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The Measurement of (Dis-)Embedded Identification

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Measurement Instruments for the Social Sciences, 2024, Vol. 6, Article e13783, https://doi.org/10.5964/miss.13783

Received: 2024-01-23 • **Accepted:** 2024-10-17 • **Published (VoR):** 2024-12-03

Handling Editor: Marco Perugini, University of Milan Bicocca, Milan, Italy

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Supplementary Materials: Data [see Index of Supplementary Materials]

Abstract

This article introduces and examines novel measures for generally applicable and insightful forms of collective identification, namely embedded identification and dis-embedded identification, which describe specific constellations of identification with a subordinate ingroup and the respective superordinate (in)group. The measure development process was guided by social identity theory and self-categorization theory, by items employed in previous research, and by empirical research addressing or containing measures of collective identification. In two samples, the young generation in Germany and Muslims in England, the measures showed no problematic characteristics, decent reliability, decent corrected item-total correlations, basic construct validity, as well as metric invariance across both samples. The presented findings hold implications for further research, as the measures provide a reliable and valid option to measure novel forms of collective identification of major interest and relevance for the comprehension of intergroup processes and conflicts in modern and plural societies. Detailed information is provided to enable replication, further use, and further development of the presented measures.

Keywords

identity, identification, multi-level, (dis-)embeddedness, measurement, scale development

The concept of collective identity was and is a prominent concept within the social sciences, especially within social psychology (Chryssochoou, 2003; Howard, 2000). A collective identity is formed if the self-interpretation of an individual is based on a single shared self-aspect by which the individual and equivalent others are categorized as a group (Simon, 2004; Turner et al., 1987), meaning that every conceivable self-aspect may

form a collective identity (Howard, 2000; Simon, 2004). Identity functions concern fundamental needs, like agency, belongingness, distinctiveness, meaning or understanding, and respect or esteem. Identity processes, like biases, conformity, discrimination, prejudice, stereotypes, as well as general pro-ingroup and anti-outgroup attitudes, serve the satisfaction of those functions (Simon, 2004; see Capozza & Brown, 2000). Consequently, collective identity is a valuable explanatory concept in multiple fields and on multiple levels of analysis within research (Deaux, 2000; Worchel et al., 2000).

A variety of measures of collective identity, unidimensional (e.g., Doosje et al., 1995; Postmes et al., 2013) or multidimensional (e.g., Leach et al., 2008; Roccas et al., 2008), is already in existence. However, if a novel kind of collective identity is conceptualized, a novel kind of measurement is required—which is the concern of the present article.[1]

Theoretical and Empirical Background

A social group, according to social identity theory (Tajfel & Turner, 1986, p. 15), is "a collection of individuals who perceive themselves to be members of the same social category, share some emotional involvement in this common definition of themselves, and achieve some degree of social consensus about the evaluation of their group and of their membership in it." Such social groups are the equivalent of self-categorizations, "i.e., cognitive groupings of oneself and some class of stimuli as the same [...] in contrast to some other class of stimuli" (Turner et al., 1987, p. 44), typically based on a single shared self-aspect (Simon, 2004). This is the origin of collective identities, involving a cognitive, evaluative, and affective facet (Simon, 2004; Tajfel & Turner, 1986; Turner et al., 1987).

In modern and plural societies, individuals hold a variety of identities, shifting in emergence and significance (Howard, 2000; Roccas & Brewer, 2002). A reasonable selection within this variety and, if applicable, a meaningful classification of (in)groups as subordinate and superordinate is dependent on the specific research question. As holding a variety of identities involves the problem of accentuation and prioritization, one may question "when confronting a [...] choice, which of one's [...] identifications ultimately governs one's actions" (Citrin & Sears, 2009, p. 149) and which of one's underlying collective norms and values prevail. Hence, intergroup processes and conflicts are shaped by multiple collective identities as well as the combination and psychologically construed vertical structure, in other words, the (dis-)embeddedness thereof (Paffrath & Grabow, 2022; Paffrath & Simon, 2020, 2023). A vertical structure of collective identity and a

1) The terms collective identity and social identity describe essentially congruent concepts of identity (see Ashmore et al., 2004). The term collective identity, in a non-Durkheimian sense, is preferred to avoid the fallacy that an individual identity is unsocial, to precisely refer to the group level of identification, as well as to avoid confusion with conceptualizations of identity not rooted in social identity theory or self-categorization theory (Ashmore et al., 2004; Brewer & Gardner, 1996; Simon, 2004).

(dis-)embeddedness of collective identities are also described by self-categorization theory: "Self-categorizations exist as part of a hierarchical system of classification" and thus "form at different levels of abstraction related by means of class inclusion" (Turner et al., 1987, p. 45).

It is argued that the selection and classification of ethnic, religious, sexual, political, or other communities as subordinate and the classification of the respective society as superordinate is reasonable and meaningful for research questions addressing intergroup processes and conflicts within modern and plural societies (Paffrath, 2020; Simon, 2020, 2023): For example, struggles about (mis)recognition and (in)tolerance ordinarily involve subordinate communities and related norms, values, and interests as well as the superordinate society as a political, legal, cultural, and ethical/normative framework (e.g., Liebkind et al., 2016; Simon, 2020, 2023; see Rawls, 2001). These struggles are politicized in that they are conducted in a public setting with society as an audience (Simon, 2020). Communities engage with society to garner supporters and detect opponents for their specific agenda (Simon, 2020; Simon & Klandermans, 2001). This politicization is likely to result in societal polarization in which society is divided along lines initially drawn between communities (Krys et al., 2020; Simon et al., 2019). Furthermore, communities may demonstrate political attitudes and actions that extend beyond politicization. The pursuit of ends and/or the use of means that are situated outside of the normatively accepted ends and means within society indicate the presence of radicalization (Rawls, 2001; Simon, 2011). As a suitable response to these processes in plural and modern societies, tolerance is put forth. It can be defined as disapproval based on community differences and contradictions counterbalanced by equality-based respect based on shared membership in society (Simon, 2023; Simon & Schaefer, 2016). In summary, the described processes and conflicts involve both a subordinate community (identity) and a superordinate society (identity) (Paffrath, 2020).

Accordingly, embedded identity and dis-embedded identity are conceptualized, previous research employing these conceptualizations is briefly reported, and—of capital importance—measures for those conceptualizations are introduced and examined.

