

Blaming the Young Misses the Point: Re-assessing Young People's Political Participation over Time Using the 'Identity-equivalence Procedure'

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Abstract

One of the central and constantly recurring features of youth participation studies is the depiction of young people and adolescents as the future of democratic politics. According to previous research, however, young people exhibit generally lower levels of political participation than adults and show decreasing trends in their political activities over time. In this study, we argue that, in order to arrive at meaningful conclusions about young and adult people's political participation over time, 'construct-equivalent' rather than identical instruments of political participation across different age groups and time points should be used. Applying the so called 'identity-equivalence procedure' for political participation across three different age groups and the time period 2002-2014 using data from the European Social Survey (ESS), our results indicate that (1) the concrete manifestations of the concept of political participation differ across young and adult people and over time and (2) levels of political participation are quite similar for young and adult people and increasing from 2002-2014. Therefore, the commonly employed strategy of applying identical instruments of political participation across age groups and time points appears at least questionable.

Keywords: political participation, youth participation, democracy, measurement equivalence, scale development, Mokken scale analysis, European Social Survey



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Citizens' participation and engagement in the political process count as a 'conditio sine qua non' of any democratic system. Consequently, it is not surprising that virtually every discussion about the well-being of democracy is strongly linked to debates and complaints about citizens' disengagement and alienation from politics (cf. Verba & Nie, 1972, 1; Verba, Schlozman, & Brady, 1995, 1). In this context, especially young people and adolescents have been singled-out as one of the major driving forces behind decreasing participation rates and growing disenchantment with the political sphere. Common depictions and characterizations of young people and adolescents in previous youth participation studies thus regularly include labels and terms such as 'apathetic', 'alienated', and 'disengaged' (cf. Garcia Albacete, 2011, 2; Martin, 2012, 213). This is especially true in the German context where previous youth participation studies have repeatedly highlighted continuously high levels of political apathy ('Politikverdrossenheit') among the German youth (cf. Schneekloth, 2015, 178-82; Sloam, 2014, 664). As Henn and Foard summarize, "the message from many such studies is that young people's levels of political participation in general are in decline, and at a somewhat more rapid rate than is the case for older adults and also for previous youth cohorts" (2014, 361).

Yet, the validity of such a far-reaching conclusion hinges on several factors, as it implies a simultaneous statement about the levels of political participation (1) for young and adult people as well as (2) over the course of time. In order to allow for this kind of conclusion, a study has to meet at least three criteria. First, it should be based on a coherent sample of *both young and adult people* to facilitate direct comparisons of political participation levels across different age groups. Studies that rely on different samples for young and adult people remain inconclusive as to whether possible differences in political participation levels between age groups are 'real' or merely an artefact of different sampling frames or survey techniques for young and adult people. Second, the sample of both young and adult people should be coherent *over time* to facilitate direct comparisons of participation *trends* across age groups. Third, the *measurement of political participation* should be a valid and reliable representation of the same underlying concept across young and adult people *as well as* over time. This at least necessitates an investigation of the underlying structure of the concept of political participation and at best implies the development of so called 'construct-equivalent' instruments of political participation (cf. Garcia Albacete, 2011, 17) across different age groups and points in time. Studies that simply assume that identical instruments of political participation can be uniformly applied across young and adult people as well as over time without checking this assumption empirically might miss important differences in the

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underlying structure of political participation and are therefore ill-suited to draw valid conclusions with regard to young people's political participation.

A cursory glance at existing studies dealing with youth political participation reveals that none fulfills all of the three criteria mentioned. Pure youth participation studies by definition violate the first criterion of a direct comparison between young and adult people (see, for example, Henn & Foard, 2014; Gaiser, de Rijke & Spannring, 2010; Quintelier, 2007). Those studies that conform to the first criterion either lack a comparison over time or do not analyze the underlying structure of political participation (see, for example, Martin, 2012). Finally, those studies that meet the third criterion and assess the underlying structure of political participation are either restricted to one point in time or only investigate one age group, thus violating the first or second criterion (see, for example, Bakker & de Vreese, 2011; Quintelier, 2008; Henn & Foard, 2014).

Against this background, the present study offers a re-assessment of young people's political participation by investigating the structure and levels of political participation across young, adult and old people in Germany over the period 2002-2014. Applying the so called 'identity-equivalence procedure' (cf. Przeworski & Teune, 1966), this study develops age-group and time-point equivalent instruments of political participation that allow for meaningful comparisons of political participation levels across young and adult people as well as over time. In doing so, this study sheds more light on contemporary questions of (increasing) political apathy among young people and the peculiarities of youth participation in general.

The remainder is structured as follows. Section 2 provides an overview of the main findings and strategies of previous studies and identifies common problems in research on political participation in general and youth participation studies in particular. Section 3 introduces the 'identity-equivalence procedure' for investigating the structure and levels of political participation across young and adult people over time. Section 4 illustrates the methods and data used. Section 5 presents the results of the empirical analysis. Section 6 discusses the most important findings as well as their broader implications and concludes.

Research on Political Participation Across Young and Adult People: Main Findings, Strategies, and Problems

One of the central and constantly recurring features of youth participation studies is the depiction of young people and adolescents as hope and sorrow for the future of democratic politics. As Mycock and Tonge (2012, 141) summarize this view, young people are "often discussed within the context of national decline or

regeneration, being projected as symbolic of the positive and progressive future or typified as a threat and somehow out of control.” Most of the time, however, it is the latter perspective that seems to dominate the discussion. Young people are portrayed as “apathetic or even as antipolitical, with neither aptitude nor inclination for participating in any form of collective social endeavour, and with no sense of civic responsibility” (Henn & Foard, 2014, 360; see also Quintelier, 2007, 165; Neufeind, Jiranek & Wehner, 2014, 278; Martin, 2012, 213; Cammaerts et al., 2014, 648).

Empirically, such negative portrayals are often countered by the observation that young people, while possibly being alienated from traditional electoral or formal politics, do engage in non-electoral or informal modes of political participation that reach beyond the realm of institutionalized politics (cf. Vissers & Stolle 2014, 937; Cammaerts et al 2014, 657; Sloam 2014, 676). In comparison with adults, then, young people’s political participation seems to be less formal, less institutionalized, and less hierarchical, and they appear to prefer more individualized, lifestyle-oriented modes of participation such as signing petitions, protesting, or political consumerism (cf. Sloam 2013, 837; Stolle, Hooghe & Micheletti 2005, 250). If these assertions are correct, it is clear that a comparison of political participation between young and adult people does not only have to consider the level of participation, but also the respective modes of participation being used by young and adult people, respectively.

