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Multiple social identifications and adolescents' self-esteem



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ABSTRACT

The research examined the relationship between multiple social identifications and self-esteem. Early adolescents (M = 11.4, SD = .95) and mid-adolescents (M = 15.9, SD = 1.18) from Germany and Israel (n = 2337) were studied. Respondents described their social identification as students, family members, and as members of the majority national group and reported self-esteem. A longitudinal, cross-sectional and cross-cultural design revealed, as predicted, multiple social identifications related positively to self-esteem concurrently; they also related positively to self-esteem longitudinally over the course of a year. Moreover, multiple social identifications were found to be antecedent to self-esteem, not vice versa. Finally, multiple social identifications were found to decrease over time. The article discusses the contribution of multiple social identifications to self-esteem at different ages and in various contexts.

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Adolescents' lives are embedded in rich social contexts, as they are connected to multiple social groups and play many social roles. Their subjective feeling of inclusion in a particular group or role is an important part of their evolving identity (Tanti, Stukas, Halloran, & Foddy, 2011). Surprisingly, however, only a handful of studies have examined the *accumulative* effect of social identifications, especially across developmental periods and cultures. Moreover, although there is ample research documenting that a single social identification (e.g., with a cultural group) is positively associated with self-esteem in youth (e.g., Smith & Silva, 2011), only a few studies consider the relations between *multiple* identifications and self-esteem (e.g. Kiang, Yip, & Fuligni, 2008).

In our study, we investigated three aspects of multiple social identifications. First, we asked whether self-esteem is — beyond the positive relationship with single social identifications — also related to the accumulation of multiple social identifications (MSI). Based on the "identity accumulation hypothesis" (Thoits, 1983, 2003), we proposed that adolescents with more social identification will enjoy higher levels of self-esteem compared to those with fewer social identifications. It is not only the content of specific social identification that matters to self-esteem, but also the increased number of identifications. Identity composed of multiple factors enhances feelings of meaning and security (Thoits, 1983), acting as a buffer to threats to the self (Linville, 1985) and enhancing self-esteem. Second, we sought to clarify whether MSI relates to future self-esteem or whether self-esteem relates to future MSI, using a longitudinal study of adolescents to determine the answer to

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this. Third, as we know nothing about the developmental process of multiple social identifications, we asked if the numbers of social identities increase or decrease during adolescence. We investigated all three research questions, both cross-sectionally with a sample of 2737 adolescents from Germany and Israel, and longitudinally with a subsample of 496 of the previously studied adolescents over a year.

Social identifications and self-esteem in adolescence

Social identification, the subjective feeling of belonging to a certain group (Tajfel & Turner, 1986), is a core aspect of a person's identity (Turner, Reynolds, Haslam, & Veenstra, 2006). According to classical Social Identity Theory (Tajfel & Turner, 1986), individuals, at least to some degree, define themselves in terms of their membership in particular social groups. The positive attributes of these groups are incorporated in personal identity which, in turn, enhances positive self-evaluation and self-esteem (Crocker, Luhtanen, Blaine, & Broadnax, 1994; Phinney, Cantu, & Kurtz, 1997). Likewise, numerous theoretical and empirical studies have suggested social identification contributes to well-being such as self-esteem by promoting feelings of uniqueness and distinctiveness (Brewer, 1991) a sense of psychological security, intellectual stimulation and collaborative learning (see Haslam, Jetten, Postmes, & Haslam, 2009). Social groups provide a special link to feelings of belonging and social support (Haslam et al., 2008), as they offer people who identify with them an option to create helpful social relationships.

Both personal and social identities become increasingly important developmental issues during adolescence (Adams & Marshall, 1996; Erikson, 1968; Marcia, 1966; Meeus, 2011; Phinney, 1993). Research on ethnic identity development (e.g., Martinez & Dukes, 1997; Phinney, 1993) has shown that the development of social identities follows patterns similar to those of the development of individual identity. Social identification, in turn, becomes especially important in enhancing self-esteem during adolescence, when youth reflect on and become more aware of their social memberships and the external evaluations associated with them (Martinez & Dukes, 1997; Smith, Walker, Fields, Brookins, & Seay, 1999; Umaña-Taylor, Diversi, & Fine, 2002) and, at the same time, strive for a sense of belonging and recognition by others (Tanti et al., 2011).

Social identification is based on inner feeling of accepting multiple social roles (being a student, being a family member, belonging to a specific nationality). Note that the term *social identification* needs to be distinguished from the term *social role*. Social identification refers to subjective feelings of belonging to a certain group, whereas social roles involve the actual participation in a certain social group, even if the role is not part of one's self concept (Burke & Tully, 1977). For example, a person could attend school and fulfill that role by showing role-specific behavior but feel no identification with the social role of a student (i.e., being a student is not of particular importance to that person). Our focus here is on the more subjective, self-relevant social identification.

