Dr Katarzyna Hamer
Institute of Psychology, Polish Academy of Sciences
Warsaw, Poland
Prof. Sam McFarland
Department of Psychology, Western Kentucky University, USA
Dr Magdalena Łużniak-Piecha
University SWPS, Warsaw, Poland
Agnieszka Golińska
MA, Social Psychology, Tecnologico de Monterrey, Mexico

Multiple social identifications and their relation to life satisfaction, physical well-being and feeling of discrimination in the cross-cultural context

1. Introduction

Many studies have found a positive link between the number of social identifications and well-being (e.g., Brook, Garcia & Fleming, 2008; Greenaway, Cruwys, Haslam & Jetten, 2016; Haslam, Cruwys & Haslam, 2014; Miller, Wakefield & Sani, 2016). However, they usually examine just a few selected relationships in this context. But, in a contemporary social world, people belong to many social groups that may not be captured by these earlier studies. In previous studies dealing with the number of social identifications that individuals have, researchers focused on maximum of about a dozen of them (e.g., Brook et al., 2008), while we propose a much wider approach. Additionally, we explore this issue in four different countries on two continents, examining the role of cultural context in Poland, the United States, Mexico and the United Kingdom.

Further, we explore the number of social identifications in relation to perceived discrimination. While well-being is lower among people who feel discriminated against, the Rejection-Identification Model suggests that social identifications can serve as a buffer from the harmful effects of discrimination (Branscombe, Schmitt & Harvey, 1999). Many researchers have confirmed this effect (e.g. Garstka, Schmitt, Branscombe & Hummert, 2004; Giamo, Schmitt & Outten, 2012; Jasinskaja-Lahti, Liebkind & Solheim, 2009; Jetten, Branscombe, Schmitt & Spears, 2001; Latrofa, Vaes, Pastore & Cadinu, 2009; Ramos, Cassidy, Reicher & Haslam, 2012). However, they tested it mostly on identification with the specific discriminated group. Our study offers wider approach. We assume that discriminated individuals may seek support by identifying additionally with other groups (e.g., identifications with people sharing the same important beliefs, human rights activists, members of the same subculture, etc.) as belonging to more groups may help buffer the

negative effects of felt discrimination. Therefore, we hypothesize that the number, strength and the type of social identifications are connected to perceived discrimination, and we test it in six different areas of discrimination (ethnicity, sexuality, skin color, religion, financial status, and subculture). We also assume that the types of social identifications that may alleviate negative consequences of feeling discriminated against may be different in four different cultural contexts. This article addresses these questions in a correlational study on American, Mexican, British and Polish participants.

1.1. Social identity and well-being

The Social Identity Approach argues that social identifications fundamentally affect the way that individuals perceive themselves, furnishing them with a sense of purpose, giving them meaning and their place in the world in a group of people with shared values and a sense of common direction (Cruwys, Haslam, Dingle, Haslam & Jetten, 2014). Moreover, research proves that social identities have a profound protective effect on individual physical and psychological well-being, and resilience (e.g. Cruwys et al., 2014; Drury, 2012; Haslam, Cruwys, & Haslam, 2014; Jetten, Haslam, & Haslam, 2012; Jones & Jetten, 2011; Sani, 2012; Scarf et al., 2016). Social identities are capable of promoting both physical and psychological well-being not only by maintaining strong social identities and developing them over time (e.g. Haslam, Holme, Haslam, Iyer, Jetten & Williams, 2008), but also through acquiring new ones (Greenaway et al., 2016).

According to Greenaway, Cruwys, Haslam and Jetten (2016) social identities promote well-being because they satisfy global psychological needs (specifically, the need to belong, the need for self-esteem, the need for control and the need for meaningful existence). Their longitudinal study revealed that gains in identity strength were associated with increased need satisfaction over seven months. A cross-sectional study revealed that social identity gain (becoming a University student) and social identity loss (not being a high school student anymore) predicted increased and reduced need satisfaction, respectively. Finally, experimental study made by that same researchers showed that, relative to a control condition, an important social identity gain increased need satisfaction and an important social identity loss decreased it. Sensitivity analyses suggested that social identities satisfy psychological needs in a global sense, rather than being reducible to one particular need (Greenaway et. al., 2016).

1.2. The number of social identifications

Many studies also show a positive link between the number of social identifications and well-being (e.g., Brook et al., 2008; Greenaway et al., 2016; Haslam et al., 2014; Miller et al., 2016). However, they usually investigate few selected identities in this context, e.g., with family, friends, peers, coworkers, sometimes with local communities or organizations, and ethnic or national groups (see e.g. Zdrenka, Yogeeswaran, Stronge & Sibley, 2015). For example, Miller, Wakefield and Sani (2016) found that higher number of group identifications is associated with healthier behavior in adolescents, but they focused on only three social groups: family, school, and friends.

Haslam, Cruwys and Haslam (2014) have offered a wider approach. They asked their participants about a number of close relationships (how many children, immediate family, and friends with whom they had close ties) and a number of group memberships (e.g., sports club, church group, social clubs, neighborhood watch, education, arts or music groups). They showed that group engagement made a significant, sustained, and unique contribution to subsequent cognitive functioning. Furthermore, the effects of group engagement were stronger with increasing age. However, apart from family ties, group membership options were limited in this study to eight specific groups.

Brook and her colleagues allowed their participants to freely list the identities that are important to them (Brook et al., 2008). They found that the number of identities listed ranged from 0 to 15, with a median of 6. In the next study, they decided to limit the identities participants could list up to 12, still using the open-ended question technique. The research showed that the association between the number of identities and psychological well-being depends on both the harmony between the identities and their importance to the person's self-concept.

We claim that in a contemporary social world, people belong to multiple social groups that may not be captured by such approach. Moreover, in the globalizing world, the number and scope of possible social identifications grow, especially with the expanding role of the Internet, which allows individuals to connect with people in a virtual world. Social media have become more and more important for many people, especially the young, allowing them to share important beliefs and interests with others offline as well as online, such as e.g., protecting human rights, sharing the love for a favorite music band or film director in social media, creating a bond by organizing online campaigns for protecting the Earth or playing computer games within online communities. To this date, these wider social identifications have not been captured in the research on social identities and well-being. When added together, can all these identifications also have such beneficial connections with life satisfaction and well-being?

