

Cultural and Gender Differences in Gender-Role Beliefs, Sharing Household Task and Child-Care Responsibilities, and Well-Being Among Immigrants and Majority Members in The Netherlands

Fons J. R. van de Vijver

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Abstract The nature and size of culture and gender differences in gender-role beliefs, sharing behavior, and well-being were examined in five cultural groups in The Netherlands (1,104 Dutch mainstreamers, 249 Turkish-, 200 Moroccan-, 126 Surinamese-, and 94 Antillean–Dutch). Acculturative changes in gender-role beliefs and sharing behavior in the immigrant groups were also addressed. It was shown that more egalitarian gender-role beliefs and more sharing were associated with more well-being in all culture and gender groups. Cultural differences were larger for gender-role beliefs than for sharing behavior. Age, educational level, and employment accounted for half of the cultural differences in gender-role beliefs and well-being, but not in household-task and child-care behavior. First-generation immigrants reported more traditional gender-role beliefs than did second-generation immigrants.

Keywords Gender-role beliefs · Sharing of household responsibilities · Well-being · Acculturation

Introduction

The labor market participation of women has increased in the past few decades in industrial societies. This development has the potential to influence beliefs about gender

roles and the division of labor for breadwinning, housework, and child-care. Most of the published studies regarding gender differences in gender-role beliefs have found that women generally hold more egalitarian gender-role beliefs than men (e.g., Larsen and Long 1988; Locke and Richman 1999; Tang and Dion 1999). Published research on cultural differences in gender-role beliefs has focused more on cross-national differences than on cultural-group differences within countries. Studies on cultural differences within countries do not provide a consistent picture of gender equality in plural societies; moreover, it is unclear how this equality is associated with psychological well-being. The current study addresses cultural and gender differences in gender-role beliefs, sharing of household-task and child-care responsibilities, and their relation with well-being among Dutch mainstreamers and members of the four largest groups of immigrants in The Netherlands (Turkish-, Moroccan-, Surinamese-, and Antillean–Dutch). The Dutch society provides an interesting context for studying these differences because, as outlined below, The Netherlands and the countries of origin of the four immigrant groups differ on gender-related cultural values. In addition, each of the four immigrant groups has first- and second-generation members, which enables a study of intergenerational shifts in gender-role beliefs and behaviors.

Gender-Role Beliefs

Gender-role beliefs refer to the general perception of gender roles such as gender-related tasks and power distribution. The social-role approach, the predominant approach to understanding gender-role beliefs, attributes the sources of these beliefs to the different social roles performed by men and women (Eagly and Wood 1991). In the ideology of separate gender roles (traditional family model), women are

F. J. R. van de Vijver (✉)
Tilburg University,
Tilburg, The Netherlands
e-mail: fons.vandevijver@uvt.nl

F. J. R. van de Vijver
North-West University,
Potchefstroom, South Africa

primarily responsible for the home, child rearing, and maintenance of good relationships. Men, in contrast, are primarily responsible for the financial support of the family. Although gender-role beliefs have been measured in a variety of ways, researchers have found in some countries that women report less traditional and more egalitarian gender-role beliefs than do men (e.g., Berkel 2004; Larsen and Long 1988; Locke and Richman 1999; Tang and Dion 1999). Research in Western and non-Western societies showed that education is a major mechanism by which women and, to lesser extent, men have come to favor gender equality. Education is positively associated with attitudes favoring gender equality in Egypt (e.g., Yount 2005). Educational level and employment status are the best predictors of women's beliefs about gender-role equality. Highly educated and employed women in the USA hold the most egalitarian beliefs (Mason et al. 1976). For men, age, education, income level, marital status, and their spouses' employment status are all strong predictors. Older, less educated, married men with full-time homemaker wives in the USA are less egalitarian in their views than younger, unmarried, more educated, high-status men with full-time employed wives (Wilkie 1993).

Several dimensions of cultural variability have been employed to distinguish cultures. The four dimensions of Hofstede (1998, 2001), individualism–collectivism, power distance, uncertainty avoidance, and masculinity–femininity, have been used by many researchers to explain a wide range of cultural differences. Studying gender-role beliefs, power distance and masculinity–femininity turned out to be important. Best and Williams (1994) found in their large-scale cross-cultural study of gender-role beliefs that gender roles were more pronounced in countries that score higher on the cultural dimension of power distance (the extent to which people in the society accept unequal distribution of power). Hofstede pointed out that more masculine societies strive for maximal distinction between how men and women are expected to behave. These societies expect men to be competitive and to strive for material success and expect women to serve and care for non-material quality of life and for children. In more masculine societies, belief in inequality of the sexes dominates, social roles of sexes are different, and the mother has a weaker position in the family. In more feminine countries, like The Netherlands (Hofstede 2001), social roles of the sexes show more overlap, the belief in equality of the sexes is more prevalent, there is less occupational and educational segregation, and the mother has a stronger position in the family. Arrindell (1998) argues that more feminine societies should manifest higher levels of subjective well-being than more masculine ones. More feminine societies would offer both sexes, especially women, more opportunities for the fulfillment of multiple social roles that are associated with more well-being and

relationship satisfaction (e.g., Barnett and Baruch 1987). The Hofstede (2001) database does not specify measures for all countries of origin of the Dutch immigrant groups of our study. However, given the very high score of The Netherlands on femininity and its very low score on power distance, it is fair to expect that Dutch mainstreamers on average score higher on femininity and lower on power distance than any of the immigrant groups, implying that Dutch mainstreamers have more egalitarian gender-role beliefs than the immigrants groups.

Sharing Household Labor

Shared family work concerns the extent to which women and men share the work to be done in their living quarters, notably the shared responsibility for housework and child-care. Besides more egalitarian gender-role beliefs, domestic task division is considered as an important indicator of gender (and marital) equality (Steil 1997). More egalitarian gender-role beliefs are associated with more sharing of domestic labor (Xu and Lai 2004), although the strength of the association is usually weak (Shelton and John 1996). The gender division in paid labor continues to dissolve; yet, the division of household labor remains gendered (Blossfeld and Drobnic 2001). There is strong cross-cultural evidence that women still bear a much larger responsibility for the care of the home and the children than men, even in the feminine countries of North-West Europe (Georgas et al. 2006). Men's educational level is usually positively associated with their participation in housework (e.g., Berado et al. 1987; Haddad 1994). The few American studies that have addressed cultural differences in the division of household labor have yielded mixed results. Some studies conclude that African–American families are more egalitarian in their division of household labor than are European–American families (Ross 1987; Shelton and John 1996) while other researchers argue that the division of household labor in the African–American family is unequal and firmly gendered (Broman 1991; Cronkite 1977; Hossain and Roopnarine 1993). Golding (1990) argues that the division of labor in Mexican–American families is more traditional than in European–American families, mainly because of differences in educational level. In summary, the literature suggests that cross-cultural differences in sharing behavior of household tasks are small or even absent. If present, the cross-cultural differences in sharing may be due to confounding educational differences.

