

## Identification with all humanity—A test of the factorial structure and measurement invariance of the scale in five countries

Katarzyna Hamer<sup>1</sup> , Marta Penczek<sup>2</sup>, Sam McFarland<sup>3</sup>, Anna Włodarczyk<sup>4</sup>, Magdalena Łuźniak-Piecha<sup>2</sup>, Agnieszka Golińska<sup>1,5</sup>, Liliana Manrique Cadena<sup>5</sup>, Manuel Ibarra<sup>6</sup>, Paul Bertin<sup>7</sup>, and Sylvain Delouvée<sup>8</sup>

<sup>1</sup>Institute of Psychology, Polish Academy of Sciences, Warsaw, Poland

<sup>2</sup>Department of Psychology, University of Social Sciences and Humanities, Warsaw, Poland

<sup>3</sup>Faculty of Arts And Social Sciences, Western Kentucky University, Bowling Green, KY, USA

<sup>4</sup>Escuela de Psicología, Universidad Católica del Norte, Antofagasta, Chile

<sup>5</sup>Campus Monterrey, Tecnológico de Monterrey, Monterrey, Nuevo León, Mexico

<sup>6</sup>UC Nezahualcóyotl, Autonomous University of the State of Mexico, Mexico

<sup>7</sup>Université Côte d'Azur, LAPCOS, Nice, France

<sup>8</sup>Université Rennes, LP3C, Rennes, France

Identification with all humanity measured as an individual characteristic is an important factor related to social and international relations, such as concern for global issues and human rights, prosocial attitudes, intergroup forgiveness, attitudes toward immigrants, solving global problems, reactions to hate crimes and dehumanisation. We examine the factorial structure, psychometric properties and measurement invariance of the Identification with All Humanity (IWAH) scale in student samples from five countries (the United States, Poland, France, Mexico and Chile;  $N = 1930$ ). Separate confirmatory factor analyses (CFAs) for each country showed a second-order model of one superordinate factor with two subfactors. The cross-country validation of the scale, based on multigroup CFA, confirmed configural and metric invariance between countries for raw scores, and full metric invariance for “pure” scores. This study showed that the IWAH scale can be successfully used for cross-country research and the results from different countries can be compared and integrated.

**Keywords:** Global human identification; Identification with All Humanity scale; Factorial structure; Measurement invariance.

In recent years, global human identification has become increasingly popular as a concept and a research topic (for a review see McFarland et al., 2019). Data from the World Value Survey (WVS) shows that seeing oneself as belonging to a supranational group is common in many countries around the globe (WVS, n.d.; Rosemann, Reese, & Cameron, 2016). However, WVS uses only one item to measure being “a world citizen.” A more complex way of measuring human identification was proposed by

McFarland, Webb, and Brown (2012) who introduced the Identification with All Humanity (IWAH) scale. Previous research showed that the pattern of correlations between IWAH scores and a range of external variables was similar across different countries, thus providing some evidence for the cross-country validity of the construct (see Hamer et al., 2018; McFarland et al., 2019). However, the measurement invariance of any human identification scales has never been tested. In this paper, we examine the

Correspondence should be addressed to Katarzyna Hamer, Institute of Psychology, Polish Academy of Sciences, Jaracza 1, 00-378 Warsaw, Poland. (E-mail: khamer@khamer.eu, khamer@psych.pan.pl).

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factorial structure, psychometric properties and replicability (i.e. measurement invariance) of the IWAH scale in five countries (the United States, Poland, France, Mexico and Chile), which differ in many socio-cultural characteristics, to determine whether this scale can be used validly in different countries, language versions and in cross-cultural studies.

## IDENTIFICATION WITH ALL HUMANITY

The idea of the unity of humanity arose as early as the third century B.C., with the Cynic Diogenes of Sinope and the Stoic Chrysippus. Within modern psychology, the concept of identification with humanity appeared in the theories of Adler, Maslow, Allport and Erikson, as each regarded caring for the well-being of all humanity an expression of psychological maturity (for reviews see Hamer, McFarland, & Penczek, 2019; McFarland et al., 2019). As Maslow noted, those who have attained the highest level of human maturity “feel kinship and connection, as if all people were members of a single family ... Because of this, self-actualizing people have a genuine desire to help the human race” (Maslow, 1954, p. 138). In Turner’s social categorisation theory, the highest, super-ordinate level is seeing oneself as part of all humanity (Reicher, Spears, & Haslam, 2010).

For a long time, the concept of global human identification drew little attention from researchers, but this changed with the beginning of twenty-first century with a growing number of research studies in this area (for a broad review see McFarland et al., 2019). In this paper, we follow the approach proposed by McFarland et al. (2012). They proposed identification with humanity as a construct that describes people who identify with and feel close to people all over the world, care for them and see them as an in-group. There are many studies showing predictors, social consequences and psychological characteristics of this broad identification (summarised in McFarland et al., 2019). Research has shown that openness to experience, empathy and universalism-tolerance are key psychological foundations of this identification (Hamer et al., 2019). In addition, IWAH is negatively associated with ethnocentrism, blind patriotism, right-wing authoritarianism, social dominance orientation and religious fundamentalism, and is positively associated with the moral foundations of care and justice. Positive multicultural experiences enhance its development (see more in Hamer et al., 2019; McFarland et al., 2019; Sparkman & Eidelman, 2018, Sparkman & Hamer, under review).

Many studies show that identification with all humanity predicts a human rights orientation and concern for global issues (McFarland et al., 2012, 2019), intergroup forgiveness (Hamer, Penczek, & Bilewicz, 2017, 2018), as well as support for refugees (Bassett & Cleveland, 2019; Dunwoody & McFarland, 2018), international

volunteering, charities to end global hunger and stronger negative reactions to hate crimes (McFarland et al., 2019). It is negatively connected to islamophobia and dehumanisation (McFarland et al., 2019). Moreover, contrary to the stereotypical view of global identification as in opposition to national identification, studies in Poland and the United States showed that people who feel more closely identified with all humanity also feel more closely identified with their nations and local communities (Bassett & Cleveland, 2019; Bayram, 2019; Hamer & Gutowski, 2009; McFarland et al., 2019). More globalised individuals do not reduce contributions to local groups while increasing contributions to global groups, but rather are overall more generous (Grimalda, Buchan, & Brewer, 2018).

Studies conducted in different countries showed similar patterns of relationships between IWAH and an interest in, and concern for, global issues, the protection of human rights and prosocial activities toward people from different countries and cultures, thus providing some evidence for the cross-cultural validity of the measure (Hamer, McFarland, et al., 2018; McFarland et al., 2019). However, to date there are no studies of the cross-country validation and replicability of the IWAH scale or any other measure of global human identification or citizenship. In this paper, we test such measurement invariance.

## CURRENT STUDY

### Factorial structure of the IWAH scale

McFarland et al. (2012) developed the 9-item IWAH scale to measure identification with humanity (see Appendix) and broadly discussed its theoretical foundations (see e.g. McFarland et al., 2012, 2019). Although some studies of the IWAH suggested only a single factor (McFarland et al., 2012, 2019), studies by Reese, Proch, and Finn (2015) in Germany, and by Reysen and Hackett (2016) in the United States, suggest a two-factor structure. The first factor consists of items 1–4 (“How close do you feel to [people all over the world]”; “How often do you use the word “we” to refer to [people all over the world]”; “How much would you say you have in common with [people all over the world]” and “Sometimes people think of those who are not a part of their immediate family as ‘family’. To what degree do you think of the following groups of people as family [people all over the world]”). The second consists of items 6–9 (“How much would you say you care (feel upset, want to help) when bad things happen to [people all over the world]”; “How much do you want to be [a responsible citizen of the world]”; “How much do you believe in [being loyal to all mankind]” and “When they are in need, how much do you want to help [people all over the world]”). Item 5 was excluded from their analyses as loading on both factors.

Applying Leach et al.'s (2008) multicomponent model of in-group identification, Reese and colleagues called the two factors "global self-definition" (items 1–4) and "global self-investment" (items 6–9). Our detailed investigation of the items of both measures shows almost no similarities, however. Furthermore, almost none of the Leach et al. items reflect a sense of positive responsibility for the one's group or a desire to help its members in need, as are assessed by the second factor of the IWAH. This positive concern is, at best, vaguely implicit in one or two (of ten) Leach et al. self-investment items from solidarity subscale ("I feel committed to [in-group]," "I feel solidarity with [in-group]"). We thus argue that Leach et al.'s model and its labels should not be applied to the IWAH scale.

