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Abstract

Previous studies have shown that immigrants' levels of life satisfaction tend to be lower than among natives. We do not know, however, whether this is due to the immigration experience as such, or rather is a result of the fact that on average this group is faced with less prosperous living conditions. In this analysis, we use data from a recent Dutch population survey (n=3,925), with an oversampling of first and second generation minority respondents of Moroccan and Turkish origin (n=1,697). While initially we observe significant differences in levels of life satisfaction, these can be almost fully explained by more financial problems and stronger feelings of social isolation among these groups, as predicted by the need-gratification theory on life satisfaction. We did not observe any interaction effect between these variables and minority status, indicating that these conditions have the same effect on all population groups. Taking into account financial and social resources, there is no significant difference in life satisfaction between the majority group and ethnic minorities in the Netherlands. We close with observations on the theoretical and policy implications.

Keywords: life satisfaction, immigration, Netherlands, ethnic minorities, need gratification

Introduction

Life satisfaction is the cognitive component of subjective well-being, and can be defined as people's evaluations and judgments about their quality of life as a whole (Angner 2010). The other components of subjective well-being are positive and negative affect, feelings of happiness and the absence of distress (Angner 2010; Diener 2000; Neto 1995). Researchers have argued that measures of subjective well-being can be an important alternative instrument to measure group inequalities and policy outcomes, because they better reflect what people themselves want out of life than traditional economic indicators of well-being and equality such as income (Diener 2000; Veenhoven 2004). In this study, we focus on differences in life satisfaction between immigrants and the native population, while because of data restriction we do not investigate other elements of subjective well-being.

Previous research has shown quite convincingly that levels of life satisfaction among specific immigrant groups in Western Europe tend to be significantly lower, compared to the native majority population (Safi 2010). The gap in life satisfaction has been demonstrated across various Western European countries, and across various immigrant population groups originating from the Asian and African continents, Turkey and Eastern Europe (Bălătescu 2007; Safi 2010; Verkuyten 2008). In the analysis of Safi (2010) among immigrants from a variety of origin countries in Western Europe, the gap remained equally strong for first and for second generation immigrants, which would imply that we do not have any indication that immigrant populations would eventually catch up with the native population with regard to levels of life satisfaction.

The goal of the current article is to ascertain whether need-gratification theory can be used to explain this apparent gap between natives and immigrant groups within the population. Need-gratification theory, based on Maslow's theory of motivation, is particularly relevant in this regard because immigrants in general occupy disadvantaged socio-economic positions in society and they have fewer resources to attain need-gratification (Maslow 1970; Oishi, Diener, Lucas and Suh 1999; Veenhoven 1991). Given this disadvantaged position, need-gratification theory suggests that lower levels of life satisfaction among immigrants can be explained by immigrants' adverse living conditions.

More specifically, in this study, we investigate to what extent economic position, perceived social support and neighbourhood characteristics can explain majority-minority differences in life satisfaction, and whether these explanations of life satisfaction apply equally well to both

natives and first and second generation immigrant minorities. In this manner, we provide further evidence on the empirical validity of a need-gratification approach to life satisfaction. From a policy perspective, the research question is relevant too. The need-gratification approach predicts that if social and economic disadvantages among immigrant populations would be reduced, levels of life satisfaction among immigrants should be improved.

To investigate the difference in levels and determinants of life satisfaction of natives and immigrants, we rely on an analysis of the first wave of the Netherlands Longitudinal Lifecourse Study (NELLS), which was conducted in 2009 and included a strong overrepresentation of members of the Turkish and Moroccan communities in the Netherlands (De Graaf, Kalmijn, Kraaykamp and Monden 2010a).

Immigrant integration and need-gratification

Need-gratification theory is an obvious point of departure to investigate the origins of differences in life satisfaction that have been found between immigrants and natives. This approach assumes that life satisfaction is driven by the fulfilment of human needs, including basic physiological needs and the needs for safety, love and belonging, esteem, and personal growth (Maslow 1970; Oishi et al. 1999; Veenhoven 1991). On average, research shows that labour and family migrants and their children occupy disadvantaged socio-economic positions in Western societies such as the Netherlands (Van Tubergen 2006; Hagendoorn, Veenman and Vollebergh 2003). Consequently, because economic deprivation and social isolation frustrate the gratification of physiological needs and needs for belonging, esteem, and personal growth, a lack of economic and social resources may explain the lower levels of life satisfaction among immigrants. We focus on three types of resources with regard to which immigrants are routinely found to be at a disadvantage; economic resources, social resources and community resources.

Economic resources

One of the most prominent explanations of life satisfaction is based on access to economic resources, which can be operationalized as income and structural economic position in society. This test is of crucial importance for this analysis, because it has been documented

that immigrant groups of the population in the Netherlands have lower income levels than the native group, partly because of lower education levels but also as a result of discriminatory practices on the labour market (Gijsberts, Huijnk and Dagevos 2012; Hagendoorn et al. 2003). Especially for those who hold relatively low socio-economic positions, it has been demonstrated that access to material resources can have a huge impact on life satisfaction, as these resources provide them with more opportunities in their daily lives. This effect is weaker among the higher income groups, where additional resources have only a limited marginal effect on the opportunity to develop one's human capabilities (Cheung and Leung 2004).

The statistical correlation between income and life satisfaction tends to be significant, but rather weak (Heady, Muffels and Wooden 2004; Moghaddam 2008), but largely this is a result of this ceiling off effect among the highest income groups. Furthermore, there is also a problem of measurement validity. In survey research it is notoriously difficult to obtain reliable figures about family income: a substantial proportion of respondents refuse to reveal their family income, while for those who do, there are doubts about the reliability of the figures. When measures are used that more directly tap people's perceived sense of economic well-being, such as perceived financial security, a stronger relation between economic position and life satisfaction emerges (Moghaddam 2008). Especially for research among ethnic minorities, it is important to consider income position as a determinant of life satisfaction as these groups are concentrated in lower income segments of the population (Amit 2010; Gokdemir and Dumludag 2012).