As introduced above, ample studies have highlighted the contribution of social identification to self-esteem (for a review, see also Chao & Otsuki-Clutter, 2011). However, people do not belong to one social group but to multiple groups, acquiring multiple social identifications (Roccas & Brewer, 2002). The current study included identification with three social groups described in the literature as important to adolescents and varying in their size and proximity to adolescents' lives (Bronfenbrenner & Evans, 2000): family, the narrowest cycle that includes a few people with whom the adolescent has an intimate relationship; school, a broader social group including hundreds of people, some but not all of whom the adolescent knows personally (i.e., peers, teachers); and nation that includes millions of people. All these social groups have been proven to feature prominently in adolescents' lives.

As the initial social group with which adolescents identify (Fuligni, 2011), an adolescent's family provides the first opportunity to feel a sense of belonging to a social group (Parke, 2004), and the degree to which adolescents identify with their families affects their development (Fuligni & Flook, 2005). The family is the primary agent of socialization and transmission of values and world views and the first source of self-localization. Family identification found to be positively related to self-esteem (Owens & Serpe, 2003) and to academic motivation (Fuligni, 2011). Another study found changes in the quality of the parent—adolescent relationship to be linked to changes in self-esteem in the schooling context (Dotterer, Lowe, & McHale, 2013).

Similarly, the school (which can be assumed to be the second major socialization institution after the family) constitutes a salient domain in identity formation (Flum & Kaplan, 2012; Meeus & Dekovic, 1995). It contributes to how students view themselves, how they direct their behavior, and how they consider their achievements (Lannegrand-Willems & Bosma, 2006). Previous research has found identification with school to be positively related to various measures of psychological well-being, including self-esteem (Bizumic, Reynolds, Turner, Bromhead, & Subasic, 2009).

A third social group important to adolescents is the national group. Theoretical reasoning for this assumption is rooted in research on cultural or ethnic identity which has shown that identification with cultural groups significantly contributes to an individual's psychological well-being (for reviews, see Phinney, 1991; Phinney et al., 1997; Phinney, Horenczyk, Liebkind, & Vedder, 2001; Smith & Silva, 2011). Most of this research has focused on members of ethnic minority groups (especially immigrants). Few studies have considered the role of cultural identification for members of cultural majority groups. One reason is that cultural belonging is often more salient in the everyday life of minorities than majorities (Umaña-Taylor et al., 2002). The present study attempted to fill this gap by examining the relationship between multiple social identifications (i.e., with family, school, and nation) and self-esteem among cultural majority members.

Self-esteem has often been considered an important indicator of general psychological well-being, especially among adolescents (Birkeland, Melkevik, Holsen, & Wold, 2012; Orth, Robins, & Widaman, 2012). Understanding the relationship between social identification and self-esteem is of considerable interest (compared to other measurements of well-being), as

both are aspects of a broader concept of the self (i.e., the way individuals define and evaluate themselves). Nevertheless, the association between them is often neglected (Owens & Serpe, 2003).

Multiple social identifications (MSI) and self-esteem

As outlined above, much research has focused on the link between identification with a single group and self-esteem. However, we know much less about the role of the *numbers* of social identifications, the focus of the present paper. Two competing theories allow predictions about the relationship between multiple identifications and self-esteem (for a review, see Brook, Garcia, & Fleming, 2008). According to the scarcity hypothesis (Goode, 1960), as human resources are limited, many social roles can demand extensive energy, leading to collapse and a lower sense of well-being. In addition, social roles might be in conflict which can lead to greater stress; this, in turn, can result in lower levels of well-being, including lower self-esteem.

Alternatively, according to the enhancement hypothesis (Thoits, 1983), multiple social identifications may increase a person's level of psychological strength by providing more potential sources of social status and self-esteem. It was shown, for example, that multi-role involvement is experienced as a source of meaning and purpose in people's lives (Simon, 1997) and is positively related to psychological well-being (Ahrens & Ryff, 2006). Thoits (1983) argued for a positive relationship between the number of roles a person has and that person's psychological health. Her seminal model, the *accumulative identity hypothesis*, suggested that a greater number of social identifications strengthen the feeling of meaning, direction, and psychological security, thus enhancing well-being and self-esteem. Moreover, identification with multiple groups provides multiple source of social support that helps buffering against negative life events (lyer, Jetten, Tsivrikos, Postmes, & Haslam, 2009; Jetten, Haslam, Dingle, & Jones, 2014).

Experimental support for both theories has been reported, with fewer studies corroborating the scarcity hypothesis (e.g., Vandewater & Stewart, 2006), than the enhancement hypothesis (e.g., Ahrens & Ryff, 2006; Harrell, Settles, Buchanan, Nnawulezi, & Yap, 2011; Simon, 1997; Thoits, 1983, 2003; Wienke & Hill, 2013). For example, one study found multiple social identifications (ethnic, American, family and religious) and self-esteem in emerging adults from mainly minority groups to be positively related to self-esteem (Kiang et al., 2008).