Reysen and Hackett (2016) named the IWAH factors "in-group identification" and "Adler/Maslow." These names seem more appropriate, as IWAH is rooted in two lines of theories: the social identity approach (Reicher et al., 2010) and the personality theories of Adler (1927/1954) and Maslow (1954). However, we believe these labels are too ambiguous for the broad audience. Thus, we propose to call the factors "bond" and "concern" as more informative and clear, also for people who are not experts in the field.

Proactive care and concern for others, present in the second factor, are critical to identification in the sense of Adler's and Maslow's personality theories, and can be exemplified by the rescuers during the Holocaust (McFarland et al., 2012). This quality, characteristic for their way of thinking, called "extensivity," means the extension of one's concern to other people, having empathy for them and a sense of responsibility toward them, regardless of who they are, and where they come from. It is the main quality distinguishing rescuers from non-rescuers (Monroe, 1996; Oliner & Oliner, 1988). According to Adler (1927/1954), "oneness with humanity" is the most mature form of social interest, and a desirable direction for its development. For Maslow (1954) sympathy, affection, IWAH and a desire to help the human race, called "human kinship," it is one of the 15 qualities of self-actualising people.

Following the social identity approach, IWAH reflects identification at the highest possible human level (Reicher et al., 2010). Social identity is defined as "that part of the individual's self-concept which derives from their knowledge of their membership of a social group (or groups) together with the value and emotional significance of that membership" (Tajfel, 1981, p. 255) and "describes and prescribes one's attributes as a member of that group—that is, what one should think and feel, and how one should behave" (Hogg, Terry, & White, 1995, pp. 259–260).

We find elements from both approaches in the items for both factors. The first factor consists more of items referring to the strength of the bond with the group,

but in the sense of both cognitive categorisation and affective feelings of closeness. We call it "bond." The second subscale refers to concern for members of the group: caring and helping them when in need, and feelings of responsibility and loyalty to the in-group. We call it "concern."

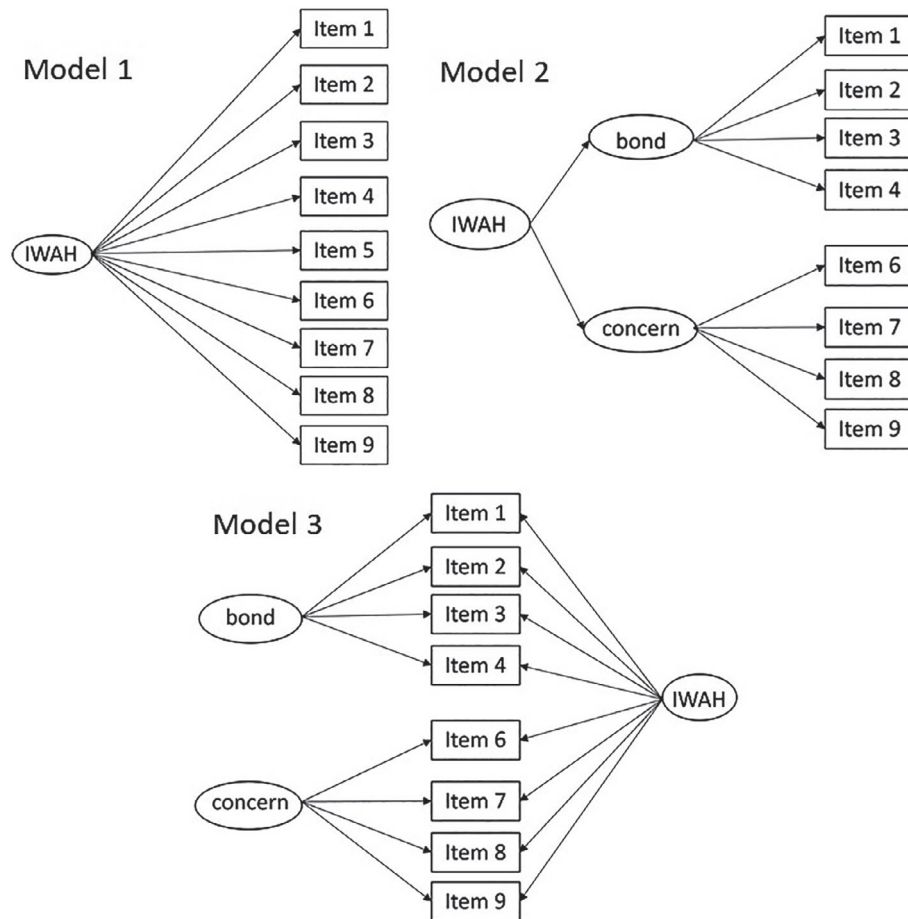
In this research we explore models of the IWAH scale's structure in five countries (see Figure 1). We test an original one factor solution (McFarland et al., 2012) with the full nine items (Model 1). We also test a two-factor solution postulated by Reese et al. (2015) and Reysen and Hackett (2016), but with a superordinate factor (Model 2). Such second-order models are "potentially applicable when (a) the lower-order factors are substantially correlated with each other, and (b) there is a higher-order factor that is hypothesized to account for the relationship among the lower-order factors" (Chen, West, & Sousa, 2006, p. 193). On the basis of previous research, we believe this characteristic is true in the case of IWAH scale. To the degree that feeling a bond with all humanity and concern for all humanity are distinguishable, as the two-factor IWAH solutions suggest, the superordinate factor of IWAH also offers greater precision and shows its usefulness in research (for a full review see McFarland et al., 2019). We therefore hypothesized that the best model of the factorial structure of the scale is of one superordinate factor with two subfactors (Hypothesis 1).

We also test a bifactor solution (Model 3), because bifactor and second-order factor models are alternative approaches to representing general constructs comprised of highly related domains. "Bifactor models are potentially applicable when (a) there is a general factor that is hypothesized to account for the commonality of the items; (b) there are multiple domain specific factors, each of which is hypothesized to account for the unique influence of the specific domain over and above the general factor; and (c) researchers may be interested in the domain specific factors as well as the common factor that is of focal interest" (Chen et al., 2006, p. 190). We do not think that the two specific factors are "over and above" the general factor in the case of IWAH; moreover, the IWAH factors are correlated. We instead expect Model 2 to be the best fit to data; however, we include a bifactor model for comparisons.

The question remains of whether the most relevant structural model of IWAH can be applied to different countries and cultures.

### IWAH as a global phenomenon

The majority of studies on IWAH were conducted in the United States (for a review see McFarland et al., 2019), but the construct was also positively verified in other countries, such as Germany (Reese et al., 2015), Australia (Faulkner, 2018) and Poland (Hamer et al., 2017, 2018,



**Figure 1.** Models of the structure of Identification with all Humanity scale tested in the study.

2019; Hamer & Gutowski, 2009). Similar constructs were also tested elsewhere in the world, such as the global citizenship construct in the United States, Bulgaria and India (Katzarska-Miller, Reysen, Kamble, & Vithoji, 2012), global social identity construct in the United States, Italy, Russia, Argentina, South Africa and Iran (Buchan et al., 2011) or the characteristics of global identity, which were explored in students from 24 countries by Türken and Rudmin (2013).

Moreover, our own analyses of data gathered in 58 countries using the World Value Survey shows that majority of people in almost all the tested countries see themselves “as a world citizen” (the only exceptions were Morocco, Russia and Egypt, but only in Egypt more respondents disagreed than agreed with the statement, WVS, n.d.).

The above studies demonstrate that the idea of seeing oneself as belonging to a supranational group is present in almost all tested countries, not only in the United States and other Western cultures, and introducing a more complex way of measuring human identification worldwide is scientifically justified. We agree with Reysen and Hackett (2016) that it is a multifaceted phenomenon that cannot

be reliably measured with only one item. Thus, we have decided to check applicability of a more complex way of measuring it in different countries, using the IWAH scale. We examine its factorial structure, psychometric properties of cross-country validation and replicability (i.e. measurement invariance) in the United States, Poland, France, Mexico and Chile.

These countries differ in many ways, such as in their cultural dimensions, ethnic makeup, national histories, geographic locations, languages and socio-cultural characteristics (see more in Hamer et al., 2020; World Atlas, 2017). For example, in Hofstede’s cultural dimensions, Chile is the most collectivistic of these countries, followed by Mexico, with Poland and France being more individualistic than collectivistic, and the United States—very individualistic (Hofstede Insights, n.d.). Similarly, in a newer approach to cultural dimensions, GLOBE’s dimension of in-group collectivism (“practices”), which refers to emotional bond with other in-group members, Mexico and Poland score highly, whereas the United States and France score significantly lower (no data for Chile; GLOBE project, n.d.). In institutional collectivism (“practices”) Poland scores the

highest and France the lowest, while Mexico and the United States are in between. In Humane orientation, which means the degree to which a collective encourages and rewards individuals for being fair, altruistic, generous, caring and kind to others, France's practices scores are the lowest, followed by Poland's and Mexico's scores, with the highest scores for the United States (GLOBE project, n.d.). Since IWAH scale measures broad social identifications, these cultural dimensions seem the most relevant. Additionally, GLOBE put the listed countries in different cultural clusters.

