

## PDF hosted at the Radboud Repository of the Radboud University Nijmegen

The following full text is a publisher's version.

For additional information about this publication click this link.

<http://hdl.handle.net/2066/203234>

Please be advised that this information was generated on 2021-01-17 and may be subject to change.

## Welfare-Based Income Among Immigrants in the Netherlands: Differences in Social and Human Capital

Jeanette A. J. Renema and Marcel Lubbers

Radboud Social and Cultural Research, Radboud University, Nijmegen, the Netherlands

### ABSTRACT

This study contributes to the structural migrants' integration literature with its focus on a wider understanding of welfare-based incomes among immigrants in the Netherlands. We examined whether immigrants' reliance on either unemployment benefits, occupational disabilities benefits, or social assistance could be explained through human-capital and social-capital determinants. We found that this foremostly applies to social assistance-based incomes, presenting the relevance of disentangling various welfare schemes. We additionally proposed that more capital increases immigrants' knowledge about the welfare schemes' bureaucratic procedures and that under the condition of lacking employment more capital leads to higher chances for a welfare-based income, but we found little support for this explanation.

### KEYWORDS

Benefit dependency; immigrant; human capital; social capital; multinomial logistic regression; Netherlands; welfare-based income

The literature on immigrants' structural integration in European nation-states often concerns immigrants' unemployment trends and immigrants' unemployment benefit reciprocity (e.g., Gowricharn, 2002; Seibel & Van Tubergen, 2013). We, however, propose that to get a better understanding of immigrants' structural economic position, a wider concept of benefit reciprocity should be examined, because being unemployed cannot be equated to receiving welfare.

Until now, the unemployment literature has often sought explanations in human- and social-capital theory (e.g., Zorlu, 2013). Whereas human-capital theorists argue that immigrants have a disadvantageous position in the labor market due to, for example, educational discrepancies between immigrants and the native population (Chiswick, 1979; Van Tubergen, 2006), social-capital theorists emphasize immigrants' hampered access to constructive native networks within the receiving country (e.g., Seibel & Van Tubergen, 2013). Especially, host-country-specific capital (skills and contacts acquired in the host country) is key in defining immigrants' positive economic outcomes (e.g., Lancee, 2012).

**CONTACT** Jeanette A. J. Renema  [j.renema@maw.ru.nl](mailto:j.renema@maw.ru.nl)  Radboud University Nijmegen, Department of Sociology, P.O. Box 9104, 6500 HE Nijmegen, The Netherlands.

© 2018 Jeanette A. J. Renema and Marcel Lubbers. Published with license by Taylor & Francis

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Both capital theories root in the assumption that immigrants with more capital are more successful in the host country's labor market because they have the skills or the contacts that contribute effectively to job search (Van Tubergen, 2006). The theory, thus, implicitly presumes that more capital results in more knowledge that is employable. We wish to put the capital theory's assumption to the test by alternatively formulating that if this assumption adds up, immigrants with host-country-specific capital are not only more successful in the labor market but, in the case of having no income, are also more likely to successfully apply for welfare support. One of the major obstacles of finding the way to welfare support is acquiring information about welfare eligibility and the required bureaucratic procedures (Currie, 2004; Hernanz, Malherbet, & Pellizzari, 2004). Hence, host-country-specific skills or contacts can usefully attribute to being successful in the labor market and to the search for information about benefit programs' application procedures.

We will use the definition of welfare-based income to refer to immigrants' reliance on one of the three following benefit programs in the Netherlands: unemployment benefit, occupational disabilities benefits, and social assistance. Social assistance is a means-tested scheme that does not depend on previous performed labor and may have an unlimited timespan; whereas unemployment benefits and occupational disabilities benefits depend on previously performed labor (contribution-based) and are short-term schemes. Therefore, contribution-based benefit receipt is likely to reflect a temporary deprived economic position, when in fact reliance on social assistance may demonstrate structural distance from the labor market. Henceforth, we innovate the research by comparing explanations for these different forms of welfare-based incomes.

In this contribution, the term *immigrant* will solely refer to first-generation migrant. Register data from the Netherlands consistently report that immigrants are at risk of falling under the social minimum (De Graaf-Zijl et al., 2015). In particular, immigrants from non-European Union (EU) countries are found to have a great entitlement risk (Zorlu, 2011). We will home in on Dutch Antillean, Moroccan, Turkish, and Surinamese immigrants, the largest non-EU immigrant groups in the Netherlands (Statistics Netherlands, 2014). Their relatively economically worse-off position cannot be explained through institutional welfare access differences, since the Coupling Act (*koppelingsbeginsel*) enables all immigrants to request the same welfare services and, with small exceptions only in the first few years, benefits.

In short, we claim that we should get a better understanding of immigrants' broader understanding of benefit reciprocity and what the role of human and social capital therein is. We propose that immigrants with more capital are not only more likely to receive income by means of employment instead of a welfare-based income but also, in the case of lacking an income through employment, more likely to acquire welfare support as compared to immigrants who lack this capital. By testing these novel expectations from human- and social-capital theory, we aim to answer the research question: *To what extent can immigrants' welfare-based*

*income be explained through host-country-specific human- and social-capital determinants?*

## **The Dutch context**

### ***Immigrant groups***

During the post-war reconstruction of Europe in the 1960s, a large-scale international recruitment of Moroccan and Turkish laborers has been initiated in the Netherlands. The migration of these *guest-workers* consisted mostly of unskilled laborers who were later followed by people from Suriname during the 1970s and who left the colony before it became independent from the Netherlands. Mainly since the 1990s, people from the Dutch Antilles arrived, often unskilled laborers. Surinamese and Dutch Antillean immigrants share a colonial past with the Netherlands and are more acquainted with the Dutch language and customs than Turkish and Moroccan immigrants. Nevertheless, despite that the Dutch Antillean islands are still a part of the Kingdom of the Netherlands, there are significant differences between the Dutch Antilles and the Netherlands. For example, the main language carried throughout the educational curricula in the Leeward Antilles is foremostly the Creole language Papiamentu rather than Dutch (Dijkhoff & Pereira, 2010). To conclude, the four immigrant groups rely relatively more on benefits than the Dutch native population, as shown in Figure 2 in the Appendices.<sup>1</sup>

### ***Contribution-based benefits***

By Dutch law, both the unemployment benefits and occupational disabilities benefits are linked with previously performed labor. Therefore, they are contribution-based benefits. An employee who works for a Dutch employer is insured for (1) unemployment through the Act of Unemployment (Wet Werkloosheid, WW) and (2) illness due to occupational reasons through the act for Work and Income According to Labour Capacity (formally known as Law for Occupational Disabilities).<sup>2</sup> Self-employed laborers also have the possibility to issue insurance. Immigrants have the same rights as native Dutch, but these entitlements are coupled with previous performed paid labor and, thus, it is not possible to receive these benefits upon arrival. To be eligible for WW a few important conditions should be met including that the employee should have worked at least 26 weeks within the last 36 weeks. WW's monthly allowance is based on the individual years of labor service and has a timespan of 3–38 months.

When an employee falls ill due to occupational reasons, the employer stays primarily responsible for the sick employee for at least 2 years. When the employee does not recover before the labor contract expires, the employee falls under the jurisdiction of the Sickness Insurance (Ziektewet). The payment of this allowance (Ziekengeld) has a maximum of 24 months. When the employee is paid by means of sick pay for longer than 2 years the employee has the opportunity to apply for Work

and Income According to Labor Capacity (WIA), which was until 2005 known as the Law for Occupational Disabilities (WAO) (Employee Insurance Agency, 2016). The application procedure for an occupational disabilities benefit is complicated, because of the examination procedure concerning the employee's labor capacity and the various tracks within the program after the examination's outcome.