An explanatory mechanism of the importance of number over content is the *self-regulatory processes model* that is based on the self-complexity model (Linville, 1985, 1987). According to this model, multiple identifications have a stress-buffering effect in two main ways: re-orientation and positive reappraisal (Rothermund & Meiniger, 2004). Using the *reorientation* mechanism, adolescents who experience a problem in one social context rely on another social context as a compensation mechanism. For example, adolescents whose parents are undergoing marital stress might feel a threat to their family identification and gain support by relying on their identification as students. Thus, the more social contexts adolescents identify with, the more potential there is for sources of strength and support (Constantino, Wilson, Horowitz, & Pinel, 2006). With the *positive reappraisal* mechanism, an event experienced as negative is reevaluated as positive or neutral. This shift in judgment often involves change in norms, values and goals that are related to other life domains. Therefore, the ability to apply this mechanism is dependent on the number of other life domains or social identifications available to the adolescent (and not their specific content). For example, adolescents who are not accepted into math camp might reappraise the failure as positive, as it leaves more time to spend with the family during summer vacation.

Testing and extending the multiple social identification assumption

In the current study, we empirically tested the general assumption of a positive link between multiple social identifications and self-esteem and extent it to a number of further differentiated research questions. First, all the above studies considered the link between numbers of social identifications and self-esteem focused on adults; it is not clear to what extent the findings apply to youth. A study examining the effect of multiple cultural identities on psychological well-being in adolescents found three identifications (feeling Jewish, American, and Russian) to have better explanatory power than bicultural identification (Birman, Persky, & Chan, 2010). To our knowledge, only one study has considered the relationship between MSI and well-being in adolescence. The researchers found that among Russian immigrant adolescents in Israel, multiple ethnic identifications (being Jewish, Israeli, and Russian) are related to better psychological adaptation (Horenczyk & Ben Shalom, 2001). Importantly, both studies targeted cultural identifications but did not consider the effect of combined social identifications from different life domains.

Second, as mentioned above, most studies on the link between (single and multiple) social identifications and psychological well-being included minority group members; our study expanded the findings to include members of the majority populations. Taking these two extensions into account, and following the overall tendency of empirical studies with adults to favor the enhancement hypothesis over the scarcity hypothesis, our first hypothesis was that MSI will relate positively to self-esteem in adolescents of majority populations.

It is also important to note that previous studies examining the relationship between multiple social identifications and well-being measured the first in a general manner with no particular group specified. For example, participants were asked to report the level of agreement with a statement like the following: "I am currently a member of several different groups" (e.g. lyer et al., 2009). Therefore, these studies were not able to determine whether the number of social identifications is the main contributor to self-esteem or if specific combinations of social identifications are more relevant to self-esteem

than others. It can be assumed there is one specific combination of two strong social identifications (family-school, school-nation, or family-nation) which is stronger than others in terms of self-esteem. One study implied that nation identification might have less impact on self-esteem than family identification (Kiang et al., 2008), but to the best of our knowledge, no study has investigated this question specifically. We refrain from formulating a specific hypothesis but take this aspect into account in an exploratory fashion. To determine whether the number or the content of social identifications is more crucial to self-esteem, we compared different combinations of social identifications with the same number of identifications in terms of self-esteem.

Our second hypothesis dealt with the *direction* of the relationship between MSI and self-esteem. Two opposite theoretical viewpoints can explain the possible causality. As previously suggested, MSI may positively affect individuals' self-esteem by increasing their sense of meaning and purpose in life (Simon, 1997). Moreover, the more social identifications adolescents have, the more access they have to sources of social support in times of stress (lyer et al., 2009). But the reverse is also possible. Adolescents who feel more secure about themselves may have more personal resources, allowing them to participate and identify with more social groups (Marshall, Parker, Ciarrochi, & Heaven, 2014). As a result, they may be better able to cope with conflicting norms and values across groups (see, e.g., Phinney & Chavira, 1992, on the potential role of self-esteem for ethnic identity development).

A few studies have examined this relationship longitudinally, focusing solely on adults (Thoits, 1983, 2003). A two-year longitudinal study of university students showed that the number of social identifications (i.e. family member or student) in T1 was an antecedent of self-esteem in T2. The opposite direction was not supported (Thoits, 2003). In addition, multiple social identifications before the move to university predicted students' well-being (lyer et al., 2009). Based on these findings, our second hypothesis was that MSI is antecedent to self-esteem, and not vice versa.