These countries also differ in the two dimensions of the Inglehart–Welzel Cultural Map (World Values Survey, n.d.). In the “traditional” versus “secular rational” value dimensions, Mexico is the most “traditional,” France—the most “secular rational,” and the United States, Poland and Chile are in between. In the “survival” versus “self-expression” dimension, the United States is highest on the “self-expression” side, followed by Mexico and France, with Chile and Poland closer to “survival” side. The latter two countries place more emphasis on economic and physical security and share a relatively more ethnocentric outlook (World Values Survey, n.d.), which potentially may hinder developing broad social identifications.

The five countries also play opposite roles in the global migration movements: Poland and Mexico have higher levels of emigration than immigration, opposite to the United States, France and Chile (Hallett, 2016). The ethnic makeups of the tested countries also differ, as Poland is one of the most nationally and religiously homogeneous, and its index of ethnic cohesion (more than 97%) is one of the highest in the world (Hamer et al., 2020). At the same time, the ethnic makeups of the United States, France, Chile and Mexico are very mixed (see, e.g. Hamer et al., 2020; World Atlas, 2017).

Despite these differences which may be relevant while measuring social identity, and on the basis of the arguments described above, we believe that identification with humanity is an appropriate concept for study in all these countries. We hypothesise that the factorial structure of the IWAH scale in these countries is the same, with one superordinate factor and two subfactors (Hypothesis 2). We also hypothesise that all items on the scale have a similar meaning and structure in all tested countries, providing measurement invariance (Hypothesis 3). If so, the scale is valid and suitable for cross-country research, including making multilevel modelling analyses across these countries.

### **Examination of cross-country concept universality and scale invariability**

Although the human psyche was originally seen as invariable across cultures, the last 30 years of cross-cultural

research has shown that to be false. It has been proven that many concepts and research results are not replicable in cultures outside their country of origin. Therefore, van de Vijver and Poortinga (2005) called for a careful examination of each phenomenon that is to be studied across cultures, and of the way it is measured.

When developing a study, researchers need to ask if a tested construct may appear in their considered cultures based on previous literature or an exploratory qualitative study. This entails the same definition of a construct, and the same corresponding behaviours. Lack of psychological construct equality is the primary reason for an inability to compare results obtained in different cultures (Van de Vijver & Poortinga, 2005).

Van de Vijver and Poortinga (2005) propose four sources of bias or lack of equivalence in cross-cultural studies: theoretical (construct), structural, measurement unit and scalar. The first step in the process of establishing comparability between cultures is mainly theoretical. Once it can be said with reasonable confidence that the construct in question exists in all considered populations, researchers can proceed to conduct a study. If the full comparability of results is required, the adoption of a specific measure (a back-translation technique) is necessary. When the data are gathered, statistical steps are still needed to ensure that question items are understood in the same way across cultures. This is due to the sampling of behaviours that represent the construct: even if in some cultures the chosen items represent a trait well, they may not in others (Van de Vijver & Poortinga, 2005).

The next level of equivalence is measurement invariance, defined as “a property of a measurement instrument (in the case of survey research, a questionnaire), implying that the instrument measures the same concept in the same way across various subgroups of respondents” (Davidov, Meuleman, Cieciuch, Schmidt, & Billiet, 2014, p. 58). This means that the structural, measurement unit and scalar equivalences need to be established in order to ensure that question items are perceived in a similar way so that both their means and correlates may be compared (Van de Vijver & Poortinga, 2005). We took all these steps in our research of IWAH scale in five countries.

Thus, a test of a measurement invariance indicates whether the scale can be used in a comparable manner across countries and whether the meaning of a construct is the same. There are three basic levels of measurement invariance. (a) Configural or structural equivalence is established if identical latent variables are measured by the same items in all groups (Van de Vijver & Poortinga, 2005). This indicates that the construct (as measured by a scale) is stable and replicable in different cultural contexts (Davidov et al., 2014). (b) Metric invariance assumes equal loadings of items on a latent variable. It indicates that the structure of the latent variable is the same across samples and therefore meaningful comparisons of the variable's correlates and predictors

are possible (Różycka-Tran, Jurek, Olech, Piotrowski, & Żemojtel-Piotrowska, 2017; Van de Vijver & Poortinga, 2005). (c) Scalar invariance indicates that comparisons in latent means across countries are possible, and is known as full equivalence (Van de Vijver & Poortinga, 2005). This level of invariance suggests that the respondents in each group use the scale in the same way (Davidov et al., 2014).

Boer, Hanke, and He (2018) describe multiple approaches to establishing equivalence. We have decided to use the most common method of testing for measurement invariance—multigroup confirmatory factor analysis (MGCFA) in AMOS (Van de Vijver & Poortinga, 2005). Vandenberg and Lance's (2000) recommend to accept models if the minimum discrepancy divided by degrees of freedom ( $CMIN/df$ ) < 3.00, Root mean square error of approximation (RMSEA)  $\leq .080$ , Standardized Root Mean Square Residual (SRMR);  $\leq .080$ , Tucker-Lewis index (TLI) > .90 and Confirmatory Fit Index (CFI) > .90, however, we will use  $CMIN/df$  < 5 which is permissible (see e.g. Bentler & Bonett, 1980), especially for large samples such as ours. The significance of  $\chi^2$  as an indicator depends on sample size and is problematic for large samples. For comparing levels of invariance, we used guidelines for the increasingly restricted models, where the benchmark change of the  $\Delta CFI$  is  $-.01$ , and where models that show worse fit should be rejected (cf. Vandenberg and Lance, 2000).

In summary, we want to determine which of the tested models best fits the construct of IWAH, whether the best found model fits the data well in all tested countries, and which levels of equivalence can be established for the IWAH scale.

## METHOD

### Participants and procedure

The data presented here was obtained during a study conducted via the Survey Monkey online platform on student samples in Chile, Mexico, Poland and the United States and with a paper/pencil technique in France ( $N = 1930$ ). We made a selection of participants in age range 18 to 30 years old in order to keep the samples as similar as possible. Participants who omitted parts of the questionnaires were excluded from further analyses. After the selection, the sample size for further analyses was  $N = 1418$ , including (a) 398 U.S. students: 74.1% female, mean age 19.88 years; (b) 257 Polish students: 79.8% female, mean age 22.93 years; (c) 210 Mexican students: 58.1% female, mean age 19.57 years; (d) 250 Chilean students: 59% female, mean age 21.28 years and (e) 303 French students: 81.2% female, mean age 20.72 years. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki

Declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual adult participants included in the study.

### Measure

IWAH was assessed with McFarland et al.'s (2012) original nine-item IWAH scale. Mean scores from identification with "people all over the world" subscale constitute raw scores of IWAH. However, following Dunwoody and McFarland (2018), for a "purer" measure of IWAH, the mean of the IWAH items was regressed onto means of identifications with one's community and nation items, and the standardised residual was used as the "pure" IWAH measure. For Poland, France, Mexico and Chile, the original IWAH scale was back-translated from English to Polish, French, Mexican-Spanish and Chilean-Spanish in order to obtain the most accurate translations of all items. All used versions of the scale can be found in Appendix.

## RESULTS

There are two parts of the analyses. We first tested models of the IWAH scale's structure (see Figure 1). Second, we tested its level of equivalence across countries. Since IWAH scale allows two types of scores for IWAH (raw and "pure"), we include them both in our analyses, however, focusing more on standardised residuals as the "purer" IWAH measure.