Social resources

Social networks, social support and the perceived quality of one's primary social relations have a strong impact on life satisfaction (Diener and Seligman 2004; Hooghe and Vanhoutte 2011; Kapıkıran, 2013; Ram 2010; Wong, Chou and Chow 2012). Social support networks are of crucial importance in upholding life satisfaction, and this effect is particularly strong in adverse economic conditions (Park, Roh and Yeo, 2012). Perceived loneliness, on the other hand, is detrimental for one's level of life satisfaction (Kapıkıran, 2013).

As with economic positions, the social network position of immigrant groups may be more precarious than that of natives. Immigrants have often had to leave behind friends and family

in the country of origin, while their social ties with the native population might be hindered by cultural barriers and negative attitudes on the part of natives. Furthermore initial language difficulties and lower socio-economic positions may also reduce the pool of eligible people to form social relations with in the host society (Martinovic, Van Tubergen and Maas 2009). Consequently, it can be expected that immigrants run a higher risk of lacking social support and experiencing loneliness. Therefore, social contacts and the perceived level of social support can form an additional explanation of the difference in life satisfaction between immigrants and natives.

Community resources

Life satisfaction is not just associated with individual characteristics, but also with characteristics of individuals' communities. First, economic conditions in the neighbourhood may have an impact on life satisfaction in several ways. Neighbourhood deprivation can negatively affect life satisfaction among local residents (Hooghe and Vanhoutte 2011). On the other hand, it is likely that people to some extent make social comparisons with peers in their own community as a reference (Hagerty 2000). In more deprived neighbourhoods, then, social comparisons may turn out relatively more positive. We expect however that community deprivation will outweigh this social comparison effect. We thus expect lower levels of satisfaction among residents of more deprived neighbourhoods, indicated by a higher proportion of welfare recipients.

Following need-gratification theory, we expect that immigrants' relative disadvantages in economic resources, social resources and community resources will each partially explain the negative relation between minority group membership and life satisfaction. Our main hypothesis is thus the following:

H1. The observed differences in levels of life satisfaction between immigrants and natives can be explained by differences in economic resources, social resources and community resources.

Different groups, different explanations?

It has to be noted that for all these elements, two kinds of relations with minority status and life satisfaction are theoretically possible. The first one is an indirect relation. Given the fact that ethnic minorities have lower income levels and less social resources, this might reduce their satisfaction with life. This would imply that income has the same effect for all respondents, but that immigrants simply have lower average income levels. The second possibility is an interaction effect, and this implies that the effect of income levels on life satisfaction is different for minority and majority respondents. Therefore, it is important to include both main and interaction effects in our analysis.

Previous research has established that correlates of life satisfaction may differ cross-culturally, between countries, and between social groups in society, e.g., with regard to class position (Cheung and Leung 2004; Diener and Diener 1995; Oishi et al. 1999). Following recent studies focusing on income effects (Bartram 2011; Olgiati, Calvo and Berkman 2013), our present study takes this line of research a step further by examining whether the relevance of economic, social and contextual correlates of life satisfaction differs between natives and first and second generation immigrants.

Regarding economic resources, recent research suggests that the impact of economic position on life satisfaction may be greater for immigrants than for natives (Bartram 2011; Olgiati et al. 2013). This can be related to the fact that improving material living conditions is a likely important reason for migration in the first place, and may continue to be an important objective well after the first moment of entry in the host country. From the perspective of need-gratification theory, the gratification of basic physiological and security needs through economic security takes precedence over the other needs higher up in the pyramid (Oishi et al. 1999). The relation between financial needs and life satisfaction has been found to be stronger in poorer nations, parallel to the recent empirical findings among immigrant groups within societies (Oishi et al. 1999; Veenhoven 1991). Accordingly, we hypothesize that:

H2. The positive relation between economic resources and life satisfaction will be stronger among immigrants than among natives.

Because family formation, family reunification and social networks in the host and origin country are factors that heavily influence migration decisions, one could expect that perceived social support is as at least as important for immigrants' life satisfaction as it is for the life

satisfaction of natives. Moreover, previous cross-national research has indicated that among European and American citizens, perceived support is less closely related to general life satisfaction than in other countries, the reason being that the more individualist European and American culture strongly emphasizes self-reliance (Uchida, Kitayama, Mesquita, Reyes and Morling 2008). As the Turkish and Moroccan minority groups in our study have a more collectivist cultural background, valuing interdependence, perceived social support may also have a stronger effect on life satisfaction among the immigrants in our study than among natives. Therefore, we hypothesize that:

H3. The positive relation between social resources and life satisfaction will be stronger among immigrants than among natives.

Lastly, neighbourhood deprivation may be particularly relevant for ethnic minorities. Because of tendencies toward ethnic segregation, neighbourhood deprivation may be related to a sense of group relative deprivation. We therefore expect that the proportion of welfare recipients in the neighbourhood will be associated more negatively with life satisfaction among immigrants than among natives. We hypothesize that:

H4. The negative relation between community resources and life satisfaction will be stronger among immigrants than among natives.

Data and Methods

Data

Moroccan and Turkish minorities are included in the NELLS survey because they are two of the largest non-Western minority groups in the Netherlands (De Graaf, Kalmijn, Kraaykamp and Monden 2010b). Moroccan and Turkish minorities are theoretically relevant groups to investigate because research has shown that their economic integration lags behind natives and other minorities such as Surinamese (Cornelisse-Vermaat et al. 2006) and because they experience discrimination more often than other groups do (Dagevos and Bierings 2005; Hagendoorn and Pepels 2003). Furthermore, minorities with a Moroccan or Turkish background are also present in many other Western European countries and can therefore be seen as exemplary cases for the European subpopulations of labour and family migrants and their children, opening up the possibility for future comparative research.