The development of multiple social identities during adolescence

The research questions outlined above constituted the core of the current study. However, the research design gave us the opportunity to shed light on the development of MSI. Adolescence is a period of complex and dynamic social and cognitive changes. Of these, two can be considered major. The first concerns identity development, a process shown to proceed quickly during adolescence (e.g., Erikson, 1968; for an overview, see Meeus, 2011; Schwartz, 2001; Steinberg, 2008). The second concerns cognitive abilities (see Kuhn, 2009; Steinberg, 2008).

Looking at these two key developmental processes allowed us to postulate competing hypotheses about MSI. First, based on the theory of identity development (Erikson, 1968; Marcia, 1966) identity formation takes place through two main processes: *exploration*, the active search for, and examination of, identity alternatives, and *commitment*, the decision between identity alternatives (Marcia, 1966). The general progression is from a more diffuse or loose identity to a firm, elaborated, and self-determined commitment to values, beliefs and groups towards mid and late adolescence (e.g. Meeus, Van De Schoot, Keijsers, Schwartz, & Branje, 2010). Importantly, this dynamic of exploration and commitment undergoes a similar process in the attachment to social groups (see Phinney, 1989, 1990). Therefore, an increase in number of social identifications can be expected between early to mid-adolescence.

Our knowledge of cognitive development, however, pointed to the possibility of a decrease in numbers of social identities during adolescence. In Piaget's theory of cognitive development, adolescents (starting at the age of 11 and older) move from a stage of concrete operational thinking to formal operational thinking (Kuhn, 2009; Steinberg, 2008). In the latter stage, thinking becomes more abstract and less bound to concrete, observable objects. Individuals increasingly think in multiple dimensions and weigh different aspects of the self. Adolescents develop the ability to conduct meta-cognitions, i.e., to reflect on their own thinking processes (Kuhn, 2009; Steinberg, 2008). In terms of the number of social identifications, these major cognitive advancements imply that older adolescents are more likely to differentiate between groups and to think more thoroughly about which group is personally important to them and why (Tanti et al., 2011). As Boyes and Chandler (1992) noted, the increase in cognitive abilities during adolescence leads to a period of "epistemic doubts" (p. 278) about one's own identity. Hence, the overall number of social identifications should be lower. This assumption is backed up by the above mentioned literature on identity development which describes a stage or identity moratorium in mid-adolescence (characterized by intensified exploration and lack of commitments) which can go along with diffusion and questioning of social belongings (see Phinney, 1993).

Taken together, based on the theories of cognitive and identity development, we postulated two competing hypotheses: during the period from early to mid-adolescence, the number of social identifications can either increase or decrease.

The current study

The study examined the relationship between MSI and self-esteem cross-sectionally (time 1) and longitudinally (time 1 and time 2) in two cultures. Importantly, the cross-cultural examination will allow testing the robustness of the findings. We hypothesized that (a) MSI will be positively related to self-esteem among adolescents. We also asked whether the *number* or the *content* of social identifications is the more important factor in self-esteem. In addition, (b) we hypothesized that MSI will be antecedent to self-esteem but not vice versa. That is, MSI in T1 will be related to self-esteem in T2, but no relationship will be found between self-esteem in T1 and MSI in T2. Lastly, we tested two competing hypotheses on whether the number of social identifications increase or decrease with age.

Method

Participants and procedure

Concurrent sample

Data came from a study of adolescents' value differentiation processes (Daniel et al., 2012). The sample included 2337 adolescents from Germany (n = 1360, 22 schools) and Israel (n = 977, 18 schools). In each country, participants were grouped according to age: early adolescents (n = 1300, ages 9-13, M = 11.39, SD = .82, 50% females) and mid-adolescents (n = 1028, ages 14-18, M = 16.09, SD = .70, 51.1% females). All adolescents were part of the majority in their country in terms of ethnicity: In Germany, this included participants whose parents were born in Germany (considered as having no migration background by the German Bureau of Statistics), and in Israel this included Jewish participants born in Israel. Most of the fathers and the mothers of the participants had completed high school (68.5%, 70.3%, respectively) and a smaller portion had higher education (26.6%, 26.5% respectively).

In Germany, all schools in the district of Bremen and Lower Saxony (Northern Germany) were approached by mail and telephone. In Israel, schools were randomly sampled from the list of schools across the country. Questionnaires were distributed in all age-appropriate classes within the selected schools. Consent forms were sent to parents, and trained research assistants approached only those adolescents whose parents gave their consent (over 95%). Questionnaires were distributed in classrooms in data collection session that lasted 45–60 min. The experimenters explained the instructions on the questionnaires and answered questions. The questionnaires did not contain any personal information, and participation was voluntary. However, for the purpose of the second data collection wave, participants were asked for their address. In Germany, students wrote their addresses on separate sheets which were collected and stored separately from the survey data. In Israel a list of participants' names was kept inside the schools. Participants were assured that their data were treated with the highest confidentiality. The study was conducted in accordance with the requirements of ethical review boards in each country.