Conceptualization of (Dis-)Embedded Identity

Embedded identity is conceptualized as the dual identification with a particular subordinate ingroup and the relevant superordinate ingroup—implying that the former is psychologically construed as hierarchically included in the latter. Dis-embedded identity is conceptualized as the accentuation and prioritization of the identification with a particular subordinate ingroup relative to the identification with the relevant superordinate (in)group—implying that the former is psychologically construed as hierarchically excluded from the latter (Paffrath & Grabow, 2022; Paffrath & Simon, 2020, 2023). Relevant examples in the context of the present article are an individual identifying with the Muslim community and likewise with the English society and thus perceiving

her/his religious community to be included in society (embedded identification) or an individual identifying significantly and primarily with the young generation but only insignificantly and secondarily with the German society and thus perceiving the young generation to be excluded from society (dis-embedded identification). This is not to deny the fact that, for specific research questions, the English or German society could also be classified as a subordinate group and the Muslim community or the young generation as a (transnational) superordinate group.

These conceptualizations exhibit similarities to other conceptualizations discussed in the literature, such as acculturative and dissociative identity (Hutnik, 1986; Liebkind et al., 2016), integrative and exclusive/hierarchical identity (Sammut, 2011), and dual and separatist identity (Simon & Grabow, 2010; Simon & Ruhs, 2008; Verkuyten et al., 2019). However, the presented conceptualizations exhibit differences due to the explicit consideration of the vertical structure and the psychological (dis-)embeddedness of collective identities as well as the considered levels, weights, and relations of both identifications in that (dis-)embedded identity shall generally be applicable and insightful (see Paffrath & Simon, 2023).

Use of (Dis-)Embedded Identity

In general, the consequence of embedded identity should be a consideration as a subordinate ingroup member of the superordinate ingroup and thus its norms, values, interests, and eventually group members as such. In contrast, the consequence of dis-embedded identity should be inconsideration. Against the backdrop of comprehensive theoretical elaborations, not in the focus of the present article, previous research demonstrated the following: Embedded identification is unrelated or even negatively related to sympathy for non-normative ends and means (Paffrath & Simon, 2020) but partially positively related to tolerance towards disapproved outgroups (Paffrath & Grabow, 2022). Dis-embedded identity is positively related to sympathy for non-normative ends and means (Paffrath & Simon, 2020) as well as the pursuit of hegemony of the subordinate ingroup in the superordinate (in)group (Paffrath & Simon, 2023), but negatively related to tolerance towards disapproved outgroups (Paffrath & Grabow, 2022). Also, dis-embedded identity is negatively predicted by societal respect and, especially under the condition of lacking societal respect, positively predicted by intragroup respect (Paffrath & Simon, 2023). Moreover, if (dis-)embedded identity is tested as a competing predictor against simple subordinate or superordinate (in)group identification, (dis-)embedded identity seems to hold the higher predictive value for social psychological outcomes (e.g., Paffrath & Simon, 2023; Simon et al., 2013, 2015; Simon & Grabow, 2010). These corroborated relations of (dis-)embedded identification can be interpreted as indicators of applicable conceptualizations and an insightfulness thereof. Particularly, because the presented consequences of (dis-)embedded identity reflect the proposed implication of (in)consideration as a subordinate ingroup member towards the superordinate (in)group.

Measurement of (Dis-)Embedded Identity

In previous research, two items each were used to construct measures of (dis-)embedded identification. For embedded identification, the items read: "I feel connected to both [subordinate ingroup] and also to [superordinate (in)group]" and "I am glad to be both a part of [subordinate ingroup] and a part of [superordinate (in)group]." For dis-embedded identification, the items read: "I feel more connected to [subordinate ingroup] than to [superordinate (in)group]" or "I feel I belong more to my [subordinate ingroup] than to [superordinate (in)group]" and "all in all, I feel more [subordinate ingroup characteristic] than [superordinate (in)group characteristic]." Despite the fact that these measures showed to be reliable and reflect the assumed structure, a need for more elaborated and extensive measures was acknowledged (Paffrath & Grabow, 2022; Paffrath & Simon, 2020, 2023; also see Simon & Grabow, 2010; Simon & Ruhs, 2008).

A direct measurement approach is used for (dis-)embedded identification, meaning that each item directly questions both components and specific constellations thereof. The counterpart to this approach is the indirect measurement approach: On separate scales, subordinate (e.g., ethnic) identification and superordinate (e.g., societal) identification are separately measured, a cluster analysis is conducted, and participants are assigned to different categories (typically four, corresponding to low versus high levels of identification on each scale and the respective constellations). Alternatively, the separate scales of subordinate (e.g., ethnic) identification and superordinate (e.g., societal) identification are, combined with the interaction thereof, used as predictors of relevant consequences (e.g., Verkuyten, 2018). In an empirical comparison of the direct and indirect measurement approach, the measures showed a partial overlap and comparable relations to social psychological consequences (Fleischmann & Verkuyten, 2016, Study 2). Nevertheless, "focusing on the combination of two separate group identifications […] may not always adequately capture the subjective meaning" of particular forms of identity (Verkuyten et al., 2019, p. 396). It is unknown whether participants with high levels of subordinate and high (or low) levels of superordinate identification experience this constellation as an embedded (or dis-embedded) identity. "The latter might have different psychological meanings and different social consequences from the former" (Verkuyten et al., 2019, p. 396; see Hopkins, 2011). Also, even asymmetrical constellations of components can yield a sense of a (dis-)embedded identity (Simon & Ruhs, 2008).

Parallels can be drawn to the discussion of direct versus indirect measurement of attitude strength and, more specifically, attitude ambivalence (e.g., Bassili, 1996; Conner & Sparks, 2002; Jonas et al., 2000). Conner and Sparks (2002) suggest that divergences between both approaches result from different assumptions: First, the direct approach assumes that participants have conscious access to the subject in question, while the indirect approach does not. Second, the indirect approach assumes that separate components of the subject in question are exclusive determinants of the participants' experience of the subject in question, while the direct approach does not but allows for additional

determinants. Again, the assumptions of the direct approach seem to be more plausible if the subject in question is a participants' identity (see Simon, 2004; Turner et al., 1987).

Thus, in the case of (dis-)embedded identification, it was deemed reasonable and more advantageous to directly question both components and specific constellations within each item—allowing participants to construe an own identification and report its congruence to the presented items.

Aims and Objectives

The aim of this research is to introduce and examine novel measures for embedded identification and dis-embedded identification and thus to contribute to the comprehension of intergroup processes and conflicts within modern and plural societies. The first objective is to generate five items, each forming measures of (dis-)embedded identification, based upon available theoretical and empirical backgrounds in a German and an English version. The second objective is to rigorously analyze those measures in regard to descriptive metrics (mean, median, standard deviation, skewness, kurtosis, item-intercorrelation), quality criteria (Cronbach's alpha, McDonald's omega, corrected item-total correlation), and basic construct validity (measurement model, associations with each other, associations with respective components), as well as measurement invariance across the German and English version in two different samples. These objectives are accompanied by the third objective to provide equivalent measures of subordinate ingroup and superordinate (in)group identification.