As such, the analysis of young people’s political participation is directly linked to discussions about the continuous expansion of the political participation repertoire and distinctions between different ‘types’ of political participation (cf. van Deth, 2014; Vissers & Stolle 2014, 937). Whereas contacting politicians or working for a political party are usually considered to be specimens of ‘formal’, ‘conventional’, ‘institutionalized’ or ‘elite-directed’ participation, other modes such as signing petitions, demonstrating or boycotting are usually labeled ‘unconventional’, ‘non-institutionalized’ or ‘protest’ participation (cf. van Deth, 2014, 361; Linssen et al., 2014, 33-4; Marien, Hooghe, & Quintelier, 2010, 198). While such distinctions between different ‘types’ of participation are well-known and frequently employed in research on political participation, there are at least two problems concerning the way in which they are being used.

The first problem refers to research on political participation in general and touches upon the fact that many studies do not test which of the several modes of participation might actually be summarized to form one (or more) coherent type(s) of political participation. Instead of investigating the structure of different modes of political participation, a lot of studies simply choose to build additive indices (cf. Quintelier, 2007, 174; Hao, Wen, & George, 2014, 1226; Wray-Lake & Hart, 2012, 457) or use self-defined assignments of participation modes to types (cf. Gaiser, de Rijke & Spannring, 2010, 440; Martin, 2012, 218-9; Neufeind, Jiranek, & Wehner, 2014, 285; Soler-i-Martí & Ferrer-Fons, 2015, 101). As a consequence, one and the

same mode of participation is oftentimes assigned to different types of participation across different studies. For example, whereas Marien, Hooghe and Quintelier (2010, 198) consider ‘donating money’ to be a specimen of ‘non-institutionalized’ participation, Gaiser, de Rijke and Spannring (2010, 440) depict it as a mode of ‘conventional’ participation. Similarly, Neufeind, Jiranek and Wehner (2014, 285) classify ‘signing a petition’ as a mode of ‘conventional’ participation, whereas Gaiser, de Rijke and Spannring (2010, 440) label it as ‘unconventional’, Martin (2012, 217) as ‘non-electoral’, and Marien, Hooghe and Quintelier (2010, 198) as ‘non-institutionalized’ participation. As these examples make clear, previous studies do not assign individual modes to commonly employed types of political participation in a coherent manner. These inconsistencies do not only hamper a comparison of participation levels and trends across different studies, but also leave open the question of whether and which different modes can actually be summarized to form one or more coherent types of political participation.

Those studies that do investigate the structure of political participation provide valuable (empirical) information on which modes form a coherent type of participation, but are usually restricted to one point in time (cf. Bakker & de Vreese, 2011, 457-8; Quintelier, 2008, 359-60; Henn & Foard, 2014, 365). Consequently, these studies have nothing to say about possible changes in the underlying structure of (different types of) political participation over time which, however, is of crucial importance especially in the context of longitudinal studies (e.g., a previously unconventional mode becomes rather conventional over time; see also Linssen et al., 2014; 34).

The second problem, which is more pertinent to our focus on young people’s political participation, has to do with the applicability or generalizability of commonly employed conceptualizations and types of political participation across different age groups. Distinctions between different types of political participation, such as ‘conventional vs unconventional’ or ‘institutionalized vs non-institutionalized’, belong to the standard toolkit of political participation researchers. The fact that these distinctions are so frequently applied is probably one of the major reasons why their usage is generally not called into question. However, especially in the context of research on youth participation, it appears important to note that these conceptualizations and distinctions have been developed primarily with reference to the general or adult population, which at least leaves room for the possibility that they are not applicable in the same manner to young people as well. As O’Toole et al. remind us, “[y]oung people are often seen in conventional accounts of political participation as simply a subset of the general population. Analyses of youth participation need to consider young people as a specific group with their own particular circumstances and concerns” (2003, 46). In this connection, Quintelier has argued that “young people operate with a very narrow conception of politics that is restricted to formal politics only” (2007, 177; see also O’Toole et al., 2003, 52). If

we consider this limited and narrow conception of politics to inform their conception and understanding of political participation as well, young people's political participation may be less faceted and based on fewer modes of participation than that of adult people. In a similar manner, changes or delays in youth transition periods as highlighted by previous studies (cf. Soler-i-Marti & Ferrer-Fons, 2015, 96; Garcia Albacete, 2011, 6) might also lead to varying structures of young people's political participation over time. An empirical investigation of the underlying structure of political participation across age groups *and* over time therefore becomes indispensable in order to shed more light on the differences and similarities concerning the structure, levels and developments of young and adult people's political participation.

The 'Identity-equivalence Procedure' for Political Participation

For our empirical investigation, we make use of the so called 'identity-equivalence procedure' which has originally been introduced by Przeworski and Teune, (1966) in the context of cross-cultural research. The basic premise of this procedure is that, in order to be comparable, measurements of the same concepts do not have to be identical but rather equivalent (cf. Przeworski & Teune, 1966, 555-9). More specifically, as its name suggests, the procedure is based on two consecutive steps. In a first step, it involves the search for a so-called 'identity set' of survey items that can be regarded as a valid representation of a given concept across all subgroups of interest (cf. van Deth, 1986, 265). These subgroups are usually different countries but the same underlying logic can be easily extended to include different social classes or age groups as well. For example, in the present study we search for a common set of survey items that form a consistent scale of the concept 'political participation' across young and adult people alike as well as over time. This common set of items constitutes our 'identity set' of political participation. In a second step, the 'identity-equivalence procedure' implies the search for additional survey items that can be used to extend the identity set of political participation in a subgroup and time-point specific way. Accordingly, in the present study we search – separately for young and adult people as well as time points – for additional survey items that can be added to the existing scale of political participation that is based on the identity set only. Since the respective survey items to be added to the identity scale of political participation possibly differ between young and adult people and time points, the resulting age-group and time-point specific scales of political participation are no longer identical but rather equivalent. Adding age-group and time-point specific items to our identity scale helps us to arrive at “longer, more reliable and more contextually relevant instruments” of political participa-

tion (Garcia Albacete, 2011, 29). With this strategy, the ‘identity-equivalence procedure’ ensures that we are analyzing the same underlying concept across different subgroups and time points (due to the identity scale which consists of the same items across all subgroups and time points) while at the same time allowing for the possibility that manifestations of the same underlying concept might differ in specific ways for different subgroups and time points (due to the construction of the equivalence scales). As such, construct equivalence is achieved by directly building the equivalence scales on the identity scale: “By referring the equivalent indicators back to the identical indicators, this procedure introduces safeguards of validity – the guarantee that the phenomena examined [...] constitute specific occurrences of a more general concept” (Przeworski & Teune, 1966, 568).

While the ‘identity-equivalence procedure’ has been developed for establishing equivalent measures across different cultural contexts, we believe that it can be fruitfully applied to investigate the underlying meaning and structure of the concept political participation across different age groups and time points as well. In contrast to previous studies on youth political participation, we thus do not simply assume that political participation exhibits the same underlying meaning and structure (over time) for young and adult people alike but rather put this proposition to an empirical test.