### **Means-tested benefit**

The social-assistance program (Bijstand) provides a basic income for people who cannot sustain themselves independently or through another social security program. Bijstand is a means-tested program, owing to the fact that it is the last resort of the Dutch social security system. To be eligible a person should be at least 21 years old (before 2004, 18 years). Since 2004, municipalities have been mandated with the task of deciding the monthly allowance, which partly depends on the number of people living in the household (known as *kostendelersnorm*).<sup>3</sup> Claiming social assistance in the Netherlands requires legal residence. And although every immigrant has the right to apply for social assistance, immigrants who have not obtained the required permanent residence permit could experience a withdrawal of their temporary residence permit (Linkage Act). The latter, however, rarely occurs, as Article 8 of the European Convention on Human Rights restricts the legitimacy of the Linkage Act's jurisdiction (Zorlu, 2011).

## **Theory and hypotheses**

### **Human capital**

Human capital literature originates in the field of economics (Becker & Chiswick, 1966), wherein the effect of individual skills implicating individual social outcomes (such as being hired for a job) is highlighted (Nahapiet, 2011). The theory roots in the assumption that human capital (such as obtained education) determines the individual's chances in the labor market. Henceforth, it is presumed that people are rational actors who carefully invest in their labor market skills to reap the benefits they will receive later in time (Becker & Chiswick, 1966). To test whether this is a valid assumption, we deduce and examine the following two general theoretical propositions.

The first is that if more human capital increases immigrants' chances for being employed (e.g., Heath & Yo, 2005) the likelihood of receiving a welfare-based income should decrease. The assumption here is that people who have better qualifications and more knowledge applicable to the labor market in which they operate have better chances in the labor market (Bourdieu, 1986). Second, departing from the same assumption, we can hypothesize that *under the condition of lacking a paid job*, human capital also increases knowledge about the procedures of how to apply for a benefit and how to successfully obtain one.

### ***Human capital and lower risk for welfare-based incomes***

The human capital theory has established that education, obtained labor experience, and language proficiency are key in defining who is successful in the labor market and who is not (e.g., Heath & Yo, 2005; Van Tubergen & Kalmijn, 2005; Zorlu, 2013). We expect that these factors will be helpful in avoiding a welfare-based income as well. We, however, anticipate that the extent of the attributional character of these factors differs for the various forms of welfare-based incomes.

First, special interest is paid to the possible misfit of education obtained in the country of origin and the receiving country's labor market. Especially when it concerns structured labor markets, wherein people's occupational chances depend on the host country's educational institutions and neatly designed job applications. Consequently, educational credentials from other educational systems than that of the host country are less understandable for employers, resulting in hampered access to the labor market (Zorlu, 2013). We expect that this will particularly affect immigrants' chances of receiving social assistance, because benefits that are contribution-based presume previous performed labor in the Netherlands and, thus, access to the labor market. We formulate our first hypothesis: *Immigrants who have not been enrolled in a Dutch educational program are more likely to receive a social-assistance-based income than immigrants who have been enrolled in a Dutch educational program (H1) and the difference is less for contribution-based benefit-based incomes (H1a).*

Second, studies also show that, despite possible higher credentials, immigrants often accept unskilled jobs with lower earnings (e.g., Heath & Yo, 2005). Unskilled labor requires physical strength (such as carrying heavy materials) and handling risky materials (such as cleaning detergents), which in turn increases the risk of occupational disability. The effect of previous performed labor is anticipated to act with a time lag and expected to be key regarding occupational-disabilities-benefit reciprocity. Thus, our second hypothesis states: *Immigrants who perform or have performed physically demanding labor are more likely to receive an occupational-disabilities-benefit-based income than immigrants who have not performed physically demanding labor (H2) and the difference is less so for unemployment-benefit-based incomes and social assistance-based incomes (H2a).*

Third, the most often discussed host-country-specific human capital is language acquisition of immigrants in the country of destination (e.g., Van Tubergen & Kalmijn, 2005). Contemporary modern Western labor markets are increasingly service-offering-based. Hence, the requirement of good language acquisition is relevant for a majority of job openings. Dutch language proficiency will therefore be a hurdle for immigrants in accessing the Dutch labor market at the first place (Gijsberts & Lubbers, 2014). We, thus, anticipate that poor comprehension of the Dutch language, first and foremost, increases immigrants' chances of relying on a social-assistance-based income due to a lack of labor market access. Additionally, we anticipate that employees with a lower Dutch proficiency will be the first employees who will be dismissed when the employer seeks organization reform or

wishes to achieve budget cuts. This leads to our third hypothesis: *The higher the proficiency in the Dutch language, the less likely that immigrants receive a social-assistance-based or unemployment-benefit-based income (H3) and this association will be less strong for an occupational-disability-benefit-based income (H3a).*

### **Human capital and more means for welfare-based incomes**

Besides actual welfare eligibility, the literature on benefit entitlement suggests that what most determines people's benefit take-up is whether they know about their welfare eligibility (e.g., Currie, 2004). This accords with the human-capital theory's underlying assumption that better equipped immigrants are successful economically because they are more informed about the host-country's labor market. By examining our second proposition, we can test the human-capital assumption further. Are immigrants with human capital better equipped to find their way through the welfare state's bureaucracy and successfully apply for welfare support when they *lack a paid job*?

We expect that education obtained in the Netherlands and a higher proficiency in the Dutch language contribute to gaining knowledge about bureaucratic procedures. Though general information about various Dutch welfare schemes can be found in various languages other than Dutch, detailed instructions of benefit application procedures are mostly given in the Dutch language solely, limiting knowledge to immigrants who comprehend the Dutch language better. This would be especially true for the occupational-disabilities-benefit receipt, for its application procedure is, in comparison to the other two benefits, complicated. We therefore hypothesize: *Under the condition that people have no paid job, immigrants with more human capital are more likely to receive an occupational-disabilities-benefit-based income than immigrants who lack this human capital (H4) and the difference will be less for an unemployment-benefit-based or social-assistance-based income (H4a).*

### **Social capital**

The theory of social capital provides a useful second account of explaining immigrants' welfare-based incomes. The theory outlines how an increase of networks or social contacts has beneficial effects on a person's economic attainment (Coleman, 1990). As with human-capital theory, social-capital theory assumes that useful contacts will be employed for the benefit of structural economic positions. We wish to put that assumption to the test by examining two theoretical propositions. First, we examine whether a lack of social capital determines whether immigrants are successful in the labor market. A lack of social capital will increase immigrants' chances for receiving a welfare-based income rather than receiving an income through paid labor. Second, we expect that an increase of social ties affects immigrants' knowledge about the bureaucratic rules of welfare programs. Therefore, we presume that people with more social ties have more opportunities to retrieve information about the welfare programs' application procedures (Sabates-Wheeler & Feldman, 2011). Thus, *under*

*the condition of lacking a paid job*, social capital increases immigrants' knowledge about welfare programs' bureaucracy and successfully apply for a welfare program.

Drawing on the research done by Pichler and Wallace (2007) on civic culture, we would expect that both formal and informal social capital are resourceful aspects. *Formal social capital* refers to people's involvement in officially constituted clubs and organizations within society, also known as participation in civil society (Putnam, 2000), while *informal social capital* is defined as the resourcefulness of casual bonds between people, such as friendships (Pichler & Wallace, 2007).

