid, a screening instrument to identify at-risk youth, has been implemented as a pilot project in four large police districts in the Netherlands (Abraham et al., 2011). Based on certain characteristics, this instrument extracts at-risk children from the police database. The police will follow-up or refer at-risk children to the appropriate care. In time, this instrument will be implemented nationally.

However, children and youths in need of help, without police contacts are even harder to identify. It is important to increase understanding on why Dutch-Moroccan families do not
Summary and discussion

find their way into mental health care. Mental health care in the Netherlands, should be accessible for all people living in the Netherlands. To address problems with accessibility of immigrant youth in mental health care, The Netherlands Organization for health research and development, started the program ‘diversity in youth care’ in 2009 (ZonMw, 2013). The aim of this program is to reach at risk immigrant youth at an earlier stage, to prevent drop-out in health care and to promote culture sensitive interventions. In the last years, 63 projects have been financed in this program, from methodological scientific projects to regional projects focusing on the daily practice. In one of these projects a ‘diversity meter’ has been introduced (Pels et al., 2009), aiming to improve interventions for immigrant groups. The diversity meter provides ten points to evaluate the degree of which an intervention meets criteria for practice in ethnic diverse populations. Such instruments may prove to be very helpful in adjusting existing interventions for ethnic minority groups. Several problems have been identified so far. In addition to factors within the immigrant groups themselves, such as cultural differences, language problems and lack of knowledge on how the Dutch healthcare is arranged, problems are also attributed to the health care institutions themselves: they lack accessibility and their methods do not match all groups, because they (unintended) do not recognize specific cultural needs or migrant related problems. This is reflected in a report on effective interventions for immigrant youths, describing that none of the twenty, by the Accreditation Committee as well rated, interventions, has reported on the effect of the intervention among immigrant groups (Ince & Van den Berg, 2009).

However, it is encouraging that, in order to reach out and offer the appropriate intervention, accessible mental health care located in low SES neighborhoods, with professionals from various ethnic background is gaining ground in larger cities. In addition, interventions are also being tested on their effectiveness in immigrant families and are, if necessary, adjusted in order to reach out for these immigrant families (e.g., Parent Management Training- Oregon, Triple P). Results of our studies did not give reason to develop interventions specifically for Dutch-Moroccan youths. The main challenge is to identify and motivate those eligible for intervention.

Furthermore is has been recognized that stereotypes of immigrant youths, with a strong emphasis on externalizing problems and delinquent behavior, attributes to insufficient recognition of other problems in immigrant families (Vollebergh, 2002). Mental health care professionals need to be aware that low screening scores do not necessarily imply an absence of problems. Clinicians need to be aware of other signals that may indicate the presence of problems, like increasing associations in co-occurring internalizing and externalizing problems during adolescence. Even if initially the level of problems does not seem worrisome, it is therefore important to monitor problems on several life domains over time. The variety of risk factors that we found signifies the need for also targeting interventions at the family domain.
Furthermore, there are some migration related factors that need attention. The marginalized position of Dutch-Moroccan youths in the Netherlands has a negative impact on their well-being. Particularly for those who are willing to integrate, discrimination has had a negative impact on depression and antisocial behavior. Promoting integration is therefore only profitable when, at the same time, an inclusive orientation towards immigrants from the mainstream society is promoted. Maintaining a high self-esteem may buffer against the negative effects of discrimination, but the current disadvantaged position of Dutch-Moroccan youths, accompanied with a repressive and punitive policy, is not likely to support their self-esteem. Supporting Dutch-Moroccan youths by accessible mental health services and creating opportunities in education and on the labor market may prove to be rewarding for both the Dutch and the Dutch-Moroccans.

**DIRECTIONS FOR FUTURE RESEARCH**

An important topic for future research is the investigation of how child and mental health care can also provide professional assistance to immigrant youths and their families. Our findings do not give reason for the absence of mental health care among Dutch-Moroccan youths. However, due to the absence of reliable and validated instruments, we could not investigate the prevalence of clinical problems in our study. Future research should investigate the validity of screening and assessments procedures for immigrant youths. By using validated instruments or procedures, clinical diagnoses could also be more easily integrated in scientific research. Longitudinal studies are needed to investigate causal relationships between risk factors and behavioral problems and to further investigate mechanisms underlying these relations. Studies among other ethnic groups are recommended in order to investigate whether the results discussed in this dissertation on Dutch-Moroccan youths are generalizable to other ethnic minority groups. In future studies it is also important to take gender differences into account. Risk factors, associations and underlying mechanisms may be different for girls as compared to boys.