In collecting the data, a random sample of 35 municipalities was selected, stratified by region and degree of urbanization. The four largest cities in the Netherlands were included because of the large proportions of ethnic minorities in these cities. Second, respondents were randomly selected from the population registry based on the respondents' age (14 to 45 years), their country of birth and their parents' country of birth. Respondents were also assigned to residential neighbourhoods, based on their six digit postcode. Consequently, respondents are nested in 256 neighbourhoods within the 35 municipalities. The operationalization of neighbourhood in this study is therefore very fine-grained.

Minority status was defined according to the official definition of the Dutch Central Bureau of Statistics. First generation Moroccan and Turkish minorities are those individuals who themselves were born in Morocco or Turkey, and of whom one or both parents were born in Morocco or Turkey. Second generation Moroccan and Turkish minorities are defined as those individuals who are themselves born in the Netherlands, and of whom at least one parent is born in Morocco or Turkey (Keij 2000).¹

The survey was administered in Dutch, and both face-to-face interviews and a self-administered drop-off questionnaire were used. The overall response rate was 52 per cent, which is average for this type of survey in the Netherlands (De Graaf et al. 2010b). It should be noted however that response rates were somewhat lower for Moroccan minorities (46%) and Turkish minorities (50%) than for the native Dutch (56%). The reason is that minority respondents were more difficult to reach and less willing to participate than natives, but minorities could also more often not participate because of language problems (De Graaf et al. 2010b). The response rates are calculated by dividing the number of (complete plus partial) interviews by a relevant base sample that excludes ineligible cases and cases for which the name and address provided by the municipality were incorrect (about 9% of the initial sample), in other words Response Rate 6 as defined by the American Association for Public Opinion Research and routinely used in survey research (AAPOR 2011).

Because the survey was administered in Dutch, some concern may be in order as to the representativeness of the sample. More specifically, a small though selective group of intended minority respondents could not participate because of insufficient Dutch language skills. Therefore, we have compared the pattern in unemployment rates between our sample and nationally representative figures. Unemployment is defined as the proportion of people who do not have work in the labour population (i.e. the total of people who are employed and

who are involuntarily unemployed, between the ages of 15 and 65). In the Netherlands, unemployment (defined as the proportion of people who do not have work in the labour population, which is the total of people who are employed and who are involuntarily unemployed between the ages of 15 and 65) in 2010 was much higher among Turkish and Moroccan immigrants (about 12.9 per cent) than among natives (about 4.5 per cent) (Gijsberts, Huijnk and Dagevos 2012). In our sample, which is broader than the labour population and also includes students and others who are voluntarily inactive on the labour market, unemployment is also much higher among Turkish and Moroccan immigrants (about 8.5 per cent) than among natives (about 2.6 per cent). The fact that we find roughly the same unemployment rates (and the differences between groups) suggests that the sample is rather representative, despite potential language barriers. As such we can be confident that the oversampling technique did not endanger the representativeness of this specific subsample.

We excluded the small portion of respondents in the sample (about 7.5 %) that did not fill out the self-administered part of the survey, because this part contains key items for the analysis. Furthermore, we focus on the respondents who are 18 or older (adults, of working age), thus we exclude the respondents between 14 and 17 years of age (about 8 %). Lastly, because only few respondents had missing values on the variables of interest (i.e. about 5 %), they were also deleted from the sample. The final sample includes 3,925 respondents, of which 2,228 are native Dutch, 1,164 are first generation minorities, and 533 are second generation minorities.

Dependent variable

Life satisfaction was measured by four items taken from the Satisfaction with Life Scale (Diener, Emmons, Larsen and Griffin 1985). Using five-point scales, the items were, 'The conditions in my life are excellent', 'I am satisfied with my life', 'The most important things I expected out of life, I have obtained', and 'In most ways my life is close to my ideal'. The scale is routinely used in research, and offers an evaluation of one's life experiences by the respondent. Previous research has indicated that the scale can be considered as valid, and can be used in various cultural and social contexts (Diener, Oishi and Lucas 2009). Factor analysis shows that all four items load on a single factor. The items also prove to form a reliable scale (Cronbach's $\alpha = .86$).

Independent variables

The NELLS data allow us to distinguish three groups of respondents; the native majority, first generation minorities and second generation minorities. The measure of minority status is based on respondents' self-reported country of birth and parents' country of birth.

The data also allow us to operationalize the independent variables that we would like to include in the model. With regard to *economic resources* we use a measure for respondents' main activity (labour market status) consisting of four categories; those who are currently employed (1) and those who are currently unemployed (2), those currently non-active (including, for instance, stay-at-home parents and permanently disabled) (3), and students (4). All respondents who were employed have described their occupation. Through standardized tools, we have recoded respondents' occupation into the International Socio-Economic Index (ISEI), which is an internationally comparable measure of occupational status (Ganzeboom, et al., 1992). ISEI scores represent a continuous approach to occupational stratification and reflect a weighted sum of the average education and average income of occupational groups (Ganzeboom, De Graaf and Treiman 1992). To illustrate, office cleaners have a score around 20, nursing personnel a score around 40, and medical doctors have a score around 85. We use the ISEI scores, ranging from 16 to 88, as a measure of occupational status.. Unemployed respondents were given the mean score of the employed respondents, so that this variable cannot play a role for them.² To assess whether respondents perceive financial difficulties, they were asked 'Have you, over the course of the last three months, had to deal with the following: a. not being able to replace broken equipment, b. having to borrow money for essential expenses, c. falling behind on regular expenses, d. being visited by a bailiff, e. having difficulty making ends meet'. Respondents could answer 'yes' (1) or 'no' (0). The 'perceived financial problems'-scale was obtained by summing the five items.