Gender Equality and Psychological Well-Being

According to Steil (1997), men and women both benefit from relationships based on equal sharing of power and

tasks. Persons who more equally share household tasks and child-care, are less likely to experience serious life stresses, such as economic hardship and social isolation. A number of studies reported that women who spend more time on housework tend to report more depression (e.g., Golding 1990; Kurdek 1993). Some studies found that men who share household labor report less well-being than men with a more traditional division of labor (e.g., Glass and Fujimoto 1994), whereas other studies did not find any relation between men's housework roles and psychological well-being (Golding 1990). No study has addressed the relationship in a longitudinal design; therefore, the reported relations reflect statistical associations and may not reflect causal relations.

Acculturation and Gender-Role Beliefs

Longitudinal studies are eminently suitable to address changes in gender-role beliefs and sharing behavior as a result of acculturation (a process of cultural change and learning that individuals experience as a result of prolonged intercultural contact; Arends-Tóth and Van de Vijver 2006); however, such studies are costly and difficult to realize. An alternative method of research is cross-sectional research of immigrant samples from different generations (Georgas et al. 1996; Georgas et al. 2006; Phinney 2006). A proxy of acculturation experience is a person's generational status. Later generations are usually more exposed to and influenced by the mainstream culture. The larger economic success and upward mobility of later generations, which are usually accompanied by a higher level of adjustment to the mainstream society, may be factors that explain how acculturation influences gender-role beliefs and behaviors in immigrant families.

Acculturation experiences modify certain aspects of cultural beliefs and values (Kagitcibasi 2006; Marín and Gamba 2003). The few American studies that have been conducted have found changes in perceived gender roles as a result of acculturation: Traditional gender-role beliefs decrease during acculturation (Leaper and Valin 1996; Rosenthal et al. 1996). More acculturated Mexican-American females held less traditional gender-role beliefs than did less acculturated females (Kranau et al. 1982).

The Dutch Society

The Netherlands, like all Western European societies, has become culturally diverse. A heterogeneous group of immigrants have taken up permanent residence in the country as a result of the Dutch colonial history in the Caribbean area (e.g., Surinamers and Antilleans), the recruitment of cheap labor from the Mediterranean region in the 1960s (e.g., Turks and Moroccans), and in recent

years the influx of refugees mainly from Africa, Eastern Europe, and the Middle East. At present, 18% of the population in The Netherlands is of foreign origin; by 2010 the three largest Dutch cities will have a foreign majority (Sociaal en Cultureel Planbureau 2005).

Turks, Moroccans, Surinamers, and Antilleans form the largest groups of immigrants in The Netherlands (with respective sizes of 2.20, 1.93, 2.02, and .80% of the total population; Garssen et al. 2006). There is a distinction in cultural distance between Turkish and Moroccan immigrants on the one hand and Surinamese and Antillean immigrants on the other hand (Schalk-Soekar et al. 2004). The latter groups are more familiar with the Dutch culture and language than are the former groups.

The question can be asked to what extent the results of studies presented here, often from the USA, will generalize to a Dutch context. We know from various cross-cultural studies that associations between attitudes often generalize well across Western countries. As a consequence, it seems adequate to expect generalizations of associations found in the USA unless dealing with features that show strong differences across the two countries. The presumably most relevant difference between The Netherlands and the USA is the different position on femininity–masculinity (Hofstede 2001); The Netherlands is more feminine. However, there are no indications that this dimension shows different relations with other gender-related attitudes than found elsewhere. As a consequence, we expect that associations reported in American studies will also be observed in our study. Another issue of generalizability involves the distinction between mainstreamers and immigrants. The question should be considered to what extent results obtained among American groups will also hold for Dutch immigrant groups. Dutch immigrant groups prefer an integration strategy in their acculturation process (Arends-Tóth and Van de Vijver 2007), which means that they combine maintenance of their ethnic culture with adjustment to the mainstream culture. Integration is the preferred acculturation orientation of immigrants in many Western countries (Arends-Tóth and Van de Vijver 2006). The process of Westernization of immigrant groups in The Netherlands is commonly found in other countries. Therefore, we argue that acculturative changes that are research findings dealing with the increasing adjustment to a Western society, often reported in American studies, can also be expected in the current study.

Research Questions and Hypotheses

The present study addressed four issues. First, we examined the equivalence of our measures by addressing the question to what extent gender-role beliefs, sharing behavior, and

well-being have the same psychological meaning across cultural and gender groups in The Netherlands (Turkish-, Moroccan-, Surinamese-, Antillean–Dutch, and mainstream Dutch males and females). Equivalence of the concepts is a prerequisite for comparisons of scores across groups. Second, we addressed the question of whether views on gender equality are related to well-being in all cultural and gender groups in the same way. Third, similarities and differences in gender-role beliefs, sharing household labor and child-care, and well-being among the different cultural and gender groups were addressed. We expected more traditional (i.e., less egalitarian) gender-role beliefs, less sharing behavior, and less well-being among immigrants than among Dutch mainstreamers (hypothesis 1). There are fewer cross-cultural differences in sharing household labor than in gender-role beliefs. Moreover, acculturation has been found to lead to changes in gender-role beliefs and sharing behaviors. Combining these findings, we expected more differences in gender-role beliefs than in sharing behavior between immigrants and Dutch mainstreamers (hypothesis 2). Finally, acculturative changes in gender-role beliefs and sharing behavior in the immigrant groups were addressed. Second-generation immigrants were expected to report less traditional gender-role beliefs and more sharing behavior than first-generation immigrants (hypothesis 3), and the differences between the two generations in gender-role beliefs are expected to be larger than in sharing behavior (hypothesis 4).

Method

Participants

This study is part of a large-scale panel study on family- and gender-related issues (The Netherlands Kinship Panel Study, NKPS) that was conducted in the period of 2002–2004. We report here only the results of a subsample of participants who live together with a partner of the other gender and have children living at home. For this study, face-to-face interviews of 1,104 Dutch mainstreamers, 249 Turkish-, 200 Moroccan-, 126 Surinamese-, and 94 Antillean–Dutch adults were usable.