Longitudinal subsample

Participants of wave 1 were again approached in the following year. In Germany, families who had participated in time 1 were sent the time 2 questionnaires by mail, with a response rate of about 50 percent. Besides the time 2 questionnaires, these letters contained a prepaid envelope to send questionnaires back to the Bremen research team. Unfortunately, we did not have the addresses of all families; as a result, 273 questionnaires were returned. In Israel, adolescents were approached in schools, as in time 1. Nevertheless, because of ethical procedures required by the Ministry of Education (very strict data protection requirements for all schools), it was not possible to ensure that all adolescents in time 1 took part in time 2. Therefore, the response rate in Israel was external and not participant dependent. That is, missing values were not dependent on the study variables. In the end, we reached 223 adolescents.

A comparison of the adolescents who participated in time 1 but dropped out of time 2 with those who participated in both studies revealed no differences in the study variables (self-esteem t(2254) = -.69, p = .49; school identification t(2312) = -.95, p = .35; family identification t(2304) = -.59, p = .55; national identification t(2301) = 1.75, p = .08). In addition, no difference was found in gender ($\chi^2(1) = 2.43$, p = .12); however, the fathers and the mothers of children who participated both time were more educated than the parents of children who participated just at time 1 ($\chi^2(3) = 39.01$, p < .001; $\chi^2(3) = 27.54$, p < .001; respectively). This difference should be taken into consideration when interpreting the data.

Measures

Multiple social identifications

Three items of the *importance* subscale were taken from a social identification questionnaire (Roccas, Sagiv, Schwartz, Halevy, & Eidelson, 2008) and were used to determine social identification with each of three social contexts: school, family, and nationality (nine items in total). The items were phrased as statements such as "It is important for me to see myself as a family member." Participants were asked to rate their agreement with these statements on a 6-point Likert-type scale (6 = strongly agree to 1 = strongly disagree). Items were translated from the English version into German and Hebrew by strict translation-back-translation procedures. Reliability for identification with the school was $\alpha_{T1} = .84$, $\alpha_{T2} = .83$; for the family, it was $\alpha_{T1} = .77$, $\alpha_{T2} = .75$; and for the nationality, it was $\alpha_{T1} = .92$, $\alpha_{T2} = .93$.

Self-esteem

Self-esteem was measured with the Rosenberg Self-Esteem Scale (Rosenberg, 1965). The scale was double translated from English to Hebrew, and an existing German version was obtained from previous research using this scale in Germany (e.g., Collani & Herzberg, 2003). Due to cross-cultural differences in interpretations of the negatively worded items of the scale (Schmitt & Allik, 2005), a mean score was calculated for the five items that were phrased positively. Participants rated their agreement with statements such as "I feel that I have a number of good qualities" on a 7-point Likert scale (7 = 1.75), agree to 1 = 1.75, agree 1.75).

Results

Preliminary analysis

Mean and standard deviation of the main variables are presented in Table 1. To test the relationship between multiple social identification (MSI) and self-esteem, participants' identification scores for the three identities (school, family and nation) were first categorized into two independent groups (high vs. low identifiers) using the median split on that variable (see Doosje, Spears, & Ellemers, 2002). This procedure was done separately for every country. Independent t-tests confirmed that participants in the high identification condition reported higher scores on this variable than those in the low identification condition for all the identities in Germany in time 1 (family, t(1339) = 39.18, p < .001, $M_{low} = 4.96$ $M_{high} = 6.00$; school, t(1339) = 45.18, p < .001, $M_{low} = 3.74$ $M_{high} = 5.48$; nation, t(1330) = 51.27, p < .001, $M_{low} = 3.15$ $M_{high} = 5.64$) and in time 2 (family, t(279) = 14.54, p < .001, $M_{low} = 5.03$ $M_{high} = 6.00$; school, t(278) = 18.49, p < .001, $M_{low} = 3.69$ $M_{high} = 5.39$; nation, t(275) = 21.65, p < .001, $M_{low} = 3.10$ $M_{high} = 5.59$). As well as in Israel in time 1 (family, t(963) = 30.89, p < .001, $M_{low} = 4.96$ $M_{high} = 6.00$; school, t(971) = 37.80, p < .001, $M_{low} = 3.80$ $M_{high} = 5.80$; nation, t(969) = 28.67, p < .001, $M_{low} = 4.68$ $M_{high} = 6.00$) and in time 2 (family, t(232) = 14.19, p < .001, $M_{low} = 4.95$ $M_{high} = 6.00$; school, t(235) = 17.31, p < .001, $M_{low} = 3.94$ $M_{high} = 5.80$; nation, t(236) = 16.04, p < .001, $M_{low} = 4.67$ $M_{high} = 6.00$). We summed these three dichotomous social identification scores to one MSI score. The score varied between 0 (no high social identification) and 3 (three high social identifications) $M_{TI} = 1.59$, SD = 1.07, $M_{TZ} = 1.52$, SD = 1.10.