### ***Social capital and lower risk for welfare-based incomes***

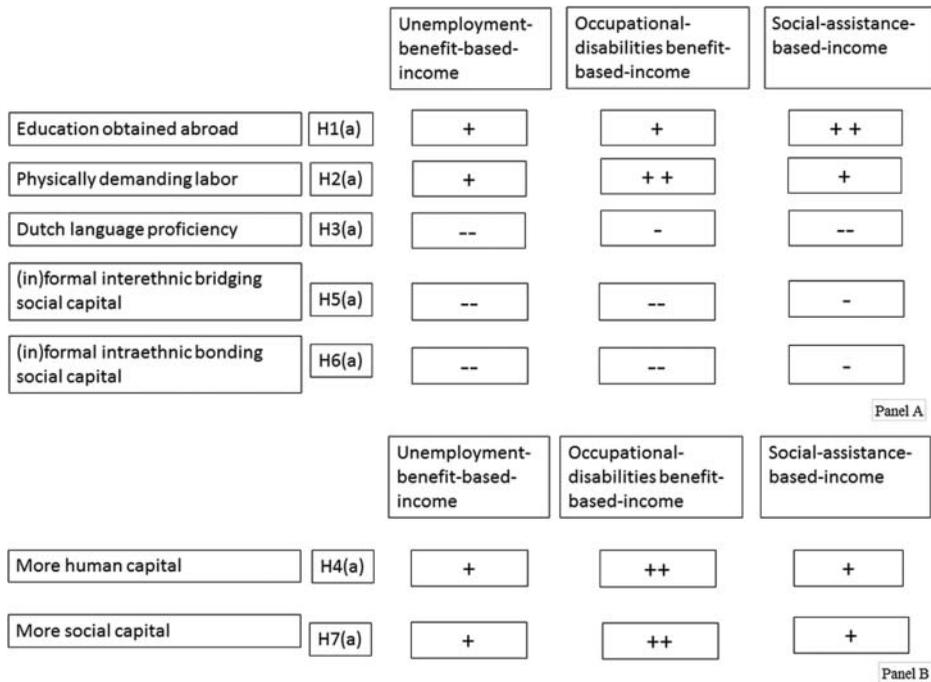
Scholars within the field of migrant integration emphasize the positive impact of ties with the native population in the country of residence, which is also known as interethnic-bridging social capital (e.g., Nannestad, Svendsen, & Svendsen, 2008). Immigrants who are embedded in the host-country's labor market by means of contacts with the native population will have an increased chance for a rich and resourceful information transmittance. Consequently, these interethnic networks enlarge immigrants' chances for not only getting a job but also getting ahead and performing well within the host country's labor market (Lancee, 2012). Hence, we expect that *immigrants with formal or informal interethnic-bridging social capital are less likely to receive an unemployment-benefit-based or occupational-disabilities-benefit-based income than immigrants who lack this social capital (H5) and the difference is less for a social-assistance-based income (H5a)*.

To be informed about job-application procedures, contact with people with a similar background, which is also known as intraethnic-bonding social capital, could be resourceful as well. Social networks consisting mostly of individuals with a migration background are possibly better informed about the labor-market hurdles that immigrants have to overcome while in the search of a job. The similarity of the individuals within the social network could supply immigrants with positive returns (Lancee, 2012). Studies show, however, that intraethnic social capital results mostly in employment within these regarded communities. Because of the close ties, occurrences of dismissal are less likely within these communities (e.g., Heath & Yu, 2005). Therefore, we expect that the effect of intraethnic-bonding capital will be stronger on the likelihood of dependence on labor-related benefits than on social assistance because social-assistance reciprocity does not necessarily depend on a previously performed labor. Our sixth hypothesis states: *Immigrants with formal or informal intraethnic-bonding social capital are less likely to receive an unemployment-benefit-based or occupational-disabilities-benefit-based income than immigrants who lack this social capital (H6) and the difference is less for social-assistance-based income (H6a)*.

### ***Social capital and more means for welfare-based incomes***

Assuming that social capital is beneficial for immigrants' structural economic position, both interethnic and intraethnic ties would subsequently also offer an

increase of information transmission about welfare schemes and their application procedures (Sabates-Wheeler & Feldman, 2011). We can relate this to our second interpretation of the role of social capital concerning immigrants' chances for a welfare-based income. On the one hand, it is feasible that interethnic-bridging networks are better informed about the Dutch benefit system than intraethnic networks members of these networks well equipped or better embedded in the Dutch nation state. On the other hand, intraethnic-bonding social capital provides immigrants with rich information on the application procedures for benefits and the hurdles that specifically immigrants have to overcome (Sabates-Wheeler & Feldman, 2011). This providence of rich information for the occupational-disabilities-benefit procedure, as the application and procedures for this benefit are fairly complicated. Therefore, we hypothesize: *Under the condition that people have no paid job, immigrants with more social capital are more likely to receive an occupational-disabilities-benefit-based income than immigrants who lack this social capital (H7) and the difference is less strong for receiving an unemployment-benefit-based and social-assistance-based income (H7a).* Figure 1 presents a visualization of this study's hypotheses.



**Figure 1.** Hypotheses as proposed. Panel A: welfare-based income compared to paid employment; Panel B: welfare-based income compared to no personal income.

## Data and methods

### Data

We pooled three Dutch survey migrant data sets to get a sufficient number of respondents depending on benefits to enable us to test our hypotheses: SPVA-2002, NELLS-2010, and SIM-2011 (De Graaf, Kalmijn, & Monden, 2010; De Koning & Gijsberts, 2002; Statistics Netherlands, 2011). The sample sets are based on a two-stage stratified sampling technique; municipalities were selected first, after which households were randomly selected (De Graaf et al., 2010; Groeneveld & Weijers-Martens, 2003; Korte & Dagevos, 2015). The sampling procedure of the municipalities includes regional location and degree of urbanization. Therefore, the sampling procedures are biased to a small degree due to the dense immigration concentration in the urban areas.

The SPVA-2002 and SIM-2011 questionnaires were set out among Dutch Antillean, Moroccan, Turkish, and Surinamese immigrants, whereas the NELLS-2010 questionnaire was set out among Turkish and Moroccan immigrants between the age of 15 and 45 specifically.<sup>4</sup> The face-to-face interviews were conducted in Dutch or the targeted mother tongue, reducing the possibility of non-response. The net response rates among first-generation immigrants (after correcting for incorrect register data due to factors such as moved or deceased respondents) varied between 43% for Surinamese immigrants (SIM-2011) and 56% for Turkish immigrants (NELLS-2010). Generally, the response rates among Turkish immigrants were higher than among other immigrant groups (SPVA-2002: 52%, NELLS-2010: 50%, SIM-2011: 56%). For more detailed information about the response rates, we refer to Table 3 in the Appendices. This Table presents the sex and age distributions of Dutch register data, SPVA-2002, NELLS-2010, SIM-2011, and the final merged data set. Additional information about data collection, sampling procedures, and response rates can be found in the targeted codebooks (De Graaf et al., 2010; Groeneveld & Weijers-Martens, 2003; Korte & Dagevos, 2015).

### Dependent variable

In both the SPVA-2002 and the SIM-2011 questionnaire, the respondents answered whether they receive one of the listed welfare benefits and which of the descriptions applied best regarding what they do in a regular week—for example, in paid work, looking after the home, or unable to work due to occupational disability. In the NELLS-2010 questionnaire, respondents were directly asked to indicate their most important source of income. Subsequently, we have constructed the dependent variable *welfare-based income* and its categories: (1) unemployment benefit, (2) occupational-disabilities benefit, and (3) social assistance. If respondents answered that they did not have a personal income, they were coded using a fourth category (4) no personal income. Respondents who indicated that they work less than 12 hours per

week while indicating that, for example, taking care of the home applies best to their situation are likewise coded as (4) no personal income. Respondents with their main mean of income provided through labor while the description of paid labor applies best are coded as (0) labor or self-employment (referred to as labor). Respondents who have an additional benefit to complement their paid labor but whose main mean of income is still through paid labor are also coded as (0) labor. We excluded respondents with pension funds, capital or other benefits as their main mean of income from the analyses.<sup>5</sup>

### **Human capital variables**

Education obtained abroad is measured with a dummy variable *education abroad*. The variable is derived from the respondents' indication whether they obtained education from (0) Dutch educational institutes or (1) foreign educational institutes. Respondents who were at least once enrolled into a Dutch educational program were coded as the reference category (0). Respondents who had a missing value on the education abroad variable but migrated to the Netherlands before the age of 18 are coded as the reference category as well, owing to the compulsory attendance age in the Netherlands, while respondents who did not obtain a diploma from elementary school, or higher level, are categorized as (1) education abroad.