Method

Measures

For the measurement of (dis-)embedded identification, five items each were generated in German and English. This process was guided by three points of reference. First, by social identity theory (Tajfel & Turner, 1986) and self-categorization theory (Turner et al., 1987) from which a cognitive, evaluative, and affective facet of collective identity can be deduced—of which the cognitive and affective facet are frequently considered within measures (Citrin & Sears, 2009; Roccas et al., 2008), but of which the cognitive facet is the most substantial (Turner et al., 1987). Second, for consistency and coherency, the mentioned items employed in previous research (Paffrath & Grabow, 2022; Paffrath & Simon, 2020, 2023; also see Simon & Grabow, 2010; Simon & Ruhs, 2008). Third, by additional empirical research addressing or containing the measurement of collective identification. The measure proposed by Doosje, Ellemers, and Spears (1995) uses four items to capture the cognitive, affective, and evaluative facets of identification (Cameron, 2004; Postmes et al., 2013): "I identify with other [ingroup members]," "I see myself as an [ingroup member]," "I am glad to be an [ingroup member]," and "I feel strong ties

with [ingroup]." It is reportedly parsimonious yet reliable (Doosje et al., 1995; Spears et al., 1997) and can be modified and extended to form an also reportedly reliable measure comprising eight items (Doosje et al., 1998, 2006). Also, it is fairly compatible with different research (see R. Brown et al., 1986; Cameron, 2004). These measures were selected as tangible templates, which were then modified and extended to match the conceptualizations of (dis-)embedded identification. This is not to deny the existence of a variety of other possible measures of collective identification (e.g., Leach et al., 2008; Roccas et al., 2008).

The items and rating scales generated to measure (dis-)embedded identification are presented in Appendix Table A and Table B. Exemplary items read "I am glad to be a member of the young generation as well as a member of the German society" (embedded identification in the sample of the young generation in Germany) and "I feel significantly connected to the Muslim community, but only insignificantly to the English society" (dis-embedded identification in the sample of Muslims in England). The first bipartite item of each scale was generated to potentially enable parsimonious single-item measures (see Postmes et al., 2013). Additionally, for subordinate ingroup identification and superordinate (in)group identification, corresponding five items each were generated guided by the same three points of reference, presented in Appendix Table C and Table D. Exploratively, a two-item measure of perceived in-/exclusion of the subordinate ingroup in/from the superordinate (in)group was generated ("I [fully / only partially] regard [subordinate ingroup] as a part of the [superordinate (in)group]"). These additional measures were employed to assess basic construct validity of the measures of (dis-)embedded identification.

Respondents and Procedure

For the purposes of this research, two different samples were recruited: Young generation in Germany (YGiG) and Muslims in England (MiE). The former was sampled between August and December 2021 as well as February and May 2023 via an online recruiting portal for psychology students at a German university. The latter was sampled in November 2021 via *Prolific Academic Ltd* (www.prolific.co). Selection criteria were citizenship (YGiG: German / MiE: British), country of residence (YGiG: Germany / MiE: England), and age (YGiG: ≤ 30 years) or religious affiliation (MiE: Muslim). The final sample sizes were N_{YGiG} = 286 and N_{MiE} = 291, respectively. Further sociodemographic information was gathered (presented for YGiG and then, separated by a slash, for MiE), such as gender (female: 78.7% / 60.8%; male: 21.0% / 38.8%), age (M = 22.7 / 29.2; SD = 3.3 / 9.1), and education (academics: 7.3% / 60.1%), as well as migration background (18.9% / 72.5%) and native language (German / English: 97.2% / 85.6%). Also, information on political orientation was gathered (M = −1.5 / −0.8; SD = 1.0 / 1.3; on a scale from −3 *left* to +3 *right*).

It was reflected if the sample sizes were reasonable for the present article (see Lakens, 2022). As the main analysis is a—rather simple—multi-group confirmatory factor analysis with five latent constructs and regularly five indicators for each construct, with expected high indicator loadings, as well as expected medium to high correlations between indicators and constructs, the sample sizes of 286 and 291, or 577 for the multi-group analysis, were assumed to be reasonable and to provide reasonably stable parameter estimates (MacCallum et al., 1999; Schönbrodt & Perugini, 2013, 2018; Wolf et al., 2013).

The study was introduced to respondents as an investigation of the relationship of individuals to particular groups, i.e., communities and societies. First, respondents read relevant information about the study and a data privacy statement and then gave informed consent to participate. Subsequently, respondents answered the measures of subordinate ingroup identification and superordinate (in)group identification presented in randomized order with randomized item order within each measure. Subsequently, respondents answered the measures of embedded identification and dis-embedded identification, which each contained one additional item exploratively targeting the perceived in-/exclusion of the subordinate ingroup in/from the superordinate (in)group, also presented in randomized order with randomized item order within each measure. Last, respondents provided sociodemographic information and were thanked.

Results

Preliminary Analyses

Missing Values

The extent of missingness within cases is low, with an average of 1.12% (*SD* = 5.63) [YGiG] or 2.03% (*SD* = 6.97) [MiE] of missing values in the variables of (dis-)embedded identification. The extent of missingness within variables of (dis-)embedded identification is also low, with a maximum of 2.45% [YGiG] or 5.15% [MiE] (see Hair, 2019). The missingness is interpreted as being random (MAR). The examination of visual and descriptive patterns of missing data as well as Little's MCAR test (Little, 1988) considering variables of (dis-)embedded identification and also sociodemographic variables did not indicate non-randomness (see Hair, 2019). Missing data in variables of (dis-)embedded identification nevertheless may be dependent on missing data in corresponding variables of subordinate ingroup or superordinate (in)group identification. Consequently, missing values will be compensated by full information maximum likelihood (FIML) (Hair, 2019; Muthén & Muthén, 2017).

Common Method Bias

To examine the possibility of common method bias, Harman's single-factor test was conducted. If all variables of embedded and dis-embedded identification were constrain-

ed to load on a single factor, it explained 44.97% [YGiG] or 47.65% [MiE] of the total variance. If all variables of subordinate ingroup, superordinate (in)group, embedded, and dis-embedded identification were constrained to load on a single factor, it explained 40.78% [YGiG] or 40.11% [MiE] of total variance (see Podsakoff et al., 2003). All of which are below the commonly used threshold of 50.00%, even though common variance can be expected based on the respective conceptualizations and the proximity of constructs.