With regard to *social resources*, we first include measures of the frequency of face-to-face social contact with family members and with friends. These two seven-point scales range from never to daily. Six questions were also asked on respondents' perceived social support. This scale was balanced, with three positive items, asking 'there are many people I can trust completely; there are enough people to whom I feel closely connected; there are enough people I can rely on in difficult times', and three 'negative' items 'I feel an emptiness surrounding me; I miss having people around me; I often feel abandoned'. Though a factor analysis suggests that the positive and negative items could be separate factors, preliminary

analyses indicated that these would be identically related to the other variables in our model. Furthermore, analysis shows that a combined perceived social support scale is as reliable (Cronbach's $\alpha = .79$) as the two separate scales (Cronbach's $\alpha = .81/.80$, respectively). Therefore, we constructed one variable for perceived social support, based on all six items.

Regarding *community resources*, we include a variable that is measured at the level of respondents' neighbourhoods, namely the proportion of welfare recipients in the neighbourhood. These figures were obtained from Statistics Netherlands and were added to the dataset prior to public release (De Graaf et al. 2010b). Finally, we include the control variables which have been found to be important correlates of life satisfaction in previous empirical research; age, gender, having a partner, having children, and education level (Amit 2010; Headey, Muffels and Wooden 2004; Hooghe 2012). In addition to age, we include age at migration as a control variable for the first generation immigrants, because this determines the length of time they have spent in the country of origin and in the Netherlands. Because this variable applies only to first generation immigrants, natives and second generation immigrants are given the mean score of the first generation in the analysis.

Analyses

First, it could be argued that the more subjective measures that we use of economic and social resources (financial problems and the measure of perceived social support) are conceptually and may be empirically quite closely related to life satisfaction. Therefore, it should be noted that we have first explored the extent of endogeneity of these factors with life satisfaction, with an exploratory factor analysis (EFA). The analysis shows that items for life satisfaction, financial problems, and perceived social support indeed clearly measure these distinct factors, and can thus be empirically distinguished. The bivariate correlations between life satisfaction on the one hand and financial problems and perceived social support on the other are about .4 (Pearson's r).³ While some element of endogeneity is almost inevitable, it does not invalidate the current research design.

Subsequently, we have generated descriptive statistics of the variables used. Because our respondents are nested within neighbourhoods and we include a measure of community resources on the neighbourhood level, we have used multilevel regression models tested in SPSS 19 for our main analyses. Multilevel analysis allows to simultaneously model the

effects of individual-level and neighbourhood-level predictors (Snijders and Bosker 1999). We centred all individual-level variables (but not the dummy variables) by the overall mean across all groups. We used stepwise models to be able to evaluate our expectations on indirect relations. Lastly, we have tested interactions to evaluate whether the associations of the selected predictors with life satisfaction differ between immigrants and natives.

Results

Descriptive statistics

Table 1 presents the descriptive statistics for natives, first generation immigrants and second generation immigrants separately. As can be observed in Table 1, immigrants (first and second generation) indeed have lower levels of life satisfaction. A one-way ANOVA with post-estimation tests (Tukey's HSD) indicates that all the differences in life satisfaction between the three groups are statistically significant. The fact that the second generation occupies a position half way between the level of the first generation and that of the native group suggests an acculturation process whereby the children of immigrants gradually acquire the life satisfaction level of the native majority group. This lends some support to our first hypothesis about the observed differences between majority and minority groups. It is therefore interesting to look at a more critical test of the observed group differences, when we take economic, social and community resources into account. Moreover, it can be observed from Table 1 that as much as one third of the second generation immigrants in our sample are students, and that second generation immigrants also significantly differ from the other two groups when it comes to age, having a partner and having children. This confirms that it is indeed important to distinguish the four categories in labour activity and to take into account these demographic background factors when making the comparisons between second generation immigrants, first generation immigrants and natives in our multivariate (multilevel) analysis.

(Table 1 around here)

Multilevel regression analyses

Table 2 presents the parameter estimates and variance components for the subsequent multilevel models. First, an intercept-only model (not presented) shows that the variance between neighbourhoods (.008) is much smaller than the variance between individuals within neighbourhoods (.481). Moreover, the results in Table 2 show that the variance between neighbourhoods is almost fully the result of compositional differences, because the neighbourhood level variance component becomes nearly zero in models one through three.

The first model in Table 2 simply confirms that levels of life satisfaction are lower among first and second generation immigrants than among natives. It can be noted that the effect is weaker for second generation immigrants compared to the first generation. For the demographic background variables, we observe the relations that we could expect given earlier research: respondents with a partner and a higher education level feel more satisfied, while age has a negative effect on satisfaction with life.

The effects of migration status, however, are already strongly weakened if we include information about economic resources in Model 2. The unemployed and those experiencing financial problems have much lower levels of life satisfaction, and including these variables apparently takes away some of the relation that initially was attributed to migration status. The effect of education too, diminishes when including economic resources in Model 2, suggesting that the education effect is partly explained by economic resources.

Including social resources in Model 3 goes a step further: perceived social support has a very strong effect on satisfaction with life, and including this variable renders migration status totally non-significant. Having more frequent contact with friends is also significantly positively related to life satisfaction. However, contact with friends does not help explain the differences in life satisfaction between majority and minority respondents. Additional analyses indicate that while minority status is indeed negatively related to economic resources and perceived social support, minority status is positively related to the frequency of social contact with friends.⁴ Contact with family members is not significantly related to life satisfaction, but it should be noted that we control separately for marital status and having children.

Finally, in Model 4, we include the proportion of welfare recipients in the neighbourhood. The non-significant relation suggests that the influence of community resources is limited,

and including this variable does not have an impact on the effects of the other independent variables. Indeed, inspection of the model log-likelihood indicates that each subsequent model fits the data better than the previous model, except Model 4. The results from the regression reported in Table 2, therefore, show quite clearly that no significant differences are left between natives and first and second generation immigrants if we take differences in economic and social resources into account.⁵

(Table 2 around here)

Are effects different?

