



Developing Identification with Humanity and Social Well-Being Through Social Identification with Peer Groups in Adolescence

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Abstract

Developmental literature highlights that cognitive, moral, and affective development proceeds from concrete operations to more abstract ones. However, it is not known whether this fundamental developmental trajectory also characterizes the development of social identification (i.e., the feelings of belonging, affiliation, and correctness to a group, coupled with the sense of commonality with fellow ingroup members). This longitudinal study aimed (a) to unfold the association between identifications with two proximal groups (i.e., classmates and friends) and identification with humanity, and (b) to examine how these identifications with close and abstract groups affect adolescents' social well-being (i.e., an indicator of youth adaptation in their societies and communities). Participants were 304 adolescents (61.84% female, $M_{age} = 17.49$) involved in a three-wave longitudinal study. Identification with proximal social groups (especially classmates) was positively associated with identification with humanity, and identifications with both proximal and abstract groups were related to social well-being over time. Moreover, identification with humanity and identification with friends mediated the positive longitudinal effects of identification with classmates on social well-being. The implications of these findings for adolescents' social inclusivity and adjustment are discussed.

Keywords Social identification · Identification with humanity · Social well-being · Peers · Longitudinal

Introduction

The increasing multicultural character of contemporary societies poses the challenge of developing inclusive communities in which the large variety of human groups can have equal citizenship (Fiske 2015). Adolescence, as the life period in which individuals redefine who they are through interpersonal and intergroup comparisons (Sani and Bennett 2011) with close and distant groups, can be a fundamental phase to understand the psychological processes through

which individuals develop inclusive identities (Albarello et al. 2019a; Crocetti et al. 2018). A wide corpus of evidence highlights that cognitive, moral, and affective development proceeds from concrete operations to abstract information processing (e.g., Aboud 2008; Lerner and Steinberg 2009). Along this line, it has been documented that children start to grasp the meaning of reality by developing symbolic thoughts basing upon their concrete experiences with people and objects that they can immediately perceive through senses (Inhelder and Piaget 1958; Steinberg 2008). Interestingly, it has been found that the path from concrete experiences to abstract cognition also involves moral (e.g., Kohlberg 1972; Moshman 2011, 2015) and affective (Rosenblum and Lewis 2003) development. In summary, systematic evidence reveals a fundamental developmental trajectory from concrete to abstract processes in several domains.

However, it is not yet known whether this trajectory also concerns the process of social identification (i.e., “the feelings of belonging, affiliation and correctness to a group, coupled with the sense of commonality with fellow ingroup members”; Miller et al. 2015, p. 340) through which individuals' social identity (i.e., self-definition in terms of the

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social groups to which one belongs to; Tajfel and Turner 1979) is achieved. To fill this gap, this contribution adopts a social psychological approach within a developmental framework, and it investigates whether adolescents' experiences with proximal (i.e., close) groups lead over time to strengthen identification with more inclusive and abstract groups, such as humanity (Turner et al. 1987). Furthermore, social identity is a source of positive distinctiveness of the groups to which one belongs to, and enhances individuals' self-esteem (Benish-Weisman et al. 2015; Tajfel and Turner 1979). In the light of this contention, this study examines whether social identification with close groups and identification with humanity are connected with a collective outcome such as adolescents' social well-being, in terms of their feeling of being part and being able to play an active role within the communities and society they are embedded in (Keyes 1998). Thus, this study aimed to deepen knowledge on the benefits of being identified with peer groups in adolescence by tackling whether and how adolescents' identifications with daily experienced close groups affect abstract processes such as identification with humanity, as a sign of social inclusivity (Albarello et al. 2019a), and how identifications with such different groups promote adolescents' adjustment to their (increasingly multicultural) communities and societies, in view of the challenges and active role that they will soon be asked to face as young adults.