Descriptive Statistics and Quality Criteria

The descriptive statistics and quality criteria of items and scales of embedded and dis-embedded identification are shown in Appendix Table E to Table H. These indicated no problematic distribution parameters in regard to mean, median, standard deviation, skewness, and kurtosis (Curran et al., 1996; Hair, 2019). The item-intercorrelations within scales were all statistically significant and reached, with one exception, the recommended minimal size of .30 (Nunnally, 1978; Robinson et al., 1991). Also, the corrected item-total correlations met the recommended minimal size of .30 (Field, 2017; Nunnally, 1978). Finally, the reliabilities, measured by Cronbach's alpha, of the proposed scales were above .80 and thus very good (Kline, 2011; Nunnally, 1978): For embedded identification, it was .912 [YGiG] and .926 [MiE], for dis-embedded identification, it was .815 [YGiG] and .891 [MiE]. Also, reliabilities were very good employing McDonald's omega (Hayes & Coutts, 2020; McDonald, 1999): For embedded identification, it was .912 [YGiG] and .926 [MiE], for dis-embedded identification, it was .820 [YGiG] and .892 [MiE].

The descriptive statistics and quality criteria for items and scales of subordinate ingroup and superordinate (in)group identification are shown in Appendix Table I to Table L.

Single-Item Measures

If the first item of each scale could each represent parsimonious single-item measures for (dis-)embedded identification, was examined using item-intercorrelations, corrected item-total correlations, as well as the correction for attenuation formula and factor analyses (Wanous & Hudy, 2001). The item-intercorrelations of the first items with all other items of the scales were all statistically significant ($ps < .001$), ≥ .65 for embedded identification and ≥ .42 for dis-embedded identification. The corrected item-total correlations were ≥ .78 for embedded identification and ≥ .65 for dis-embedded identification. Using the correction for attenuation formula with a reasonable assumption that the assumed underlying construct correlation is .95 (Wanous & Hudy, 2001), item *embIDa* holds a reliability of .757 [YGiG] or .801 [MiE], and item *disIDa* holds a reliability of .612 [YGiG] or .602 [MiE]. Using extracted communalities in principle axis factor analyses, reliabilities of item *embIDa* are .684 [YGiG] or .722 [MiE], and reliabilities of item *disIDa* are .512 [YGiG] or .531 [MiE].

Based on these results, not consistently satisfying the suggested minimum reliability of .70 for single-item measures (Wanous & Hudy, 2001), the use of items *embIDa* and *disIDa* as single-item measures of (dis-)embedded identification cannot be recommended.

Extended Confirmatory Factor Analyses With Measurement Invariance

Since specific assumptions about the measurement and constellations of the constructs of interest were in existence, I conducted confirmatory factor analyses. To further explore the measurement, structure, and basic construct validity of (dis-)embedded identification, the components subordinate ingroup and superordinate (in)group identification, as well as perceived inclusion, were also incorporated into the extended analyses. Missing values were handled by FIML. Indicators of each construct were allowed to load on one factor respectively. Due to a parallel wording of indicators in all forms of identification (see Appendix Table A–Table D), residuals of parallelly worded indicators were allowed to correlate (T. A. Brown, 2006; Kline, 2011). In the sample of the young generation in Germany as well as in the sample of Muslims in England, the model yielded an acceptable overall fit (χ^2 (167) = 389.828 / 309.178, *p*s < .001; CFI = .938 / .966; TLI = .914 / .953; RMSEA = .068 / .054; SRMR = .078 / .062; estimator = MLR) (Beaujean, 2014; Hu & Bentler, 1999). The results of freeing some parameters, as indicated by standardized residuals or modification indices, would have been fewer local areas of strain and an improved model fit. Although sometimes theoretically reasonable, for example allowing for minor cross-loadings of some indicators (e.g., a good indicator of superordinate ingroup identification may also be a mediocre indicator of embedded identification since it represents one of its components), implementation would have not been in accordance with the original theoretical rationale. Nevertheless, the examination of parameter estimates, including their direction, standard error, and statistical significance, did not indicate a problematic model estimation as such (T. A. Brown, 2006). Detailed results are presented in Table 1.

In this model, measurement invariance was examined in a multi-group confirmatory factor analysis. Based on recommended cut-off criteria regarding χ^2, CFI ($\Delta \geq .10$), RMSEA ($\Delta \geq .15$), and SRMR ($\Delta \geq .30$), metric invariance was established across both samples (Chen, 2007; Putnick & Bornstein, 2016): A comparison between configural and metric model showed acceptable changes, $\Delta\chi^2(17) = 37.899$, $p = .003$; ΔRMSEA = .001; ΔCFI = .002; ΔSRMR = .002. A comparison between the metric and scalar model showed partly acceptable and partly unacceptable changes, $\Delta\chi^2(17) = 258.224$, $p < .001$; ΔRMSEA = .013; ΔCFI = .029; ΔSRMR = .006. The model with implemented metric invariance is displayed in Figure 1, and detailed results are presented in Table 1.

Table 1

Extended Confirmatory Factor Analyses

	without measurement invariance		with metric measurement invariance	
Variable	**YGiG**	**MiE**	**YGiG**	**MiE**
superordinate (in)group identification BY				
supIDa	.871***	.910***	.857***	.916***
supIDb	.894***	.858***	.882***	.870***
supIDc	.794***	.860***	.817***	.846***
supIDd	.748***	.904***	.793***	.890***
supIDe	.755***	.796***	.740***	.807***
perceived inclusion BY				
perINa	.824***	.825***	.891***	.739***
perINbi	.736***	.388***	.643***	.493***
subordinate ingroup identification BY				
subIDa	.881***	.928***	.878***	.929***
subIDb	.892***	.916***	.899***	.912***
subIDc	.809***	.894***	.787***	.898***
subIDd	.864***	.923***	.859***	.925***
subIDe	.712***	.835***	.735***	.825***
embedded identification BY				
embIDa	.826***	.844***	.832***	.830***
embIDb	.850***	.863***	.852***	.859***
embIDc	.835***	.865***	.829***	.869***
embIDd	.782***	.816***	.785***	.821***
embIDe	.788***	.821***	.789***	.820***
dis-embedded identification BY				
disIDa	.709***	.687***	.681***	.706***
disIDb	.863***	.869***	.853***	.879***
disIDc	.692***	.819***	.712***	.808***
disIDd	.481***	.638***	.534***	.600***
disIDe	.726***	.848***	.724***	.846***
superordinate (in)group identification WITH				
perceived inclusion	.539***	.672***	.535***	.715***
subordinate ingroup identification	.379***	.158**	.383***	.157**
subordinate ingroup identification WITH				
perceived inclusion	−.057	.257***	−.028	.232**
embedded identification WITH				
dis-embedded identification	−.374***	−.272***	−.374***	−.276***

	without measurement invariance		with metric measurement invariance	
Variable	**YGiG**	**MiE**	**YGiG**	**MiE**
embedded identification WITH				
superordinate (in)group identification	.781***	.739***	.782***	.738***
perceived inclusion	.524***	.852***	.530***	.880***
subordinate ingroup identification	.464***	.449***	.459***	.448***
dis-embedded identification WITH				
superordinate (in)group identification	−.606***	−.509***	−.601***	−.509***
perceived inclusion	−.640***	−.423***	−.587***	−.515***
subordinate ingroup identification	.346***	.417***	.349***	.413***