Previous studies showed that the method one uses to ask about social identities is of key importance (Hamer, McFarland, Łużniak-Piecha & Golińska, 2016). Hamer et al. compared two methods, an open-ended and a close-ended question (identity selection method) type. They found much more strong social identifications in a group with close-

ended questions, whereas in a group with open-ended questions, subjects limited their responses and omitted many identifications they probably had. We believe that it was due to the fact that in a study situation only a few the most central identifications come to participant's mind. Also other groups may not be mentioned because of the time or energy required to list them. We decided to explore this issue by listing many social identifications that might be significant for our participants (students) and checking the association of the number of important social identifications with life satisfaction and physical well-being.

We assume that the number of meaningful social identifications have a positive association with life satisfaction and physical well-being. There are few premises for thinking so. One is that belonging to social groups provide a gain of specific knowledge (cultural capital) and opportunities (social capital) (Iyer, Jetten, Tsivrikos, Postmes & Haslam, 2009). Second, social identifications satisfy psychological needs, therefore promoting both physical and psychological well-being (Greenaway et al., 2016). Moreover, belonging to social groups gives social support (Haslam, Reicher, & Levine, 2012), and collective resilience that holds communities together, provides protection and facilitates recovery in times of disasters and extreme collective stress situations (Drury, 2012). Multiple identities provide people with more sources of support in difficult, stressful times (Haslam et al, 2008).

Research shows that it is individuals' subjective identification with groups, rather than the objective amount of contact with them, that predicts well-being (Greenaway et al., 2016). Therefore, we assume that a social identification is particularly meaningful whenever it has significance or importance to the individual - that is, when he or she identifies with the group at a high level.

On the basis of these considerations, we hypothesize that having more meaningful social identifications is connected to higher satisfaction with life (Hypothesis 1a) and higher subjective physical well-being (lower somatic complaints; Hypothesis 1b).

1.3. Perceived discrimination, social identifications, and well-being

The human need to belong to social groups can be frustrated when one faces discrimination and rejection. Several social psychological theories, such as Social Identity Theory (Tajfel & Turner, 1986) claim that people are motivated to seek inclusion and avoid being excluded. As discrimination frustrates this important need, psychological well-being declines. Studies among different disadvantaged groups have indeed found that the more people perceive discrimination directed at them and their group, the worse their psychological well-being is (Giamo et al., 2012).

The Rejection-Identification Model suggests that social identifications can serve as a buffer from the harmful effects of discrimination (Branscombe et al., 1999). The negative consequences of perceiving oneself as, for example, a victim of racial prejudice, can be alleviated by identification with the minority group. When rejected by a privileged outgroup, identifying with the disadvantaged, discriminated ingroup can be perceived a

compensating strategy that satisfies a need to feel accepted (Latrofa, Vaes, Pastore & Cadinu, 2009). This mechanism was shown in studies on e.g. African-Americans (e.g. Branscombe et al., 1999), Southern Italians in Italy (Latrofa et al., 2009), Soviet immigrants in Finland (Jasinskaja-Lahti, Liebkind, & Solheim, 2009), women (Schmitt, Branscombe, Kobrynowicz, & Owen, 2002), older adults (Garstka et al., 2004), and people with body piercings (Jetten et al., 2001).

Ramos, Cassidy, Reicher, and Haslam (2012) argue that the discriminated minority group can serve as a coping resource since it provides psychological shelter from hostile treatment by the majority group. Their longitudinal study on international students in Scotland supported the accuracy of RIM and showed that perceived discrimination indeed caused minority group identification rather than the reverse (minority group identification causing perceived discrimination).

Molina, Philips, and Sidanius (2014) tested both minority and majority groups in this context. They demonstrated that for most ethnic minorities higher perceptions of group discrimination are related to lower levels of national identity and higher ethnic identity. Conversely, among majority group members, higher levels of perceived discrimination predict higher levels of national identity with little influence on ethnic identity.

Giamo, Schmitt, and Outten (2012), in their test of RIM on a group with multiracial identities showed that perceived discrimination was positively related to identifying with other multiracial people. Further analysis proved that multiracial identification's protective properties rest in the fact that it provides a collective identity where one "fits."

However, the review of research upon this topic shows that positive link between social identifications and perceived discrimination is tested mostly in the context of identification with particular discriminated groups. We propose a wider approach, as it seems reasonable to assume that bonding with more types of social groups can be an even more successful way of coping with discrimination, bringing even more benefits of the social identifications we listed earlier. As Haslam et al. (2008, p. 2008) wrote "When the ship of self encompasses more group memberships, it has more ports in which to find shelter if it is caught in a storm."

In this context, we test the possible protective and supportive role of social identifications of a different type. For example, discrimination because of ethnicity can be linked not only to stronger identification with people of the same ethnic group, but depending on the cultural context, also to people with the same religious beliefs (e.g. in Poland) or race and similar social and financial status (the U.S. or the UK) (see more on differences upon understanding the term 'ethnic group' in Hamer, Jułkowski, Cadena, Golińska, Łużniak-Piecha, Czarnecka & McFarland, under review). The feeling of being discriminated (no matter what the reason) may also be connected to looking for support among people similar to an individual in another way, e.g., belonging to the same subculture or group of people sharing the same important beliefs or even groups directly opposing discrimination, such as human rights activists.

In summary, we hypothesize that the number, strength and the type of social identifications are connected to perceived discrimination, and we test it in six different areas of discrimination (ethnicity, sexuality, skin color, religion, financial status, and subculture). We also assume that some of the types of social identifications that may alleviate negative consequences of feeling discriminated against may be somewhat different in four different cultural contexts (see more on cultural differences between these four countries in Hamer et al., under review).

On the basis of these considerations, we expect that feelings of discrimination will be connected to lower satisfaction with life (H2a) and lower subjective physical well-being (H2b). However, we also expect that higher feelings of discrimination will be connected to having more meaningful social identifications (H3), especially in the area of specific discriminations, but also with other social groups which may potentially support and protect an individual (H4).

In our study we explore few types of discrimination (ethnicity, sexuality, skin color, religion, financial status, and subculture) students may suffer from, taking into consideration cultural contexts of four different countries: the U.S., Mexico, Poland and the UK.

2. Method

Participants: 226 students from four countries (the U.S., the UK, Poland, Mexico) took part in this study. All participants were citizens of the country the survey was taken at and studied at private universities. In the U.S., 52 students took part, who ranged in age from 18 to 21 years (M = 18.5, SD = 0.8); 69% were female. The sample in Poland comprised of 73 students, who ranged in age from 20 to 50 years (M = 26.8, SD = 7); 66% were female. In Mexico, 45 students took part, who ranged in age from 18 to 26 years (M = 21.2, SD = 1.7); 62% were female. The sample in the UK consisted of 54 students, who ranged in age from 18 to 58 years (M = 25.9, SD = 9.6); 83% were female.