In Table 2, we thus far only investigated the main effects. It is possible, however, that immigrant groups respond differently to, e.g., financial problems than the native majority of the population. In Table 3, therefore, we systematically include interaction effects with the independent variables. All interaction effects in Table 3 were tested separately while controlling for all variables included in the full model (Model 4) of Table 2. We have used a dichotomous moderator variable, comparing (first and second generation) immigrants to natives. If these interaction effects would be significant, this would indicate that the independent variables have a different effect on life satisfaction among minorities than among the general population.

As can be seen in the first column of Table 3, few effects significantly differ between immigrants and natives. The interactions show that only the effects of education, not being active on the labour market, and occupational status are significantly different for immigrants, compared to natives. We have calculated simple slopes as suggested by Aiken & West (1991), which show the effects of the predictors for natives and immigrants separately, in the second and third column of Table 3. The simple slopes illustrate that education and occupational level are positively related to life satisfaction among natives, but not among immigrants. The negative relation between being inactive on the labour market and life satisfaction also only holds for natives. As we had actually hypothesized that the effect of economic resources would be stronger for immigrants, this means our second hypothesis is refuted. Moreover, we do not find support for our third and fourth hypotheses either.

For most of the elements in our model, it actually turns out that there are no significant interaction effects. This means that having financial problems and feelings of isolation have exactly the same effect on natives as on immigrants. The main problem for the immigrants is therefore not that they perceive financial problems or loneliness differently, or that these factors have a different impact on life satisfaction among immigrants, but it is rather that they experience having more financial problems, and that they are more prone to feeling isolated.

(Table 3 around here)

Discussion

We know that ethnic minorities and immigrants tend to have lower levels of life satisfaction than the majority group, and in this respect this study from the Netherlands confirms previous findings. It has to be noted, however, that the group differences in life satisfaction can be fully explained by taking economic and social resources into account. This suggests that, despite all the negative effects associated with migration, levels of satisfaction with life are not inevitably lower among immigrants than among natives. This is an important addition to previous studies that have detected lower levels of life satisfaction among various immigrant groups in Western European countries, including immigrants from Turkey (Bălătescu 2007; Safi 2010; Verkuyten 2008). Where these previous studies mainly emphasized the processes of ethnic discrimination in Western European societies that possibly underlie the differences in life satisfaction between immigrants and natives, our study adds that the relatively unfavourable economic and social living conditions of immigrants are associated with lower levels of life satisfaction.

Furthermore, our most important finding is maybe the almost complete lack of interaction effects with migration status. Financial problems and social isolation seem to have exactly the same effect on majority and minority respondents and we do not find any evidence for cultural differences in this regard. This is somewhat in contrast to recent studies which suggest that the impact of economic position on life satisfaction may be greater for immigrants than for natives (Bartram 2011, Olgiati et al. 2013). These previous findings were based on the effects of income, however, which are also shown to be generally quite weak in these studies. Our study shows, in line with the argument made by Moghaddam (2008), that

economic position in terms of perceived financial security is quite strongly associated with life satisfaction, and this applies as much to natives as it does to immigrants.

These results imply a number of policy and theoretically oriented conclusions. From a policy perspective, it can be assumed that the inequality with regard to levels of satisfaction with life amounts to a social problem, as it indicates that the integration into society of ethnic minorities apparently has not been fully successful. Furthermore, low levels of life satisfaction in turn can be associated with socially disruptive behaviour, like criminality, hostility or forms of political or religious radicalism. What we can note, however, is that immigrants do not attain the level of Dutch people, but this can be explained by real life indicators of economic and social resources. The policy implication is that low levels of life satisfaction among ethnic minorities should not be considered as a price one has to pay for the original sin of moving from one society to another. Although this is a rather naïve reading of multivariate analysis, a provoking way to state our findings would be that poor immigrants who feel isolated report exactly the same life satisfaction as poor Dutch natives who feel isolated.

The theoretical relevance of our findings is that they provide support for a need-gratification approach to life satisfaction. Our empirical results indicate, in line with need-gratification theory, that adverse living conditions are strongly related to life satisfaction, indeed leading to differences between immigrants and natives. Our study therefore adds a new type of evidence to cross-national studies that have found support for the impact of economic and social living conditions on life satisfaction (Oishi et al. 1999; Veenhoven 1991). The fact that these relations are present even among a highly specific group, such as respondents who have had an immigration experience, strengthens the case for the usefulness and the empirical validity of the need-gratification approach. The fact that we hardly find any interaction effects suggests that the need-gratification approach can be applied quite successfully to various social groups.

In addition, however, it should be noted that our results are also compatible with other approaches to (immigrants') life satisfaction. The differences between the first and second generation suggest that there is to some extent an 'immigration shock' effect and subsequent adaptation over the course of migrant generations, as suggested in some of the literature (Băltătescu 2007; Sam 1998; Vohra and Adair 2000). Moreover, the key role of financial problems suggests that processes of social comparison are also important, as financial

problems lead to a relatively low consumption level and loss of status (Guillen-Royo 2008). Our study thus would hint at the fact that these approaches are complementary to need-gratification theory.

We also want to mention some limitations to our present study. First, because we rely on cross-sectional data, we cannot provide a strong test of the causality of the proposed relations. Second, because we use a single cross-sectional survey, common method bias may to some extent be reflected in the levels of life satisfaction found, and we cannot assess the generalizability of our results to other cultural settings. These issues suggest that our results should be confirmed in longitudinal and comparative studies. Moreover, an interesting extension of our study would be to make a comparison with individuals in immigrants' countries of origin, and ideally such a study among migrants and non-migrants would include multiple origin and destination countries. Third, it has to be acknowledged that some of the variables that we introduce to explain levels of life satisfaction might be rather endogenous. Empirical analysis, however, suggests that this risk is not that strong, and it does not seem to invalidate our main findings in this study. Fourth, we focus on factors that are relevant for the experience of both the majority and the minority groups. Therefore, we give less attention to factors that may be particularly relevant for the experience of minorities, such as perceived discrimination and ethnic identification (Amit 2010; Verkuyten 2008; Vohra and Adair 2000). In terms of the needs for belonging and self-esteem, however, factors such as ethnic and national identification and perceived discrimination may indeed be quite important (Kennedy and Cummins 2007; Safi 2010; Verkuyten 2008). Fifth, many of our measurements have been subjective assessments. It is still possible that ethnic minorities report more financial problems, even given the same objective income level as the majority population. Although we cannot exclude this possibility, all the real life indicators that are available about immigrant groups suggest that their income position is indeed more negative, that their unemployment levels are much higher. As such, there is enough reason to assume that their lower scores on these indicators in the current survey indeed reflect a less privileged social position.