To measure the physically demanding performed labor in their current job, or when respondents who were not in paid labor at their last performed job, we created two dummy variables: (1) *no professional career* (containing respondents who have never performed any form of paid labor) and (2) *physically demanding job* with the reference category (0) physically nondemanding labor.<sup>6</sup> To distinguish between physically and non-physically demanding labor, we followed the International Standard Classification of Occupations 2008 (ISCO-08) skill level procedure.<sup>7</sup> In the NELLS-2010 data set, an ISCO-08 variable was given; for the SPVA-2002 and SIM-2011 data sets we converted the SBC92 classification to an ISCO-08 classification by means of a published converting scheme.<sup>8</sup>

To indicate the Dutch language proficiency of the respondents we operationalized the respondents' estimation of their own speaking abilities with regard to the Dutch language and created the variable *Dutch language proficiency*. Due to scale differences between the various data sets, we standardized the given answers enabling a data set merge. The higher the score for *Dutch language proficiency*, the stronger the respondents' Dutch speaking comprehension.

### **Social capital variables**

For the analyses, we operationalized two kinds of social capital—formal and informal—while accounting for the migrant composition.

Regarding the operationalization of formal social capital, in the SPVA-2002 and SIM-2011 it is asked whether the respondents are members of any of the 11 listed

organizations and clubs; in the NELLS-2010, seven organizations and clubs were listed. Furthermore, the respondents had to score whether the composition of these organizations and clubs contained members from their own migrant background (intraethnic) or whether they contained members with various backgrounds including native Dutch. This resulted in the following four dummy variables with the reference category (0) no membership: (1) *clubs and societal interest organizations with none or few immigrants*, (2) *migrants and religious organizations with none or few immigrants*, (3) *clubs and societal interest organizations with mostly immigrants*, and (4) *migrants and religious organization with mostly immigrants*. The former two dummy variables represent formal bridging social capital (interethnic), whereas the latter two refer to formal bonding social capital (intraethnic). The reference category contains the respondents who consistently answered no regarding the listed membership possibilities.

A good indication of informal social capital is interaction with friends. Hence, we have chosen to operationalize whether the respondents have native Dutch friends and whether they have friends with a similar ethnic background. We created the following two dummy variables: (1) *Dutch friends* (reference category is [0] no Dutch friends) and (2) *country of origin friends* (reference category is [0] no friends from the country of origin). The dummy variable *Dutch friends* refers to informal bridging social capital (interethnic). The SPVA-2002 survey question asked respondents whether they have friends or acquaintances who were born in the Netherlands. Both the NELLS-2010 and SIM-2011 survey questionnaire asked respondents whether they have friends who were born in the Netherlands. In the questionnaires, no definition of friends is given. Therefore, what is considered as a friend is in the perception of the respondents.

The latter dummy variable *country of origin friends* concerns the informal bonding social capital (intraethnic). Both the SPVA-2002 and NELLS-2010 asked the respondents whether they have friends (friends and acquaintances regarding the SPVA-2002 questionnaire) who were born in their country of origin. For the SIM-2011 we derived the *country of origin friends* variable from the respondents' contact frequency during their spare time. The respondents who answered that they never see or speak to their friends who were born in their country of origin or that the question did not apply to their situation were coded as (0) no country of origin friends (reference category), assuming they have no friends (or at least no close friends) from their country of origin.

### **Control variables**

For the analyses we included the control variables *country of origin*, *age*, *sex*, *educational level*, *marital status*, *number of children in the household*, and *data set source*.

Respondents were asked in which country they were born. By means of dummy variables we created the variables (1) *Morocco*, (1) *Turkey*, and (1) *Suriname*, with the reference category (0) Dutch Antillean. Second-generation migrants are

excluded from the analyses.<sup>9</sup> Age is measured in years and is restricted to people between the age of 15 and 64 years, enabling a representation of the labor force.<sup>10</sup> Sex is measured through a dummy variable with women as reference category. The *educational level* variable measures the level of the highest obtained education or, when still studying, the educational program currently enrolled in, in eight categories. To measure immigrants' household composition, we coded the following three dummy variables with the reference category (0) *single*: (1) *relationship* for immigrants' who are in a non-cohabiting relationship, (2) *cohabiting and/or married*, (3) *divorced or widowed*. We derived two dummy variables for (1) *1 or 2 children in the household* and (1) *3 or more children in the household* and a reference category (0) *no kids in the household*. Finally, two dummy variables, (1) *NELLS-2010* and (1) *SIM-2011* with reference category (0) SPVA-2002, control for the three data sets.

### Missing data

We confined the sample to first-generation migrants from Turkey, Morocco, Suriname, or Dutch Antilles who were between age 15 and 64 years and who did not have a missing value for the *country of origin*, *welfare-based income*, or *age* variable; this reduced the number of respondents to 3,144 for the SPVA-2002 sample, 1,516 for the NELLS-2010 sample, and 1,907 for the SIM-2011 sample. Thereafter, we restricted the sample by excluding respondents' who were fulltime students (2.2% of the SPVA-2002 respondents, 6.6% of the NELLS-2010 respondents, and 8.1% of the SIM-2011 respondents) which makes a merged sample set of 6,189 respondents. By using a multiple imputation procedure, we imputed values for respondents who had invalid values on one of the independent or control variables.<sup>11</sup> Five data sets were estimated and we used the imputed regression coefficients of the pooled data set including 6,189 respondents (Ruben, 1996). The descriptive statistics are shown in Tables 4 and 5 in the Appendices.

### Method

For our data analyses we employed multinomial regression models to test our hypotheses. This enables a series of comparisons between categories with the reference category set as main mean of income through *labor* (Kleinbaum & Klein, 2002). The first multinomial logistic regression contains the human capital, social capital, and control variables with *labor* as the reference category. Through this model we test whether the expected effects of Hypotheses 1, 2, 3, 5, and 6 are supported. The second model includes the same components, but instead *no personal income* is taken as the reference category while excluding people with paid employment. Therefore, this model estimates what the chances are to rely on specific welfare-based income as compared to having no personal income, given that immigrants have no employment. This model thus tests whether Hypotheses 4

and 7 are supported. We ran additional analyses to probe whether the effect on one of the concerning benefits is higher or lower compared with the other benefits.

## Results

### *Human capital*

Table 1 presents the results obtained from the first multinomial logistic regression model with reference category *labor* as main mean of income (results for the contrast with people who have no personal income are presented in Table 6 in the Appendices). Table 2 shows the results of the second multinomial logistic model excluding people in paid employment and with *no personal income* as the reference category. For Hypothesis 1, we expected that, despite the respondent's educational level, a respondent who was not enrolled into a Dutch educational program would have an increased chance of receiving a welfare-based income rather than receiving income through paid labor. Although educational level itself has the expected effect, the effects of having obtained an education abroad are, as shown in Table 1, not significant for any of the welfare benefits. Therefore, we have to refute both Hypothesis 1 and its addendum, 1a.

In line with Hypothesis 2, Table 1 shows that immigrants' chances of receiving an occupational-disabilities-benefit-based income, instead of an income through employment, is greater for immigrants with a physically demanding profession (OR: 1.720,  $p < .001$ ) than for immigrants with a physically nondemanding job. This finding supports Hypothesis 2. Additionally, we observe the same pattern regarding immigrants' social-assistance-based income (OR: 1.869,  $p < .001$ ). The results of an additional multinomial logistic model, with occupational-disabilities-benefit-based income as the reference category, show that the odds ratios of both unemployment-benefit-based and social-assistance-based incomes are insignificant.<sup>12</sup> Hence, an effect of physically demanding labor being larger for occupational disabilities-benefit-based incomes, compared with unemployment-benefit-based or social-assistance-based incomes, is not found. And, thus, the addendum to Hypothesis 2, 2a, is not supported.