Social Identification with Peer Groups in Adolescence

During the life course, individuals belong to several groups that become important building components of their *social identity* (i.e., the portion of an individual's self-concept derived from perceived membership in a relevant social group, together with its evaluation and emotional meaning; Turner and Oakes 1986). Developing social identity is a crucial task for adolescents too (Brown and Larson 2009; Tarrant 2002). Social identity theory (Tajfel and Turner 1979) emphasizes that belongingness to a group affects one's self-definition in terms of social identity. In this respect, *social identification*, as one's psychological investment in a group, is much more than merely being part (i.e., belongingness) of it. Identification refers to subjective aspects of group membership (Miller et al. 2015), and it is a core process at the roots of social identity (Crocetti et al. 2018), capturing the bond between the individual and the group to which one belongs to (Tajfel and Turner 1979). Notably, it determines the extent to which an individual behaves in accordance with his/her self-categorizations (cf. Turner et al. 1987). Thus, social identification is the process through which the group becomes crucial in a person's mind, with all this entails in terms of individual self-esteem

and intergroup relationships, such as ingroup favoritism, outgroup prejudice (e.g., Albarello et al. 2017; Albarello and Rubini, 2011, 2018) and stereotyping (e.g., Albarello et al. 2019b; Moscatelli et al. 2019).

Adolescents are in the process of moving away from the controlled environment of the parental home to enter a social world where they spend increasing time with peers and other people and begin to make independent choices about their future (Sussman et al. 2007). There is plenty of different peer groups in adolescence (e.g., age-mates; sports groups; youth organizations; etc.). In this regard, literature highlighted that adolescents' peer social system becomes more complex (Brown and Klute 2008) and comprises dyads of friends (as in childhood), but also cliques (i.e., small-groups either formal, such as sports groups, religious, community or youth groups organized and supervised by adults, or informal, with indirect supervision by adults), as well as crowds, that is, broad group systems in which membership is determined by reputation (e.g., socio-economic background; individual interests or abilities, etc.) rather than by interaction, as in the case of dyads or cliques.

In adolescence, these peer groups assume increasing importance and work as "social laboratories" (Sherif and Sherif 1964) in which young people can experiment themselves outside the family, and activate processes of social comparisons (Hartup 2005). Peer groups also represent a primary form of support for adolescents who face multiple developmental tasks (Chu et al. 2010). In fact, peers are a crucial point of reference for adolescents' adjustment to their increasingly complex social world (Brown and Larson 2009; Cooper 2018) characterized by new tasks (e.g., decisions about future choices) and social interactions across different contexts and with different people (Sani and Bennet 2011).

Consistent evidence reveals the positive effects of membership in peer groups. For instance, adolescents offer more positive evaluations of their own peer groups than the outgroup by associating it with positive characteristics (e.g., popularity, honesty) to a high extent, and with negative features (e.g., being unfriendly and boring) to a less extent (Tarrant 2002). Moreover, having positive peer relationships (i.e., considering friends as fun and positive) positively relates to adolescents' life satisfaction (Oberle et al. 2011).

The inherent literature has also highlighted a connection between peer groups and social identification, stressing that they are a crucial entity with which adolescents can identify (e.g., Tarrant 2002). For instance, it has been shown that identification with peer groups (i.e., sport groups; religious groups; informal or quasi-formal groups of friends met outside school without engaging in any specific project) helps to cope with developmental problems (e.g., acceptance of biological changes and

development of satisfactory interpersonal relationships; Palmonari et al. 1990), and that adolescents with high identifications with multiple social groups (i.e., school, family, nation) have higher self-esteem at a later time than adolescents who identify only with one group or no group (Benish-Weisman et al. 2015). Moreover, adolescents who view peer group membership (i.e., friends) as very important and have a positive sense of group belongingness, have significantly fewer behavioral problems than those who see peer group membership as important but do not have a positive sense of peer group belongingness (Newman et al. 2007). Such evidence highlights the crucial role of peer groups and identification with them and their possible connections with adolescents' well-being.