References

- Aiken, L.S. and West, S.G. (1991) *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- AAPOR (The American Association for Public Opinion Research) (2011). *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys*. 7th edition. Deerfield: AAPOR.
- Amit, K. (2010). Determinants of Life Satisfaction Among Immigrants from Western Countries and from the FSU in Israel. *Social Indicators Research*, 96, 515-534.
- Angner, E. (2010). Subjective well-being. *The Journal of Socio-Economics*, 39, 361-368.
- Bălăţescu, S. (2007). Central and eastern Europeans migrants' subjective quality of life: A comparative study. *Journal of Identity and Migration Studies*, 1, 67-81.
- Bartram, D. (2011). Economic Migration and Happiness: Comparing Immigrants' and Natives' Happiness Gains from Income. *Social Indicators Research*, 103, 57-76.
- Berry, J.W. (1997). Immigration, Acculturation and Adaptation. *Applied Psychology: An International Review*, 46, 5-68.
- Byrne, B. M., Shavelson, R. J. & Muthén, B. (1989). Testing for the equivalence of factor covariance and mean structures: the issue of partial measurement invariance. *Psychological Bulletin*, 105, 456-466.
- Cheung, C. & Leung, K. (2004). Forming Life Satisfaction among Different Social Groups during the Modernization of China. *Journal of Happiness Studies*, 5, 23-56.
- Cornelisse-Vermaat J.R., Antonides G., Van Ophem, J.A.C. & Maassen van den Brink, H. (2006). BMI, perceived health, and happiness: Their determinants and structural relationships. *Social Indicators Research*, 79, 143-158.
- Dagevos, J. & Bierings, H. (2005). Arbeid en inkomen (Work and income). In SCP/WODC/CBS (Eds.), *Jaarrapport Integratie 2005* (pp. 81-106). The Hague: SCP/WODC/CBS.

- De Graaf, P.M., Kalmijn, M., Kraaykamp, G. & Monden, C.W.S. (2010a). *The NEtherlands Longitudinal Lifecourse Study (NELLS Wave 1). Dataset*. Tilburg University and Radboud University Nijmegen, Netherlands.
- De Graaf, P.M., Kalmijn, M., Kraaykamp, G. & Monden, C.W.S. (2010b). *Design and content of the NEtherlands Longitudinal Lifecourse Study (NELLS). Research report*. Tilburg University and Radboud University Nijmegen, Netherlands.
- Diener, E. (2000). Subjective Well-Being. The Science of Happiness and a Proposal for a National Index. *American Psychologist*, 55, 34-43.
- Diener, E. & Diener, M. (1995). Cross-Cultural Correlates of Life Satisfaction and Self-Esteem. *Journal of Personality and Social Psychology*, 68, 653-663.
- Diener, E., Emmons, R. A., Larsen, R. J. & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71–75.
- Diener, E., S. Oishi & R. Lucas (2009). Subjective Well-Being: The Science of Happiness and Life Satisfaction. In C. Snyder & R. Lopez (Eds.), *Oxford Handbook of Positive Psychology* (pp. 187-194). Oxford: Oxford University Press.
- Diener, E. & Seligman, M.E.P. (2004). Beyond Money: Toward an Economy of Well-Being. *Psychological Science in the Public Interest*, 5, 1-31.
- Ganzeboom, H.B.G., De Graaf, P.M. & Treiman, D.J. (1992). A standard international socio-economic index of occupational status. *Social Science Research*, 21, 1-56.
- Gijsberts, M., Huijnk, W. & J. Dagevos (2012). *Jaarrapport Integratie 2011*. The Hague: Social and Cultural Planning Office.
- Gokdemir, O. & Dumludag, D. (2012). Life Satisfaction Among Turkish and Moroccan Immigrants in the Netherlands: The Role of Absolute and Relative Income. *Social Indicators Research*, 106, 407-417.
- Guillen-Royo, M. (2008). Consumption and Subjective Wellbeing: Exploring Basic Needs, Social Comparison, Social Integration and Hedonism in Peru. *Social Indicators Research*, 89, 535-555.

Hagendoorn, L. & Pepels, J. (2003). Why the Dutch maintain more social distance from some ethnic minorities than others: A model explaining the ethnic hierarchy. In Hagendoorn, L., Veenman, J. & Vollebergh, W. (Eds.), *Integrating Immigrants in the Netherlands: Cultural versus Socio-Economic Integration* (pp. 41-61). Aldershot: Ashgate.

Hagendoorn, L., Veenman, J. & Vollebergh, W. (Eds.) (2003). *Integrating Immigrants in The Netherlands: Cultural versus Socio-Economic Integration*. Aldershot: Ashgate.

Hagerty, M.R. (2000). Social Comparisons of Income in One's Community: Evidence From National Surveys of Income and Happiness. *Journal of Personality and Social Psychology*, 78, 764-771.

Headey, B. & Wearing, A. (1992). *Understanding Happiness: A theory of subjective well-being*. Melbourne: Longman Cheshire.

Headey, B., Muffels, R. & Wooden, M. (2004). Money Doesn't Buy Happiness.... Or Does It? A Reconsideration Based on the Combined Effects of Wealth, Income and Consumption. *IZA Discussion Paper No. 1218*. <http://ssrn.com/abstract=571661>. Accessed 17 July 2012.