Furthermore, immigrants' likelihood of receiving a social-assistance-based income, compared to receiving an income through paid employment, is greater for immigrants who have no professional career (OR: 16.433,  $p < .001$ ) than for immigrants who perform or have performed non-physically demanding labor. Although this is expected, we also find a puzzling effect for immigrants who indicated that they have never started a professional career in the Netherlands at any point in their lives but that their income is unemployment-benefit-based (OR: 4.301,  $p < .001$ ) or occupational-disability-benefit-based (OR: 4.022,  $p < .001$ ). These results are somewhat counterintuitive because both benefits are only accessible after having a professional career (since they are contribution-based schemes). This might be related to erroneous answers in the surveys (e.g., an answer about

**Table 1.** Multinomial Logistic Regression Model 1 (Ref. Paid Labor Vs. Welfare-Based Income), Coefficients, Standard Errors, Significance Values, Odds Ratio

	Unemployment			Occupational disabilities			Social assistance		
	b	(SE)	Odds Ratio	b	(SE)	Odds Ratio	b	(SE)	Odds Ratio
<b>Human</b>									
Education (ref. obtained in Netherlands)									
Obtained abroad	.004	(.139)	1.004	-.059	(.101)	.943	.039	(.103)	1.039
Job (ref. physically nondemanding)									
Physically demanding job	.217	(.168)	1.243	.542	(.130)***	1.720	.626	(.149)***	1.869
No professional career	1.459	(.302)***	4.301	1.392	(.263)***	4.022	2.799	(.240)***	16.433
Dutch language proficiency (z score)	-.110	(.076)	.896	-.082	(.056)	.921	-.190	(.057)***	.827
<b>Social</b>									
Dutch friends (ref. no)									
Dutch friends	-.453	(.160)**	.635	-.529	(.122)***	.589	-.403	(.125)***	.669
Membership (ref. no membership)									
Club or societal interest group—none or few	-.613	(.264)*	.542	-.069	(.172)	.933	-.802	(.222)***	.448
Migrants or religious organization—none or few	.330	(.512)	1.391	.413	(.333)	1.511	-.192	(.364)	.912
Country of origin friends (ref. no)									
Country of origin friends	.169	(.192)	1.184	.157	(.131)	1.170	-.051	(.135)	.950
Membership (ref. no membership)									
Club or societal interest group—mostly	.057	(.211)	1.059	-.199	(.191)	.820	-.273	(.195)	.761
Migrants or religious organization—mostly	-.514	(.212)*	.598	-.242	(.143)	.785	.081	(.150)	1.085
Country of origin (ref. Dutch Antilles)									
Morocco	.619	(.224)**	1.858	1.224	(.179)***	3.401	.343	(.159)*	1.409
Turkey	.787	(.224)***	2.197	1.262	(.178)***	3.533	.013	(.162)	1.013
Suriname	.067	(.231)	1.069	.180	(.173)	1.197	-.404	(.154)**	.668
<b>Control</b>									
Sex (ref. female)									
Male	.073	(.143)	1.076	-.483	(.108)***	.617	-.583	(.111)***	.558
Educational level	-.236	(.041)***	.790	-.240	(.030)***	.787	-.331	(.033)***	.718
Marital status (ref. single)									
Relationship	-.215	(.237)	.807	-.016	(.192)	.984	-.389	(.170)**	.678
Cohabiting/married	-.870	(.204)***	.419	-.371	(.155)*	.690	-.1.689	(.161)***	.185
Divorced/widowed	1.045	(.335)***	2.843	.957	(.345)***	2.603	.916	(.312)	2.500
Amount of children in household (ref. no)									
1 or 2 children household	-.116	(.186)	.890	-.162	(.128)	.850	.241	(.143)	1.272
3 or more children household	.007	(.215)	1.007	-.400	(.148)**	.670	.386	(.157)*	1.471
Age	.058	(.035)	1.060	.415	(.027)***	1.515	.165	(.026)***	1.179
Data set source (ref. SPVA-2002)									
NELLS-2010	-.209	(.209)	.812	-.1.139	(.190)***	.320	-.1.170	(.202)***	.310
SIM-2011	.632	(.157)***	1.881	-.050	(.115)	.951	-.208	(.123)	.812
Constant	-.1.896	(.402)***		-.3.275	(.316)***		-.264	(.292)	
Cox & Snell R <sup>2</sup>	.460								
-2LL (df)	9,894.098 (92)								

Note. Total N = 6,189. Baseline model  $\chi^2$  13,701.533.  
 \*p < .05. \*\*p < .01. \*\*\*p < .001.  
 Source: SPVA-2002, NELLS-2010, SIM-2011.


**Table 2. Multinomial Logistic Regression Model 2 (Ref. No Income Vs. Welfare-Based Income), Coefficients, Standard Errors, Significance Values, Odds Ratio**

	Unemployment			Occupational disabilities			Social assistance		
	b	(SE)	Odds Ratio	b	(SE)	Odds Ratio	b	(SE)	Odds Ratio
<b>Human</b>									
<i>Education (ref. obtained in Netherlands)</i>									
Obtained abroad	-.072	(.192)	.930	-.193	(.168)	.825	-.077	(.163)	.926
<i>Job (ref. physically nondemanding)</i>									
Physically demanding job	-.091	(.239)	.913	.331	(.213)	1.393	.398	(.218)	1.489
No professional career	-1.861	(.251)*	.155	-1.821	(.213)*	.162	-5.29	(.195)*	.589
<i>Dutch language proficiency (z score)</i>									
Dutch friends (ref. no)	.051	(.102)	1.052	.090	(.088)	1.094	-.044	(.087)	.957
<b>Social</b>									
Dutch friends	-.053	(.209)	.949	-.181	(.183)	.835	-.007	(.178)	.993
<i>Membership (ref. no membership)</i>									
Club or societal interest group—none or few	.378	(.390)	1.460	.930	(.341)*	2.534	.170	(.364)	1.185
Migrants or religious organization—none or few	1.436	(.778)	4.205	1.405	(.651)*	4.074	.923	(.645)	2.516
<i>Country of origin friends (ref. no)</i>									
Country of origin friends	.370	(.274)	1.447	.366	(.234)	1.442	.082	(.222)	1.086
<i>Membership (ref. no membership)</i>									
Club or societal interest group—mostly	.247	(.299)	1.280	.019	(.303)	1.019	-.093	(.307)	.912
Migrants or religious organization—mostly	-.142	(.290)	.868	.073	(.242)	1.076	.420	(.234)	1.522
<i>Country of origin (ref. Dutch Antilles)</i>									
Morocco	-.075	(.337)	.928	.252	(.308)	1.286	-.515	(.286)*	.597
Turkey	.341	(.335)	1.406	.492	(.305)	1.635	-.649	(.286)*	.522
Suriname	.473	(.394)	1.606	.474	(.362)	1.606	-.154	(.351)	.857
<i>Sex (ref. female)</i>									
Male	2.024	(.214)*	7.570	1.525	(.192)*	4.594	1.358	(.193)*	3.890
<i>Educational level</i>									
Marital status (ref. single)	-.116	(.055)*	.890	-.130	(.049)*	.878	-.201	(.049)	.818
Relationship	.222	(.429)	1.248	.441	(.411)	1.554	.049	(.388)	1.051
Cohabiting/married	-2.139	(.271)*	.118	-1.692	(.249)*	.184	-2.991	(.242)*	.050
<i>Amount of children in household (ref. no)</i>									
1 or 2 children household	.503	(.270)	1.653	.582	(.237)	1.789	.883	(.243)*	2.418
3 or more children household	.311	(.286)	1.364	.036	(.254)	1.037	.660	(.261)*	1.934
<i>Age</i>									
Data set source (ref. SPVA-2002)	.133	(.048)*	1.142	.459	(.044)*	1.582	.261	(.042)*	1.298
NELLS-2010	-.906	(.276)*	.404	-1.806	(.258)*	.164	-1.812	(.248)*	.163
SIM-2011	-1.210	(.238)*	.298	-1.823	(.210)*	.161	-2.104	(.207)*	.122
Constant	.620	(.572)		-.385	(.528)		2.325	(.497)*	
Cox & Snell R <sup>2</sup>	.494								
-2LL (df)	4,342.207 (66)								

Note: Total N = 2127. Baseline model  $\chi^2$  5.853.68.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Source: SPVA-2002, NELLS-2010, SIM-2011.

the partner's income) or to improper benefit reciprocity. Despite this inconsistency, we decided to keep these respondents in our sample.<sup>13</sup>

With regard to Hypothesis 3, immigrants comprehending the Dutch language better, have a decreased likelihood of receiving a social-assistance-based income (OR: .827,  $p < .01$ ) compared with receiving income through paid labor. The expected effect of language proficiency on unemployment-benefit-based income, however, was not found. Thus, immigrants' language comprehension does not seem to affect their job-loss chances once they are hired by an employer. Henceforth, Hypothesis 3 is partly supported, whereas addendum 3b is rejected.