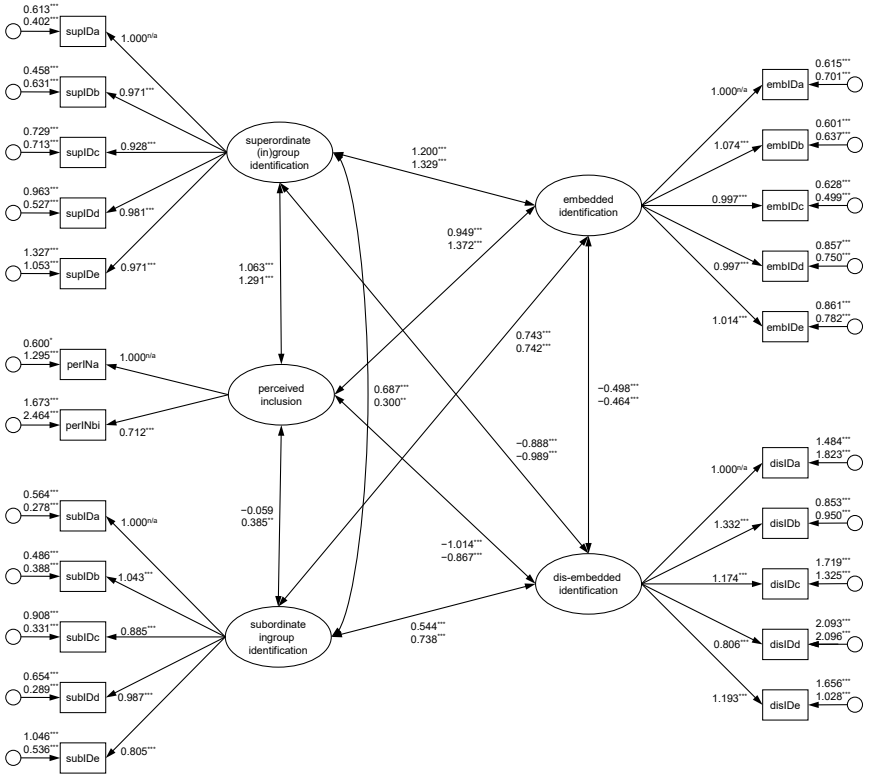
Note. Reported are standardized parameter estimates. YGiG = Young generation in Germany; MiE = Muslims in England; BY = factor loading; WITH = correlation; ON = direct effect.
*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$ (two-tailed).

It yielded an acceptable overall fit, $\chi^2(351) = 735.186$, $p < .001$; CFI = .951; TLI = .935; RMSEA = .062; SRMR = .073; estimator = MLR (Beaujean, 2014; Hu & Bentler, 1999). Thus, it can be assumed that basic structures of constructs are invariant across groups and that each indicator contributes to the respective construct to an invariant degree across groups—despite two different samples and two different languages (T. A. Brown, 2006; Putnick & Bornstein, 2016).

The estimated parameters of this model reflect the hypothesized measurement of embedded and dis-embedded identification and indicate basic construct validity (see Table 1 and Figure 1): Standardized loadings were mostly above .50; communalities (R^2) of items were mostly above .50 as well as greater than the squared correlation between factors; reliabilities (α and ω) were above .70 (Hair, 2019). A negative moderate correlation between embedded and dis-embedded identification indicates that those constructs are oppositional in the broader sense. This is reasonable because both constructs are comparable regarding the identification with the subordinate ingroup but incomparable regarding the identification with the superordinate (in)group—and the specific constellation of both. All other observed correlations were also in line with the presented conceptualizations of embedded and dis-embedded identity.

Figure 1

Extended Confirmatory Factor Analyses With Measurement Invariance



Note. Reported are unstandardized parameter estimates from the model with metric measurement invariance. The model yields an acceptable overall fit.
$^{*}p \leq .05$. $^{**}p \leq .01$. $^{***}p \leq .001$ (two-tailed). $^{n/a}$ = not applicable (for marker indicators).

Association and Comparison of Different Forms of Identification

To tie in with reported associations and comparisons of different forms of identification, especially in the sense of direct and indirect measurement approaches (e.g., Fleischmann & Verkuyten, 2016), respective analyses were conducted and are briefly reported.

Intercorrelations of different forms of identification were, as already seen in the confirmatory factor analyses, in line with the presented conceptualizations (see Table 2). If embedded and dis-embedded identification were regressed on superordinate (in)group identification, subordinate ingroup identification, the interaction thereof, as well as perceived inclusion, the regression parameters were also in line with the presented concep-

tualizations and comparable across both samples (see Table 2). It is noteworthy, however, that the interaction of superordinate (in)group and subordinate ingroup identification was a non-significant predictor (even when perceived inclusion was excluded from the analyses), except for embedded identification in the sample of the young generation in Germany. The explained variances (R^2) were .68 [YGiG] or .67 [MiE] for embedded identification and .60 [YGiG] or .49 [MiE] for dis-embedded identification.

Table 2

Intercorrelations and Predictive Values in Regressions

	r		β	
Variable	**YGiG**	**MiE**	**YGiG**	**MiE**
embedded identification WITH/ON				
superordinate (in)group identification	.732***	.689***	.340***	.498***
perceived inclusion	.429***	.582***	.212***	.306***
subordinate ingroup identification	.451***	.441***	.173***	.343***
interaction (sup.*sub. identification)	n.a.	n.a.	.366***	−.003
dis-embedded identification WITH/ON				
superordinate (in)group identification	−.534***	−.475***	−.593***	−.373***
perceived inclusion	−.529***	−.474***	−.242***	−.321***
subordinate ingroup identification	.283***	.363***	.517***	.445***
interaction (sup.*sub. identification)	n.a.	n.a.	−.042	−.004

Note. YGiG = Young generation in Germany; MiE = Muslims in England; WITH = correlation with; ON = regression on. The explained variances (R^2) were .68 [YGiG] or .67 [MiE] for embedded identification and .60 [YGiG] or .49 [MiE] for dis-embedded identification.
*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$ (two-tailed).