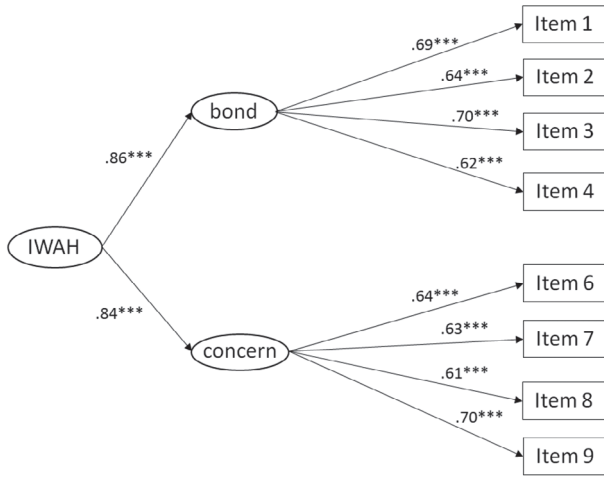
### TESTING THE FACTORIAL STRUCTURE OF IWAH

In the first step, we conducted confirmatory factor analyses (CFAs) across all countries in order to compare the three models ( $N = 1418$ ; see Figure 1).

The one factor model originally proposed by McFarland (see Figure 1, Model 1) did not fit the data for "pure" IWAH scores:  $\chi^2 = 393.41$ ,  $p < .05$ ,  $CMIN/df = 14.57$ ,  $TLI = .85$ ,  $CFI = 0.913$ ,  $RMSEA = .094$ ,  $SRMR = 0.05$ ,  $AIC = 447.41$ ,  $ECVI = 0.29$ , nor for raw IWAH scores:  $\chi^2 = 833.93$ ,  $p < .001$ ,  $CMIN/df = 30.89$ ,  $TLI = .73$ ,  $CFI = 0.84$ ,  $RMSEA = .138$ ,  $SRMR = .050$ ,  $AIC = 887.93$ ,  $ECVI = 0.57$ ).

In the next step, we tested a second-order model of one superordinate factor with two subfactors (bond and concern). The model that included all the items for "pure" scores fit the data well:  $\chi^2 = 124.20$ ,  $p < .001$ ,  $CMIN/df = 4.97$ ,  $TLI = .96$ ,  $CFI = 0.98$ ,  $RMSEA = .05$ ,  $SRMR = 0.037$ ,  $AIC = 182.20$ ,  $ECVI = 0.12$ .

However, item 5 loaded on both factors (for bond  $\beta = .34$ ,  $p < .001$ , for concern  $\beta = .46$ ,  $p < .001$ ). Since the loadings are significantly lower than



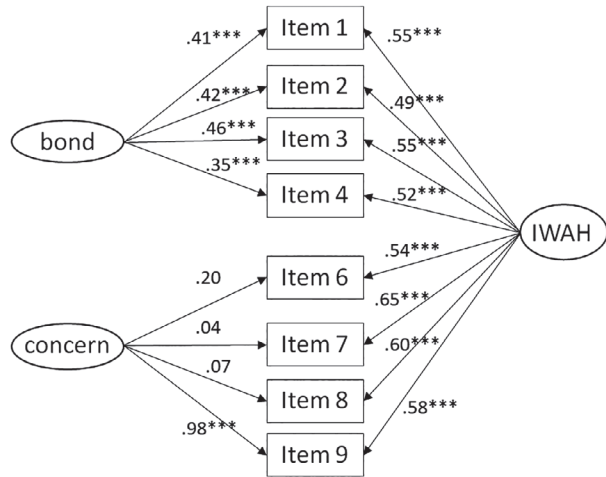
**Figure 2.** The results for the second-order model of one superordinate factor with two subfactors for “pure” IWAH scores (Model 2,  $N = 1418$ ).

those of other variables, and to avoid artificial increase of correlation between factors, we have decided to delete this item from further analyses, as Reese et al. (2015) and Reysen and Hackett (2016) postulated. The modified model is the one we hypothesized to fit the data best (see Figure 1, Model 2). The results for “pure” IWAH scores showed that it fit the data well:  $\chi^2 = 84.66$ ,  $p < .001$ ,  $CMIN/df = 4.46$ ,  $TLI = .96$ ,  $CFI = 0.98$ ,  $RMSEA = .047$ ,  $SRMR = 0.04$ ,  $AIC = 134.66$ ,  $ECVI = 0.09$  (see Figure 2).

The same analyses for raw IWAH scores showed similar results. The model with a superordinate factor that included item 5 for raw scores did not fit the data ( $\chi^2 = 159.93$ ,  $p < .001$ ,  $CMIN/df = 6.40$ ,  $TLI = 0.95$ ,  $CFI = 0.97$ ,  $RMSEA = .059$ ,  $SRMR = 0.037$ ,  $AIC = 217.93$ ,  $ECVI = 0.139$ ). However, since item 5 loaded weakly on both factors ( $\beta = .34$  for bond and  $\beta = .46$  for concern), we tested the same model without item 5 and the modified model fit the data well ( $\chi^2 = 87.38$ ,  $p < .001$ ,  $CMIN/df = 4.60$ ,  $TLI = 0.97$ ,  $CFI = 0.98$ ,  $RMSEA = .048$ ,  $SRMR = 0.03$ ,  $AIC = 137.38$ ,  $ECVI = 0.087$ ).

We also tested a model with two correlated factors without a superordinate factor, as proposed by Reese et al. (2015) and Reysen and Hackett (2016). This solution differs on theoretical level from the Model 2 proposed by us, but mathematically is identical, so it proved to fit the data well for both “pure” IWAH score:  $\chi^2 = 84.66$ ,  $p < .001$ ,  $CMIN/df = 4.46$ ,  $TLI = .96$ ,  $CFI = 0.98$ ,  $RMSEA = .05$ ,  $SRMR = 0.03$ ,  $AIC = 134.66$ ,  $ECVI = 0.09$ , and raw IWAH score:  $\chi^2 = 87.38$ ,  $p < .001$ ,  $CMIN/df = 4.60$ ,  $TLI = 0.97$ ,  $CFI = 0.98$ ,  $RMSEA = .048$ ,  $SRMR = 0.03$ ,  $AIC = 137.38$ ,  $ECVI = 0.087$ .

Finally, we tested a bifactor model (see Figure 1, Model 3). Although it fit the data well (for “pure” scores:  $\chi^2 = 34.33$ ,  $p < .001$ ,  $CMIN/df = 2.64$ ,  $TLI = 0.98$ ,



**Figure 3.** The results for the bifactor solution for “pure” IWAH scores (Model 3,  $N = 1418$ ).

$CFI = 0.99$ ,  $RMSEA = .03$ ,  $SRMR = 0.02$ ,  $AIC = 96.33$ ,  $ECVI = 0.06$ , see Figure 3; for raw scores:  $\chi^2 = 60.71$ ,  $p < .001$ ,  $CMIN/df = 4.67$ ,  $TLI = 0.98$ ,  $CFI = 0.99$ ,  $RMSEA = .05$ ,  $SRMR = 0.020$ ,  $AIC = 122.71$ ,  $ECVI = 0.08$ ), some of the factor loadings were either insignificant or very low (see Figure 3), and therefore we dismissed this model as worse than Model 2.

In summary, Model 2, the second-order model of the IWAH scale with one superordinate factor with two subfactors, appeared to best fit the data. Thus, Hypothesis 1 was confirmed. Therefore, Model 2 was used to establish the level of invariance between countries.

### TESTING CROSS-COUNTRY INVARIANCE

Next, we assessed the cross-country validity of the IWAH scale using MGCFAs and invariance analyses on data from five countries, both for raw and “pure” scores. For this purpose, we used Model 2, because it best fit the data, when all national samples were combined.

Table 1 presents statistical properties of the raw and “pure” IWAH scores.

We conducted the CFA for each country, using first “pure” and then raw IWAH scores.

The results indicate that the model fits the data well for all countries:  $RMSEA$ ,  $CFI$  and  $CMIN/df$  were acceptable in all national samples for both “pure” and raw IWAH scores (see Figure 4 and b and Table 2a and b), thus confirming Hypothesis 2.

In the final step, we conducted a three-level measurement equivalence test (configural, metric and scalar), using MGCFAs. Table 3a presents the global fit coefficients for “pure” IWAH scores. The results indicate full equivalence between samples.