The selection of the mainstream Dutch group was based on a random sample of addresses of private residences in The Netherlands ($N=40,000$), from which 21,571 addresses were useful. For the selection of the immigrant sample the municipal population registers of 13 municipalities with relatively large numbers of immigrants were used. From these municipal population registers, a random sample of households were selected which had at least one person born either in Turkey, Morocco, Suriname, or the Dutch

Antilles, or had at least one parent who was born there. The final selection consisted of 765 Turks, 648 Moroccans, 862 Surinamers, and 826 Antilleans.

Sample members received an introductory letter describing the purpose of the study. A day or two after sending the letter, a trained interviewer contacted the addressee to make an appointment for an interview. In order to ensure random selection of family members, the birthday rule was applied: The first person to have his or her birthday after the first time the household was reached was selected for the interview.

Of the Dutch mainstream sample members, 9,771 people agreed to be interviewed (45.3%). For this study, 1,104 interviews were usable as the others either had more than 25% missing values on the items or were born outside The Netherlands (and were considered as not being Dutch mainstreamers), or had no partner and children living at home. The sample of Dutch mainstreamers consisted of 651 females and 453 males. Their mean age was 37.59 ($SD=6.76$). The mean educational level, which varied from no elementary school (1) to university degree (8), was 5.58 ($SD=1.59$). The employment rate was 83.2%.

Response rates in the immigrant sample varied from 48.0% for Antillean–Dutch to 56.9% for Moroccan–Dutch. A group of 165 bilingual interviewers conducted the interviews. For this study, 669 interviewers (249 Turkish-, 200 Moroccan-, 126 Surinamese-, and 94 Antillean–Dutch) were usable as the others either had more than 25% missing values on the items or had no partner and children living at home. The sample of immigrants consisted of 299 females and 370 males. Their mean age was 38.21 year ($SD=8.92$). The mean educational level, which varied from no elementary school (1) to university degree (8), was 3.42 ($SD=1.96$). The employment rate was 61.0%. Second-generation immigrants ($N=97$) were higher educated and were younger than first-generation immigrants ($N=572$), but the two generations did not differ in employment rate.

Measurements

Gender-role beliefs were measured with 6 items; each item was formulated as a brief statement (e.g., “It is best if women are responsible for household tasks” and “Decisions about important purchases should be made by men”). Response categories ranged from 1 (strongly agree) to 5 (strongly disagree). A higher score reflected less traditional, more liberal gender-role beliefs. Cronbach’s alpha was .67 for the total sample.

Sharing household responsibilities, addressing behavioral aspects of gender-role division, were measured with seven items using a 3-point scale with the following anchor

points: 1 (no sharing: only partner of only participant), 2 (some sharing: more often partner or participant), and 3 (about equally shared). Three items addressed household tasks (shopping, cleaning, and cooking) and four items measured child-care responsibilities (dressing and washing, bringing to school, staying at home if child is ill or being awake at night, and talking about problems and emotions). A higher score indicated more sharing. The value of Cronbach's alpha was .75.

Psychological well-being was measured with three scales: mental health, social support, and partner relationship. Mental health was measured with three items (e.g., "How often did you feel happy in the past four weeks?"). Answers could be given on a six-point Likert scale, ranging from 1 never to 6 always. Cronbach's alpha was .74. Social support (e.g., "I have many people in whom I can confide") was measured with four items on a 3-point scale, ranging from 1 yes, 2 sometimes, to 3 no. Two items of social support were reverse scored so that higher scores on an item reflected more social support. The value of Cronbach's alpha was .65. Partner relationship was measured with one item, asking respondents to describe their relationships with their partners on a four-point scale, ranging from 1 (not so good) to 4 (very good). A higher score on the components of well-being indicates higher well-being.

Analytic Methods

Scores can only be compared across cultural groups if the instrument used has the same psychological meaning in these groups. Equality of meaning is called structural equivalence (Van de Vijver and Leung 1997). Similarity of factors in an exploratory or confirmatory factor analysis is a common criterion for structural equivalence. In exploratory factor analysis, employed in the current research, correspondence between factors is expressed in terms of some factorial agreement index, such as Tucker's phi. A value higher than .90 is seen as evidence for factorial similarity (Van de Vijver and Leung). Structural equivalence was examined per scale by comparing the factor solution in a cultural and gender group (e.g., Turkish males) with the factor solution in the combined and weighted nine other groups (Dutch-, Moroccan-, Surinamese-, and Antillean-Dutch males and females). Correspondence between factors was assessed by Tucker's phi. In all the ten groups, unidimensional scales emerged for gender-role beliefs, perceived social support, mental health, and sharing behavior. The values of the Tucker's phi coefficients for each group and each scale are presented in Table 1. The lowest observed value was .90, which implies that the scales are equivalent across groups and that the scales have the same psychological meaning across the groups.

Table 1 Tucker's phi coefficients per scale for each cultural and gender group.

	Scales			
	Gender-role beliefs	Sharing behavior	Social support	Mental health
Groups				
Dutch males	.959	.996	.995	.997
Dutch females	.900	.998	.996	.999
Turkish males	.965	.973	.967	.999
Turkish females	.979	.990	.963	.995
Moroccan males	.924	.986	.999	.999
Moroccan females	.995	.997	.998	.900
Surinamese males	.987	.997	.960	.998
Surinamese females	.986	.996	.938	.998
Antillean males	.986	.980	.997	.999
Antillean females	.962	.991	.966	.998

Results

The results are divided into three parts: (1) influence of gender equality (beliefs and behavior) on well-being; (2) similarities and differences among the cultural and gender groups in gender-role beliefs, sharing behavior, and well-being; (3) generational differences in gender equality.

A Model of Gender Equality and Well-Being

To investigate the influence of gender equality (i.e., gender-role beliefs and sharing behavior) on well-being, a structural equation modeling (multigroup analysis) was performed using Amos 5.0 (Arbuckle 2003). A MIMIC model (Multiple Indicators, Multiple Causes; Jöreskog and Goldberger 1975) was tested. In this model two or more antecedent conditions impact on a single latent variable that is measured using two or more indicators. Gender-role beliefs and sharing behavior were the antecedent variables that are taken to influence a latent variable, labeled well-being, which is measured by three indicators, mental health, perceived social support, and partner relationship. Cultural and gender similarities and differences were explored by testing the fit of a hierarchy of models with increasing constraints on the number of invariant parameters to the data (see Table 2). The structural-weights model (see Fig. 1), in which the factor loadings on well-being and the regression coefficients of gender-role beliefs and sharing behavior were assumed to be invariant across all groups, was the most restrictive model with an acceptable fit: $\chi^2(76, N=1,773), p<.05; \chi^2/df=1.41$ (recommended, ≤ 3.00). Other indices confirmed the good fit of the model: The goodness of fit index (GFI) was .98 (recommended,

Table 2 Results of the multi-group structural equation model analysis.