Table 2 shows that our expectation that *under the condition of no paid employment* having more human capital would increase immigrants' chances for a welfare-based income cannot be confirmed. Both Dutch language acquisition and education obtained in the Netherlands proved not to be significant predictors. Hypothesis 4 and addendum 4a are refuted.

### **Social capital**

In line with Hypothesis 5, the results presented in Table 1 show that members of a sports or societal club are less likely to depend on an unemployment benefit (OR: .542,  $p < .05$ ) while such associations have no effect on occupational-disabilities-benefit-based incomes. Additionally, the chances for depending on both contribution-based benefits instead of receiving an income through paid labor is lower (OR: unemployment-benefit-based: .635,  $p < .001$ ; OR: occupational-disabilities-benefit-based: .589,  $p < .001$ ) for immigrants with Dutch native friends. Additional models, with unemployment-benefit-based income as the reference category, do not present significant results,<sup>14</sup> which means that the effect of native Dutch friends does not significantly differ between welfare-based incomes. We reject addendum 5a.

Concerning Hypothesis 6, Table 1 does present a significant finding regarding the expected effects of bonding social capital. Compared with receiving an income through paid employment, the chances (OR: .598,  $p < .05$ ) for receiving an unemployment-benefit-based income decrease when immigrants join migrant or religious organizations consisting mostly of immigrants. This effect, of formal bonding social capital, however, was not found with regard to an occupational-disabilities-benefit-based or a social-assistance-based incomes. Hence, we found partial support for Hypothesis 6 but no support for addendum 6a, because we hypothesized that the chances for relying on a contribution-based-benefit-based income would be affected.

Table 2 confirms our expectation that, under the condition that immigrants *have no paid employment*, it is more likely that immigrants with social ties know how to find their way through the benefits application procedures. This effect was only found with regard to bridging social capital; thus, members of a sports or societal interest club (OR: 2.534,  $p < .01$ ) or a religious organization (OR: 4.074,  $p < .05$ ) with only a few or no immigrants have indeed a higher chance to rely on an occupational-disabilities-benefit-based income compared with immigrants

having no personal income. This effect was not found for receiving an unemployment-benefit-based or a social-assistance-based income. Thus, while Hypothesis 7 is supported, 7a is not supported.

Finally, relating to our control variables, the results of Table 1 show that the likelihood of Moroccan and Turkish immigrants relying on one of the three welfare-based incomes instead of on paid labor is generally higher than the likelihood for Dutch Antillean and Surinamese immigrants reliance on the the same welfare-based incomes. This finding supports the presumption that immigrants from the Dutch Antilles and Suriname have a less hampered access to the labor market (Van Tubergen & Kalmijn, 2005). Additionally, in the case of lacking a personal income, both Moroccan and Turkish immigrants have a lower chance to rely on a social-assistance-based income.

## Conclusions and discussion

The current study has examined explanations of immigrants' chances for receiving a welfare-based income and adds to the current literature on immigrants' structural economic positions in host countries. It moved beyond the current literature since it identified which human- and social-capital indicators explain who relies on various welfare-based incomes. We did this through the extension of the underlying assumption of human and social capital that more employable knowledge increases immigrants' chances to be successful in the labor market and *decreases* reliance on the benefits. By presuming that this knowledge can also be called in when immigrants are in need of access to welfare programs, in the case of lacking a personal income, an *increasing* reliance on the benefits is generated. In line with previous research, we found that human and social capital decrease the risk of relying on a welfare-based income (De Graaf-Zijl et al., 2015). We add that these forms of capital not only affect direct labor-market outcomes and unemployment benefit take-up but also that the effect carries over time by creating a stronger reliance on social assistance in particular.

We did not find evidence for our assumption that human capital increases knowledge about the bureaucratic procedures since, under the condition of having no paid job, human capital does not increase the likelihood of relying stronger on benefit-based incomes. On the other hand, we do find substantial effects with regard to our social capital expectations. Immigrants who socialize with native Dutch persons in a formal setting are more likely to find their way to an occupational-disabilities-benefit-based income. Therefore, this study supports the idea that to prevent immigrants from falling into a more-structurally-vulnerable position, ongoing integration processes are needed. Especially, when host countries' social security systems involve complicated application procedures (Nahapiet, 2011).

Interestingly, and as unlike the previous condition (socializing with native Dutch persons), immigrants who are members of a religious or migrants organization with

people from a common migration background are more likely to have a paid job rather than relying on an unemployment-benefit-based income. This finding follows the logic of low dismissal occurrences within close-knit communities (Heath & Yu, 2005), implying that intraethnic networks seem to guide immigrants to suitable job openings within their own networks and that having social contacts in the native population is not the only way of securing an economically stable societal position for immigrants.

Nevertheless, to gather more insight into how knowledge about the host country's labor market or the welfare state's system exactly affects immigrants' mean of income, more precise information about immigrants' welfare knowledge should be collected. It would also be fruitful to further examine the association between immigrants' unemployment trends and their trajectories toward social-assistance-based incomes. The social-assistance program is mainly a welfare scheme of last resorts, but it simultaneously functions as the exit scheme for contribution-based benefits (Pellizzari, 2006). It is likely that, over time, a proportion of immigrants have slid down from a contribution-based-benefit scheme into the support of the social-assistance program.

This study's results support previous findings that human and social capital are helpful in the labor market, keeping immigrants from relying on unemployment benefits, disability benefits, or social assistance. In particular, for reliance on social assistance, differences in capital have strong effects. We posited that human and social capital also increases knowledge to find the way through the bureaucratic procedures for applying for benefits. Here, however, only social capital seemed to play a role. We call for a better understanding of the knowledge immigrants obtain both about the labor market and the welfare procedures. For further research, we suggest that the disentanglement of various welfare-based incomes is crucial, whilst further strengthening the idea of the resourcefulness of social integration with the native population to reduce economic inequality regarding immigrants (Nannestad et al., 2008; Pichler & Wallace, 2007).

## Acknowledgments

We thank our colleagues from the MIFARE project who provided insight and expertise that greatly assisted the research. Gratitude is also owed to the participants of the MIDA conference organized at the Aalborg University, where an earlier version of this paper was presented.

## Funding

This work was supported by the 15 NORFACE partners and the European Commission (ERA-Net Plus funding, grant agreement number 618106) under the program Welfare State Futures; project MIFARE.

## Notes

1. For more information, see Statline //statline.cbs.nl.
2. Over time, the Ziektewet has been privatized, while being publicly steered. See //uwv.nl/particulieren.

3. There are exceptions, children who have reached the age of 18 years while living outside the household or students until they are 21 years who live within the household are not counted as adults. See [//government.nl/documents/leaflets/2011/10/20/q-a-social-assistance](http://government.nl/documents/leaflets/2011/10/20/q-a-social-assistance).
4. Both NELLS-2010 and SIM-2011 sampled among native Dutch as well. We limited our data to immigrants from Morocco, Turkey, Suriname, and the Dutch Antilles.
5. This exclusion applied to 18.8% of SPVA-2002, 2.5% of NELLS-2010, and 17% of SIM-2011 among respondents born in Morocco, Turkey, Suriname, or the Dutch Antilles.
6. See [www.cbs.nl/nl-nl/achtergrond/2012/14/de-nederlandse-beroepsbevolking-twee-afbakeningen](http://www.cbs.nl/nl-nl/achtergrond/2012/14/de-nederlandse-beroepsbevolking-twee-afbakeningen). Respondents with an army career were excluded from the analyses; this pertains to less than 0.01% of SPVA-2002 respondents. Despite the required physical abilities of each of the force's ranks, the diversity between the ranks disallows a solid classification of physically demanding or nondemanding jobs.
7. For more information, see [www.ilo.org/public/english/bureau/stat/isco/isco08/](http://www.ilo.org/public/english/bureau/stat/isco/isco08/).
8. See [//cbs.nl/nl-nl/menu/methoden/classificaties/overzicht/sbc/isco/default.htm](http://cbs.nl/nl-nl/menu/methoden/classificaties/overzicht/sbc/isco/default.htm).
9. 7.8% of SPVA-2002, 23.4% of NELLS-2010, and 25.5% of SIM-2011 respondents.
10. 2% of SPVA-2002 and 3.8% of SIM-2011 respondents.
11. SPVA-2002: *marital status*, < 0.1%; *children in the household*, 0.2%; *educational level*, 2.8%; *Dutch language proficiency*, 0.5%; formal membership dummies, 0.3%; *Dutch friends*, 0.6%; *country of origin friends*, 0.6%. NELLS-2010: *marital status*, < 0.1%; 2%; *children in the household*, 2.1%; *educational level*, 14%; *education abroad*, 4.8%; (*non*) *physically demanding job* dummies, 4.2%; *Dutch language abilities*, 14.8%; formal membership dummies, 13.7%; *Dutch friends*, 13%; *country of origin friends*, 14.1%. SIM-2011: *educational level*, 0.1%; (*non*) *physically demanding job* dummies, 2.5%; formal membership dummies, 0.6%.
12. Or unemployment benefit: .723 ( $p > .05$ ); Or social assistance: 1.087 ( $p > .10$ ).
13. Or occupational disabilities benefit: .928 ( $p > .10$ ); Or social assistance: 1.052 ( $p > .10$ ).