Hooghe, M. (2012). I'm Happy, Hope You're Happy Too. Examining the Different Dynamics of Individual Subjective Well-Being and View on Society. *Journal of Happiness Studies*, 13, 17-29.

Hooghe, M. & Vanhoutte, B. (2011). Subjective Well-Being and Social Capital in Belgian Communities. The Impact of Community Characteristics on Subjective Well-Being Indicators in Belgium. *Social Indicators Research*, 100, 17-36.

Kapıkıran, Ş. (2013). Loneliness and Life Satisfaction in Turkish Early Adolescents: The Mediating Role of Self Esteem and Social Support. *Social Indicators Research*, 111, 617-632.

Keij, I. (2000). Standaarddefinitie allochtonen (Standard definition minorities). *Index*, 10, 24-25.

Kennedy, W.L. & Cummins, R.A. (2007). Ethnic Identity and Subjective Wellbeing: Connections and Possibilities. *The International Journal of Diversity in Organizations, Communities and Nations*, 7, 107-116.

Martinovic, B., Van Tubergen, F. & Maas, I. (2009). Dynamics of Interethnic Contact: A Panel Study of Immigrants in the Netherlands. *European Sociological Review*, 25, 303-318.

- Maslow, A.H. (1970). *Motivation and Personality*. New York: Harper & Row.
- Muthén, L.K. & Muthén, B.O. (2010). *Mplus User's Guide. Sixth Edition*. Los Angeles: Muthén & Muthén.
- Moghaddam, M. (2008). Happiness, Faith, Friends, and Fortune: Empirical Evidence from the 1998 US Survey Data. *Journal of Happiness Studies*, 9, 577–587.
- Neto, F. (1995). Predictors of Satisfaction With Life Among Second Generation Migrants. *Social Indicators Research*, 35, 93-116.
- Oishi, S., Diener, E.F., Lucas, R.E. & Suh, E.M. (1999). Cross-Cultural Variations in Predictors of Life Satisfaction: Perspectives from Needs and Values. *Personality and Social Psychological Bulletin*, 25, 980-990.
- Olgiati, A., Calvo, R. & Berkman, L. (2013). Are Migrants Going Up a Blind Alley? Economic Migration and Life Satisfaction around the World: Cross-National Evidence from Europe, North America, and Australia. *Social Indicators Research*, 114, 383-404.
- Park, J., Roh, S. & Yeo, Y. (2012). Religiosity, Social Support, and Life Satisfaction among Elderly Korean Immigrants. *The Gerontologist*, 52, 641-649.
- Ram, R. (2010). Social Capital and Happiness: Additional Cross-Country Evidence. *Journal of Happiness Studies*, 11, 409-418.
- Safi, M. (2010). Immigrants' Life Satisfaction in Europe: Between Assimilation and Discrimination. *European Sociological Review*, 26, 159–176.
- Sam, D.L. (1998). Predicting Life Satisfaction Among Adolescents from Immigrant Families in Norway. *Ethnicity & Health*, 3, 5-18.
- Smart, J. F. & Smart, D. W. (1995). Acculturative Stress of Hispanics: Loss and Challenge. *Journal of Counselling & Development*, 73, 390–396.
- Snijders, T. & Bosker, R. (1999). *Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modeling*. Thousand Oaks: Sage.
- Steenkamp, J. E. & Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research*, 25, 78-90.

Tucker, K.L., Ozer, D.J., Lyubomirsky, S. & Boehm, J.K. (2006). Testing for Measurement Invariance in the Satisfaction with Life Scale: A Comparison of Russians and North Americans. *Social Indicators Research*, 78, 341-360.

Uchida, Y., Kitayama, S., Mesquita, B., Reyes, J.A.S & Morling, B. (2008). Is Perceived Emotional Support Beneficial? Well-Being and Health in Independent and Interdependent Cultures. *Personality and Social Psychology Bulletin*, 34, 741-754.

Van Tubergen, F. (2006). *Immigrant Integration: A Cross-National Study*. New York: LFB Scholarly Publishing LLC.

Veenhoven, R. (1991). Is Happiness Relative? *Social Indicators Research*, 24, 1-34.

Veenhoven, R. (2004). Happiness as a public policy aim: The greatest happiness principle. In A. Linley & S. Joseph (Eds.), *Positive Psychology in Practice* (pp. 658-678). Hoboken: John Wiley.

Verkuyten, M. (2008). Life satisfaction among ethnic minorities: The role of discrimination and group identification. *Social Indicators Research*, 89, 391-404.

Vohra, N. & Adair, J. (2000). Life Satisfaction of Indian Immigrants in Canada. *Psychology and Developing Societies*, 12, 109-138.

Wong, W.K.F., Chou, K. & Chow, N.W.S. (2012). Correlates of Quality of Life in New Migrants to Hong Kong from Mainland China. *Social Indicators Research*, 107, 373-391.

Tables

Table 1: Descriptive statistics of life satisfaction and independent variables, N = 3,925

	Range	Natives		First generation		Second generation	
		Mean / proportion	SD	Mean / proportion	SD	Mean / proportion	SD
<u>Dependent variable</u>							
Life satisfaction	0-4	2.854	.634	2.569	.783	2.691	.678
<u>Economic resources</u>							
Labour activity							
Employed	0/1	.778		.601		.501	
Unemployed	0/1	.026		.092		.071	
Inactive	0/1	.053		.260		.099	
Student	0/1	.143		.047		.328	
Occupational status	19-88	48.583	13.283	43.647	9.609	46.925	9.761
Financial problems	0-5	.429	.886	1.143	1.429	.867	1.287
<u>Social resources</u>							
Contact – family	0-6	4.474	1.176	4.031	1.749	5.141	1.156
Contact – friends	0-6	4.337	1.160	4.337	1.484	4.820	1.111
Perceived social support	0-3	2.223	.470	1.946	.496	2.079	.488
<u>Community resources</u>							
Proportion welfare recipients	.07-.37	.153	.046	.201	.052	.199	.054
<u>Control variables</u>							
Age	18-49	32.843	8.303	35.405	6.766	25.919	6.513
Female	0/1	.538		.512		.555	
Partner	0/1	.639		.706		.372	
Children	0/1	.490		.747		.311	
Education	0-5	3.188	1.021	2.202	1.338	2.829	1.035
N		2,228		1,164		533	

Source: NELLS 2009, own calculations.