Procedure: Participants completed an online survey in their native language (English, Polish or Spanish, respectively). The questionnaire was prepared initially in Polish and then back-translated into English and Spanish (Brislin, 1970) except when official language adaptations were available (e.g., for the Satisfaction with Life Survey noted below).

Measures:

1) *Social Identifications* - to check the amount, type and strength of social identifications, we constructed a questionnaire asking about more than 80 different groups of identification (trying to cover key areas of social identifications for our participants), measuring the level of each identification on a scale from 1 (*not at all close*) to 5 (*very close*), with additional code 0 (*not applicable*; used when a participant is asked, e.g. about identification with siblings while not having any).

We asked about such groups/communities, such as:
− family members: from closest family to distant relatives,
− territorial identifications: from different types of local identifications (local community: from neighbors, through district to residents of my borough), through national, to supranational, always referring directly to inhabitants of these areas (e.g., people all over the world),
− occupational groups (e.g., students, students of own University, work colleagues, people with the same profession),
− own sex group, people with the same sexual orientation,
− ethnic group, people with the same skin color, people from the same cultural background, with the same customs,
− people with the similar social position; people with similar financial status,
− members of own subculture,
− groups of people sharing same important attitudes/beliefs, like 'people who share my important beliefs,' religious groups, volunteers, human rights activists, animal rights activists, vegetarians, environmentalists, supporters of own preferred political party, etc.,
− hobby groups and fans of different types of activities (e.g., art, music, sport, cinema, poetry, theatre, board games, video games, cyclists, fishermen, etc.),
− Internet groups (from intranet and communities like Facebook or Instagram to different types of forums and newsgroups).

2) *Satisfaction with life* was measured by well-known Satisfaction With Life Scale (SWLS, Diener, Emmons, Larsen & Griffin, 1985); language adaptations were taken from the official website[1]. Respondents used a seven-point scale to indicate the extent to which they agreed with the statements (e.g. 'In most ways my life is close to my ideal,' 'I am satisfied with my life,' 'If I could live my life over, I would change almost nothing'). The items formed a reliable scale in all countries (the U.S.: $\alpha = 0.86$; Pl: $\alpha = 0.87$, Mex: $\alpha = 0.83$; UK: $\alpha = 0.87$).

3) *Subjective physical well-being* was measured by six item Somatic Complaints subscale from Berne Questionnaire of Subjective Well Being (Grob, 1995). Participants described how often from 1 (*never*) to 5 (*very often*), in the past few weeks, they had experienced different somatic complaints: stomach ache, headache, being ill and unable to

---

[1] https://internal.psychology.illinois.edu/~ediener/SWLS.html

work, felt unusually tired, had no appetite, have been unable to fall asleep. The higher the score, the poorer one's physical well-being. The items formed a reliable scale in all countries (the U.S.: $\alpha = 0.76$; Pl: $\alpha = 0.72$, Mex: $\alpha = 0.80$; UK: $\alpha = 0.83$).

4) *Perceived discrimination* was measured similarly to Molina, Philips and Sidanius' Study 1 procedure (2014). Participants described how often from 1 (*never*) to 5 (*very often*) they experienced discrimination because of their: ethnicity, sexual orientation, skin color, religion, financial status, subculture. The items formed a reliable scale in all countries (the U.S.: $\alpha = 0.70$; Pl: $\alpha = 0.75$, Mex: $\alpha = 0.66$; UK: $\alpha = 0.76$).

3. Results

3.1. The number and strength of social identifications We analyzed how many social identifications participants from the four tested countries declared and the strength of these identifications (see Table 1 and Figure 1). The results show that the number of strong identifications (on level 4 and 5) varies from 14.9 in the UK, 19.4 in Poland, 25 in the U.S. to 31.2 in Mexico.

Table 1. *Correlations, means, and standard deviations for measured variables.*

	id on level 3				id on level 4				id on level 5				id on level 4-5			
	USA	PL	Mex	UK	USA	PL	Mex	UK	USA	PL	Mex	UK	USA	PL	Mex	UK
id on level 3					.02	.34**	.29*	.41**	-.27*	-.12	-.42**	.04	-.18	.16	-.22	.28*
id on level 4									.15	.24*	.04	.23	.71**	.83**	.52**	.77**
id on level 5													.80**	.74**	.88**	.80**
id on level 4-5																
id on level 3-5													.84**	.76**	.79**	.80**
id on level 1-2													-.66**	-.67**	-.78**	-.52**
SWLS																
somatic complaints																
M	20.81	22.26	25.16	17.96	14.92	12.90	17.16	9.15	10.02	6.48	14.07	5.72	25.0	19.4	31.22	14.87
SD	8.45	12.34	10.23	9.53	8.72	8.44	7.22	6.03	10.18	7.15	12.80	6.39	14.35	12.28	15.0	9.7

Table 1. *Correlations, means, and standard deviations for measured variables- continuation.*

|	id on level 3-5				SWLS				somatic complaints				Mean perceived discrimination			
	USA	PL	Mex	UK	USA	PL	Mex	UK	USA	PL	Mex	UK	USA	PL	Mex	UK
id on level 3	.39**	.76**	.43**	.79**	-.31*	-.01	.04	.02	.02	-.06	.03	0.19	.33**	-.005	.10	.23*
id on level 4	.68**	.76**	.66**	.74**	.16	.22*	.24ᵗ	.29*	.10	-.13	.13	-.004	.03	.22*	-.11	.06
id on level 5	.60**	.41**	.55**	.53**	.38**	.14	.26*	.27*	.21	.03	-.13	.15	.18	.002	-.21ᵗ	.34**
id on level 4-5					.37**	.23*	.33*	.36**	.21ᵗ	-.07	-.05	.09	.14	.15ᵗ	-.23ᵗ	.26*
id on level 3-5					.18	.14	.33*	.24*	.20	-.08	-.03	.18	.32*	.10	-.16	.30*
id on level 1-2	-.71**	-.77**	-.93**	-.64**	-.34*	-.17ᵗ	-.22ᵗ	-.17	-.12	.13	.10	-.30*	-.14	-.02	.20ᵗ	-.12
SWLS									-.21ᵗ	-.19ᵗ	.15	-.22ᵗ	-.34**	-.28**	-.37***	-.05
somatic complaints													.16	.29**	-.05	.46**
M	45.75	41.64	56.38	32.83	5.05	4.23	5.48	4.51	2.62	2.47	2.34	2.72	1.61	1.22	1.49	1.79
SD	15.29	18.79	16.14	15.38	1.22	1.12	1.11	1.44	.76	.72	.86	.93	.58	.38	.55	.74

Notes. USA: $N = 52$; Pl: $N = 73$, Mex: $N = 45$; UK: $N = 54$; one-tailed.
ᵗ $0.05 < p < 0.1$; □ $p < 0.05$; □□ $p < 0.01$; □□□ $p < 0.001$.