For raw IWAH scores, configural and metric invariance were found; scalar invariance cannot be assumed,

**TABLE 1**  
Statistical properties of the raw and “pure” IWAH scores

	Mean scores and standard deviations for raw IWAH scores			Mean scores and standard deviations for “pure” IWAH scores			Cronbach’s Alpha for raw IWAH scores			Cronbach’s Alpha for “pure” IWAH scores		
	Bond	Concern	full IWAH	Bond	Concern	full IWAH	Bond	Concern	full IWAH	Bond	Concern	full IWAH
USA	2.49 (0.77)	4.24 (0.68)	3.36 (0.61)	0 (0.75)	0 (0.74)	0 (0.65)	0.73	0.78	0.78	0.74	0.73	0.81
Poland	2.27 (0.87)	3.24 (0.93)	2.75 (0.80)	0 (0.84)	0 (0.84)	0 (0.77)	0.86	0.86	0.88	0.87	0.87	0.90
Chile	2.67 (0.77)	3.82 (0.88)	3.24 (0.71)	0.00 (0.74)	0.01 (0.71)	0.01 (0.63)	0.73	0.78	0.81	0.72	0.70	0.79
Mexico	2.67 (0.79)	4.08 (0.77)	3.37 (0.65)	0 (0.72)	0 (0.71)	0 (0.60)	0.74	0.8	0.8	0.70	0.68	0.75
France	2.64 (0.83)	3.65 (0.81)	3.15 (0.73)	0 (0.76)	0 (0.74)	0 (0.67)	0.73	0.75	0.82	0.75	0.72	0.82

because  $CFI \leq .90$ , and  $CMIN/df > 5$  indicate lack of fit (see Table 3b).

Thus, these results support Hypothesis 3, confirming the metric invariance of the IWAH scale in regards to raw IWAH scores across all five countries and the full scalar invariance in regards to “pure” IWAH scores.

## SUMMARY AND DISCUSSION

IWAH, measured as an individual characteristic, is an important factor related to social and international relations, such as interest and concern for global issues and human rights, prosocial attitudes, intergroup forgiveness, attitudes toward immigrants, reactions to hate crimes and dehumanisation. For that reason, it seems important to investigate this construct in cross-country contexts, as it may contribute to solving global problems, advancing human rights and world peace. There has been no previous research into the equivalence of any human identification scales and invariance, which have often been assumed but not tested. Therefore, we believe that this study makes an important contribution, indicating that IWAH is a common construct across countries, and that the IWAH scale may be translated into different languages and used in different cultures.

Previous research with the IWAH scale revealed that the pattern of correlations between IWAH scores and a range of external variables is similar across different countries, thus providing some evidence for the cross-country validity of the construct (e.g. Hamer, McFarland, et al., 2018; McFarland et al., 2019). In this paper, we examined factorial structure and the psychometric properties of cross-country validation and replicability (i.e., measurement invariance) of the IWAH scale using samples from five countries: the United States, Poland, France, Mexico and Chile ( $N = 1930$ ).

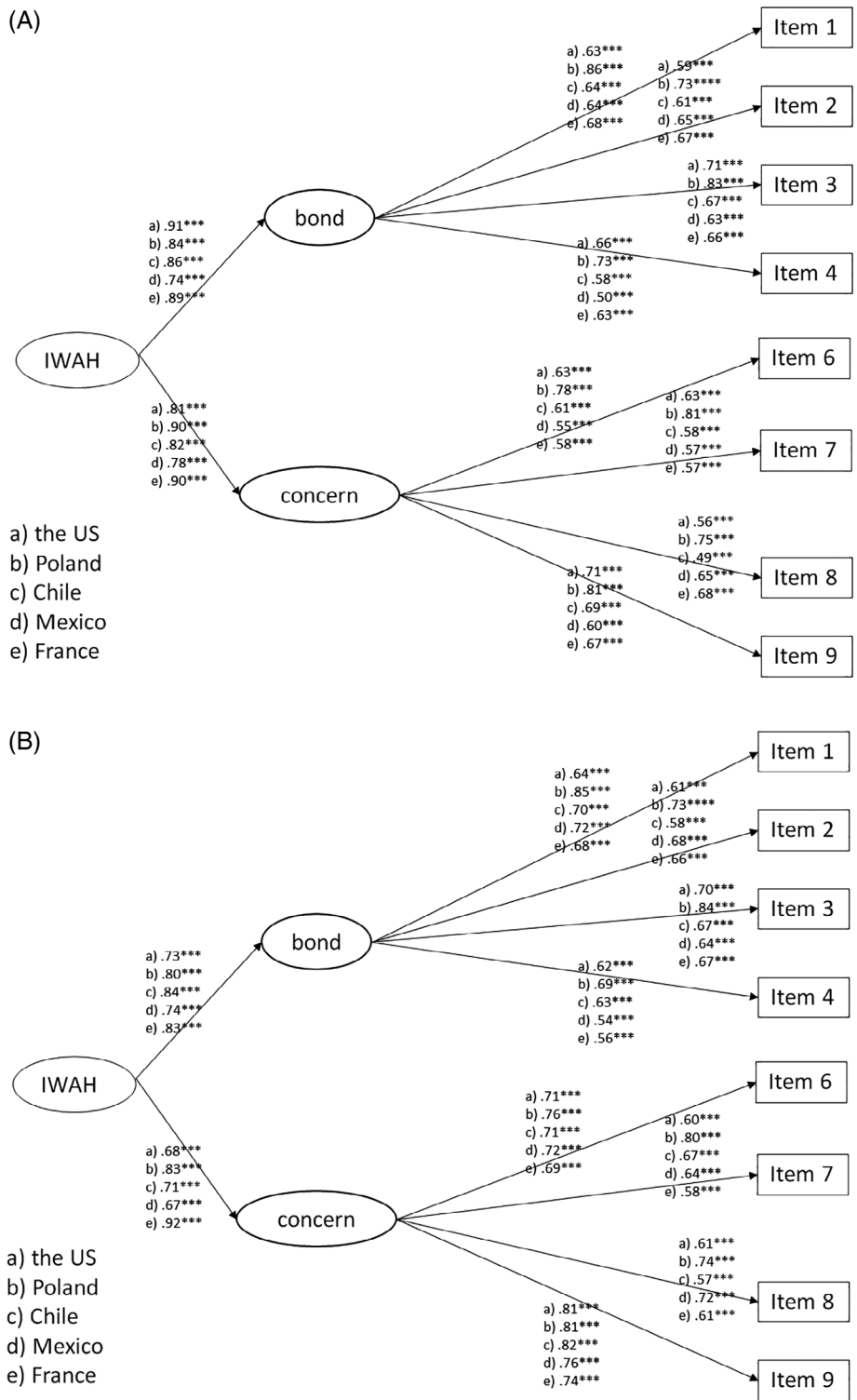
We tested three main models of the IWAH scale’s structure (see Figure 1), including the original, one factor solution with full 9 items (Model 1), a second-order solution with one superordinate factor and two subfactors (Model 2) and a bifactor solution (Model 3). On the basis of previous research (summarised in McFarland

et al., 2019), we hypothesized that the best model of the factorial structure of the IWAH scale is that of one superordinate factor with two subfactors (Hypothesis 1). We believed that this model is the most appropriate for IWAH, because to the degree that feeling a bond with all humanity and caring for all humanity are distinguishable, as the two-factor IWAH solutions suggest, the superordinate factor of IWAH offers greater precision and proved its usefulness in research (McFarland et al., 2019).

The results confirmed Hypothesis 1, showing that the second-order model with one superordinate factor and two subfactors (bond and concern) best fit the data, in both model goodness of fit criteria and factor loadings. Further CFA analyses proved that this model fits the data well in all five countries, confirming Hypothesis 2. MGCFAs confirmed that the IWAH scale is equivalent across countries (implying that the instrument measures the same concept and in the same way), as we found full (scalar) invariance for standardised residuals measure of IWAH (“pure” IWAH scores) as well as configural and metric invariance for raw IWAH scores. We thus showed that the construct (as measured by this scale) is stable and replicable in different national contexts and that the structure of the latent variable is the same across samples, confirming Hypothesis 3. This ensures the potential for cross-country comparisons in terms of correlates, predictors and effects of identification with humanity (both raw and standardised residuals scores), as well as cross-country comparisons in terms of IWAH means (standardised residuals measure). Lack of scalar invariance in raw scores of IWAH may be due to differences between societies included in the study, the studied groups and the context (see e.g. Cieciuch, Davidov, Oberski, & Algesheimer, 2015; Davidov et al., 2018; Rózycka-Tran et al., 2017). Future studies, conducted in a greater number of countries, could explore these issues further.

Although our study is limited by its reliance on students as participants, comparable student samples are ideal for cross-country comparisons to confirm the reliability and validity of the scale in different countries, as in our case (see also Rózycka-Tran et al., 2017).





**Figure 4.** The results of separate confirmatory factor analyses (CFAs) for five countries using (a) “pure” IWAH scores and (b) raw IWAH scores. [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)].