If K-means cluster analyses were conducted with subordinate ingroup and superordinate (in)group identification specifying four clusters, in accordance with the classic acculturation strategies (Berry & Sam, 2016), the means of embedded and dis-embedded identification within these clusters were in line with the presented conceptualizations and preceding analyses (see Table 3). Post-hoc comparisons with Tukey's HSD test expectably revealed that embedded identification was significantly highest in the cluster "integration" and that (dis-)embedded identification was significantly highest in the cluster "separation."

Table 3

Sizes and Means of Clusters

	% of *N*		superordinate (in)group identification		subordinate ingroup identification		embedded identification		dis-embedded identification	
Cluster	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**
integration	49.1	41.9	1.770	1.708	2.179	2.800	1.680^{a}	2.236^{a}	-0.477^{a}	-0.125^{a}
assimilation	16.1	18.2	1.430	1.106	−0.039	0.906	0.717^{b}	1.434^{b}	-1.499^{b}	-0.989^{b}
separation	25.3	33.7	−0.464	−0.881	1.456	2.469	-0.040^{c}	0.651^{c}	0.819^{c}	1.193^{c}
marginalization	9.5	6.2	−0.837	−0.450	−1.531	−1.556	-0.563^{c}	-0.911^{d}	-0.607^{a}	-1.100^{b}

Note. YGiG = Young generation in Germany; MiE = Muslims in England. For superordinate (in)group identification and subordinate ingroup identification, final cluster centers are reported. Different letters in superscript indicate significantly different means within columns according to Tukey's HSD test.
$^{*}p \leq .05$. $^{**}p \leq .01$. $^{***}p \leq .001$ (two-tailed).

Discussion

This article introduced novel measures for novel forms of collective identification, namely embedded identification and dis-embedded identification, which describe specific constellations of identification with a subordinate ingroup and the respective superordinate (in)group—often a community and the respective society. A measure consisting of five items for each of those forms of identification was developed in German and English and was examined in samples of the young generation in Germany and Muslims in England. In both samples, the measures showed no problematic characteristics (in terms of means, standard deviations, skewness, and kurtosis), decent reliability (above .80) combined with decent corrected item-total correlations (above .30), basic construct validity (in terms of the measurement model as well as associations with each other and with the respective components), as well as metric measurement invariance across both samples.

The use of single-item measures of (dis-)embedded identification cannot be recommended. Hence, the bipartite first item of each scale, construed for this purpose, could be split into two items. With hindsight, the proposed conceptualizations of (dis-)embedded identity might be too complex and broad to be appropriately captured by single-item measures (Sackett & Larson, 1990).

As argued in the section *Measurement of (Dis-)Embedded Identity*, the use of a direct measurement approach is recommended, although—admittedly—this position might be controversial. The present research suggests that the direct and indirect measurements of (dis-)embedded identification can be described as unequal yet comparable: There is no conceptual mismatch, but there is deviation. This insight is in accordance with previous research (Fleischmann & Verkuyten, 2016). It is improbable that different measurement

approaches of identification produce different, or even contrary, results in regard to its consequences. Instead, relations to social psychological consequences are probably more evident in the case of direct measurement (Fleischmann & Verkuyten, 2016; Paffrath & Simon, 2023; Simon et al., 2013, 2015; Simon & Grabow, 2010).

I want to acknowledge some possible limitations of the present research and/or the developed measures. First, despite the fact that the measures were examined in two different languages and samples, there is no guarantee that the measures will be equally reliable or valid in other languages and/or group contexts. For each group context, it is also a necessity to reasonably select and meaningfully classify (in)groups as subordinate and superordinate. Second, only basic construct validity can be examined based on the available data. A comprehensive examination of construct validity, i.e., convergent and discriminant validity, and criterion validity is essential but requires further data and research. This endeavor may also further elucidate the extent of overlap with existing conceptualizations or operationalizations of identity. Third, longitudinal stability and predictive validity could not be examined for the time being. Fourth, instead of an exploratory two-item measure, a sophisticated measure of perceived in-/exclusion of the subordinate ingroup in/from the relevant superordinate (in)group may extend and deepen the comprehension of intergroup processes and conflicts. It may also be possible and worthwhile to develop items targeting the psychologically construed hierarchical in-/exclusion in a manner that can be incorporated into the measures of (dis-)embedded identification.

In conclusion, this article provides further research with reliable and apparently valid options to measure forms of collective identification, which are of major interest and relevance for the comprehension of intergroup processes and conflicts in modern and plural societies. It explicitly provides detailed information to enable replication as well as further use and development of the measures—which is encouraged.

Funding: The author has no funding to report.

Acknowledgments: The author has no additional (i.e., non-financial) support to report.

Competing Interests: The author has declared that no competing interests exist.

Ethics Statement: Each data collection was conducted in accordance with the ethical guidelines of the German Psychological Society (Deutsche Gesellschaft für Psychologie [DGPS], 2016). An ethics approval was not necessary on the grounds of the university's guidelines, the ethical guidelines of the German Psychological Society, or national regulations.

Data Availability: The datasets and syntaxes that support the findings of the present article are available in the Supplemental Material (see Paffrath, 2024).

Supplementary Materials

For this article, the following Supplementary Materials are available (see Paffrath, 2024):

- data_SPSS.sav: dataset used for analyses in SPSS
- data_Mplus.dat: dataset used for analyses in Mplus
- syntax_SPSS.sps: syntax for all analyses conducted in SPSS (i.e., all analyses except MI and CFAs)
- syntax_Mplus_MI.inp: Mplus syntax for measurement invariance testing
- syntax_Mplus_ECFAwoMI.inp: syntax for extended confirmatory factor analyses without measurement invariance
- syntax_Mplus_ECFAwMI.inp: syntax for extended confirmatory factor analyses with measurement invariance

Index of Supplementary Materials

Paffrath, J. (2024). *Supplementary materials to "The measurement of (dis-)embedded identification"* [Data, syntax]. PsychOpen GOLD. https://doi.org/10.23668/psycharchives.15638