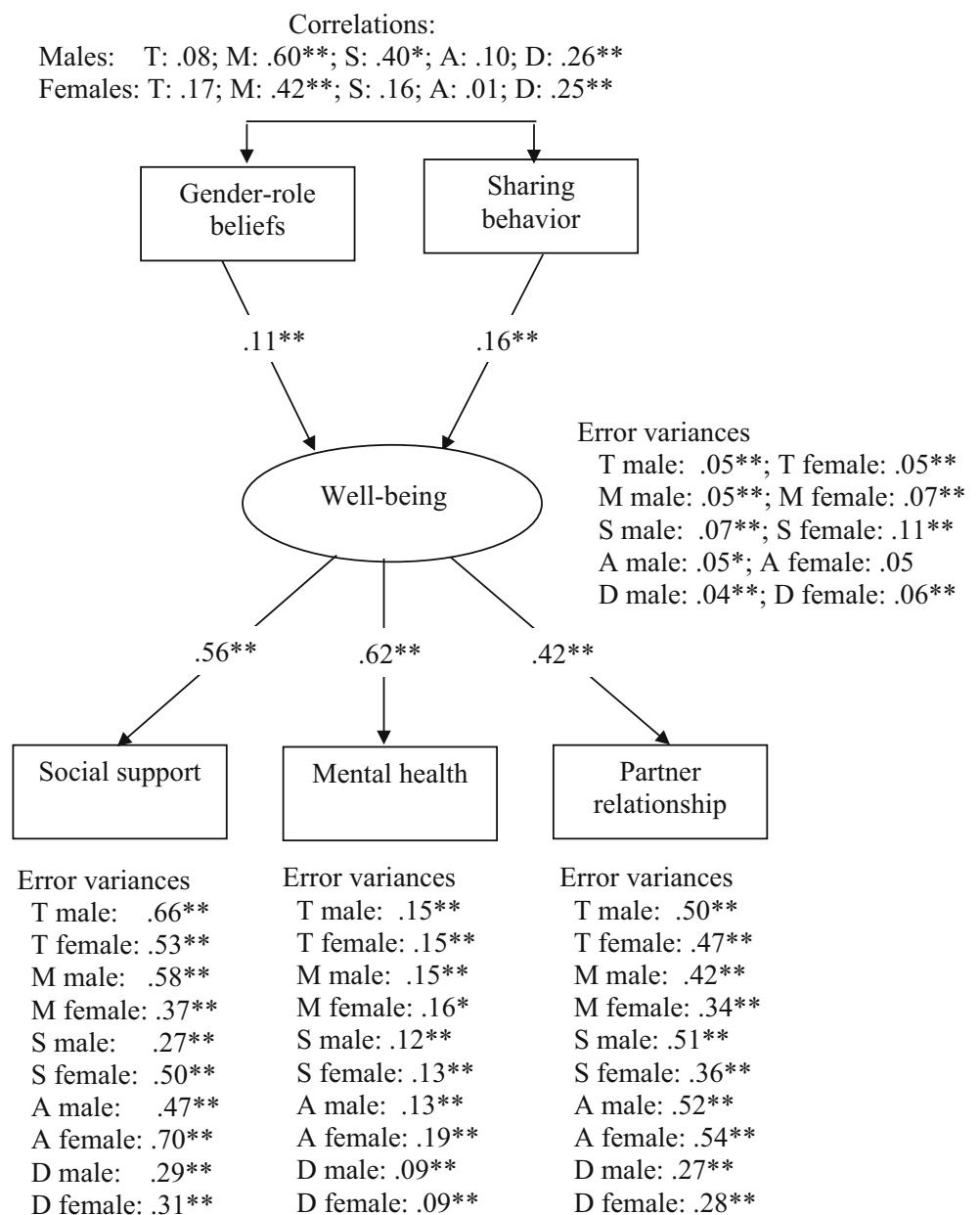
Model	χ^2/df	GFI	AGFI	TLI	RMSEA	$\Delta\chi^2$	Δdf
Unconstrained	1.47*	.99	.95	.93	.02	–	–
Measurement weights	1.61**	.98	.95	.91	.02	34.36*	18
<i>Structural weights</i>	<i>1.41*</i>	<i>.98</i>	<i>.95</i>	<i>.94</i>	<i>.02</i>	<i>14.12</i>	<i>18</i>
Structural covariances	2.22**	.94	.92	.82	.03	121.10**	27
Structural residuals	2.20**	.94	.92	.83	.03	18.33*	9
Measurement residuals	2.84**	.90	.90	.73	.03	147.86**	27

Most restrictive model with a good fit is printed in italics.
* $p < .05$
** $p < .01$

$\geq .95$), the adjusted goodness of fit index (AGFI) was .95 (recommended, $\geq .90$), the Tucker Lewis index (TLI) was .94 (recommended, $\geq .90$), and the root mean square error of approximation (RMSEA) was .02 (recommended, $\leq .05$).

The good fit of the structural-weights model indicates that gender-role beliefs and sharing behavior are associated with well-being in the same way in all ten groups; more egalitarian gender-role beliefs and more sharing of house-

Fig. 1 A model of gender equality and psychological well-being. *A* Antillean–Dutch, *D* main-stream Dutch, *M* Moroccan–Dutch, *S* Surinamese–Dutch, *T* Turkish–Dutch.



hold-tasks and child-care were related to higher well-being (standardized path coefficients, $\beta=.11$ and $\beta=.16$, $p<.01$, respectively). It may be noted that we found consistency of the relationship for both men and women, while some literature reported a reverse relationship for both genders. Sharing behavior was somewhat more important for well-being than were gender-role beliefs; however, the effects of beliefs and behavior were small. The correlations between beliefs and behavior were positive in all cultural groups: Individuals with more egalitarian beliefs tended to report more sharing behavior. The strength and significance, however, varied across the samples. The strongest correlations were found for Moroccan–Dutch, the weakest for the Antillean–Dutch. In addition, the correlation was slightly stronger for males (mean $r=.29$) than for females (mean $r=.20$).