**TABLE 2**  
Summary of CFA in each of five countries

	$\chi^2$	<i>p</i>	<i>CMIN/df</i>	<i>TLI</i>	<i>CFI</i>	<i>RMSEA</i>	<i>SRMR</i>	<i>AIC</i>	<i>ECVI</i>
(a) Pure IWAH scores									
USA	28.67	0.07	1.51	0.98	0.99	0.036	0.03	78.67	0.2
Poland	46.39	<.001	2.44	0.96	0.98	0.075	0.037	96.39	0.38
Chile	27.07	0.1	1.43	0.97	0.99	0.032	0.037	77.07	0.19
Mexico	43	<.05	2.26	0.88	0.92	0.079	0.057	93	0.46
France	25.28	0.15	1.33	0.99	0.99	0.033	0.032	75.28	0.25
	$\chi^2$	<i>p</i>	<i>CMIN/df</i>	<i>TLI</i>	<i>CFI</i>	<i>RMSEA</i>	<i>SRMR</i>	<i>AIC</i>	<i>ECVI</i>
(b) Raw IWAH scores									
USA	29.3	0.06	1.54	0.98	0.99	0.037	0.03	79.3	0.2
Poland	42.32	0.002	2.23	0.97	0.98	0.069	0.041	92.32	0.36
Chile	28.33	0.08	1.49	0.98	0.98	0.044	0.038	78.33	0.32
Mexico	23.61	0.21	1.24	0.99	0.99	0.034	0.038	73.61	0.35
France	27.28	0.1	1.44	0.98	0.99	0.038	0.03	77.28	0.26

**TABLE 3**  
The level of equivalence

	$\chi^2$	<i>df</i>	<i>p</i>	<i>CMIN/df</i>	<i>CFI</i>	$\Delta CFI$	<i>TLI</i>	<i>RMSEA</i>	<i>SRMR</i>	<i>AIC</i>	<i>ECVI</i>
(a) Pure IWAH scores—Model comparisons											
(1) Configural invariance (equal form)	170.48	95	<.001	1.79	0.98	—	0.96	0.023	0.047	420.48	0.27
(2) Metric invariance (equal factor loadings)	188.24	119	<.001	1.58	0.98	0	0.97	0.019	0.051	390.24	0.25
(3) Scalar invariance (equal indicator intercepts)	189.19	151	0.019	1.25	0.99	0.01	0.99	0.013	0.051	327.19	0.21
	$\chi^2$	<i>df</i>	<i>p</i>	<i>CMIN/df</i>	<i>CFI</i>	$\Delta CFI$	<i>TLI</i>	<i>RMSEA</i>	<i>SRMR</i>	<i>AIC</i>	<i>ECVI</i>
(b) Raw IWAH scores—Model comparisons											
(1) Configural invariance (equal form)	157.76	95	<.001	1.66	0.98	—	0.97	0.021	0.03	407.76	0.26
(2) Metric invariance (equal factor loadings)	208.15	119	<.001	1.85	0.98	0	0.96	0.022	0.043	410.15	0.26
(3) Scalar invariance (equal indicator intercepts)	816.18	151	<.01	5.41	0.82	0.17	0.79	0.053	0.068	954.18	0.61

The results of our study therefore show that IWAH is a phenomenon that exists among respondents from the tested countries. Although our selected countries are very different in cultural dimensions, ethnic makeup, national histories, languages, geographic locations and socio-cultural characteristics, all are predominantly Christian and therefore may be seen as sharing some similarities that potentially stem from this religion. In order to establish the universality of the construct and IWAH as a way of measuring it, future studies should aim to include more countries, particularly those with very different religious backgrounds, such as Confucian or Hindu.

The relevance of studying and developing IWAH worldwide is of growing importance, especially in our world fighting global problems, such as climate change, refugee crisis and pandemic of COVID-19. Earlier research shows that collectivisation in a time of emergency increases the chances to survive. Collective identity mitigates against damaging behaviours, leads to positive actions, helps coordinate and create collective sources of support (Drury et al., 2019; Drury, Reicher, & Stott, 2020). Future studies could explore how IWAH changes

during the times of pandemic—does the threat (fear of being infected, losing a job) weaken or strengthen IWAH? Do individual differences determine whether weakening or strengthening of IWAH occurs? How does IWAH affect prosocial behaviours within and between countries in such difficult times, and does threat mediate this relationship? In our era of the Internet does IWAH change the way people cope with stress during the time of social distancing?

Chinese businessman Jack Ma donated supplies to several countries being hit by the coronavirus, including Japan, Korea, Italy, Iran and Spain. In his statement, he said “*The crisis presents a huge challenge to all humankind in a globalized world. The pandemic we face today can no longer be resolved by any individual country*” (Ward, 2020). The Japanese government, companies and private people donated money and medical supplies to aid China and showed their support in many other ways. On the crates with supplies they wrote quotes from Chinese poems, such as “*We are from different lands and are separated by mountains and waters. Yet above us, we share the same sky and the same feelings*” (Chong, 2020). The Chinese technology company Xiaomi

mailed a shipment of masks protecting from coronavirus to the Italian government stapling sides of the crates with an ancient line of poetry from the Roman philosopher, Seneca: “*We are waves from the same sea, leaves from the same tree, and flowers from the same garden*” (Shiyue, 2020). Apart from different motivations that could stand behind these donations, the quotes are clear manifestations of the idea being a core of IWAH, and it is not a fortuity. In a face of global threats, humanity needs to stand together to survive. It seems that studying and developing IWAH worldwide has never been more important.

## CONCLUSIONS

To date there were no studies of the cross-country validation and replicability of any measure of global human identification. Thus, our research brings important contribution in this area, showing the IWAH scale’s utility in measuring such a broad identification in different countries. In this paper, we showed that the IWAH scale displays full invariance across five countries and language versions for “pure” IWAH scores (controlling for shared variance with local and national identifications) and metric invariance for raw IWAH scores. This is sufficient to allow a comparison of correlates and predictors of the scale in different countries (for both type of IWAH scores) and a comparison of means for “pure” IWAH scores. Our cross-country research has also confirmed that the eight-item IWAH scale has a one superordinate factor and two subfactor structure in all five countries and tested languages. This study indicates that the IWAH scale can be successfully used for cross-country research and the results from different countries can be compared and integrated.

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**APPENDIX**

American version\*. Original version prepared by McFarland et al. (2012):

1. How close do you feel to each of the following groups? Please mark what best represents your feelings on the following scale:

	<i>Not at all close</i>	<i>Not very close</i>	<i>Just a little or somewhat close</i>	<i>Pretty close</i>	<i>Very close</i>
People in my community	1	2	3	4	5
Americans	1	2	3	4	5
People all over the world	1	2	3	4	5

2. How often do you use the word “we” to refer to the following groups of people?

	<i>Almost never</i>	<i>Rarely</i>	<i>Occasionally</i>	<i>Often</i>	<i>Very often</i>
People in my community	1	2	3	4	5
Americans	1	2	3	4	5
People all over the world	1	2	3	4	5

3. How much would you say you have in common with the following groups?

	<i>Almost nothing in common</i>	<i>Little in common</i>	<i>Some in common</i>	<i>Quite a bit in common</i>	<i>Very much in common</i>
People in my community	1	2	3	4	5
Americans	1	2	3	4	5
People all over the world	1	2	3	4	5

4. Sometimes people think of those who are not a part of their immediate family as “family.” To what degree do you think of the following groups of people as “family?”

	<i>Not at all</i>	<i>Just a little</i>	<i>Somewhat</i>	<i>Quite a bit</i>	<i>Very much</i>
People in my community	1	2	3	4	5
Americans	1	2	3	4	5
All humans everywhere	1	2	3	4	5

5. How much do you identify with (that is, feel a part of, feel love toward, have concern for) each of the following?

	<i>Not at all</i>	<i>Just a little</i>	<i>Somewhat</i>	<i>Quite a bit</i>	<i>Very much</i>
People in my community	1	2	3	4	5
Americans	1	2	3	4	5
All humans everywhere	1	2	3	4	5

6. How much would you say you care (feel upset, want to help) when bad things happens to:

	<i>Not at all</i>	<i>Just a little</i>	<i>Somewhat</i>	<i>Quite a bit</i>	<i>Very much</i>
People in my community	1	2	3	4	5
Americans	1	2	3	4	5
All humans everywhere	1	2	3	4	5

7. How much do you want to be:

	<i>Not at all</i>	<i>Just a little</i>	<i>Somewhat</i>	<i>Quite a bit</i>	<i>Very much</i>
A responsible citizen of your community	1	2	3	4	5
A responsible American citizen	1	2	3	4	5
A responsible citizen of the world	1	2	3	4	5

8. How much do you believe in:

	<i>Not at all</i>	<i>Just a little</i>	<i>Somewhat</i>	<i>Quite a bit</i>	<i>Very much</i>
Being loyal to my community	1	2	3	4	5
Being loyal to America	1	2	3	4	5
Being loyal to all mankind	1	2	3	4	5

9. When they are in need, how much do you want to help:

	<i>Not at all</i>	<i>Just a little</i>	<i>Somewhat</i>	<i>Quite a bit</i>	<i>Very much</i>
People in my community	1	2	3	4	5
Americans	1	2	3	4	5
People all over the world	1	2	3	4	5

**\*Subscales and scores**

Subscales:

- “Bond” subscale: items 1–4.
- “Concern” subscale: items 6–9.