Multiple social identifications and self-esteem

To examine the hypothesis that identifying with multiple social roles is positively related to self-esteem, we correlated the adolescents' number of social identifications with reported levels of self-esteem in time 1. Pearson correlations were significant within both countries in both age groups: in Germany, for early adolescents (r = .32, p < .001) and for mid-adolescents (r = .27, p < .001); in Israel, for early adolescents (r = .29, p < .001) and for mid-adolescents (r = .26, p < .001). This confirmed our first hypothesis.

Comparison of the content of social identification in relation to self-esteem

To examine whether the *content* of identification ratings affects self-esteem, we first selected only those participants who identified with only one social group and tested for differences in self-esteem levels depending on which group they identified with (for example, whether identification with school was associated with higher self-esteem than identification with family). The same was examined for those participants with an MSI of two identifications (combinations: school-family, family-nation, and school-nation). One-way ANOVA revealed no differences in self-esteem between adolescents who identified with school or family or nation in T1 (F(2) = .51, p = .60) and T2 (F(2) = .06, p = .95) for Germans, as well as for Israel adolescents in T2 (F(2) = .45, p = .64). However, a difference was found for Israeli adolescents in T1 (F(2) = 3.23, p = .04). Post hoc comparisons revealed family identification was related more to increased self-esteem than was nation identification in T1. In addition, among those who identified with two groups, we found no differences in self-esteem for the different combinations, German in T1(F(2) = 1.03, p = .36) and T2 (F(2) = .06, p = .95) and Israeli in T1 (F(2) = .19, p = .83) and T2 (F(2) = .45, p = .64) adolescents.

Table 1Means and standard deviations of social identification and self-esteem across ages in different cultural groups (Wave 1).

			Mean	SD	Zero-order correlations		
					SI	FI	NI
German majority	Early adolescents	School identification (SI)	4.78	1.06			
		Family identification (FI)	5.53	.68	.42**		
		Nation identification (NI)	4.29	1.58	.30**	.32**	
		Self-esteem	5.70	.97	.28**	.28**	.18**
	Mid-adolescents	School identification	4.21	1.14			
		Family identification	5.25	.89	.31**		
		Nation identification	3.94	1.67	.21**	.22**	
		Self-esteem	5.57	.93	.16**	.29**	.24**
Israeli Majority	Early adolescents	School identification	5.12	1.27			
		Family identification	5.74	.68	.33**		
		Nation identification	5.53	.97	.33**	.38**	
		Self-esteem	6.36	.91	.31**	.21**	.19**
	Mid-adolescents	School identification	4.69	1.29			
		Family identification	5.69	.66	.32**		
		Nation identification	5.42	1.01	.17**	.19**	
		Self-esteem	6.08	.95	.24**	.22**	.11**

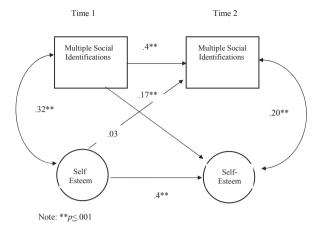


Fig. 1. Model testing for longitudinal associations between multiple social identifications and self-esteem.

The relationship between multiple social identification and self-esteem across time

To examine the longitudinal relationship between MSI and self-esteem, we performed cross-lagged panel path analysis (Kenny, 1975), using three types of paths. The first model included *autoregressive* associations between MSI in T1 and MSI in T2, as well as stability of the paths of self-esteem. The second included *crossed-lagged* paths between MSI in T1 and self-esteem in T2 and between self-esteem in T1 and MSI in T2. The third model included *covariances* between the two variables (MSI, self-esteem). In the model, we included participants' parents' education, country, age, and gender as control variables.

In the first analysis, we did not include the path leading from self-esteem in T1 to MSI in time 2, because this path was not part of our hypothesis. In addition, dropping the path assured that the model will not be saturated, enabling us to establish the quality of model fit. The model reached excellent fit (CFI = 1.00, RMSEA = .00, SRMR = .01).

We next turned to the saturated model. As shown in Fig. 1, crossed-lagged paths analysis revealed a positive association between MSI in T1 and self-esteem in T2. The opposite direction, however, did not reveal a significant effect. Therefore, our hypothesis that MSI is antecedent to self-esteem (and not vice versa) was supported. We found stability for MSI and self-esteem. In addition, we found concurrent relations between MSI and self-esteem in T1 and T2.