## References

- Becker, G. S., & Chiswick, B. R. (1966). Education and the distribution of earnings. *American Economic Review*, 56, 358–369.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Eds.), *Handbook of theory and research for the sociology of education*. Westport, CT: Greenwood.
- Chiswick, B. R. (1979). The economic progress of immigrants: Some apparently universal patterns. In W. Fellner (Eds.), *Contemporary economic problems* (pp. 357–399). Washington, DC: American Enterprise Institute.
- Coleman, J. (1990). *The foundations of social theory*. Cambridge, MA: Harvard University Press.
- Currie, J. (2004). *The take up of social benefits* (Working paper for Eugene Smolensky, Berkeley, December 12, 2013). Cambridge, MA: National Bureau of Economic Research
- De Graaf, P. M., M. Kalmijn, G. Kraaykamp, & Monden, C. W. S. (2010). *Design and content of the Netherlands Longitudinal Lifecourse Study (NELLS)* [Data file and codebook]. Tilburg, Netherlands: Tilburg University and Radboud University Nijmegen.
- De Graaf-Zijl, M., Josten, E., Boeters, S., Eggink, E., Bolhaar, J., Ooms, I., ... Woittiez, I. (2015). *De Onderkant van de Arbeidsmarkt in 2025* [The lower end of the labour market in 2025]. Den Haag, Netherlands: Netherlands Institute for Social Research.
- De Koning, J., & Gijsberts, M. (2002). *Sociale positie en voorzieningengebruik van allochtonen 2002—SPVA 2002* [Societal positions and use of social welfare among immigrants 2002] [Data file]. doi:10.17026/dans-xdt-cynn

- Dijkhoff, M., & Pereira, J. (2010). Language and education in Aruba, Bonaire and Curaçao. In B. Migge, I. Léglise, & A. Bartens (Eds.), *Creoles in education: An appraisal of current programs and projects*. Amsterdam, Netherlands: John Benjamin.
- Gijsberts, M., & Lubbers, M. (2014). Beheersing van de Nederlandse taal onder recente migranten uit nieuwe EU-lidstaten en traditionele migratielanden [Dutch language proficiency among recent migrants from new EU member-states and traditional emigration countries]. *Sociologie*, *10*(1), 27–48. doi:10.5117/SOC2014.1.GIJS
- Gowricharn, R. (2002). Integration and social cohesion: The case of the Netherlands. *Journal of Ethnic and Migration Studies*, *28*(2), 259–273. doi:10.1080/13691830220124323
- Groeneveld, S., & Weijers-Martens, Y. (2003). *Minderheden in beeld: Sociale positie en voorzieningengebruik van allochtonen 2002* [The image of minorities: Societal positions and use of social welfare among immigrants 2002] [Codebook]. Rotterdam, Netherlands: Institute for Sociological Economic Research.
- Heath, A., & Yu, S. (2005). Explaining ethnic minority disadvantage. In A. Heath, J. Ermish, & D. Gallie (Eds.), *Understanding Social Change*. Oxford, UK: Oxford University Press.
- Hernanz, V., Malherbet, F., & Pellizzari, M. (2004). Take-up of welfare benefits in OECD countries: A review of the evidence (OECD Social, Employment and Migration Working Papers 17). Paris, France: OECD Publishing. doi:10.1787/525815265414
- Kleinbaum, D. G., & Klein, M. (2002). *Logistic regression: A self-learning text*. (2nd ed.). New York, NY: Springer.
- Korte, K., & Dagevos, J. (2015, June). *Survey Integratie Minderheden 2011. Verantwoording van de Opzet en Uitvoering van een Survey onder Turkse, Marokkaanse, Surinaamse en Antilliaanse Nederlands en Autochtone Vergelijklingsgroep* [Minorities Integration Survey 2011: A report about the design and implementation of the survey among Turkish, Moroccan, Surinamese, Dutch Antillean, and native Dutch comparison group]. Den Haag, Netherlands: Netherlands Institute for Social Research, NL.
- Lancee, B. (2012). *Immigrant performance in the labour market: Bonding and bridging social capital*. Amsterdam, Netherlands: Amsterdam University Press.
- Nahapiet, J. (2011). A social perspective: Exploring the links between human capital and social capital. In A. Burton-Jones & J. C. Spencer (Eds.), *Oxford handbook of human capital*. Oxford, UK: Oxford University Press.
- Nannestad, P., Svendsen, G. L. H., & Svendsen, G. T. (2008). Bridge over troubled water? Migration and social capital. *Journal of Ethnic and Migration Studies*, *34*(4), 607–631. doi:10.1080/13691830801961621
- Pellizzari, M. (2006). Unemployment duration and the interactions between unemployment insurance and social assistance. *Labour Economics*, *13*(6), 773–798. doi:10.1016/j.labeco.2005.10.003
- Pichler, F., & Wallace, C. (2007). Patterns of formal and informal social capital in Europe. *European Sociological Review*, *23*, 423–435. doi:10.1093/esr/jcm013
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York, NY: Simon and Schuster.
- Ruben, D. B. (1996). Multiple imputation after 18+ years. *Journal of the American Statistical Association*, *91*(434), 473–489. doi:10.1080/01621459.1996.10476908
- Sabates-Wheeler, R., & Feldman, R. (2011). Structures of access to social provision for migrants. In R. Sabates-Wheeler & R. Feldman (Eds.), *Migration and social protection. Claiming social rights beyond borders*. Basingstoke, UK: Palgrave.
- Seibel, V., & Van Tubergen, F. (2013). Job-search methods among non-Western immigrants in the Netherlands. *Journal of Immigrant and Refugee Studies*, *11*(3), 241–258. doi:10.1080/15562948.2013.801727

- Statistics Netherlands. (2011). *Survey Integratie Minderheden–SIM 2011 version 2* [Survey integration of minorities, version 2] [Data file]. doi:10.17026/dans-x67-dmep
- Statistics Netherlands. (2014). *Jaarrapport integratie 2014* [Annual report on integration 2014]. Den Haag, Netherlands: Statistics Netherlands.
- Van Tubergen, F., & Kalmijn, M. (2005). Destination-language proficiency in cross-national perspective: A study of immigrant groups in nine Western countries. *American Journal of Sociology*, 110, 1412–1457. doi:10.1086/428931
- Van Tubergen, F. (2006). *Immigrant integration: A cross-national study*. New York, NY: LFB Scholarly Publishing.
- Zorlu, A. (2011). Immigrant participation in welfare benefits in the Netherlands (IZA Discussion Paper 6128). Retrieved from <http://ftp.iza.org/dp6128.pdf>
- Zorlu, A. (2013). Occupational adjustment of immigrants in the Netherlands. *International Migration and Integration*, 14(4), 711–731. doi:10.1007/s12134-012-0264-2

## Appendix

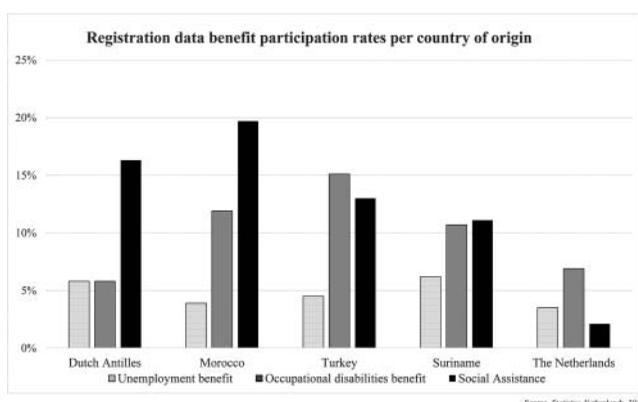


Figure 2. Registration data, benefit participation rates per country of origin.