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Appendix

Table A

Measurement of Embedded Identification

Instruction		
IN	eng	Please rate the following statements.
	ger	Bitte bewerten Sie die folgenden Aussagen.
Embedded Identification		
embIDa	eng	I identify with [subIN] and likewise with [supIN]—of which [subIN] is a part.
	ger	Ich identifiziere mich mit [subIN] und ebenso mit [supIN] – von der [subIN] ein Teil ist.
embIDb	eng	I feel connected to [subIN] and likewise to [supIN].
	ger	Ich fühle mich mit [subIN] und ebenso mit [supIN] verbunden.
embIDc	eng	I am glad to be a [subIN member] as well as a [supIN member].
	ger	Ich bin froh ein [subIN member] sowie ein [supIN member] zu sein.
embIDd	eng	I see myself as a [subIN characteristic] [supIN member].
	ger	Ich sehe mich selbst als ein [subIN characteristic] [supIN member].
embIDe	eng	I feel [subIN characteristic] as well as [supIN characteristic].
	ger	Ich fühle mich [subIN characteristic] sowie [supIN characteristic].
Rating Scale		
RS	eng	very inaccurate [−3] — very accurate [+3] | no answer [999]
	ger	sehr unzutreffend [−3] — sehr zutreffend [+3] | keine Antwort [999]

Note. subIN = subordinate ingroup; supIN = superordinate (in)group. eng = Englisch; ger = German. [subIN] = e.g., "the Muslim community", [supIN] = e.g., "the German society", [subIN member] = e.g., "member of the young generation", [supIN member] = e.g., "member of the English society", [subIN characteristic] = e.g., "Muslim", [supIN characteristic] = e.g., "German".

Table B

Measurement of Dis-Embedded Identification

Instruction		
IN	eng	Please rate the following statements.
	ger	Bitte bewerten Sie die folgenden Aussagen.
Dis-Embedded Identification		
disIDa	eng	I primarily identify with [subIN], but only secondarily with [supIN]—of which [subIN] is no part.
	ger	Ich identifiziere mich hauptsächlich mit [subIN], aber nur nebensächlich mit [supIN] – von der [subIN] kein Teil ist.
disIDb	eng	I feel significantly connected to [subIN], but only insignificantly to [supIN].
	ger	Ich fühle mich bedeutend mit [subIN], aber nur unbedeutend mit [supIN] verbunden.
disIDc	eng	I am rather glad to be a [subIN member] than a [supIN member].
	ger	Ich bin eher froh ein [subIN member] als ein [supIN member] zu sein.
disIDd	eng	I see myself as an "un-[supIN characteristic]" [subIN member].
	ger	Ich sehe mich selbst als ein "un[supIN characteristic]" [subIN member].
disIDe	eng	I feel rather [subIN characteristic] than [supIN characteristic].
	ger	Ich fühle mich eher [subIN characteristic] als [supIN characteristic].
Rating Scale		
RS	eng	very inaccurate [−3] — very accurate [+3] | no answer [999]
	ger	sehr unzutreffend [−3] — sehr zutreffend [+3] | keine Antwort [999]

Note. subIN = subordinate ingroup; supIN = superordinate (in)group. eng = Englisch; ger = German. [subIN] = e.g., "the Muslim community", [supIN] = e.g., "the German society", [subIN member] = e.g., "member of the young generation", [supIN member] = e.g., "member of the English society", [subIN characteristic] = e.g., "Muslim", [supIN characteristic] = e.g., "German".

Table C

Measurement of Subordinate Ingroup Identification

Instruction		
IN	eng	Please rate the following statements.
	ger	Bitte bewerten Sie die folgenden Aussagen.
Subordinate Ingroup Identification		
subIDa	eng	I identify with [subIN].
	ger	Ich identifiziere mich mit [subIN].
subIDb	eng	I feel connected to [subIN].
	ger	Ich fühle mich mit [subIN] verbunden.
subIDc	eng	I am glad to be a [subIN member].
	ger	Ich bin froh ein [subIN member] zu sein.
subIDd	eng	I see myself as a [subIN member].
	ger	Ich sehe mich selbst als ein [subIN member].
subIDe	eng	I feel [subIN characteristic].
	ger	Ich fühle mich [subIN characteristic].
Rating Scale		
RS	eng	very inaccurate [−3] — very accurate [+3] | no answer [999]
	ger	sehr unzutreffend [−3] — sehr zutreffend [+3] | keine Antwort [999]

Note. subIN = subordinate ingroup. eng = Englisch; ger = German.

Table D

Measurement of Superordinate (In)Group Identification

Instruction		
IN	eng	Please rate the following statements.
	ger	Bitte bewerten Sie die folgenden Aussagen.
Superordinate (In)Group Identification		
supIDa	eng	I identify with [supIN].
	ger	Ich identifiziere mich mit [supIN].
supIDb	eng	I feel connected to [supIN].
	ger	Ich fühle mich mit [supIN] verbunden.
supIDc	eng	I am glad to be a [supIN member].
	ger	Ich bin froh ein [supIN member] zu sein.
supIDd	eng	I see myself as a [supIN member].
	ger	Ich sehe mich selbst als ein [supIN member].
supIDe	eng	I feel [supIN characteristic].
	ger	Ich fühle mich [supIN characteristic].
Rating Scale		
RS	eng	very inaccurate [−3] — very accurate [+3] | no answer [999]
	ger	sehr unzutreffend [−3] — sehr zutreffend [+3] | keine Antwort [999]

Note. supIN = superordinate (in)group. eng = Englisch; ger = German.

Table E

Descriptive Statistics and Quality Criteria of Embedded Identification

	M		*SD*		*Mdn*		skewness		kurtosis		corrected item-total correlation (ρ)		reliability (α), if item deleted	
Item	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**
embIDa	0.72	1.19	1.42	1.56	1.00	1.00	−0.40	−0.65	−0.47	−0.29	.78	.81	.891	.908
embIDb	0.57	1.03	1.47	1.58	1.00	1.00	−0.40	−0.51	−0.45	−0.49	.80	.82	.887	.906
embIDc	0.82	1.55	1.42	1.43	1.00	2.00	−0.55	−1.03	−0.13	0.85	.77	.84	.892	.904
embIDd	1.30	1.52	1.53	1.52	2.00	2.00	−0.84	−1.05	0.04	0.63	.77	.78	.894	.914
embIDe	1.00	1.49	1.53	1.56	1.00	2.00	−0.58	−0.99	−0.38	0.31	.76	.78	.896	.914
scale	0.88	1.36	1.27	1.34	1.00	1.60	−0.56	−0.84	−0.12	0.42	–	–	–	–

Note. YGiG = Young generation in Germany; MiE = Muslims in England. Score range: −3 to +3. Scale reliability (α): .912 [YGiG] / .926 [MiE]. Scale reliability (ω): .912 [YGiG] / .926 [MiE].