Methods and Data

For the implementation of the procedure, we rely on Mokken Scale Analysis (MSA) (Mokken, 1971). MSA is based on principles of nonparametric item response theory (IRT) and constitutes a probabilistic extension of the Guttman scale (cf. van Schuur, 2003, 139). MSA can be used to investigate response patterns to a set of survey items that are supposed to measure a certain latent trait, such as ‘political participation’ in the present study (cf. Sijtsma & Molenaar, 2002; van Schuur, 2003; van der Ark 2007; 2012; Linssen et al. 2014, 39-41; Schnaudt, Walter, & Popa, 2016, 76). MSA assumes that each respondent has a certain, unknown value on that latent trait, so that the probability of a positive response to any of the survey items for political participation increases with that unknown value on the latent trait. For the construction of political participation scales, the individual survey items have to meet certain criteria as implied by the monotone homogeneity model: all item pairs have to be positively correlated and the scalability coefficients for each individual item have to exceed a certain lower bound (usually $H > 0.3$). In addition, the overall degree of scalability for the resulting scale(s) as indicated by Scale H should exhibit a minimum value of 0.3 as well. In MSA, the item scalability coefficients can be compared to discrimination parameters in parametric IRT models, whereas the Scale H indicates the average discrimination power with regard to the

ordering of all items in the final scales (cf. Mokken, 1971, 184-5; van der Ark, 2007, 3-4; Sijtsma, Meijer, & van der Ark, 2011, 33). If the assumptions of the monotone homogeneity model hold, respondents and items can be meaningfully ordered along a latent continuum of political participation.¹ While MSA has been successfully applied in previous studies of political participation (cf. van Deth, 1986; Garcia Albacete, 2011; Linssen et al., 2014), this study is the first to use it for analyzing the structure of political participation across different age groups and time points.

MSA is particularly suitable because it allows us to identify which concrete modes of participation might be summarized to form coherent scales or types of political participation and whether these modes are constant or varying across young and adult people and over time (cf. van Deth, 1986, 265). What is more, it gives us information on the ranking or 'difficulty' of individual survey items along the latent continuum 'political participation' and whether we find an identical or varying item order across young and adult people and over time (cf. Linssen et al., 2014, 42-4; Garcia Albacete, 2011, 24). Finally, it allows us to construct equivalent scales of political participation across young and adult people and over time and thus enables us to draw meaningful conclusions about differences and similarities with respect to the levels of political participation across different age groups and time points.

With regard to our empirical analysis, we rely on German data from the first seven waves of the European Social Survey (ESS) covering the years 2002-2014. The ESS is a biennial survey covering a wide range of European citizens' economic, moral, social and political attitudes and behaviors and has been conducted in more than thirty European countries since 2002 (for a general overview, see Schnaudt et al., 2014). Considering the focus of the present study, the advantage of using data from the ESS consists in its combination of providing (1) a stable set of survey items tapping the concept political participation for a period of twelve years and (2) a representative sample of the German population aged 15 and above. Relying on ESS data thus remedies at least two possible shortcomings of previous studies. First, since it covers the general population aged 15 and above, it enables us to directly analyze differences and similarities in political participation between young and adult people using only one coherent sample. Such a direct comparison between young and adult people allows us to find out more about the specificities of young people's political participation and establishes an advantage vis-à-vis pure youth studies (for example, Gaiser, de Rijke, & Spanning, 2010; Quintelier, 2007). Second, covering people already from the age of 15, the ESS allows us to depict a more realistic and encompassing picture of young people than previous studies relying on a sample only with respondents aged 18 or above (for example, Henn &

1 For a more detailed discussion of MSA, including its properties and underlying assumptions, see Mokken, 1971; Sijtsma & Molenaar, 2002; van Schuur, 2003; van der Ark, 2007; 2012; Ligetvoet et al., 2010, 2011.

Foard, 2014; Wray-Lake & Hart, 2012). Germany is a substantively interesting case to focus on given previous findings about continuously high levels of political apathy ('Politikverdrossenheit') among the German youth (cf. Schneekloth, 2015, 178-82; Sloam, 2014, 664). In addition, our focus on Germany also reflects a pragmatic decision based on sample size and data availability. While the ESS is a survey of the general population, sample sizes in Germany are sufficiently high (more than 2,750 respondents in each of the seven waves) to still allow for meaningful analyses across young and adult people as well as individual waves of the survey (cf. Schnaudt et al., 2014, 501-2). Our focus on Germany thus remedies the problem of very small sample sizes for the young population that is routinely encountered in other studies (cf. Sloam, 2014, 668).

In our following analysis, we employ a total of seven items that are supposed to measure the concept of political participation which we broadly define here as "citizens' activities affecting politics" (van Deth, 2014, 351). While the ESS provides a higher number of suitable items in certain waves, we select these seven items because they are available in all seven waves of the ESS and can be meaningfully applied to all respondents aged 15 and above. This implies that we exclude the item 'voting in national elections' from our analyses as it would lead to the exclusion of a substantial and theoretically important subset of our sample, namely all young people who did not have the chance to vote in the last general election due to their young age (cf. Quintelier, 2007, 169). The seven items selected are: (1) working for a political party or action group, (2) contacting politicians or government officials, (3) working for another organization or association, (4) wearing a badge or campaign sticker, (5) signing a petition, (6) taking part in a lawful demonstration, and (7) boycotting products. The ESS asks which of these several activities respondents have done within the last twelve months.² This question wording ensures that responses are not biased against young people who, due to their lower age, did not have the same chances of engaging in political activities as adult people (cf. Martin, 2012, 215). In the remainder of this section, we analyze the structure of these seven items separately for three age groups. In addition to a group of young people (aged 15-29) and a group of adult people (aged 30-65), we also investigate a group of older people (aged 66 and above). This classification is informed by one of the most established findings in participation research according to which political participation follows the shape of an inverted U, implying that participation rates increase with age and then drop again when people get older and reach retirement (cf. Milbrath, 1965, 134). While the cutting point for distinguishing between the second and the third age group is rather straightforward (i.e., transition to retirement), the decision to classify people until the age of 29 as belonging to the young-

2 Each of the seven items is binary in nature (1=have done/0=haven't done). Respondents with missing information ('don't know', no answer, or refusal) on any of the items have been excluded from the analysis (less than 0.5% for each item).