Comparisons Across Cultural and Gender Groups

In order to examine gender and cultural differences in gender equality and well-being, a multivariate analysis of variance was carried out with cultural group (five levels) and gender (two levels) as the independent factors and the mean scores of the scales of gender-role beliefs, sharing behavior, social support, partner relationship, and mental health as dependent variables. The mean scores of scales per cultural group and gender are presented in Table 3. The multivariate effect of culture was significant, Wilks' lambda=.78, $F(20, 1,773)=23.14$, $p<.01$, and had a medium effect size of $\eta^2=.06$ (the latter value is the partial eta square, which gives the proportion of variance

accounted for by culture in the analysis; boundary values for small, medium, and large effect sizes are .01, .06, and .14; Cohen 1988). The multivariate effect of gender was also significant, Wilks' lambda=.96, $F(5, 1,773)=15.02$, $p<.01$, and had a small effect size of $\eta^2=.04$. Although significant, the effect size of the interaction was less than .01 and is not further considered here (Wilks' lambda=.98, $F(20, 1,773)=1.89$, $p<.05$).

The univariate effects of culture on gender-role beliefs, social support, and mental health showed medium effect sizes ($\eta^2=.08$, .11, and .08, respectively), while sharing behavior and partner relationship revealed small cultural differences ($\eta^2=.02$ and .05, respectively). The univariate effect of gender on sharing behavior showed a small effect size ($\eta^2=.03$); males reported more sharing behavior in household task and child-care than did females in all cultural groups (see also Table 3). The effect sizes for gender-role beliefs, social support, partner relationship, and mental health were below .01.

In addition to the above comparison of all groups, we were also interested in a comparison of the mean scores of mainstream and immigrant groups. Planned comparisons were carried out to test the expectation that mainstreamers had higher scores on gender-role beliefs, sharing behavior, and well-being than immigrants. The weights in the comparison were 1.00 for the mainstream group and $-.25$ for each of the four immigrant groups. In line with our expectation, the t ratios for gender-role beliefs and well-being were significant, $t(1,768)=5.34$ and 10.41 , $ps<.01$, respectively); however, the t test of sharing did not yield a significant difference, $t(1,768)=-.82$, ns . Our first hypothesis

Table 3 Mean scores (SD) per scale for each cultural and gender group.

Groups	Scales				
	Gender-role beliefs ^a	Sharing behavior ^b	Social support ^b	Mental health ^c	Partner relation ^d
Dutch males _a	3.70 (.68) _{cde}	2.27 (.37) _{bcdj}	2.69 (.35) _{cd}	4.90 (.69) _{bcddef}	3.59 (.58) _{defi}
Dutch females _b	3.81 (.63) _{cde}	2.07 (.42) _{adegi}	2.73 (.38) _{cdefgh}	4.71 (.78) _{acdei}	3.57 (.61) _{defi}
Turkish males _c	3.05 (.69) _{abefghij}	2.11 (.44) _{adg}	2.32 (.45) _{abefhij}	4.26 (.95) _{abgi}	3.44 (.74) _f
Turkish females _d	3.25 (.76) _{abfghi}	1.91 (.46) _{abceefghi}	2.29 (.44) _{abefhij}	4.06 (.91) _{abfghij}	3.29 (.74) _{ab}
Moroccan males _e	3.45 (.79) _{abchi}	2.23 (.45) _{bd}	2.59 (.47) _{bcd}	4.33 (.90) _{abgi}	3.25 (.69) _{ab}
Moroccan females _f	3.64 (.80) _{cd}	2.13 (.55) _d	2.57 (.50) _{bcd}	4.51 (.81) _{adi}	3.08 (.68) _{abegh}
Surinamese males _g	3.66 (.78) _{cd}	2.40 (.54) _{bcdj}	2.51 (.46) _b	4.97 (.82) _{cde}	3.53 (.73) _f
Surinamese females _h	3.90 (.66) _{cde}	2.18 (.59) _d	2.55 (.48) _{bcd}	4.63 (1.04) _{di}	3.44 (.76) _f
Antillean males _i	3.91 (.65) _{cde}	2.32 (.45) _{bdi}	2.59 (.43) _{cd}	5.09 (.83) _{bcddefh}	3.25 (.82) _{ab}
Antillean females _j	3.61 (.80) _c	1.96 (.62) _{agi}	2.59 (.53) _{cd}	4.70 (1.03) _d	3.20 (.76) _{ab}

Subscripts a, b, c, d, e, f, g, h, i, j indicate that in post hoc comparison (Bonferroni) tests, the mean score differs significantly (at least at $p<.05$ level) from the mean score of Dutch males (a), Dutch females (b), Turkish males (c), Turkish females (d), Moroccan males (e), Moroccan females (f), Surinamese males (g), Surinamese females (h), Antillean males (i), and Antillean females (j).

^a Scale range, 1–5

^b Scale range, 1–3

^c Scale range, 1–6

^d Scale range, 1–4

(i.e., immigrants hold more traditional gender-role beliefs, less sharing behavior, and less well-being than Dutch mainstreamers) was confirmed for gender-role beliefs and well-being but not for sharing behavior. Moreover, the findings corroborate the second hypothesis in that the differences between immigrants and Dutch mainstreamers in gender-role beliefs are higher than in sharing behavior. Cohen's d was then employed to compare the size of the differences in gender-role beliefs and well-being between Dutch mainstreamers and the combined immigrant groups (boundary values for small, medium, and large effects are .20, .50, and .80, respectively; Cohen 1988). The difference between the mean scores of Dutch mainstreamers and immigrants was small for gender-role beliefs ($d=.40$). The effect size of well-being (latent variable) was of medium size ($d=.62$), with mainstreamers reporting higher values. The effect size of social support was also of medium size ($d=.60$); mainstreamers reported more social support. Finally, the effect sizes of partner relationship and mental health were small (mainstreamers were more satisfied with the quality of the relationship with their partner and showed fewer mental health problems; $d=.40$ and $d=.38$, respectively). It can be concluded that well-being is an important source of cultural differences between the mainstream and immigrant groups in The Netherlands: Dutch mainstreamers reported more well-being. On the other hand, there is a remarkable absence of cultural differences in the division of household labor and child-care responsibilities between partners. Finally, gender and cultural differences were further examined by conducting post hoc comparisons in which the mean of a specific combination of gender and ethnic group (e.g., Moroccan females) was compared to the means of the other groups (see Table 3). In general, Turkish females differed the most from the other groups since they reported less sharing behavior, social support, mental health,

and they held more traditional gender-role beliefs than the other groups (except for Turkish males). Turks (males and females), and Moroccan females differed the most from the other groups in gender-role beliefs and in sharing behavior.