Table 3. Distribution of Sex, Age and Country of Origin.

	Register data–2008		SPVA-2002		NELLS-2010		SIM-2011		Merged data set		
	obs.	%	obs.	%	obs.	%	obs.	%	obs.	%	
Distribution of Dutch Antillean immigrants											
Sex											
Male	38,643	49%	344	44%	4	24%	274	51%	503	47%	
Female	40,325	51%	444	56%	13	76%	259	49%	569	53%	
Age											
15–24	14,739	8%	44	7%	4	29%	85	16%	57	5%	
25–34	45,389	26%	179	28%	6	43%	113	21%	265	25%	
35–44	64,977	37%	197	31%	4	29%	126	24%	323	30%	
45–64	51,226	29%	221	34%	0	0%	209	39%	427	40%	
Distribution of Moroccan immigrants											
Sex											
Male	88,539	53%	730	74%	345	47%	229	51%	660	39%	
Female	78,524	47%	261	26%	395	53%	218	49%	1040	61%	
Age											
15–24	14,619	10%	26	3%	48	9%	32	7%	54	3%	
25–34	43,612	29%	231	30%	207	37%	82	17%	514	30%	
35–44	49,259	33%	244	32%	282	51%	132	27%	692	41%	
45–64	42,560	28%	273	35%	20	4%	244	50%	440	26%	
Distribution of Turkish immigrants											
Sex											
Male	100,434	52%	807	267%	381	52%	219	46%	710	39%	
Female	94,122	48%	302	27%	355	48%	252	54%	1123	61%	
Age											
15–24	12,311	7%	28	3%	50	9%	38	8%	72	4%	
25–34	26,191	16%	246	28%	153	28%	94	20%	483	26%	
35–44	52,110	32%	342	39%	304	56%	158	34%	799	44%	
45–64	74,784	45%	258	30%	40	7%	181	38%	479	26%	
Distribution of Surinamese immigrants											
Sex											
Male	83,678	45%	418	43%	12	52%	193	96%	535	46%	
Female	101,606	55%	565	57%	11	48%	201	51%	630	54%	
Age											
15–24	13,863	20%	4	1%	1	5%	21	5%	9	1%	
25–34	16,589	24%	147	19%	1	5%	56	14%	197	17%	
35–44	15,503	22%	299	38%	17	85%	118	30%	431	37%	
45–64	23,212	34%	333	43%	1	5%	199	51%	528	45%	

Source. SPVA-2002; NELLS-2010; SIM-2011; Statistics Netherlands, 2016.

**Table 4.** Descriptive Statistics Categorical Data.

	%
<i>Welfare take-up</i>	
Income through labor	64.2
Unemployment benefit	4.8
Occupational-disability benefits	10.8
Social assistance	12.0
No personal income	8.2
<i>Country of origin</i>	
Dutch Antilles	17.7
Morocco	30.4
Turkey	32.5
Suriname	19.4
<i>Education abroad</i>	
Education obtained in Netherlands	62.4
Education obtained abroad	37.6
<i>Physically demanding profession</i>	
No professional career	12.6
Physically nondemanding	70.0
Physically demanding	17.4
<i>Membership formal social capital</i>	
No membership	63.2
Club or societal interest group—none or few	11.2
Migrants' or religious organization—none or few	2.0
Club or societal interest group – mostly	10.5
Migrants' or religious organization – mostly	13.1
<i>Native Dutch friends</i>	
No	16.9
Yes	83.1
<i>Country of origin friends</i>	
No	16.5
Yes	83.5
<i>Sex</i>	
Female	44.9
Male	55.1
<i>Marital status</i>	
Single	18.1
Relationship	13.4
Married or cohabiting	66.2
Widowed or divorced	2.3
<i>Kids in household</i>	
None	29.3
One or two	45.4
Three or more	25.3
<i>Data set source</i>	
SPVA-2002	49.6
NELLS-2010	22.1
SIM-2011	28.3
<i>n</i>	6,189

Note. Total  $N = 6,189$ .

Source. SPVA-2002, NELLS-2010, SIM-2011.

**Table 5.** Descriptive Statistics Interval Data.

	Range		Mean	S.D.
Age (15–19 to 60–64 years)	1 -	10	5.689	.025
Education (no education – university)	1 -	8	3.917	.026
Dutch language proficiency (z-score)	–3.08 -	1.03	–.220	.015
<i>n</i>	6,189			

Source. SPVA-2002, NELLS-2010, SIM-2011.

**Table 6.** Multinomial Logistic Regression Results of “No Income” Category Model 1, Coefficients, Standard Errors, Significance Values, Odds Ratio.

		MODEL 1		
		b	(SE)	Odds Ratio
HUMAN	<i>Education (ref. obtained in Netherlands)</i>			
	Obtained abroad	.128	(.140)	1.136
	<i>Job (ref. physically nondemanding)</i>			
	Physically demanding job	.060	(.266)	1.061
	No professional career	3.185	(.130) <sup>***</sup>	24.173
SOCIAL	<i>Dutch language proficiency (z score)</i>	-.227	(.074) <sup>**</sup>	.797
	<i>Dutch friends (ref. no)</i>			
	Dutch friends	-.431	(.156) <sup>**</sup>	.650
	<i>Membership (ref. no membership)</i>			
	Club or societal interest group—none or few	-.531	(.273) <sup>*</sup>	.588
	Migrants or religious organization—none or few	-.922	(.542)	.398
	<i>Country of origin friends (ref. no)</i>			
	Country of origin friends	-.125	(.207)	.883
	<i>Membership (ref. no membership)</i>			
	Club or societal interest group—mostly	-.207	(.258)	.813
CONTROL	Migrants or religious organization—mostly	-.296	(.199)	.744
	<i>Country of origin (ref. Dutch Antilles)</i>			
	Morocco	.830	(.283) <sup>**</sup>	2.293
	Turkey	.610	(.236)	1.840
	Suriname	-.158	(.220) <sup>***</sup>	.854
	<i>Sex (ref. female)</i>			
	Male	-2.044	(.158) <sup>***</sup>	.130
	<i>Educational level</i>			
	Marital status (ref. single)			
	Relationship	-.779	(.370) <sup>*</sup>	.459
	Cohabiting/married	.838	(.225) <sup>***</sup>	2.312
	Divorced/widowed	.	.	.
	<i>Amount of children in household (ref. no)</i>			
	1 or 2 children household	-.304	(.188)	.739
	3 or more children household	.058	(.213)	1.060
<i>Age</i>	-.101	(.037) <sup>**</sup>	.904	
<i>Data set source (ref. SPVA-2002)</i>				
NELLS-2010	.618	(.215) <sup>**</sup>	1.855	
SIM-2011	1.710	(.177) <sup>***</sup>	5.527	
Constant	-2.236	(.381) <sup>***</sup>		
Cox & Snell R <sup>2</sup> .460				
-2LL (df)	9,894.098 (92)			

Note. Total N = 6,189. Baseline models  $\chi^2$  13,701.533.

\*p < .05. \*\*p < .01. \*\*\*p < .001.

Source. SPVA-2002, NELLS-2010, SIM-2011.