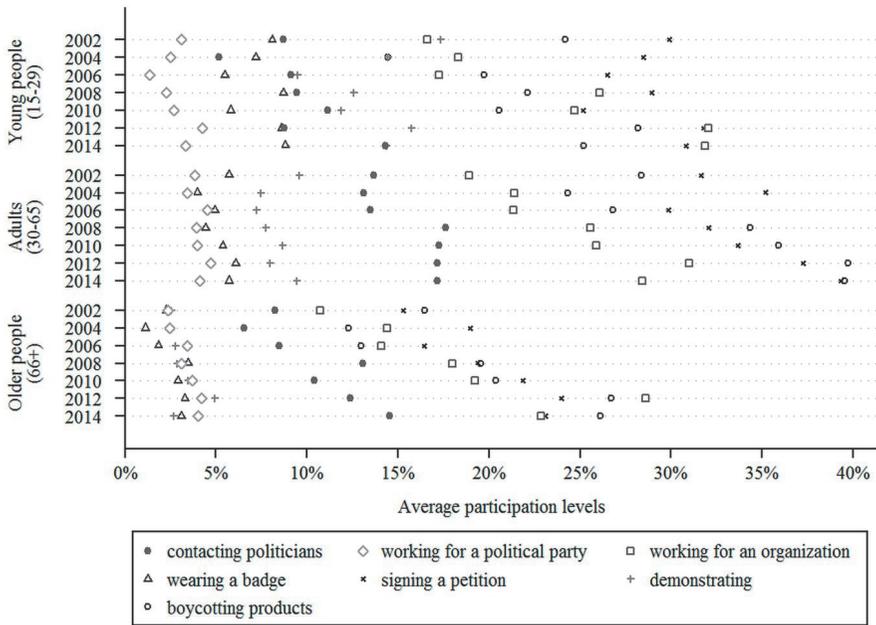
est category follows theoretical arguments and empirical findings about a longer or delayed transition from youth to adulthood (cf. Garcia Albacete, 2011, 6). As “transformations in patterns of youth participation in Western Europe may arise more from the lengthening of youth than from any generational change” (Soler-i-Marti & Ferrer-Fons, 2015, 96), implying that young people reach important stages of their life-cycles (e.g., marriage, getting children) at a later point in time as compared to some decades ago, we consider the age of 29 as a plausible cutting point for distinguishing between young and adult people.

Empirical Findings

Before we turn to the results of the ‘identity-equivalence procedure’ for political participation, Figure 1 gives a first descriptive overview of the seven items for political participation across the three age groups and seven time points (2002-2014) under consideration.

On average, participation levels are lowest for the oldest age group and highest for the group of adults. The group of young people occupies the medium position. What is more, the figures indicate an increase in the average participation rates for certain items over time across all age groups (e.g., working for an organization, signing a petition, boycotting products). Other forms of participation, such as working for a political party or wearing a badge, remain at rather stable levels across time and age groups.

Having a closer look at the participation profiles of each of the three age groups over time, Figure 1 shows that for young people working for a political party, wearing a badge, and contacting politicians are the least common modes of participation across all years and usually do not exceed participation levels of ten percent. The remaining four items for demonstrating, working for an organization, boycotting products, and signing a petition reach average levels between ten and thirty-two percent across all years but show more variability with regard to their rank order across time. Overall, the participation profile for the youngest age group thus exhibits some internal changes and a certain degree of volatility over time. For the group of adults, a different picture emerges. Here, the general participation profile is very stable over time and exhibits only one minor change with regard to the rank order of the items for signing a petition and boycotting between the years 2006 and 2008. Otherwise, the identical rank order of participation modes is evident across all years. The least common participation modes are working for a political party, wearing a badge, and demonstrating, usually not exceeding average levels of ten percent. The most common modes of participation are boycotting, signing a petition, and working for an organization, with average levels between twenty and forty percent across all years. Contacting politicians occupies an intermediate



Notes: ESS data 2002-2014, data weighted using post-stratification weights.

Figure 1 Average levels of different modes of political participation across three age groups and seven time points (percentages)

position with average levels between thirteen and eighteen percent across the seven time points. Finally, the participation profile of the oldest age group shows the most fluctuations with regard to the rank order of participation modes over time. While wearing a badge, working for a political party, and demonstrating are the least common modes with average levels below five percent, their relative order changes from year to year. The same volatility in the rank order over time holds true for the most common modes of signing a petition, boycotting, and working for an organization, whose levels in all years range between ten and thirty percent. Contacting politicians is the only consistent mode of participation occupying an intermediate rank across all years with levels between seven and fourteen percent.

To summarize, the inspection of the seven individual modes of political participation as depicted in Figure 1 shows some similarities and common trends between age groups and over time. Yet, some differences with regard to the average levels and rank order of these seven modes across age groups and time points are also evident. The main question of interest concerns whether these differences in the frequency distribution and rank order of the seven individual modes indicate the existence of different meanings or structures underlying the concept of political participation across different age groups and time points.

To answer this question, we turn to the ‘identity-equivalence procedure’ as briefly described before. In a first step, we search for the so called ‘identity set’ of political participation. The identity set is that set of items which corresponds to the properties of a Mokken Scale and is valid across all age groups and time points under investigation. Starting first with the pooled data set to get an impression of the structure of political participation across all respondents and time points (with no distinctions between age groups and ESS waves), MSA yields a uni-dimensional scale of political participation consisting of six out of the seven items under consideration. More specifically, with the exception of ‘boycotting products’ all remaining modes of participation can be summarized to form a coherent scale of political participation (Scale $H=0.35$, $LCRC=0.66$).³ This finding also indicates that, at least for the pooled data set, commonly employed types of political participation, such as ‘institutionalized vs non-institutionalized’, do not receive empirical support. The interesting question at this point is whether the political participation scale found for the pooled data set can be replicated in the same way across all age groups and over time to form our ‘identity set’ of political participation. The short and clear answer is ‘no’. From the seven items included in our analysis, the only set of items that corresponds with the criteria of a Mokken Scale across all age groups and time points consists of the three items working for a political party, contacting politicians, and working for another organization. Accordingly, these three modes of participation can be meaningfully summarized to form our ‘identity set’ of political participation. Again, it has to be noted that MSA yields only one scale of political participation, indicating that commonly used conceptions and distinctions between different types of political participation are not supported in our data. Table 1 presents the detailed properties of the final three-item identity scale of political participation across age groups and time points.

All item scalability coefficients exceed the critical lower bound of 0.3. The overall scalability of the resulting scales ranges between 0.35 (young people in 2004) to 0.55 (older people in 2012). In five out of twenty-one cases, the scale H is below 0.4 (indicating a weak scale), in eleven out of twenty-one cases the scale H is between 0.4 and 0.5 (indicating a medium scale), and in five out of twenty-one cases the scale H is above 0.5 (indicating a strong scale) (cf. Mokken, 1971, 185). The reliability coefficients of the resulting identity scales as measured by ρ and $LCRC$, respectively, do not reach conventional levels of 0.7, which can be explained by the fact that the identity scale consists of only a small number of three items which, in addition, also lack a uniform distribution in their difficulties (cf. Garcia Albacete, 2011, 27). Lastly, the rank order of the three items within the identity scale is the same across all age groups and time points: The most difficult item is working for a political party, followed by contacting politicians and working for

3 The $LCRC$ (Latent Class Reliability Coefficient) is a measure of reliability in MSA (see van der Ark, van der Palm, & Sijtsma, 2011).