ANOVA for repeated measures showed that there were statistically significant differences between the number of social identifications of different strength within all four groups: the U.S.: $F(3.41; 174.13) = 6.94$, $p<.001$; Poland: $F(2.45; 176.21) = 19.44$, $p<.001$; Mexico: $F(3.16; 138.97) = 6.97$, $p<.001$; UK: $F(2.88; 152.48) = 22.06$, $p<.001$. As expected, students from all countries declared having more "weak" identifications (answer "3" on a scale) than any other identification levels (Bonferroni post hoc tests, all p<0,01).

Students from Poland and the UK declared also statistically more "strong" identifications (on level 4) than "very strong" identifications (on level 5). Students in the U.S. showed the same tendency, while for students from Mexico there were no significant differences between these two levels of identifications.

Figure 1. *The number and the strength of social identifications declared by participants from four tested countries.*
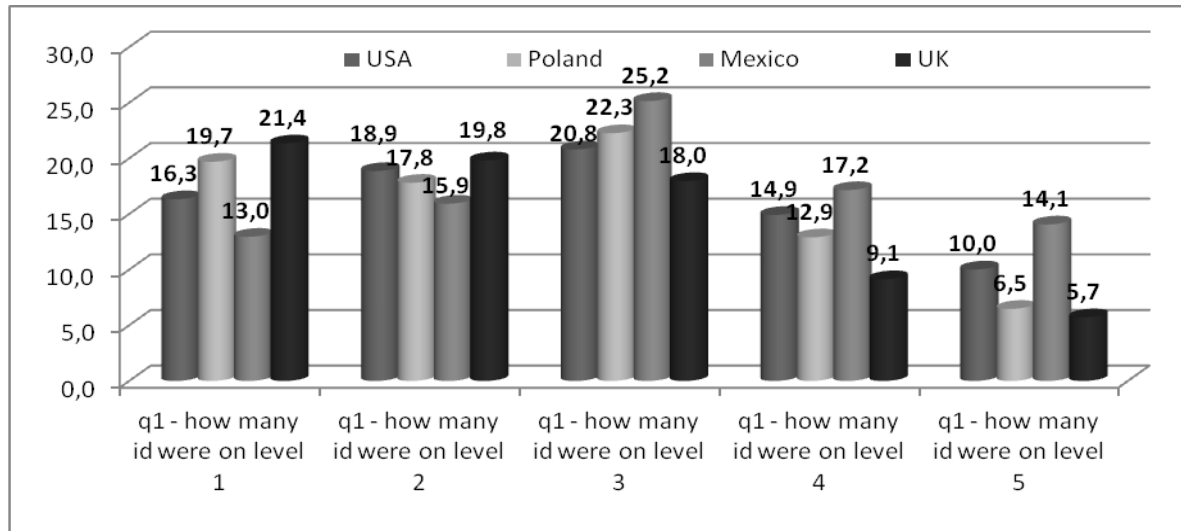
3.2. Social identifications in connection with satisfaction with life and physical well-being

As correlations in Table 1 show, having more strong and very strong social identifications (on levels 4 and 5) is connected to higher SWL in all tested countries, which confirms Hypothesis 1a.

The number of identifications was not, however, connected to physical well-being, so Hypothesis 1b was not confirmed. It is worth noting, though, that complaints about physical well-being were quite low in all four tested countries (below 2 on a 1-5 scale). Students in our samples simply had very few physical complaints.

3.3. Perceived discrimination in connection with satisfaction with life and well-being

The results revealed that in all tested countries the feeling of discrimination is rather low (mean was below the middle of the scale). However, as correlations in Table 1 show, more perceived discrimination is connected to less satisfaction with life for Polish, American and Mexican participants, which confirms hypothesis 2a for these countries' samples. A closer look at specific reasons of discrimination reveals that for U.S. students the reasons of discrimination connected negatively to satisfaction with life (SWL) are mostly sexual orientation, ethnicity, and subculture, for Poles - sexual orientation, skin color and financial status; for Mexicans - religion, subculture and sexual orientation. For British students, there

are no reasons of discrimination connected negatively to SWL, except for a statistical tendency for financial status.

Table 2. *Means and standard deviations for specific reasons of perceived discrimination and their correlations with social identifications. satisfaction with life and well-being.*

	1. Discrimination - ethnicity				2. Discrimination - sexual orientation				3. Discrimination - skin color			
	USA	PL	MEX	UK	USA	PL	MEX	UK	USA	PL	MEX	UK
2	.30*	.67**	.34*	.17								
3	.69**	.32**	.34*	.89**	.21†	.47**	.37**	.18†				
4	.37**	.62**	-.05	.39**	.02	.46**	.098	.17	.42**	.03	.27*	.35**
5	.13	.27*	-.04	.24*	.14	.23*	.12	.34**	.001	.10	.16	.27*
6	.36**	.68**	.28*	.31*	.36**	.47**	.48**	.63**	.12	.11	.29*	.35**
SWLS	-.24*	-.14	-.05	.07	-.37**	-.30**	-.36**	.01	-.12	-.32**	-.06	-.01
somatic complaints	-.01	.23*	.10	.30*	.001	.20*	-.05	.25*	.13	.16†	.18	.30*
id on level 3	.29*	.006	.14	.10	.22†	-.06	-.13	.14	.05	-.16†	.01	.15
id on level 4	.18†	.11	-.07	.06	.04	-.03	-.25*	.08	-.05	-.13	-.11	.00
id on level 5	.13	.09	-.06	.33**	-.16	.07	.04	.35**	.46**	.07	-.19	.29*
id on level 4-5	.21†	.13	-.08	.25*	-.09	.02	-.09	.28*	.29*	-.05	-.22†	.20†
id on level 3-5	.35**	.09	.01	.22†	.04	-.03	-.17	.26*	.30*	-.14	-.20†	.21†
id on level 1-2	-.15	.04	.02	-.17	-.08	.005	.17	-.16	-.14	.13	.23†	-.16
M	1.62	1.14	1.38	1.98	1.62	1.12	1.42	1.52	1.65	1.03	1.49	1.89
SD	.91	.45	.81	1.07	1.03	0.50	1.08	1.00	1.01	0.16	.89	1.04

Feelings of discrimination were also connected to worse physical well-being (more somatic complaints) among Polish and UK groups, which confirms Hypothesis 2b for these countries' samples. However, when we take into account specific reasons of discrimination (see Table 2), the described relationship appears in all tested countries.