The question can be asked to what extent differences in the psychological variables under study are a reflection of genuine cultural and gender differences and to what extent they reflect confounding differences in background characteristics of the samples, notably education. The question was addressed by comparing the effect of culture and gender before and after correction for the participants' age, educational level, and employment status. In the first step, the influence of background variables on gender equality and well-being was investigated. Five separate multiple regression analyses were carried out for the combined groups, with gender-role beliefs, sharing behavior, social support, partner relationship, and mental health as dependent variables and age, educational level, and employment status as independent variables. As can be seen in Table 4, background variables influenced gender-role beliefs most (adjusted $R^2=.13$); educational level was the strongest predictor, followed by employment. In the second step, the residual scores were treated as test variables, meaning that the scores on values were corrected for individual background characteristics (i.e., age, education, and employment). After correction, the multivariate effect size of culture was still significant (Wilks' lambda=.86, $F(20, 17,973)=13.38$, $p<.01$); its value decreased from .06 before to .04 after correction. The univariate effect size of gender-role beliefs changed from .08 to .04, the effect size of sharing behavior did not change (.02 before and after correction). The effect size of social support changed from .11 before to .05 after correction, the effect size of partner relation from .05 to .02, and the effect size of mental health from .08 to .03. In summary, individual background

Table 4 Multiple regression analyses of gender-role beliefs, sharing behavior, social support, mental health, and partner relationship using background variables as predictors (standardized regression coefficients).

Predictors	Dependent variables				
	Gender-role beliefs	Sharing behavior	Social support	Mental health	Partner relation
Age	NS	.06*	NS	NS	NS
Education ^a	.34**	.13**	.19**	.17**	.11**
Employment ^b	NS	.14**	.13**	.18**	.09**
Adjusted R^2	.13**	.05**	.07**	.08**	.03**

Numbers in cells are standardized regression coefficients.

^a Educational level was scored on an eight-point scale: 1 (no education), 2 (primary school), 3 (lower vocational secondary school), 4 (lower general secondary school), 5 (intermediate vocational secondary school), 6 (upper general secondary school), 7 (higher vocational school), 8 (university or post-graduate degree).

^b Unemployed=1, employed=2

* $p<.05$

** $p<.01$

characteristics accounted on average for half of the cultural differences in gender-role beliefs, social support, mental health, and partner relationship, but they did not influence sharing behavior significantly. After correction for individual background cultural differences became small (or remained small in the case of sharing behavior). Our analyses suggest that a substantial part of score differences of cultural groups are not due to their cultural background but to demographic variables such as education.

The multivariate effects of gender remained significant after correction for background variables, Wilks' lambda = .97, $F(5, 1,773) = 9.58$, $p < .01$; its effect size changed from .04 to .03. The univariate effect size of sharing behavior changed from .03 to .02, the other variables had effect sizes below .01. The effect size of the interaction remained below .01. It can be concluded that gender differences were hardly affected by background variables.

Generational Differences

The difference in gender-role beliefs, sharing behavior, and well-being among first- and second-generation immigrants, and Dutch mainstreamers was investigated in a multivariate analysis of variance before and after correction for individual background characteristics (i.e., age, educational level, and employment). The multivariate effect of generation before correction for background variables was significant, Wilks' lambda = .87, $F(3, 1,768) = 42.77$, $p < .01$, and had a medium effect size of $\eta^2 = .07$. The univariate analysis of well-being showed a medium effect size ($\eta^2 = .09$), gender-role beliefs revealed a small effect size ($\eta^2 = .05$), and sharing behavior was not significant (*ns*). A comparison of first- and second-generation immigrants with Dutch mainstreamers, using Cohen's *d*, revealed that first-generation immigrants had more traditional gender-role beliefs ($d = .55$, $p < .01$), but they did not report less sharing than Dutch mainstreamers (*ns*). Second-generation immigrants did not report more traditional gender-role beliefs and sharing behavior than Dutch mainstreamers (*ns*). We found that first-generation immigrants had more traditional gender-role beliefs than had second-generation immigrants ($d = .50$, $p < .01$), but no significant generational differences were found for sharing behaviors (*ns*). The differences between first- and second-generation immigrants and between second-generation immigrants and Dutch mainstreamers on well-being (latent variable) showed a small effect size ($d = .41$ and $d = .26$, respectively, both $ps < .01$), while the difference between first-generation immigrants and Dutch mainstreamers was of medium size ($d = .70$, $p < .01$). These findings provide partially support for the third hypothesis according to which second-generation immigrants report less traditional gender-role beliefs than first-generation immigrants. However, no significant differ-

ences were found in sharing behavior. In addition, hypothesis 4 was confirmed since the difference between the two generations was larger in gender-role beliefs than in sharing behavior.

After correction for age, educational level, and employment, the multivariate effect size of generation was still significant (Wilks' lambda = .96, $F(3, 1,768) = 12.77$, $p < .01$); its value decreased from .07 before to .02 after correction. The univariate effect size of well-being changed from .09 to .02, the effect size of gender-role beliefs changed from .05 to .01, and the effect size of sharing behavior did not change. The pattern of differences between first and second-generation immigrants and Dutch mainstreamers after correction for background variables remained the same but the differences became smaller.

In summary, larger differences were found for gender-role beliefs than for sharing behavior across the two generations. In addition, the differences were larger between first-generation immigrants and Dutch mainstreamers than between second-generation immigrants and Dutch mainstreamers. The results suggest increasing levels of adjustment of the immigrant groups to the Dutch mainstream culture in the domains studied. Finally, the analyses revealed that part of the cultural differences were due to differences in age, educational level, and employment status. After correction for these background variables, cultural differences became small.

Discussion

The aim of this study was to investigate the nature and size of cultural and gender differences in gender-role beliefs, sharing of household-task and of child-care responsibilities between partners, and well-being in five cultural groups in The Netherlands (Dutch mainstreamers, Turkish-, Moroccan-, Surinamese-, and Antillean–Dutch). An essential condition for making valid comparisons among groups is that the concepts measured have the same psychological meaning (i.e., identical structure) for the groups. It was shown that the structures of the concepts were identical for the ten groups, implying that the concepts can be compared.