Note: Context variables measured at the neighbourhood level (3,925 respondents in 255 neighbourhoods).

Table 2: Stepwise multilevel models of life satisfaction, N = 3,925

	<u>Model 1</u> Minority status + controls			<u>Model 2</u> Economic resources			<u>Model 3</u> Social resources			<u>Model 4</u> Community resources		
	b	se	p	b	se	p	b	se	p	b	se	p
<u>Minority status</u>												
Native = ref.												
1st gen	-.210	.026	***	-.068	.026	*	.003	.025		.008	.026	
2nd gen	-.148	.034	***	-.076	.032	*	-.036	.030		-.031	.031	
<u>Economic resources</u>												
Employed = ref.												
Unemployed				-.284	.048	***	-.221	.045	***	-.221	.045	***
Inactive				-.156	.035	***	-.098	.033	**	-.097	.033	**
Student				.090	.037	*	.068	.035		.068	.035	*
Occupational status				.005	.001	***	.004	.001	***	.004	.001	***
Financial problems				-.172	.009	***	-.139	.009	***	-.139	.009	***
<u>Social resources</u>												
Contact – family							.001	.007		.001	.007	
Contact – friends							.025	.008	**	.025	.008	**
Perceived social support							.474	.021	***	.474	.021	***
<u>Community resources</u>												
Proportion welfare recipients										-.114	.197	
<u>Control variables</u>												
Age	-.014	.002	***	-.012	.002	***	-.009	.002	***	-.009	.002	***
Female	.036	.022		.045	.021	*	.029	.020		.029	.020	
Partner	.262	.028	***	.203	.027	***	.169	.026	***	.169	.026	***
Children	.080	.030	**	.113	.028	***	.104	.026	***	.104	.026	***
Education	.078	.010	***	.025	.010	*	.010	.009		.010	.009	
(Constant)	2.604	.024	***	2.588	.025	***	2.588	.023	***	2.607	.039	***
-2*Log Likelihood	8,001			7,581			7,052			7,053		
Δ-2*Log Likelihood (df)	321 (7)			420 (5)			529 (3)			1 (1)		
<u>Variance components</u>												
Individual level,	.444			.396			.344			.344		
(% explained) ^a	(8)			(18)			(28)			(28)		
Neighbourhood level,	<.001			<.001			<.001			<.001		
(% explained) ^a	(96)			(91)			(96)			(95)		

Source: NELLS 2009, own calculations. Significant at *** p<.001, ** p<.01, * p<.05.

Note: Context variables measured at the neighbourhood level (3,925 respondents in 255 neighbourhoods).

^a: % explained compared to intercept-only model.

Table 3: Final model (Model 4, Table 2) + interactions, N = 3,925

	Interaction effect			Simple slope among natives			Simple slope among immigrants		
	b	se	p	b	se	p	b	se	p
<u>Economic resources</u>									
x Unemployed	.028	.095		-.225	.079	**	-.197	.053	***
x Inactive	.241	.067	***	-.257	.057	***	-.015	.039	
x Student	.069	.057		.039	.042		.108	.048	*
x Occupational status	-.004	.002	*	.005	.001	***	.001	.002	
x Financial problems	.014	.018		-.147	.014	***	-.134	.011	***
<u>Social resources</u>									
x Contact – family	-.005	.014		.003	.011		-.002	.009	
x Contact – friends	.018	.015		.015	.012		.034	.011	**
x Perceived social support	-.061	.039		.501	.027	***	.440	.030	***
<u>Community resources</u>									
x Proportion welfare recipients	.418	.389		-.317	.277		.100	.277	
<u>Control variables</u>									
x Age	.001	.002		-.009	.002	***	-.009	.002	***
x Female	.044	.039		.010	.025		.054	.030	
x Partner	-.050	.039		.192	.031	***	.142	.034	***
x Children	.010	.039		.102	.031	**	.111	.036	**
x Education	-.066	.017	***	.046	.013	**	-.020	.012	

Source: NELLS 2009, own calculations. Significant at *** $p < .001$, ** $p < .01$, * $p < .05$.

Note: Significant interaction effects and respective simple slopes in bold print. The interaction effects were tested with a dichotomous variable for immigrant status (0=natives, 1=immigrants) as the moderator variable. All interaction effects were tested separately in models that further include all the variables of the final model (Model 4 of Table 2).

Endnotes

¹ It can be noted that for the second generation, the label “immigrants” is not correct, as this group according to the definition was born in the Netherlands. This group did not migrate, but only the generation of their parents did. In line with the official statistics office of the Netherlands, and the definition being used by that office, however, we will continue to use this label in order to avoid cumbersome expressions about “descendants of immigrants”.

² In an alternative operationalization, the unemployed were not included, and this did lead to the same results, so this procedure clearly does not have an effect on our final results.

³ Results of the exploratory factor analysis are available upon request.

⁴ The results of these additional analyses are available upon request from the authors.

⁵ In order to make sure that these non-significant findings are not being caused by dividing the ethnic minority group into first and second generation immigrants, we also ran the models of Table 2 again with all ethnic minorities (1st and 2nd generation combined) together, and with four ethnic minority groups separately (1st and 2nd generation Moroccans plus 1st and 2nd generation Turks separately). The results of these alternative operationalizations indicate that the non-significant relation between minority status and life satisfaction is not caused by making the distinction between first and second generation immigrants. Also when the two groups are combined, or when we separate four groups, we do not find a significant relation between minority status and life satisfaction in the final model (once controlling for economic and social resources). The results of these additional analyses are available upon request.