Table 1 Properties of the three-item identity scale of political participation across three age groups and seven time points (item frequencies and scalability coefficients; scale coefficients and reliability)

Age group	Year	Working for political party		Contacting politicians		Working for organisation		Scale H	Scale reliability
		Item diff.	Item H	Item diff.	Item H	Item diff.	Item H		
Young people (15-29)	2002 (N= 525)	.03 (.17)	.50 (.10)	.09 (.28)	.42 (.08)	.17 (.37)	.43 (.08)	.44 (.07)	.52 / .49
	2004 (N= 549)	.03 (.16)	.39 (.13)	.05 (.22)	.35 (.09)	.18 (.39)	.32 (.10)	.35 (.09)	.39 / .34
	2006 (N= 535)	.01 (.12)	.42 (.13)	.09 (.29)	.36 (.08)	.17 (.38)	.42 (.08)	.39 (.07)	.43 / .46
	2008 (N= 457)	.02 (.15)	.52 (.08)	.09 (.29)	.49 (.08)	.26 (.44)	.49 (.09)	.49 (.07)	.49 / .45
	2010 (N= 620)	.03 (.16)	.42 (.11)	.11 (.32)	.36 (.07)	.25 (.43)	.34 (.08)	.36 (.07)	.42 / .38
	2012 (N= 583)	.04 (.20)	.54 (.09)	.09 (.28)	.37 (.08)	.32 (.47)	.44 (.09)	.44 (.08)	.41 / .36
	2014 (N= 531)	.03 (.17)	.45 (.10)	.14 (.35)	.36 (.07)	.31 (.46)	.36 (.08)	.38 (.07)	.42 / .39
Adults (30-65)	2002 (N= 1,849)	.04 (.19)	.58 (.05)	.14 (.34)	.44 (.03)	.19 (.39)	.42 (.03)	.46 (.03)	.58 / .55
	2004 (N= 1,760)	.03 (.18)	.68 (.05)	.13 (.34)	.49 (.03)	.21 (.41)	.48 (.04)	.52 (.03)	.59 / .55
	2006 (N= 1,746)	.04 (.21)	.62 (.05)	.13 (.34)	.48 (.03)	.21 (.41)	.46 (.04)	.50 (.03)	.59 / .56
	2008 (N= 1,696)	.04 (.19)	.58 (.06)	.18 (.38)	.45 (.03)	.26 (.44)	.44 (.03)	.47 (.03)	.56 / .54
	2010 (N= 1,777)	.04 (.20)	.70 (.05)	.17 (.38)	.51 (.03)	.26 (.44)	.52 (.03)	.54 (.03)	.60 / .57
	2012 (N= 1,734)	.05 (.22)	.65 (.05)	.18 (.39)	.50 (.03)	.32 (.47)	.52 (.04)	.54 (.03)	.56 / .53
	2014 (N= 1,822)	.04 (.19)	.59 (.06)	.16 (.37)	.48 (.03)	.27 (.44)	.44 (.04)	.48 (.03)	.56 / .54

Table 1 continued

Age group	Year	Working for political party		Contacting politicians		Working for organisation		Scale H	Scale reliability
		Item diff.	Item H	Item diff.	Item H	Item diff.	Item H		
Older people (66+)	2002 (N= 515)	.02 (.15)	.44 (.10)	.08 (.28)	.38 (.07)	.11 (.31)	.37 (.08)	.39 (.07)	.51 / .49
	2004 (N= 480)	.02 (.15)	.54 (.11)	.07 (.25)	.50 (.07)	.14 (.35)	.36 (.09)	.46 (.08)	.55 / .56
	2006 (N= 567)	.03 (.18)	.66 (.08)	.08 (.28)	.43 (.07)	.14 (.35)	.39 (.07)	.47 (.07)	.57 / .54
	2008 (N= 558)	.03 (.17)	.65 (.09)	.13 (.34)	.44 (.06)	.18 (.38)	.43 (.06)	.47 (.06)	.58 / .55
	2010 (N= 593)	.04 (.19)	.68 (.07)	.10 (.31)	.44 (.06)	.19 (.40)	.37 (.07)	.47 (.06)	.54 / .50
	2012 (N= 615)	.04 (.21)	.70 (.09)	.13 (.34)	.52 (.06)	.30 (.46)	.51 (.07)	.55 (.06)	.56 / .51
	2014 (N= 666)	.04 (.19)	.62 (.07)	.14 (.34)	.40 (.06)	.20 (.40)	.42 (.06)	.45 (.05)	.51 / .49

Notes: MSA based on three dichotomous items for political participation. 'Item diff.' shows the frequency of each item with s.e. in parentheses. 'Item H' indicates the scalability coefficient for each item separately with s.e. in parentheses. 'Scale H' indicates the scalability coefficient for the final scale with s.e. in parentheses. Reliability indicated by 'rho/LCRC'. No violations of latent monotonicity and non-intersection found. ESS data 2002-2014.

an organization (see also Figure 2 below). This information provides additional evidence that the identity scale represents one and the same underlying concept (i.e., political participation) across all age groups and time points and thus forms a solid basis for meaningful comparisons of the equivalent scales to be built upon the identity set in the next step.

The second step of the 'identity-equivalence procedure' consists in adding further, age-group and time-point specific items to the identity scale. In this step, additional items are added as long as the properties of a Mokken Scale hold. More specifically, this implies that, in order to qualify as an extension of the identity scale, any of the four remaining items (i.e., wearing a badge or campaign sticker, signing a petition, taking part in a lawful demonstration, and boycotting products) has to meet the following criteria: It has to be positively correlated with the three constitutive items of the identity scale, exhibit a minimum scalability coefficient of 0.3 (item H), and lead to an overall degree of scalability of the resulting scale of at

least 0.3 (scale H) (see also section 4). Any of the four items fulfilling these criteria is added to the identity scale to form equivalent scales of political participation that are comparable across age groups and time points. With this strategy, longer and more reliable scales of political participation can be reached that reflect the specific conditions of the respective age groups and time points while still being manifestations of the same underlying concept due to their inclusion of the same identity set. The results of this second step are summarized in Table 2.

In sixteen out of twenty-one cases the identity scales could be enriched with age-group or time-point specific items. For the adult age group, with the exception of 2008, the scale for political participation could be extended by three additional items (wearing a badge, signing a petition, demonstrating). The same holds true for the oldest age group in the years 2004, 2006, 2008 and 2012 as well as for the youngest age group in 2008. For the youngest age group it is further noteworthy that the identity scale could not be extended at all in the years 2004, 2010, 2012 and 2014. The item for boycotting products was not scalable in any of the age groups across time (item H <0.3). In thirteen out of twenty-one cases, the final equivalent scales of political participation establish weak scales (Scale H 0.3-0.39), while in the remaining eight cases they form medium scales (Scale H 0.4-0.49). More importantly, however, in all sixteen cases where additional items could be added, the reliability of the final equivalent scales in comparison to the identity scale could be improved.