Poor physical well-being (somatic complaints) is connected to higher perceived discrimination because of financial status, ethnicity and sexual orientation among Poles; to higher perceived discrimination because of religion among Americans; to higher perceived discrimination because of ethnicity, sexual orientation, skin color, financial status, subculture (and with statistical tendency also for discrimination because of religion) among British; but to lower perceived discrimination because of financial status among Mexicans.

Table 2. *Means and standard deviations for specific reasons of perceived discrimination and their correlations with social identifications. satisfaction with life and well-being – continuation.*

	4. Discrimination - religion				5. Discrimination - financial status				6. Discrimination - subculture			
	USA	PL	MEX	UK	USA	PL	MEX	UK	USA	PL	MEX	UK
2												
3												
4												
5	.33**	.31**	.34*	.27*								
6	.31*	.42**	.20†	.35**	.45**	.39**	.52**	.33**				
SWLS	-.04	-.19†	-.30*	.08	-.15	-.26*	-.13	-.23†	-.39**	-.04	-.49**	-.10
somatic complaints	.28*	.08	-.03	.22†	.17	.34**	-.25*	.41**	.03	.10	-.07	.36**
id on level 3	.08	.02	.05	.06	.32*	-.02	.18	.18†	.37**	.08	.15	.29*
id on level 4	.07	.23*	.21†	.13	-.11	.22*	-.01	-.02	-.05	.27*	-.06	-.02
id on level 5	.37**	.01	-.27*	.07	-.14	-.11	-.20†	.02	-.06	-.01	-.17	.34**
id on level 4-5	.30*	.17†	-.13	.13	.08	.18†	-.17	.00	-.07	.18†	-.17	.21†
id on level 3-5	.33**	.12	-.09	.12	.02	.04	-.05	.11	.14	.17†	-.07	.32*
id on level 1-2	-.11	-.03	.03	.10	-.06	-.03	.13	.01	.05	-.07	.12	-.15
M	1.79	1.36	1.31	1.74	1.56	1.53	1.84	1.93	1.44	1.15	1.51	1.69
SD	.98	.77	.67	1.15	.85	.77	1.02	1.16	.78	.52	.84	1.16

3.4. Social identifications and perceived discrimination

As correlations in Table 1 show, higher feeling of discrimination is connected to having more social identifications in the U.S. (for medium identifications on level 3), Poland (for strong identifications on level 4) and the UK (for medium identifications on level 3 and very strong identifications on level 5), which confirms Hypothesis 3 for these countries' samples.

The results for the specific reasons of discrimination reveal that the positive relationship between the number of social identifications and discrimination appears for all reasons of discrimination in case of the U.S., discrimination because of religion, financial status and subculture in case of Poland, and ethnicity, skin color, sexual orientation and subculture in case of the UK. In Mexico this relationship is negative and appears for discrimination because of sexual orientation, religion, and financial status.

Table 3. *Means and standard deviations for selected social identifications and their correlations with specific reasons of perceived discrimination – continuation.*

	people with similar financial status id				people with similar social position id				people of the same sexual orientation id				neighbors id			
	US	PL	MEX	UK	US	PL	MEX	UK	US	PL	MEX	UK	US	PL	MEX	UK
discrimination - ethnicity	.33"	-.04	-.01	.39"	.25'	.02	-.03	.42"	,18	,16	-,01	,35"	.00	.11	-.22	.25'
discrimination - sexual orientation	.11	-.01	-.19	.16	-.02	.05	-.21ᵗ	.24'	-,06	,29"	,13	,49"	-.23ᵗ	-.02	-.09	.02
discrimination - skin color	.34"	-.28"	-.29'	.38"	.27'	-.30"	-.34'	.35"	,19	,04	-,20	,33"	-.02	-.08	-.21ᵗ	.15
discrimination - religion	.29'	.03	-.05	.13	.30'	.08	-.09	.26'	,18	,14	-,16	,21ᵗ	.27'	.29"	-.16	.18
discrimination - financial status	-.03	.18ᵗ	-.18	.09	.03	.18ᵗ	-.24ᵗ	0.14	-,08	,14	,12	,25'	.10	.14	-.12	-.19ᵗ
discrimination - subculture	.12	.17ᵗ	-.29'	.25'	.07	.23'	-.30'	.32"	-,03	,17	,10	,36"	.08	.09	-.27'	.21ᵗ
M	2.67	2.30	3.22	2.35	2.83	2.39	3.37	2.66	2.89	2.61	3.49	2.47	2.81	2.52	2.65	2.22
SD	1.34	1.12	1.14	1.13	1.37	1.10	1.13	1.14	1.31	1.35	1.22	1.26	1.33	1.23	.98	1.12

| SD | 1.35 | 1.53 | 1.77 | 1.68 | 1.65 | 1.5 | 1.68 | 1.78 | 1.02 | .86 | 1.20 | 1.21 | 1.33 | 1.78 | 1.78 | 2.03 |

We found that there are positive connections between specific reasons of discrimination and specific groups people identify with (see Table 3), which confirms Hypothesis 4 for all countries. However, we also found some negative connections between specific reasons of discrimination and specific groups of identification.

As expected, we found some cultural differences in patterns of the results for the countries that may be summarized as follows:

In the U.S.:

– Discrimination because of ethnicity is positively connected to identification with people from the same cultural background, with similar financial status, and with the similar social position, as well as with some local identities.

– Discrimination because of sexual orientation is negatively connected to identification "with people who share my important beliefs" and with some local identities.

– Discrimination because of skin color is positively connected to identification with people with the same skin color, the same cultural background and county, similar financial status, and similar social position.

– Discrimination because of religion is positively connected to identification "with people who share my important beliefs," people with similar financial status, and similar social position, as well as with local identities.

– Discrimination because of financial status is negatively connected to identification with the ethnic group.

– Discrimination because of subculture – no connections found.

– In Poland:

– Discrimination because of skin color is negatively connected to identification with people with similar social position and with similar financial status, as well as with some local identities.

– Discrimination because of sexual orientation is positively connected to identification with people with the same sexual orientation (and with similar statistical tendency for identification "with people who share my important beliefs"), but negatively with some local identities.