The item 5 from the original scale was deleted as loading on both factors.

Scores:

- raw: mean scores from identification with “people all over the world,”
- “pure”: the mean of the identification with all humanity items is regressed onto means of identifications with one’s community and nation items, and the standardised residual is used as the “pure” IWAH measure.

**Chilean version\***

Version prepared by A. Włodarczyk:

1. ¿Qué tan cercano te sientes con cada uno de los siguientes grupos? Por favour, marca la opción que mejor representa tus sentimientos:

	<i>Para nada cercano/a</i>	<i>No muy cercano/a</i>	<i>Cercano/a de alguna manera</i>	<i>Muy cercano/a</i>
Personas en mi comunidad	1	2	3	4
Chilenos/as	1	2	3	4
Personas de todo el mundo	1	2	3	4

2. ¿Qué tan seguido usas la palabra “nosotros” para referirte a los siguientes grupos de personas?

	<i>Casi nunca</i>	<i>Rara vez</i>	<i>Ocasional mente</i>	<i>Frecuent emente</i>	<i>Muy frecuente mente</i>
Personas en mi comunidad	1	2	3	4	5
Chilenos/as	1	2	3	4	5
Personas de todo el mundo	1	2	3	4	5

3. ¿Cuánto dirías que tienes en común con los siguientes grupos?

	<i>Casi nada en común</i>	<i>Un poco en común</i>	<i>Algo en común</i>	<i>Un poco más en común</i>	<i>Mucho en común</i>
Personas en mi comunidad	1	2	3	4	5
Chilenos/as	1	2	3	4	5
Personas de todo el mundo	1	2	3	4	5

4. A veces la gente piensa en personas que no son parte de su familia inmediata como “familia”. ¿Hasta qué punto piensas de los siguientes grupos de personas como “la familia”?

	<i>Para nada</i>	<i>Un poco</i>	<i>Algo</i>	<i>Bastante</i>	<i>Mucho</i>
Personas en mi comunidad	1	2	3	4	5
Chilenos/as	1	2	3	4	5
Personas de todo el mundo	1	2	3	4	5

5. ¿Cuánto te identificas con te sientes parte de/sientes amor hacia/te preocupas por) ... ?

	<i>Para nada</i>	<i>Un poco</i>	<i>Algo</i>	<i>Bastante</i>	<i>Mucho</i>
Personas en mi comunidad	1	2	3	4	5
Chilenos/as	1	2	3	4	5
Personas de todo el mundo	1	2	3	4	5

6. ¿Qué tanto dirías que te importa (sientes molestia o deseos de ayudar) cuando cosas malas suceden a ... ?

	<i>Para nada</i>	<i>Un poco</i>	<i>Algo</i>	<i>Bastante</i>	<i>Mucho</i>
Personas en mi comunidad	1	2	3	4	5
Chilenos/as	1	2	3	4	5
Personas de todo el mundo	1	2	3	4	5

## 7. ¿Qué tanto quisieras ser ... ?

	<i>Para nada</i>	<i>Un poco</i>	<i>Algo</i>	<i>Bastante</i>	<i>Mucho</i>
Un/a ciudadano/a responsable de tu comunidad	1	2	3	4	5
Un/a ciudadano/a responsable de Chile	1	2	3	4	5
Un/a ciudadano/a responsable del mundo	1	2	3	4	5

## 8. ¿Qué tanto crees en ... ?

	<i>Para nada</i>	<i>Un poco</i>	<i>Algo</i>	<i>Bastante</i>	<i>Mucho</i>
Ser leal a mi comunidad	1	2	3	4	5
Ser leal a Chile	1	2	3	4	5
Ser leal a toda la humanidad	1	2	3	4	5

## 9. En el caso de que surja la necesidad ¿Qué tanto quisieras ayudar a ... ?

	<i>Para nada</i>	<i>Un poco</i>	<i>Algo</i>	<i>Bastante</i>	<i>Mucho</i>
Personas en mi comunidad	1	2	3	4	5
Chilenos/as	1	2	3	4	5
Personas de todo el mundo	1	2	3	4	5

**Mexican version\*.**

Version prepared by K. Hamer, A. Golińska, & L. Manrique Cadena:

1. ¿Qué tan cercano te sientes con cada uno de los siguientes grupos? Por favour, marca la opción que mejor representa tus sentimientos:

	<i>Para nada cercano/a</i>	<i>No muy cercano/a</i>	<i>Cercano/a de alguna manera</i>	<i>Cercano/a cercano/a</i>	<i>Muy cercano/a</i>
Personas en mi comunidad	1	2	3	4	5
Mexicanos	1	2	3	4	5
Personas de todo el mundo	1	2	3	4	5

2. ¿Qué tan seguido usas la palabra “nosotros” para referirte a los siguientes grupos de personas?

	<i>Casi nunca</i>	<i>Rara vez</i>	<i>Ocasional mente</i>	<i>Frecuente mente</i>	<i>Muy frecuente mente</i>
Personas en mi comunidad	1	2	3	4	5
Mexicanos	1	2	3	4	5
Personas de todo el mundo	1	2	3	4	5

3. ¿Cuánto dirías que tienes en común con los siguientes grupos?

	<i>Casi nada en común</i>	<i>Un poco en común</i>	<i>Algo en común</i>	<i>Un poco más en común</i>	<i>Mucho en común</i>
Personas en mi comunidad	1	2	3	4	5
Mexicanos	1	2	3	4	5
Personas de todo el mundo	1	2	3	4	5

4. A veces la gente piensa en personas que no son parte de su familia inmediata como “familia”. ¿Hasta qué punto piensas de los siguientes grupos de personas como “la familia”?

	<i>Para nada</i>	<i>Un poco</i>	<i>Algo</i>	<i>Bastante</i>	<i>Mucho</i>
Personas en mi comunidad	1	2	3	4	5
Mexicanos	1	2	3	4	5
Personas de todo el mundo	1	2	3	4	5

5. ¿Cuánto te identificas con (sentirse parte de, sentir amor hacia, tener preocupación por) lo siguiente?

	<i>Para nada</i>	<i>Un poco</i>	<i>Algo</i>	<i>Bastante</i>	<i>Mucho</i>
Personas en mi comunidad	1	2	3	4	5
Mexicanos	1	2	3	4	5
Personas de todo el mundo	1	2	3	4	5

6. ¿Qué tanto dirías que te importa (sentirse molesto, con deseos de ayudar) cuando cosas malas suceden a:?

	<i>Para nada</i>		<i>Un poco</i>		<i>Algo Bastante Mucho</i>	
Personas en mi comunidad	1	2	3	4	5	
Mexicanos	1	2	3	4	5	
Personas de todo el mundo	1	2	3	4	5	

7. ¿Qué tanto quisieras ser ... ?

	<i>Para nada</i>		<i>Un poco</i>		<i>Algo Bastante Mucho</i>	
Un/a ciudadano/a responsable de tu comunidad	1	2	3	4	5	
Un/a ciudadano/a responsable de México	1	2	3	4	5	
Un/a ciudadano/a responsable del mundo	1	2	3	4	5	

8. ¿Qué tanto crees en ... ?