Table 2 also provides information on the rank order of the individual modes of participation within the final equivalent scales of political participation. While this information is negligible for the construction of the equivalent scales itself, it provides some additional insights with regard to the differences in the participation profiles across age groups and time. As can be seen, even in those instances where the final equivalent scales are identical across the three age groups, the rank order of the individual modes differs between young, adult, and old people. Using the six-item equivalence scale as an example, we see that for young and adult people the least popular (or most 'difficult') mode of participation is working for a political party, whereas for the oldest age group it is wearing a badge. We also observe that contacting politicians is more difficult for young people as compared to adult and old people, while the opposite holds true for demonstrating. Yet, as the relative position of the three items of the identity set (which is the same across all respondents and years) does not change within the equivalence scales, these are still supposed to be comparable across age groups and time points.

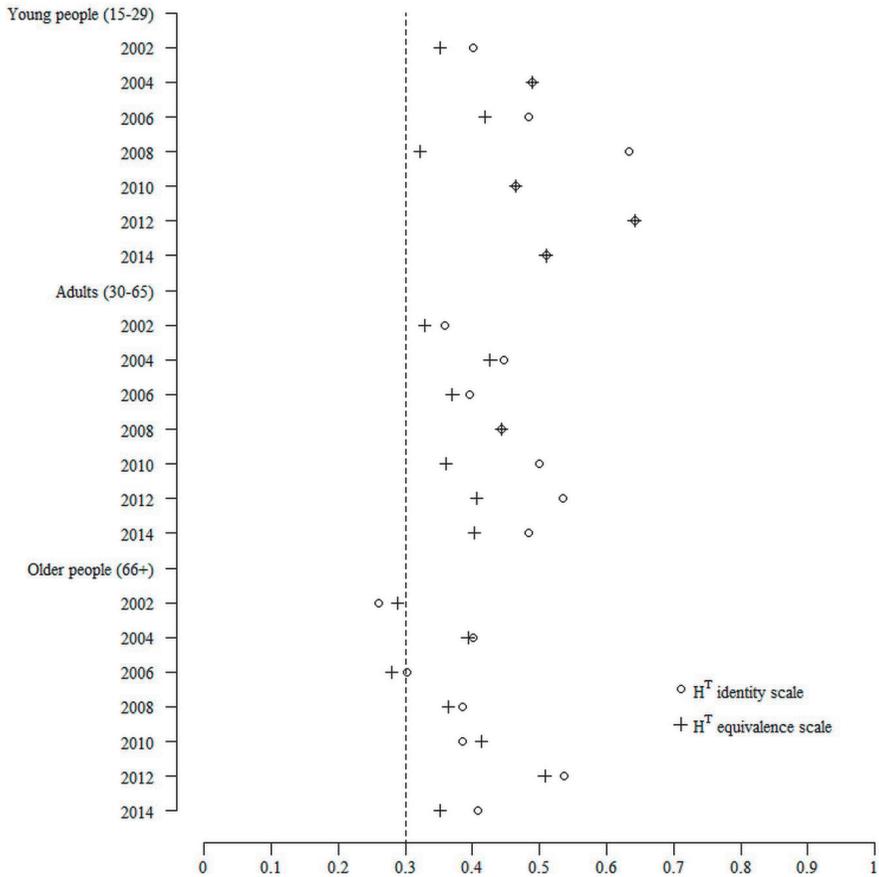
A more detailed investigation of the item ordering across age groups and time points is shown in Figure 2. Here we assessed whether the item rank orders as shown in Table 2 are the same for all respondents within a respective age group at a given point in time. In technical terms, we investigated the existence of an invari-

Table 2 Properties of the final equivalent scales of political participation across age groups and ESS waves

Age group	Year	Work for political party		Contacting politicians		Work for organisation		Wearing a badge		Signing a petition		Demonstrating		Scale reliability	
		Item diff. (rank)	Item H	Item diff. (rank)	Item H	Item diff. (rank)	Item H	Item diff. (rank)	Item H	Item diff. (rank)	Item H	Item diff. (rank)	Item H		
Young people (15-29)	2002	.03 (1)	.54 (.08)	.09 (3)	.30 (.06)	.17 (4)	.40 (.05)	.08 (2)	.35 (.06)	.30 (5)	.43 (.06)	--	--	.39 (.05)	.60 / .63
	2004	.03 (1)	.39 (.13)	.05 (2)	.35 (.09)	.18 (3)	.32 (.10)	--	--	--	--	--	--	.35 (.09)	.39 / .34
	2006	.01 (1)	.32 (.13)	.09 (2)	.34 (.06)	.17 (3)	.43 (.05)	--	--	.27 (4)	.37 (.06)	--	--	.38 (.05)	.55 / .71
	2008	.02 (1)	.54 (.10)	.09 (3)	.33 (.05)	.26 (5)	.32 (.05)	.06 (2)	.36 (.06)	.28 (6)	.36 (.05)	.10 (4)	.34 (.05)	.35 (.04)	.60 / .68
	2010	.03 (1)	.42 (.11)	.11 (2)	.36 (.07)	.25 (3)	.34 (.08)	--	--	--	--	--	--	.36 (.07)	.42 / .38
	2012	.04 (1)	.54 (.09)	.09 (2)	.37 (.08)	.32 (3)	.44 (.09)	--	--	--	--	--	--	.44 (.08)	.41 / .36
	2014	.03 (1)	.45 (.10)	.14 (2)	.36 (.07)	.31 (3)	.36 (.08)	--	--	--	--	--	--	.38 (.07)	.42 / .39
	2002	.04 (1)	.39 (.04)	.14 (4)	.33 (.02)	.19 (5)	.32 (.02)	.06 (2)	.38 (.03)	.32 (6)	.38 (.03)	.10 (3)	.31 (.03)	.34 (.02)	.61 / .66
Adults (30-65)	2004	.03 (1)	.46 (.03)	.13 (4)	.37 (.03)	.21 (5)	.40 (.03)	.04 (2)	.39 (.03)	.35 (6)	.46 (.03)	.07 (3)	.31 (.03)	.40 (.02)	.63 / .66
	2006	.04 (1)	.43 (.04)	.13 (4)	.39 (.03)	.21 (5)	.39 (.03)	.05 (2)	.40 (.04)	.30 (6)	.41 (.03)	.07 (3)	.35 (.03)	.40 (.02)	.63 / .69
	2008	.04 (1)	.58 (.06)	.18 (2)	.45 (.03)	.26 (3)	.44 (.03)	--	--	--	--	--	--	.47 (.03)	.56 / .54
	2010	.04 (1)	.42 (.04)	.17 (4)	.38 (.02)	.26 (5)	.35 (.02)	.05 (2)	.39 (.04)	.34 (6)	.33 (.03)	.09 (3)	.32 (.03)	.36 (.02)	.60 / .67
2012	.05 (1)	.42 (.04)	.18 (4)	.37 (.03)	.32 (5)	.34 (.02)	.06 (2)	.32 (.04)	.39 (6)	.36 (.03)	.09 (3)	.33 (.03)	.36 (.02)	.59 / .64	
2014	.04 (1)	.39 (.04)	.16 (4)	.38 (.03)	.27 (5)	.34 (.02)	.05 (2)	.39 (.03)	.38 (6)	.36 (.03)	.09 (3)	.31 (.03)	.36 (.02)	.60 / .64	