– Discrimination because of ethnicity is positively connected to identification with people with the same religious beliefs and "with people who share my important beliefs."

– Discrimination because of religion is positively connected to identification "with people who share my important beliefs", and human rights activists (with statistical tendency in the same direction for identification with people "who share my religious beliefs"), as well as with some local identities (with people from the same estate/housing and neighbors).

– Discrimination because of financial status is negatively connected to identification with subculture (plus statistical tendency in the same direction for identification with people with similar financial status and social position), but positively with people from the same estate/housing.

– Discrimination because of subculture is positively connected to identification with human rights activists and people with similar social position (with statistical tendency in the same direction for identification with people with similar financial status and "who share my important beliefs").

In Mexico:

- Discrimination because of ethnicity is negatively connected to identification with people with the same skin color, and human rights activists, while it is positively connected to identification with subculture.
- Discrimination because of sexual orientation is negatively connected to identification with people "who share my religious beliefs" and identification with religious community.
- Discrimination because of skin color is negatively connected to identification with people with similar financial status, and similar social position, with ethnic group and with religious community.
- Discrimination because of religion is negatively connected to identification with people "who share my important beliefs," and people from the same cultural background, but positively with the people from the same estate/housing.
- Discrimination because of financial status – no connections found (only negative statistical tendency for people with similar social position).
- Discrimination because of subculture is positively connected to identification with subculture, but negatively with people with similar financial status and social position, neighbors, the same cultural background and religious community.
- In the U.K.:
- Discrimination because of ethnicity is positively connected to identification with people from the same cultural background and county, neighbors, people of the same skin color, same ethnic group, people with similar financial status, and with similar social position, subculture, "with people who share my important beliefs", and human rights activists.
- Discrimination because of sexual orientation is positively connected to identification with people with the same sexual orientation, similar social position, human rights activists and subculture (plus statistical tendency in the same direction for identification "with people who share my important beliefs").
- Discrimination because of skin color is positively connected to identification with people with the same skin color, the same cultural background and county, subculture, similar financial status, and similar social position (plus statistical tendency in the same direction for identification "with people who share my important beliefs").
- Discrimination because of religion is positively connected to identification with religious community, people "who share my religious beliefs," human rights activists and people with similar social position, as well as with local identities.
- Discrimination because of financial status is positively connected to identification with people with the same skin color.

– Discrimination because of subculture is positively connected to identification with subculture, human rights activists and people with similar financial status and social position.

–

3.5. Predictors of satisfaction with life in four countries

To check the predictive role of perceived discrimination and social identifications on satisfaction with life, we conducted hierarchical regression analysis with satisfaction with life as the dependent variable, separately for each country (see Table 4). In the first step, we entered perceived discrimination and in the second step, added the number of meaningful social identifications.

Table 4. Hierarchical regression analysis for satisfaction with life as a dependent variable.

		US	(R^2=.33)		Poland	(R^2=.18)		Mexico	(R^2=.22)		UK	(R^2=.15)	
		Beta	p	ΔR^2	Beta	p	ΔR^2	Beta	p	ΔR^2	Beta	p	ΔR^2
1	perceived discrimination	-0.34	0.01	.12*	-0.28	0.02	.08*	-0.38	0.01	.14*	-0.05	0.73	.002
2	perceived discrimination	-0.39	0.005	.22**	-0.35	0.003	.10*	-0.32	0.03	.26	-0.13	0.37	.15*
	id on level 3	-0.07	0.61		-0.12	0.31		0.12	0.46		-0.07	0.63	
	id on level 4	0.11	0.36		0.33	0.01		0.16	0.30		0.27	0.08	
	id on level 5	0.42	0.003		0.05	0.69		0.23	0.15		0.26	0.08	

Notes. USA: $N = 52$; Pl: $N = 73$; Mex: $N = 45$; UK: $N = 54$; one-tailed.
† $0.05 < p < 0.1$; □ $p < 0.05$; □□ $p < 0.01$; □□□ $p < 0.001$.

The results show that perceived discrimination is a negative predictor of satisfaction with life in all four countries. They also confirm that adding social identifications to the regression analysis adds significant explained variance in the U.S., Poland and the UK ($\Delta R^2 < 0.05$).

4. Discussion

Our study aimed to shed more light on the complex relationships between well-being, social identifications and perceived discrimination within four different countries: the U.S., Mexico, Poland and the UK.

We analyzed how many social identifications participants from these countries declared and what was the strength of these identifications. The results show that the number of strong and very strong identifications varies from 14.9 in case of the UK, 19.4 in Poland, 25 in the U.S. to 31.2 in Mexico. Although our data do not allow cross-cultural comparisons, the results show that by using identity selection method we obtained higher mean number of meaningful social identifications than researchers using open-ended

questions (6 identifications; see Brook et al., 2008). It may indeed mean that when facing open-ended questions individuals limit their responses and omit many identifications they may have, as they simply do not cross their minds, or to save the time and energy required to list them (see also Hamer et al., 2016).

To sum up other results, our study confirmed earlier research that perceived discrimination is connected to lower satisfaction with life and more somatic complaints (confirmation of Hypotheses 2a and 2b). We also showed that perceived discrimination is linked to having more meaningful social identifications (confirmation of Hypothesis 3 in Poland, UK and the U.S.). On the other hand, having more strong and very strong identifications is connected to higher satisfaction with life (confirmation of Hypothesis 1a). These results may suggest that not only identifying with the discriminated group but having many meaningful social identifications potentially serve as a buffer from the harmful effects of perceived discrimination.

However, a number of social identifications reported by individuals was not connected to their physical well-being (somatic complaints), which fails to support Hypothesis 1b. However, the students from all countries reported very few somatic complaints, and that may be the primary reason for this lack of significant connection.

Specific reasons of discrimination and well-being

Closer look at specific reasons of discrimination and their negative correlations with satisfaction with life reveals that there are some differences in patterns of results, e.g. subculture is a reason of perceived discrimination negatively connected to SWL in the U.S. and Mexico, financial status and skin color - in Poland, ethnicity – in the U.S. and religion - in Mexico. However, sexual orientation is a reason of perceived discrimination connected to lower satisfaction with life in almost all tested countries (U.S., Poland and Mexico).

In the UK (and Poland) discrimination (also because of sexual orientation) is connected to more somatic complaints reported. However, when we take into account specific reasons of discrimination, expected relationship with poor physical well-being appears in all tested countries: more somatic complaints is connected to higher perceived discrimination because of financial status, ethnicity and sexual orientation among Poles; to higher perceived discrimination because of religion among Americans; to higher perceived discrimination because of ethnicity, sexual orientation, skin color, financial status, subculture (with statistical tendency also for religion) among British; however, to lower perceived discrimination because of financial status among Mexicans.