The development of multiple social identities during adolescence

A t-test for independent samples between early and mid-adolescents showed German early adolescents (M = 1.59) had, on average, more social identifications than German mid-adolescents (M = .99), (t(1322) = 9.92, p < .001). The same result was repeated in Israel (t(943) = 6.20, p < .001): early adolescents (M = 2.10) had more social identifications than mid-adolescents (M = 1.70). These findings supported our hypothesis of a decrease in numbers of social identifications in the course of cognitive development (and possible identity confusion) in mid-adolescence.¹

Discussion

In this study, we established the existence of a positive relationship between multiple social identifications and self-esteem in adolescence using a longitudinal, cross-sectional and cross-cultural design. The longitudinal aspect allowed us to examine the causality of this relationship and provide evidence of MSI being antecedent to self-esteem; the cross-sectional aspect allowed us to test the developmental path of MSI, suggesting it decreases with age. Finally, these results were repeated in two countries, thus proving the robustness of the findings.

 $^{^1}$ We performed confirmatory factor analyses for each social identification scale, examining whether the three items for each social identification (family, school and nation) showed similar loading on a latent factor (social identification) among early and mid-adolescents. For every social identification, we performed a multi-group comparison with all measurement weights (factor loadings) constrained to equality for early and mid-adolescents. Next, we estimated a model in which these parameters were allowed to vary freely. Comparisons of the constrained and free-to-vary models revealed no significant difference in model fit (for family identification $\Delta\chi^2$ (2) = .50, p = .78; for school identification $\Delta\chi^2$ (2) = 4.30, p = .12; for nation identification $\Delta\chi^2$ (2) = .56, p = .76), Supporting the claim that the questions were perceived in the same way across the two age groups.

Multiple social identifications and self-esteem

We found MSI to be positively related to self-esteem, with the repetition of the results across age groups and cultures assuring the validity of the findings. Former research reported a positive relationship between single social identification and self-esteem in youth (Smith & Silva, 2011). Our study expanded these findings by showing an *accumulative* effect of social identifications. As a result, we suggest that since adolescents are exposed to several social contexts related to their self-esteem at the same time, it is important to examine the effect of these contexts simultaneously. We found the number, not the content of social identifications, is the crucial factor in self-esteem. However, for Israeli adolescents, it seems family identification makes a larger contribution to self-esteem than nation identification. The results repeated earlier findings from the US (Kiang et al., 2008) but may also reflect the unique and important role of family in Israeli adolescents' lives (Tzameret-Kertcher, 2010).

The relationship between the number but not the content of social identifications highlights the potential of one social context to compensate for another to prevent a reduction of self-esteem. As the *self-regulatory processes* model (Rothermund & Meiniger, 2004) suggests, more social identifications, no matter what their specific type, can serve as a buffer against negative life events. Adolescents can reduce the harmful effect of one social context being threatened (for example, a war might threaten their nation identification and oblige them to stay at home) by reevaluating and even acknowledging the benefit to another social context (more time to spend with family). Therefore, the higher the number of social identifications, the greater potential for well-being (Jetten et al., 2014), especially when other social identifications are threatened.

An advantage of social identification over other kinds of identifications, such as a guitar player or dancer (Haslam et al., 2008), is that it increases potential resources in adolescents' lives (Haslam et al., 2008). Studies have found people gain more support from those persons with whom they identify as fellow group members (Haslam, O'Brien, Jetten, Vormedal, & Penna, 2005; Jetten et al., 2014). By extension, identification with multiple groups increases the potential for emotional sharing and collective caring, resulting in higher levels of self-esteem (Jetten et al., 2014). Future studies should trace the specific mechanisms, like social support, that mediate and moderate the relationship between MSI and self-esteem.

Our cross-lagged design suggested MSI is an antecedent of self-esteem. Based on theory and current and past findings, we can assume that MSI predicts self-esteem. Furthermore, previous studies investigated the link between MSI and self-esteem using only adult samples (Thoits, 1983, 2003), but we extended this research to adolescents and found the contribution of multiple social identifications to self-esteem is also prominent during adolescence. At this time, adolescents' physical and psychological environments change, and they need to adjust to new realities (Eccles et al., 1993). The sense of being *grounded* (LaFromboise, Coleman, & Gerton, 1993) in multiple social groups is likely to enhance their ability to cope with the stressors and difficulties of adolescence transition, and to maintain self-esteem. Future studies based on more than two time points will allow us to confirm this conclusion.

However, although our study showed that having multiple social identifications enhances self-esteem in adolescence, our data also suggested that mid-adolescents have an overall lower number of social identifications than early adolescents. While this conflicted with previous research on identity development during adolescence (which would assume progression across age instead of regression), it pointed to a more differentiated view of group membership in mid-adolescence, based on advanced cognitive abilities. As found in previous studies (Tanti et al., 2011), it seems adolescents' ability to think in a more distinctive way and to question their group membership results in less social identification with family, school and nation. Identity development literature supports this assumption by showing that adolescents can go through a phase of identity confusion and questioning which is mastered only in later adolescence or young adulthood (e.g., Meeus, Iedema, Helsen, & Vollebergh, 1999). Future studies should also include older adolescents and young adults so test whether the number of social identifications increases again after mid adolescence towards young adulthood (i.e., whether MSI follows an inverted U-shape development from young adolescence to young adulthood).