Age group	Year	Work for political party		Contacting politicians		Work for organisation		Wearing a badge		Signing a petition		Demonstrating		Scale reliability
		Item diff. (rank)	Item H	Item diff. (rank)	Item H	Item diff. (rank)	Item H	Item diff. (rank)	Item H	Item diff. (rank)	Item H	Item diff. (rank)	Item H	
Older people (66+)	2002	.02 (2)	.47 (.07)	.08 (3)	.36 (.07)	.11 (4)	.34 (.08)	.02 (1)	.36 (.09)	--	--	--	--	.38 (.06)
	2004	.02 (2)	.44 (.08)	.07 (4)	.46 (.07)	.14 (5)	.36 (.06)	.01 (1)	.33 (.13)	.19 (6)	.47 (.06)	.03 (3)	.35 (.08)	.41 (.06)
	2006	.03 (2)	.48 (.07)	.08 (4)	.32 (.06)	.14 (5)	.37 (.05)	.02 (1)	.44 (.09)	.16 (6)	.37 (.06)	.03 (3)	.42 (.07)	.39 (.05)
	2008	.03 (3)	.47 (.07)	.13 (4)	.40 (.05)	.18 (5)	.39 (.05)	.03 (1)	.43 (.07)	.19 (6)	.35 (.05)	.03 (2)	.45 (.08)	.40 (.04)
	2010	.04 (2)	.54 (.07)	.10 (3)	.43 (.06)	.19 (4)	.38 (.07)	.03 (1)	.32 (.10)	--	--	--	--	.42 (.06)
	2012	.04 (2)	.46 (.06)	.13 (4)	.43 (.06)	.30 (5)	.51 (.06)	.03 (1)	.50 (.08)	--	--	.05 (3)	.31 (.07)	.44 (.05)
2014	.04 (3)	.46 (.06)	.14 (4)	.32 (.05)	.20 (5)	.34 (.04)	.03 (1)	.41 (.07)	.21 (6)	.32 (.04)	.03 (2)	.40 (.06)	.36 (.04)	

Notes: MSA based on six dichotomous items for political participation. For the number of cases included in the analysis, see Table 1. 'Item diff.' shows the frequency of each item with its rank across all items in parentheses (1= most difficult/least popular). 'Item H' indicates the scalability coefficient for each item separately with s.e. in parentheses. 'Scale H' indicates the scalability coefficient for the final scale with s.e. in parentheses. Reliability indicated by 'rho/LCRC'. No violations of latent monotonicity and non-intersection found. ESS data 2002-2014.



Notes: For further information, see Ligetvoet et al. 2010; 2011.

Figure 2 Inspection of invariant item ordering (IIO) for political participation scales across three age groups and seven time points (H^T coefficients)

ant item ordering (IIO) across respondents as implied by the double monotonicity assumption in MSA (cf. Ligetvoet et al., 2010, 2011; Sijtsma, Meijer, & van der Ark, 2011; Watson et al., 2014). The existence of IIO implies that the item response functions of any pair of items do not intersect and are sufficiently different from each other to speak of a meaningful order of items across respondents. For the inspection of IIO, Ligetvoet et al. (2010, 2011) have proposed the coefficient H^I which should exhibit a minimum value of 0.3 in order to draw meaningful conclusions about the existence of IIO of the items within a Mokken Scale (see also Sijtsma, Meijer, & van der Ark, 2011; Watson et al., 2014, 74-5).

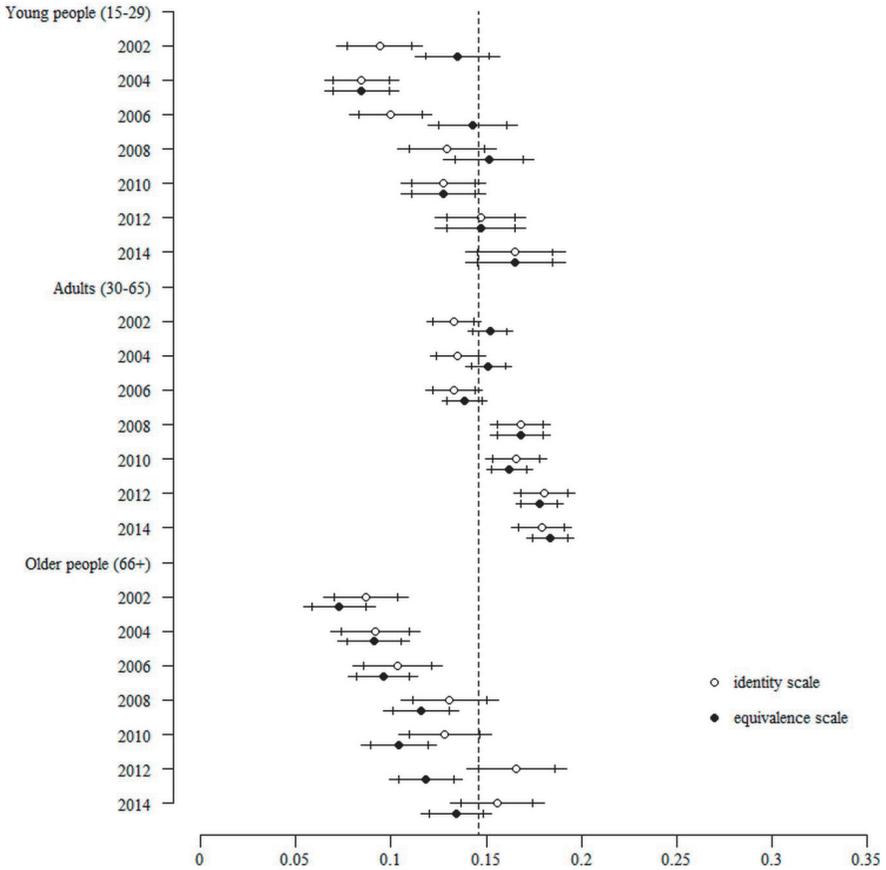
Figure 2 plots the respective H^1 coefficients for the identity and equivalence scales of political participation across age groups and time points. With only two exceptions, all coefficients exceed the critical value of 0.3 so that we can speak of an invariant item ordering and a meaningful order of the different modes of political participation across all respondents within the same age group at a given point in time. Both exceptions refer to the oldest age group (2002 and 2006) where the item response functions for the different items are too close to each other ($H^1 < 0.3$) to convey any meaningful message about the order of the items across all respondents.

As a final summary of the ‘identity-equivalence procedure’ for political participation, Figure 3 provides a descriptive overview of the final identity and equivalence scales across age groups and time points. To account for the varying number of items in the final equivalence scales across age groups and time points, we have standardized all scales to range from 0-1 (cf. van Deth, 1986, 269).