The results of our study show that the negative connection between sexual orientation-based discrimination and some aspects of well-being is quite universal, as it was found in all tested countries (negative SWL in the U.S., Mexico and Poland, as well as more somatic complains in the UK and Poland).

The results also indicate that financial status may be an important problem particularly among Polish students (as it connects to both, lower SWL and more somatic

complaints; similar, although the weaker pattern, was found for British students). The same pattern of results was found for discrimination because of skin color in Poland, which may be explained by the fact, that Poland is an almost mono-racial country with growing fear of "others" and that some students come from the area of high prejudices and discrimination (Białystok).

Interestingly, discrimination because of financial status seems not to be a problem for Mexican students – as it is negatively connected to somatic complaints. The explanation of this reversed pattern probably lies in the fact that the majority of the Tec students come from the families of rather high financial status and perceive being discriminated due to their relatively better rather than worse economic situation – in contrast to Poland and the UK.

Specific reasons of discrimination and social identifications

The more detailed analysis shows that most of the time, as expected, feelings of discrimination are connected to stronger social identifications of different kinds (this pattern of results was obtained in the U.S., UK and in Poland, but not in Mexico). These results support our assumption that feeling of being discriminated against is connected to stronger identifications in the area that may help an individual to deal with perceived discrimination, by making stronger bonds with people who belong to the same discriminated group or are similar to him/her in other important areas. The example of the latter may be sharing the same beliefs and therefore giving support to the fellow group member. It may be also directly connected to feeling ties with people who fight discrimination, such as human rights activists. We found this connection very often, especially in the UK (for most types of discrimination) and in Poland.

Another example may be discrimination because of sexual orientation which is connected to higher identification with people of the same sexual orientation, as RIM suggests, but it is also connected to higher identification with people who share "my important beliefs" in Poland and the UK. In the UK, discrimination of this type additionally correlates with identification with human rights activists and people with the similar social positions. It seems that these all are identifications that can help sexual minorities deal with their feelings of discrimination.

In line with these findings, in the UK feeling of being discriminated for most of the reasons is connected to stronger identification with human rights activists, subculture, people with similar social position or financial status, and with people who share "my important beliefs." In Mexico, main supportive role in case of discrimination seems to have one's identification with subculture (the most frequent ones listed by participants were geeks and hipsters).

Another good example of this potential support mechanism is discrimination because of religion connected to stronger identification with people who share "my religious beliefs" in the UK and Poland, with religious community in the UK, and people who share "my

important beliefs" and human rights activists in Poland. Interestingly in all tested countries people who feel this type of discrimination have stronger local identifications.

However, sometimes feelings of discrimination are connected to lower social identifications. This was especially frequent in the results for the Mexican sample, where most identifications were connected negatively to different kinds of perceived discrimination (the only identification that confirms RIM model is identification with subculture which was stronger among Mexicans who felt discriminated because of their subculture). This is a probable reason that Hypothesis 3 in Mexico was not confirmed. It may be due to the fact that "individualist cultures place greater importance on the interpersonal aspects of social groups than collectivist cultures, even if they place less importance on social groups than collectivist cultures" (Rubin, Milanov & Paolini, 2016, p. 226). A meta-analysis of cross-cultural research studies (Oyserman, Coon & Kemmelmeier, 2002) shows that, e.g. U.S. samples (an individualist culture) scored higher than collectivist countries on relational, interpersonal dimensions such as feeling close to ingroup members and a sense of belonging to ingroups. Our results would then be another argument to take cultural differences into considerations when studying connections between social identities, discrimination, and well-being.

However, it is also possible that another mechanism is involved in the negative relationship between social identities and perceived discrimination – distancing from a community which is oppressive for the individual or somehow supports discrimination. A good example may be discrimination because of sexual orientation connected to lower identification with people who share "my religious beliefs" and with religious community in Mexico. As many religions and religious communities condemn practicing sexual orientations other than heterosexual (e.g., two of the biggest religions: Christianity and Islam), distancing from groups oppressive toward individual seem understandable.

Discrimination because of sexual orientation was also connected to lower local identifications in the U.S. and Poland, which may suggest the same mechanism – distancing from local communities that are prejudiced towards sexual minorities. Another example of the same mechanism may be discrimination because of skin color negatively linked to local identities in Poland.

Limitations

There are some limitations to the present research. As previously mentioned, our participants were students, so future research should include more diverse samples. Moreover, this study had a preliminary and exploratory character, which resulted in measuring over 80 social identifications, but with one item scales. In effect, it has not provided the data to build complex structural models for each of six tested reasons of perceived discrimination, including well-being and social identifications. Also, due to our correlational design, causality cannot be determined. Therefore, further studies are needed to build more complex models.

Moreover, because of small student samples, this dataset does not allow us to conduct cross-country comparisons. However, the observed differences in patterns of results for the tested countries suggest that further studies on much bigger, aligned country samples could lead to discovering important cultural differences in relationships between perceived discrimination, social identifications and well-being.

Small samples and rather low level of perceived discrimination are probably the reasons we did not confirm all hypotheses in all four tested countries. Future studies could aim not only for bigger samples, but also for targeting more discriminated groups to confirm the connection between tested variables in these cultural contexts.

Conclusions

The results of our study confirmed in all tested countries that having more meaningful identities is connected to higher satisfaction with life. Moreover, perceived discrimination, which is connected to lower satisfaction with life and lower physical well-being, is also linked to having more meaningful social identities (in the U.S., UK and Poland). These results may suggest that not only identifying with the discriminated group, as RIM suggests, but having many other meaningful social identities potentially serves as a buffer from the harmful effects of perceived discrimination. However, occasionally feelings of discriminations are connected to lower social identifications, suggesting the mechanism of self-distancing from the rejecting group. This mechanism was particularly observed among Mexican students. Thus, our study additionally showed the importance of taking the cultural context into consideration. The research also showed that it is worth using the identity selection method in this context, as it brings the higher mean number of meaningful social identifications than open-ended questions method.

References:

Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology*, *77*(1), 135.

Brislin, R.W. (1970). Back-Translation for Cross-Cultural Research. *Journal of Cross-Cultural Psychology*, *1*, 185-216, DOI: 10.1177/135910457000100301

Brook, A. T., Garcia, J., & Fleming, M. A. (2008). The effects of multiple identities on psychological well-being. *Personality and Social Psychology Bulletin*, *34*(12), 1588-1600.