Nevertheless, our examination of intra-individual differences across time 1 and time 2 revealed moderate stability in multiple social identifications, with an interval of one year between examinations. Earlier studies (e.g. Seaton, Scottham, & Sellers, 2006) found changes in adolescents' identity status over the period of a year; however, it seems a significant shift in multiple social identifications takes longer than a year and can only be traced when looking at the period from young adolescence to young adulthood as a whole. Of course, our analyses represent a first exploration which can stimulate future investigations. Future studies should investigate this research question more thoroughly, using measures of both cognitive abilities and identity exploration and commitment (see Meeus, 2011, for an overview on the latter). In this way, the link between identity and cognitive development and numbers of identifications can be tested more directly, along with the implications for adolescents' self-esteem.

Conducting the same study in two culturally distinct contexts (Germany and Israel) allowed us to test for the robustness of the findings. As expected, the relationships between MSI and self-esteem were identical in both countries. This pointed to the universal role of MSI as a resource for well-being, independently of cultural influences. This assumption, however, requires additional inquiry. Since we had only two cultural contexts available for comparison, we suggest conducting studies in a wider cultural context to investigate the moderating role of culture in the link between MSI and self-esteem. For example, it can be assumed that social identifications play a stronger role for self-esteem in cultures where social connectedness is valued as more important than individual autonomy (e.g., the individualism-collectivism distinction made by Triandis, 1995 and Hofstede, 2001; or the autonomy-embeddedness dimension identified by Schwartz, 2006).

Strength and limitations

The study has several major strengths. First, the work provided an integrative framework to examine MSI in adolescence. The combination of a cross-sectional, a longitudinal and a cross-cultural design enabled us to take the first steps towards comprehending how MSI contributes to self-esteem. Second, adolescents were randomly sampled in Israel, and by approaching all schools in set districts in Germany, we could ensure a quality sampling and reduce the risk of a sampling bias. Third, a large sample of adolescents was selected in both countries, contributing to our confidence in the results. Fourth, the replication of the main results in two countries shows the robustness of the findings.

Finally, former studies examining the relation between multiple social identifications and well-being measured multiple social identifications in a general way (Iyer et al., 2009). In contrast, we named specific social groups relevant to adolescents' self-esteem and asked adolescents to rate their identification with these groups. This method allowed us to measure more precisely a specific identification, taking into account identification strength.

Some methodological issues are noteworthy. First, we addressed three social contexts (school, family, nationality) that proved to be important in adolescents' lives, but other social contexts such as identification with peer group (Knifsend & Juvonen, 2014) may be just as relevant for adolescents' self-esteem and should be explored. Second, all measures in the present research are based on participants' reports and are therefore prone to participant bias. However, social identifications and self-esteem are personal characteristics (as opposed to behaviors) that cannot be measured by external means (Daniel et al., 2012). The replication of the results in two different cultures, across two age groups and using a longitudinal design attests to their validity. Third, in this study we examined the salience of social identification, merely one aspect among many, such as commitment to identity (Crocetti, Klimstra, Hale, Koot, & Meeus, 2013), self-regard (Hope, Chavous, Jagers, & Sellers, 2013) or deference to group authorities (Roccas et al., 2008). Future studies should trace more aspects of multiple social identifications and their relations with self-esteem.

Lastly, although we found no differences in the major research variables between the participants who dropped out after time 1 and the participants who participated in both time 1 and time 2, we found a difference in the fathers' education (the fathers of those participating both times had higher education). Nevertheless, we found no difference in the mothers' education. Moreover in Israel, the attrition was completely random. That is, participants were not included in the study because of instructions from the ethics bureau, not because of any individual characteristics. Thus, the fact that the same model applied to the Israeli sample and the German sample strengthens our conclusion that it is not likely that attrition account for the results.

The study suggested the importance of diverse identification in adolescents' lives and points to the accumulative effect of social identifications on well-being. On a practical level, educational programs aiming to improve adolescents' adjustment and to enhance their well-being should include a component to enhance social identifications. Feeling a sense of belonging to important social contexts such as family, school and nation might support and maintain educational program outcomes and elevate adolescents' academic motivation and self-esteem (Fuligni, 2011). Programs should highlight the importance of resources and networks that can be derived from different group memberships. Highlighting the potential resources of multiple group memberships is especially relevant in the context of psychological therapy which often aims at overcoming individuals' personal problems by revealing resources the patient is not aware of. In summary, our results suggested adolescents should be involved in a range of social groups. Both parents and educators should work to increase adolescents' group engagement, in the hope that involvement with these groups will have a positive effect on adolescents' self-esteem (Jetten et al., 2014).

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