The four hypotheses were largely confirmed. Less egalitarian gender-role beliefs and less well-being were reported by immigrants than by Dutch mainstreamers, but no significant differences were found in sharing behavior (hypothesis 1 was partially confirmed). Cultural differences were larger for gender-role beliefs than for sharing behavior (hypothesis 2 was confirmed). Sharing of household-task and child-care responsibilities between partners, which can be taken to consist of the behavioral aspects of gender equality, showed much similarity across the five cultural groups and also between generations. Generational differ-

ences in gender-role beliefs were shown in all immigrant groups. Second-generation immigrants reported less traditional gender-role beliefs than first-generation immigrants, but they did not report more sharing behavior than first-generation immigrants (hypothesis 3 was partially confirmed). Finally, the difference between the two generations in gender-role beliefs was larger than in sharing behavior (hypothesis 4 was confirmed). The present study shows that acculturation makes the views of cultural groups in The Netherlands on gender-role beliefs less traditional and more in line with the Dutch mainstream. Differences in gender-role beliefs between generations could be largely explained by differences in background characteristics, notably educational level. Our findings indicate that this acculturative shift in gender-role beliefs may be primarily a consequence of changes in background variables such as the higher educational level of second-generation immigrants. We found that gender-role beliefs were more influenced by individual background variables (especially by education) than was sharing behavior. The stronger context relatedness of gender-role beliefs suggests that they are more under external, presumably normative control. Our results can be adequately summarized by stating that we found more cultural and generational differences in beliefs than in practices and that these differences were mainly due to contextual differences between cultural groups, such as education.

We found that acculturative shifts are engendered by factors such as education and employment status. These factors are presumably proxies of learning mechanisms used by socialization agents in the native and host culture, such as exposure to the new culture, observational learning, and adverse reactions to behaviors viewed as common or normative in the host or native culture. Teachers, other pupils, significant others from the mainstream or immigrant group, and colleagues at work are important “acculturation agents” who induce acculturative shifts among immigrants.

The demographics of many Western societies have changed nowadays and the majority of women are no longer full-time homemakers. The focus of research has also changed. Investigators are less interested in whether marriage per se is less or more beneficial for women than in attempting to understand the ways in which gender-related aspects facilitate or impede well-being. In our samples gender equality was related to well-being in all cultural and gender groups in the same way: More egalitarian gender-role beliefs and more sharing were associated with more well-being. Moreover, individuals in all cultural groups with more egalitarian gender-role beliefs tended to report more sharing behavior. Still, a stronger association was found for males than for females. This finding is in line with studies which indicate that men’s gender-role beliefs are more strongly associated with the division of household

task than are women’s (Shelton and John 1996). The strength and significance of the association also varied across cultural groups: The strongest relation was found in the Moroccan–Dutch sample.

We found that women held more egalitarian beliefs than men, although gender differences were very small. The finding that men reported more sharing of household and child-care responsibilities than women did in all cultural groups is somewhat surprising. We offer four explanations for this unexpected finding. First, this finding can presumably be explained by a self-serving bias of male respondents assuming that they see sharing more as the implicit norm when presenting themselves to interviewers than do female respondents. Second, the reference-group effect (Heine et al. 2002) holds that people think about themselves and about their behaviors compared with similar others and one’s reference group affects perceptions. When male respondents answer questions about sharing behavior they might evaluate themselves in comparison with other males, or with the “average” male, and possibly with their fathers. With this reference group in mind they report that they share household and child-care tasks with their female partners. Third, knowing the implicit norm of task sharing, males remember better what they have done in the household than what females have done. Finally, the last explanation addresses methodological concerns. It was shown that direct general questions about household-task sharing produce higher estimates for activities that occur frequently and slightly lower estimates for task segregation (Shelton and John 1996). Male respondents in our study probably overestimate their own housework time and underestimate the time spent by their female partner because of the way questions were asked. Moreover, instead of a three-point response scale that was used in this study, a more detailed response scale addressing the frequencies of doing household tasks could shed a more detailed light on sharing practices.

This study contributes to the growing literature on gender-related beliefs and practices. Our study extends the cross-national finding by Georgas et al. (2006) that the division of labor in the household continues to be gendered in various countries to both mainstreamers and immigrant groups in The Netherlands. We did not find large cultural difference in the division of household labor and child-care responsibilities between men and women. Cultural differences remain in gender-role beliefs but they decrease after correction for background variables. Background variables, especially educational level, are mainly responsible for differences in gender-role beliefs across cultural groups and between generations. Sutor (1991) argues that satisfaction with division of domestic labor could show more gender and culture differences and could be a better predictor of well-being and marital quality than actual sharing behavior.

In addition, some researchers have turned their research attention to the question of whether the relation between the division of household labor and well-being depends on the perception of fairness and personal preference (Wilkie et al. 1998). Future research could elaborate more on cultural differences in satisfaction, in perception of fairness in gender equality, and in the relation of these variables with actual behavior division in the household.