Table F

Intercorrelations of Items of Embedded Identification

	embIDa		**embIDb**		**embIDc**		**embIDd**		**embIDe**	
Item	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**
embIDa	—	—								
embIDb	.72***	.78***	—	—						
embIDc	.69***	.72***	.69***	.74***	—	—				
embIDd	.65***	.70***	.68***	.66***	.67***	.74***	—	—		
embIDe	.67***	.67***	.67***	.70***	.64***	.74***	.67***	.69***	—	—

Note. YGiG = Young generation in Germany; MiE = Muslims in England.
*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$ (two-tailed).

Table G

Descriptive Statistics and Quality Criteria of Dis-Embedded Identification

	M		*SD*		*Mdn*		skewness		kurtosis		corrected item-total correlation (ρ)		reliability (α), if item deleted	
Item	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**
disIDa	−0.98	−0.21	1.71	1.94	−1.00	0.00	0.43	0.03	−0.93	−1.16	.65	.69	.765	.877
disIDb	−0.28	0.06	1.81	2.01	0.00	0.00	0.05	−0.13	−1.19	−1.18	.75	.81	.731	.848
disIDc	0.48	0.50	1.82	1.99	1.00	1.00	−0.31	−0.31	−0.95	−1.04	.59	.74	.782	.865
disIDd	−1.54	−1.01	1.62	1.87	−2.00	−1.00	1.12	0.65	0.42	−0.68	.39	.64	.834	.886
disIDe	0.68	1.01	1.86	1.92	1.00	1.00	−0.57	−0.71	−0.81	−0.62	.64	.78	.767	.855
scale	−0.32	0.10	1.35	1.62	−0.20	0.20	−0.16	−0.20	−0.80	−0.87	–	–	–	–

Note. YGiG = Young generation in Germany; MiE = Muslims in England. Score range: −3 to +3. Scale reliability (α): .815 [YGiG] / .891 [MiE]. Scale reliability (ω): .820 [YGiG] / .892 [MiE].

Table H

Intercorrelations of Items of Dis-Embedded Identification

	disIDa		disIDb		disIDc		disIDd		disIDe	
Item	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**
disIDa	–	–								
disIDb	.61***	.66***	—	—						
disIDc	.45***	.53***	.61***	.71**	—	—				
disIDd	.42***	.54***	.41***	.56***	.17***	.49***	—	—		
disIDe	.48***	.60***	.60***	.72***	.59***	.74***	.30***	.53***	—	—

Note. YGiG = Young generation in Germany; MiE = Muslims in England.
*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$ (two-tailed).

Table I

Descriptive Statistics and Quality Criteria of Subordinate Ingroup Identification

	M		*SD*		*Mdn*		skewness		kurtosis		corrected item-total correlation (ρ)		reliability (α), if item deleted	
Item	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**
subIDa	1.09	2.08	1.58	1.43	1.00	3.00	−0.75	−1.68	−0.18	2.25	.82	.90	.895	.940
subIDb	1.05	1.70	1.56	1.54	1.00	2.00	−0.79	−1.11	−0.13	0.54	.84	.88	.891	.943
subIDc	1.07	2.27	1.61	1.29	1.00	3.00	−0.74	−2.02	−0.22	3.75	.77	.88	.906	.944
subIDd	1.56	2.09	1.60	1.41	2.00	3.00	−1.24	−1.76	0.79	2.70	.83	.90	.893	.939
subIDe	1.64	2.23	1.48	1.34	2.00	3.00	−1.16	−2.03	0.75	3.71	.70	.82	.920	.953
scale	1.28	2.07	1.36	1.29	1.60	2.60	−1.02	−1.76	0.48	2.94	–	–	–	–

Note. YGiG = Young generation in Germany; MiE = Muslims in England. Score range: −3 to +3. Scale reliability (α): .919 [YGiG] / .955 [MiE]. Scale reliability (ω): .921 [YGiG] / .956 [MiE].

Table J

Intercorrelations of Items of Subordinate Identification

	subIDa		subIDb		subIDc		subIDd		subIDe	
Item	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**
subIDa	—	—								
subIDb	.80***	.86***	—	—						
subIDc	.70***	.83***	.74***	.80***	—	—				
subIDd	.76***	.86***	.74***	.84***	.71***	.84***	—	—		
subIDe	.60***	.76***	.64***	.76***	.57***	.78***	.70***	.78***	—	—

Note. YGiG = Young generation in Germany; MiE = Muslims in England.
*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$ (two-tailed).

Table K

Descriptive Statistics and Quality Criteria of Superordinate (In)Group Identification

	M		*SD*		*Mdn*		skewness		kurtosis		corrected item-total correlation (ρ)		reliability (α), if item deleted	
Item	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**
supIDa	0.45	0.62	1.54	1.56	1.00	1.00	−0.14	−0.25	−0.79	−0.61	.79	.88	.878	.911
supIDb	0.48	0.48	1.47	1.59	1.00	1.00	−0.15	−0.24	−0.76	−0.63	.83	.83	.870	.920
supIDc	1.02	0.83	1.43	1.61	1.00	1.00	−0.61	−0.40	−0.15	−0.58	.76	.81	.886	.923
supIDd	1.54	0.68	1.55	1.65	2.00	1.00	−1.11	−0.42	0.65	−0.57	.74	.86	.889	.913
supIDe	1.02	0.40	1.75	1.71	1.00	1.00	−0.60	−0.18	−0.60	−0.83	.71	.76	.899	.933
scale	0.90	0.59	1.32	1.45	1.00	0.80	−0.43	−0.27	−0.56	−0.51	–	–	–	–

Note. YGiG = Young generation in Germany; MiE = Muslims in England. Score range: −3 to +3. Scale reliability (α): .905 [YGiG] / .935 [MiE]. Scale reliability (ω): .905 [YGiG] / .935 [MiE].

Table L

Intercorrelations of Items of Superordinate Identification

	supIDa		**supIDb**		**supIDc**		**supIDd**		**supIDe**	
Item	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**	**YGiG**	**MiE**
supIDa	—	—								
supIDb	.80***	.80***	—	—						
supIDc	.66***	.77***	.72***	.74***	—	—				
supIDd	.61***	.81***	.67***	.76***	.69***	.79***	—	—		
supIDe	.66***	.75***	.66***	.69***	.57***	.63***	.60***	.73***	—	—

Note. YGiG = Young generation in Germany; MiE = Muslims in England.
*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$ (two-tailed).