Three observations seem to be notable. First, it can be seen that the identity and equivalence scales yield varying participation levels. Especially for the youngest age group the equivalence scales reveal higher participation levels than the identity scales (see 2002, 2006 and 2008), while for the oldest age group the opposite can be observed. For the group of adults, the equivalence scales sometimes result in higher and sometimes in lower participation levels than the identity scales. Second, there appears to be an increasing trend in the levels of political participation over time for young, adult, and old people alike. Accordingly, for all three age groups, the average participation levels are higher in 2014 than 2002. Third, comparing the levels of political participation across young, adult, and old people, the oldest age group clearly is the least politically active. However, more interesting from the perspective of youth participation research is the observation that young and adult people in fact show quite similar levels of political participation. With the exception of 2004, young people’s political participation does not deviate significantly from the average participation levels of the overall population. Using equivalent instruments of political participation that are based on a common identity set thus provides us with a less gloomy picture about young people’s political participation than relying on the commonly employed strategy of applying identical instruments.

Summary and Discussion

In applying the ‘identity-equivalence procedure’ for political participation across different age groups and time points, this study offers a re-assessment of young people’s political participation in Germany. As Cammaerts et al. have pointed out, “much of the existing social science literature, as well as many journalistic accounts of the supposedly low turnout of young people in elections, assumes that



Notes: ESS data for the years 2002-2014, data weighted using post-stratification weights. The vertical line shows the average level of political participation across all three age groups and time points as measured by the equivalence scale.

Figure 3 Average levels of political participation across three age groups and seven time points (means with 99% and 95% CIs)

young people today are simply fed up with politics per se and not interested in the political questions facing their communities or their countries. However, much of this literature fails to provide convincing empirical evidence for such claims and critiques” (2014, 650). In this study, we argue that, in order to arrive at meaningful conclusions about young people’s political participation, its specificities in comparison with adult people, as well as its developments over time, ‘construct-equa-

lent' rather than identical instruments of political participation across different age groups and over time should be used.

What are the main insights of the 'identity-equivalence procedure' for political participation across age groups and time points? First, the (empirical) structure of the concept of political participation does not reflect commonly employed types of political participation, such as the distinction between institutionalized and non-institutionalized participation. For all age groups and time points under investigation, MSA yields a single, uni-dimensional scale of political participation. In light of this finding, the commonly employed strategy of many previous studies of simply applying well-known distinctions between different types of political participation without checking their empirical suitability is at least questionable. Second, while the 'identity-equivalence procedure' shows a generally uni-dimensional structure of political participation, the concrete composition of the final equivalent scales of political participation as well as the rank order of the different participation modes within these scales vary across age groups and over time. Overall, the equivalence scales contain more items for adult people and are more stable in their composition over time when compared to young and old people. This finding might indeed be a reflection of a more narrow conception of politics held by young people as pointed out in previous research (cf. Quintelier, 2007, 177; O'Toole et al., 2003, 52). In any case, it shows that the concrete manifestation of the concept political participation differs across age groups and time. Simply applying identical (rather than equivalent) instruments of political participation for young and adult people as well as different time points thus appears to be an ill-suited strategy to arrive at meaningful conclusions about the levels and trends of political participation. Third, regarding the levels and trends of political participation, the results for our final equivalent scales show an increase in participation levels over time that is observable for all age groups. These results are clearly at odds with the conventional wisdom stating that young people are less politically active than adults and are becoming more and more politically apathetic and disengaged as time passes by (cf. Henn & Foard, 2014, 361). Judging from the results based on our equivalent scales of political participation, the future prospects of (German) democracy are not as shady as suggested in some previous studies of youth political participation.

What are the implications of the 'identity-equivalence procedure' for political participation across age groups and time points? In light of the results presented, a central question concerns the analytical value of commonly employed conceptions and types of political participation, such as the distinction between conventional and unconventional or institutionalized and non-institutionalized participation. As indicated earlier, for none of our age groups and time points under consideration the 'identity-equivalence procedure' as implemented by MSA yields a solution that consists of two (or more) scales and that could be indicative of any of the types of political participation mentioned above. Does this mean that we can completely

eschew these commonly employed conceptions of political participation? Such a conclusion would certainly be premature. First, it is clear that (cross-national) surveys such as the ESS are limited in the number and the variety of items to be included in the survey. Constructing time-series data for a stable set of items logically comes at the expense of including new items into a survey when interviewing time is limited. This establishes a possible problem, as surveys such as the ESS are limited in their capability to adapt to recent changes and developments concerning political participation. As a consequence, survey items for newer modes of participation, such as ‘guerilla gardening’ or ‘reclaim-the-street parties’ (cf. van Deth, 2014), which might form the basis of a second dimension of political participation, are not available in the ESS. Hence, it might be possible that the uni-dimensionality of our equivalent scales establishes an artefact of the particular items used in the present analysis.⁴ While there is certainly no easy answer to this problem, cross-national surveys such as the ESS sooner or later have to find a way to adapt to and cover changes in the empirical realities of concepts such as political participation. Second, the uni-dimensionality found for our equivalent participation scales might also be a direct consequence of the underlying logic of the ‘identity-equivalence procedure’. As the procedure requires a common identity set that represents a valid scale across all subgroups considered, it might have obscured other, more-dimensional structures of political participation. However, since our goal was to establish ‘construct-equivalent’ scales of political participation for young and adult people over time, we did not inspect any scales that were not based on a common identity set for all age groups and time points.

What are the implications of the findings for comparative survey research in general and participation research in particular? Researchers investigating differences and similarities in the political behavior of young and adult people over time should ensure that (1) they use reliable samples including *both young and adult people*, (2) they track both groups *over time*, and (3) the *measurement of political participation* is equivalent across age groups as well as over time. Questions of measurement equivalence in the area of comparative survey research usually arise in the context of establishing equivalent instruments *across countries* (cf. Przeworski & Teune, 1966; van Deth, 1986; Garcia Albacete, 2011; Linssen et al., 2014).

4 To investigate this argument, we checked the robustness of the results presented in Table 2 by repeating the same analysis with a broader set of participation items that is only available for the first wave of the ESS in 2002. The additional four items encompass (1) boycotting products, (2) donating money to a political organization, (3) participating in an illegal protest, and (4) taking part in a referendum. The results confirm the uni-dimensional scale of political participation across all age groups. For young and old people, the robustness check even yields the exact same equivalence scales as shown in Table 2. For adult people, the equivalence scale can be extended by the items for boycotting and donating money. Detailed results of the robustness check are available upon request.

As this study has pointed out, similar considerations concerning the equivalence of instruments may also apply if the main objective is to draw meaningful conclusions about differences and similarities *between different societal groups and points in time*. Accordingly, future studies on political participation and beyond should be (more) attentive to the fact that the analysis of one and the same phenomenon may require the usage of equivalent rather than identical instruments.

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