Cruwys, T., Haslam, S. A., Dingle, G. A., Haslam, C., & Jetten, J. (2014). Depression and social identity: An integrative review. *Personality and Social Psychology Review*, *18*(3), 215-238.

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, *49*(1), 71-75.

Drury, J. (2012). Collective resilience in mass emergencies and disasters. *The social cure: Identity, health and well-being*, 195-216.

Garstka, T. A., Schmitt, M. T., Branscombe, N. R., & Hummert, M. L. (2004). How young and older adults differ in their responses to perceived age discrimination. *Psychology and Aging, 19*, 326-335.

Giamo, L. S., Schmitt, M. T., & Outten, R. H. (2012). Perceived discrimination, group identification, and life satisfaction among multiracial people: A test of the rejection-identification model. *Cultural Diversity and Ethnic Minority Psychology*, *18*(4), 319.

Greenaway, K. H., Cruwys, T., Haslam, S. A., & Jetten, J. (2016). Social identities promote well-being because they satisfy global psychological needs. *European Journal of Social Psychology*, *46*(3), 294-307.

Grob, A. (1995). Subjective well-being and significant life-events across life span. *Swiss Journal of Psychology, 54*(1), 3-18.

Hamer, K., Jułkowski, T., Cadena, L.M. Golińska, A., Łużniak-Piecha, M., Czarnecka, B., McFarland, S. (under review). What is 'ethnic group' in ordinary people's eyes? Different ways of understanding it among American, British, Mexican and Polish respondents. *Cross-Cultural Research.*

Hamer, K., McFarland, S. Łużniak-Piecha, M., Golińska, A (2016). *Satisfaction with life, feelings of discrimination, and their connection to social identifications*. Paper presented at the 39th Annual Scientific Meeting of the International Society of Political Psychology (ISPP), Warsaw, Poland.

Haslam, C., Cruwys, T., & Haslam, S. A. (2014). "The we's have it": Evidence for the distinctive benefits of group engagement in enhancing cognitive health in aging. *Social Science & Medicine*, *120*, 57-66.

Haslam, C., Holme, A., Haslam, S. A., Iyer, A., Jetten, J., & Williams, W. H. (2008). Maintaining group memberships: Social identity continuity predicts well-being after stroke. *Neuropsychological Rehabilitation*, *18*(5-6), 671-691.

Haslam, S. A., Reicher, S. D., & Levine, M. (2012). When other people are heaven, when other people are hell: How social identity determines the nature and impact of social support. *The social cure: Identity, health and well-being*, 157-174.

Iyer, A., Jetten, J., Tsivrikos, D., Postmes, T., & Haslam, S. A. (2009). The more (and the more compatible) the merrier: Multiple group memberships and identity compatibility as predictors of adjustment after life transitions. *British Journal of Social Psychology*, *48*(4), 707-733.

Jasinskaja-Lahti, I., Liebkind, K., & Solheim, E. (2009). To identify or not to identify? National disidentification as an alternative reaction to perceived ethnic discrimination. *Applied Psychology*, *58*(1), 105-128.

Jetten, J., Branscombe, N. R., Schmitt, M. T., & Spears, R. (2001). Rebels with a cause: Group identification as a response to perceived discrimination from the mainstream. *Personality and Social Psychology Bulletin*, *27*(9), 1204-1213.

Jetten, J., Haslam, C., & Haslam, A.S. (Eds.). (2012). *The social cure: Identity, health and well-being*. Psychology Press.

Jones, J. M., & Jetten, J. (2011). Recovering from strain and enduring pain: Multiple group memberships promote resilience in the face of physical challenges. *Social Psychological and Personality Science, 2*(3), 239-244.

Koch, E. J., & Shepperd, J. A. (2004). Is Self-Complexity Linked to Better Coping? A Review of the Literature. *Journal of Personality*, *72*(4), 727-760.

Latrofa, M., Vaes, J., Pastore, M., & Cadinu, M. (2009). "United We Stand, Divided We Fall"! The Protective Function of Self-Stereotyping for Stigmatised Members' Psychological Well-Being. *Applied Psychology*, *58*(1), 84-104.

Miller, K., Wakefield, J. R., & Sani, F. (2016). Greater number of group identifications is associated with healthier behaviour in adolescents. *British Journal of Developmental Psychology*, *34*(2), 291-305.

Molina, L. E., Phillips, N. L., & Sidanius, J. (2015). National and ethnic identity in the face of discrimination: Ethnic minority and majority perspectives. *Cultural Diversity and Ethnic Minority Psychology*, *21*(2), 225.

Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, *128*, 3-72. doi:10.1037/0033-2909.128.1.3.

Ramos, M. R., Cassidy, C., Reicher, S., & Haslam, S. A. (2012). A longitudinal investigation of the rejection–identification hypothesis. *British Journal of Social Psychology*, *51*(4), 642-660.

Rubin, M., Milanov, M., & Paolini, S. (2016). Uncovering the diverse cultural bases of social identity: Ingroup ties predict self-stereotyping among individualists but not among collectivists. *Asian Journal of Social Psychology, 19*(3), 225-234.

Sani, F. (2012). Group identification, social relationships, and health. *The social cure: Identity, health and well-being*, 21-37.

Scarf, D., Moradi, S., McGaw, K., Hewitt, J., Hayhurst, J. G., Boyes, M., ... & Hunter, J. A. (2016). Somewhere I belong: Long-term increases in adolescents' resilience are predicted by perceived belonging to the in-group. *British Journal of Social Psychology*, *55*(3), 588-599.

Schmitt, M. T., Branscombe, N. R., Kobrynowicz, D., & Owen, S. (2002). Perceiving discrimination against one's gender group has different implications for well-being in women and men. *Personality and Social Psychology Bulletin*, *28*(2), 197-210.

Schmitt, M. T., Branscombe, N. R., Postmes, T., & Garcia, A. (2014). The consequences of perceived discrimination for psychological well-being: a meta-analytic review. *Psychological Bulletin*, *140*(4), 921.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of inter group behavior. In S Worchel & WG Austin (Eds). *Psychology of intergroup relations*. Chicago: Nelson.

Zdrenka, M., Yogeeswaran, K., Stronge, S., & Sibley, C. G. (2015). Ethnic and national attachment as predictors of wellbeing among New Zealand Europeans, Māori, Asians, and Pacific Nations peoples. *International Journal of Intercultural Relations*, *49*, 114-120.