	<i>Para nada</i>		<i>Un poco</i>		<i>Algo Bastante Mucho</i>	
Ser leal a mi comunidad	1	2	3	4	5	
Ser leal a México	1	2	3	4	5	
Ser leal a toda la humanidad	1	2	3	4	5	

9. Cuando tienen alguna necesidad ¿Qué tanto quisieras ayudar a:?

	<i>Para nada</i>		<i>Un poco</i>		<i>Algo Bastante Mucho</i>	
Personas en mi comunidad	1	2	3	4	5	
Mexicanos	1	2	3	4	5	
Personas de todo el mundo	1	2	3	4	5	

#### Polish version\*.

Version prepared by K. Hamer:

1. Jak bardzo czujesz się związany/a z każdą z poniższych grup? Zaznacz na poniższej skali odpowiedź najlepiej oddającą Twoje odczucia:

	<i>w małym wcale</i>		<i>w dużym stopniu</i>		<i>w bardzo dużym stopniu</i>	
Z ludźmi, którzy mieszkają w Twojej miejscowości	1	2	3	4	5	
Z Polakami	1	2	3	4	5	
Z ludźmi na całym świecie	1	2	3	4	5	

2. Jak często używasz słowa "my" w odniesieniu do poniższych grup ludzi:

	<i>prawie nigdy</i>		<i>rzadko</i>		<i>czasami często</i>		<i>bardzo często</i>	
Ludzi, którzy mieszkają w Twojej miejscowości	1	2	3	4	5			
Polaków	1	2	3	4	5			
Ludzi na całym świecie	1	2	3	4	5			

3. Jak wiele łączy Cię z poniższymi grupami ludzi:

	<i>zupełnie nie</i>		<i>prawie nie</i>		<i>średnio</i>		<i>raczej bardzo wiele</i>	
Z ludźmi, którzy mieszkają w Twojej miejscowości	1	2	3	4	5			
Z Polakami	1	2	3	4	5			
Z ludźmi na całym świecie	1	2	3	4	5			

4. Czasem ludzie myślą o innych, którzy tak naprawdę nie są ich rodziną, jak o rodzinie. Do jakiego stopnia myślisz o wymienionych grupach jak o swojej rodzinie?

	<i>prawie nigdy</i>		<i>rzadko</i>		<i>czasami często</i>		<i>bardzo często</i>	
O ludziach, którzy mieszkają w Twojej miejscowości	1	2	3	4	5			
O Polakach	1	2	3	4	5			
O ludziach na całym świecie	1	2	3	4	5			

5. Na ile czujesz się częścią poniżej wymienionych grup, na ile żywisz do nich pozytywne uczucia, troszczysz się o nie, czyli – na ile utożsamiasz się z:

	<i>w małym wcale</i>		<i>w dużym stopniu</i>		<i>w bardzo dużym stopniu</i>	
Z ludźmi, którzy mieszkają w Twojej miejscowości	1	2	3	4	5	
Z Polakami	1	2	3	4	5	
Z ludźmi na całym świecie	1	2	3	4	5	



6. Na ile przejmujesz się (czujesz się zdenerwowany/a, chcesz pomóc), gdy coś złego zdarza się:

	<i>w małym</i>		<i>w dużym</i>		<i>w bardzo</i>
	<i>wcale</i>	<i>stopniu</i>	<i>średnio</i>	<i>stopniu</i>	<i>dużym</i> <i>stopniu</i>
Ludziom, którzy mieszkają w Twojej miejscowości	1	2	3	4	5
Polakom	1	2	3	4	5
Ludziom gdziekolwiek na świecie	1	2	3	4	5

7. Jak bardzo chcesz być:

	<i>w małym</i>		<i>w dużym</i>		<i>w bardzo</i>
	<i>wcale</i>	<i>stopniu</i>	<i>średnio</i>	<i>stopniu</i>	<i>dużym</i> <i>stopniu</i>
Odpowiedzialnym członkiem/członkinią społeczności ludzi, którzy mieszkają w Twojej miejscowości	1	2	3	4	5
Odpowiedzialnym obywatelem/obywatelką Polski	1	2	3	4	5
Odpowiedzialnym członkiem/członkinią społeczności ludzkiej	1	2	3	4	5

8. Na ile wierzysz w to, że trzeba być lojalnym:

	<i>w małym</i>		<i>w dużym</i>		<i>w bardzo</i>
	<i>wcale</i>	<i>stopniu</i>	<i>średnio</i>	<i>stopniu</i>	<i>dużym</i> <i>stopniu</i>
Wobec społeczności z Twojej miejscowości	1	2	3	4	5
Wobec Polaków	1	2	3	4	5
Wobec całej ludzkości	1	2	3	4	5

9. Kiedy jest taka potrzeba, na ile chcesz pomóc:

	<i>w małym</i>		<i>w dużym</i>		<i>w bardzo</i>
	<i>wcale</i>	<i>stopniu</i>	<i>średnio</i>	<i>stopniu</i>	<i>dużym</i> <i>stopniu</i>
Ludziom, którzy mieszkają w Twojej miejscowości	1	2	3	4	5
Polakom	1	2	3	4	5
Ludziom na całym świecie	1	2	3	4	5

### French version\*.

Version prepared by P. Bertin & S Delouvée:

1. À quel point vous sentez-vous proche de chacun des groupes suivants? Veuillez cocher la lettre sur la grille de réponse qui représente le mieux votre ressenti selon l'échelle suivante:

	<i>pas du tout</i>		<i>juste un peu ou légèrement</i>		<i>assez</i>	<i>très</i>
	<i>proche</i>	<i>proche</i>	<i>proche</i>	<i>proche</i>	<i>proche</i>	<i>proche</i>
Les membres de ma communauté	1	2	3	4	5	
Les Français	1	2	3	4	5	
Les humains du monde entier	1	2	3	4	5	

2. À quelle fréquence utilisez-vous le mot « nous » lorsque vous faites référence aux groupes de personnes suivants?

	<i>presque jamais</i>		<i>occasionnelle</i>		<i>très</i>
	<i>jamais</i>	<i>rarement</i>	<i>ment</i>	<i>souvent</i>	<i>souvent</i>
Les membres de ma communauté	1	2	3	4	5
Les Français	1	2	3	4	5
Les humains du monde entier	1	2	3	4	5

3. Que pensez-vous avoir en commun avec les groupes suivants?

	<i>peu de choses</i>		<i>certains</i>		<i>beaucoup</i>	<i>vraiment</i>
	<i>quasiment rien en commun</i>	<i>choses en commun</i>	<i>choses en commun</i>	<i>de choses en commun</i>	<i>de choses en commun</i>	<i>beaucoup de choses en commun</i>
Les membres de ma communauté	1	2	3	4	5	
Les Français	1	2	3	4	5	
Les humains du monde entier	1	2	3	4	5	

4. Parfois les gens considèrent comme faisant « partie de leur famille » des personnes qui ne sont pas de leur famille proche. Jusqu'à quel point pensez-vous que les groupes suivants font partie de « votre famille »?

	<i>pas du tout</i>		<i>un peu</i>	<i>moyennement</i>	<i>beaucoup</i>	<i>vraiment beaucoup</i>
Les membres de ma communauté	1	2	3	4	5	
Les Français	1	2	3	4	5	
Les humains du monde entier	1	2	3	4	5	

5. À quel point vous identifiez-vous (c'est-à-dire, avoir le sentiment d'appartenir à, ressentir de l'attachement envers, se préoccuper de) à chacun des groupes suivants?

	<i>pas du tout</i>		<i>un peu</i>	<i>moyennement</i>	<i>beaucoup</i>	<i>vraiment beaucoup</i>
Les membres de ma communauté	1	2	3	4	5	
Les Français	1	2	3	4	5	
Les humains du monde entier	1	2	3	4	5	

6. À quel point diriez-vous que vous vous sentez concerné (se sentir bouleversé, avoir envie d'aider) lorsque des choses négatives arrivent aux:

	<i>pas du tout</i>		<i>un peu</i>	<i>moyennement</i>	<i>beaucoup</i>	<i>vraiment beaucoup</i>
Les membres de ma communauté	1	2	3	4	5	
Les Français	1	2	3	4	5	
Les humains du monde entier	1	2	3	4	5	

7. À quel point voulez-vous être:

	<i>pas du tout</i>		<i>un peu</i>	<i>plutôt</i>	<i>beaucoup</i>	<i>vraiment beaucoup</i>
un citoyen responsable de votre communauté	1	2	3	4	5	
un citoyen Français responsable	1	2	3	4	5	
un citoyen du monde responsable	1	2	3	4	5	

8. Quelle importance accordez-vous à:

	<i>pas du tout</i>		<i>un peu</i>	<i>plutôt</i>	<i>beaucoup</i>	<i>vraiment beaucoup</i>
la loyauté envers votre communauté	1	2	3	4	5	
la loyauté envers la France	1	2	3	4	5	
la loyauté envers toute l'humanité	1	2	3	4	5	

9. Lorsqu'ils sont dans le besoin, jusqu'à quel point voulez-vous aider:

	<i>pas du tout</i>		<i>un peu</i>	<i>plutôt</i>	<i>beaucoup</i>	<i>vraiment beaucoup</i>
Les membres de votre communauté	1	2	3	4	5	
Les Français	1	2	3	4	5	
Les humains du monde entier	1	2	3	4	5	