References

- Arbuckle, J. J. (2003). *Amos 5.0 user's guide*. Chicago: Smallwaters.
- Arends-Tóth, J. V., & Van de Vijver, F. J. R. (2006). Assessment of psychological acculturation: Choices in designing an instrument. In D. L. Sam & J. W. Berry (Eds.), *Handbook of acculturation psychology* (pp. 142–160). Cambridge, UK: Cambridge University Press.
- Arends-Tóth, J. V., & Van de Vijver, F. J. R. (2007). Acculturation attitudes: A comparison of measurement methods. *Journal of Applied Social Psychology, 37*, 1462–1488.
- Arrindell, W. A. (1998). Femininity and subjective well-being. In G. Hofstede (Ed.), *Masculinity and femininity: The taboo dimension of national cultures* (pp. 44–54). Thousand Oaks, CA: Sage.
- Barnett, R., & Baruch, G. (1987). Determinants of fathers' participation in family work. *Journal of Marriage and the Family, 49*, 29–40.
- Berado, D. H., Shehan, C. L., & Leslie, G. R. (1987). A residue of tradition: Jobs, careers, and spouses' time in housework. *Journal of Marriage and the Family, 49*, 381–390.
- Berkel, L. A. (2004). A psychometric evaluation of the sex-role egalitarianism scale with African Americans. *Sex Roles, 50*, 737–742.
- Best, D. L., & Williams, J. E. (1994). Masculinity/femininity in the self and ideal self descriptions of university students in fourteen countries. In A. M. Bouvy, F. J. R. Van de Vijver, P. Boski, & P. Schmitz (Eds.), *Journeys into cross-cultural psychology* (pp. 297–306). Lisse, The Netherlands: Swets & Zeitlinger.
- Blossfeld, H. P., & Drobnic, S. (2001). *A cross-national comparative approach to couples' careers*. Oxford, UK: Oxford University Press.
- Broman, C. L. (1991). Gender, work-family roles, and psychological well-being of blacks. *Journal of Marriage and the Family, 53*, 504–520.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd Ed.). Hillsdale, NJ: Erlbaum.
- Cronkite, R. C. (1977). The determinants of spouses' normative preferences for family roles. *Journal of Marriage and the Family, 39*, 575–585.
- Eagly, A. H., & Wood, W. (1991). Explaining sex differences in social behavior: A meta-analytic perspective. *Personality and Social Psychology Bulletin, 17*, 306–315.
- Garssen, J., Nicolaas, H., & Sprangers, A. (2006). *Demografie van de allochtonen in Nederland* [Demographics of immigrant groups in The Netherlands]. Retrieved August 19, 2007 from <http://www.cbs.nl/NR/rdonlyres/CCD504EA-9D41-40C2-AE28-BFB0A51C2045/0/2005k3b15p096art.pdf>
- Georgas, J., Berry, J. W., Shaw, A., Christakopoulou, S., & Mylonas, K. (1996). Acculturation of Greek family values. *Journal of Cross-Cultural Psychology, 27*, 329–338.
- Georgas, J., Berry, J. W., Van de Vijver, F. J. R., Kagitçibasi, C., & Poortinga, Y. H. (2006). *Families across cultures: A 30-nation psychological study*. New York: Cambridge University Press.
- Glass, J., & Fujimoto, T. (1994). Housework, paid work, and depression among husbands and wives. *Journal of Health and Social Behavior, 35*, 179–191.
- Golding, J. M. (1990). Division of household labor, strain, and depressive symptoms among Mexican American and non-Hispanic whites. *Psychology of Women Quarterly, 14*, 103–117.
- Haddad, T. (1994). Men's contribution to family work: A re-examination of "time availability." *International Journal of Sociology of the Family, 24*, 87–111.
- Heine, S. J., Lehman, D. R., Peng, K., & Greenholtz, J. (2002). What's wrong with cross-cultural comparisons of subjective Likert scales?: The reference-group effect. *Journal of Personality and Social Psychology, 82*, 903–918.
- Hofstede, G. (1998). *Masculinity and femininity: The taboo dimension of national cultures*. Thousand Oaks, CA: Sage Publications.
- Hofstede, G. (2001). *Culture's consequences. Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage.
- Hossain, Z., & Roopnarine, J. L. (1993). Division of household labor and child care in dual-earner African-American families with infants. *Sex Roles, 29*, 571–583.
- Jöreskog, K. G., & Goldberger, A. S. (1975). Estimation of a model with multiple indicators and multiple causes of a single latent variable. *Journal of the American Statistical Association, 70*, 631–639.
- Kagitçibasi, C. (2006). An overview of acculturation and parent-child relationships. In M. H. Bornstein & L. R. Cote (Eds.), *Acculturation and parent-child relations: Measurement and development* (pp. 79–95). Mahwah, NJ: Lawrence Erlbaum.
- Kranau, E. J., Green, V., & Valencia-Weber, G. (1982). Acculturation and the Hispanic woman: Attitudes toward women, sex-role attribution, sex-role behavior, and demographics. *Hispanic Journal of Behavioral Science, 4*, 21–40.
- Kurdek, L. A. (1993). The allocation of household labor in gay, lesbian, and heterosexual married couples. *Journal of Social Issues, 49*, 127–134.
- Larsen, K. S., & Long, E. (1988). Attitudes toward sex-roles: Traditional or egalitarian? *Sex Roles, 19*, 1–12.
- Leaper, C., & Valin, D. (1996). Predictors of Mexican American mothers; and fathers' attitudes toward gender equity. *Hispanic Journal of Behavioral Sciences, 18*, 343–355.
- Locke, L. M., & Richman, C. L. (1999). Attitudes toward domestic violence: Race and gender issues. *Sex Roles, 40*, 227–247.
- Marin, G., & Gamba, R. J. (2003). Acculturation and changes in cultural values. In K. M. Chun, P. B. Organista, & G. Marin (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 83–93). Washington, DC: American Psychological Association.
- Mason, K. O., Czajka, J. L., & Arber, S. (1976). Changes in U.S. women's sex-role attitudes, 1964–1974. *American Sociological Review, 41*, 573–596.
- Phinney, J. S. (2006). Acculturation is not an independent variable: Approaches to studying acculturation as a complex process. In M. H. Bornstein, & L. R. Cote (Eds.), *Acculturation and parent-child relations: Measurement and development* (pp. 79–95). Mahwah, NJ: Lawrence Erlbaum.
- Rosenthal, D., Rainieri, N., & Klimdis, S. (1996). Vietnamese adolescents in Austria : Relationships between perceptions of self and parental values, intergenerational conflict, and gender dissatisfaction. *International Journal of Psychology, 31*, 81–91.
- Ross, C. E. (1987). The division of labor at home. *Sociological Forces, 65*, 816–833.
- Schalk-Soekar, R.G. S., Van de Vijver, F. J. R., & Hoogsteder, M. (2004). Attitudes toward multiculturalism of immigrants and majority members in The Netherlands. *International Journal of Intercultural Relations, 28*, 533–550.

- Shelton, B. A., & John, D. (1996). The division of household labor. *Annual Review of Sociology*, 22, 299–322.
- Sociaal en Cultureel Planbureau (2005). *Jaarrapport integratie [Annual Integration Report]*. The Hague: Sociaal en Cultureel Planbureau.
- Steil, J. M. (1997). *Marital equality: Its relationship to the well-being of husbands and wives*. Thousand Oaks, CA: Sage.
- Suitor, J. J. (1991). Marital quality and satisfaction with the division of household labor across the family cycle. *Journal of Marriage and the Family*, 53, 221–230.
- Tang, T. N., & Dion, K. L. (1999). Gender and acculturation in relation to traditionalism: Perception of self and parents among Chinese students. *Sex Roles*, 41, 17–29.
- Van de Vijver, F. J. R., & Leung, K. (1997). *Methods and data analysis for cross-cultural research*. Thousand Oaks, CA: Sage.
- Wilkie, J. (1993). Changes in U.S. men's attitudes toward the family provider role, 1972–1989. *Gender & Society*, 7, 261–279.
- Wilkie, J. R., Ferree, M. M., & Ratcliff, K. S. (1998). Gender and fairness: Marital satisfaction in two-earner couples. *Journal of Marriage and the Family*, 60, 577–594.
- Xu, X., & Lai, S. C. (2004). Gender ideologies, marital roles, and marital quality in Taiwan. *Journal of Family Issues*, 25, 318–355.
- Yount, K. M. (2005). Women's family power and gender preference in Minya, Egypt. *Journal of Marriage and the Family*, 67, 410–428.