Among the peer groups to which adolescents belong, two are very important and affect their experience at large: classmates and friends. More specifically, the group of classmates, who are not chosen, but met daily in the institutional context of school (i.e., where young people develop their orientation towards institutions being exposed to norms and adults' formal authority; Rubini and Palmonari 2006), represents a primary setting of interaction with peers (for instance, classmates are those with whom the individual has to interact and coordinate for school activities, to the end of sharing space and time). Besides, interactions with peers include friends who are reciprocally chosen and with whom adolescents share a substantial amount of their (spare) out-of-school leisure time and without parental control (De Goede et al. 2009). Although these two groups may partly overlap (some classmates may also belong to the group of friends with whom adolescents spend their leisure time out-of-school), they are characterized by distinct social experiences that can be understood considering the distinction between formal and informal peer groups (Palmonari et al. 1992). Formal peer groups, such as the group of classmates, originate in an institutional context and involve both symmetrical (with other peers) and asymmetrical (with teachers and other school officers) relationships; whereas informal peer groups, such as the group of out-of-school friends, are formed spontaneously and are based exclusively on symmetrical relationships (Palmonari et al. 2003; Rubini et al. 2009). Importantly, the group of friends met out-of-school can be a crucial resource for understanding adolescents' well-being and adjustment, especially for those who are less engaged in school (Witkow and Fuligni 2010).

The effects of the quality of relationships with such groups in adolescence have received considerable attention (see Brown and Klute 2008; Brown and Larson 2009). For instance, classmates provide to adolescents informational and emotional support (Hombrados-Mendieta et al. 2012) that is positively associated with health-related quality of life (Demir and Leyendecker 2018). Furthermore,

adolescents with low social support from classmates also report low general self-worth. This detrimental effect is not compensated by supportive siblings or out-of-school friends (Van Aken and Asendorpf 1997), although also out-of-school friends have been found to be an important source of social support (Bokhorst et al. 2010). Overall, this evidence points to the effect of relationship quality with classmates and friends, but less is known about the specific implications of identification with these close groups.

As for classmates, it has been documented that adolescents who are highly identified with a school-based friendship group (i.e., people at their school who they were friendly with and who were approximately of the same age) report high self-esteem (Tarrant et al. 2006). Moreover, Knifsend and Juvonen (2014) highlighted that adolescents who identified with out-of-school groups (i.e., sport groups, religious groups, peer crowds, and social groups) had more complex social identities, leading to better intergroup attitudes towards different others. Similarly, it was shown that adolescents' identification with multiple social groups (i.e., family, school, and out-of-school friends) led to better mental health (Miller et al. 2015). However, the effect of identification with friends, likely due to the transient nature of this group, was less strong than that of identification with family and school (Miller et al. 2015). Along the same line, a recent study of Albarello et al. (2018a) showed that identifications with classmates and with the group of out-of-school friends were positively related over time. Furthermore, it was also found that social identification with these two groups influenced the consolidation of personal identity formation (see Crocetti 2017, 2018; Crocetti et al. 2011).

Taken together, this evidence speaks about the multiple functions played by social identification with groups (e.g., Deaux et al. 2014). In fact, identification not only provides a contribution to individual self-esteem (Vignoles et al. 2006), but it also offers psychological support to individuals, it facilitates self-understanding and assessment of one's abilities through social comparison (Deaux et al. 2014). Given that during adolescence, development undergoes a change from concrete to abstract processes, is it possible that daily experiences and psychological bonds between individuals and their close groups such as classmates and friends have a substantial impact on abstract psychological processes? If social identification with such proximal groups affects personal identity development (Albarello et al. 2018a), would this influence be extended to identification with a superordinate, and thus more abstract, group comprising all human beings (cf. Gaertner and Dovidio 2000; Turner et al. 1987)? This study addressed these questions by examining longitudinal associations between adolescents' social identifications with proximal groups (i.e., classmates and

friends), identification with humanity, and their implications for social well-being.

From Identification with Proximal Groups to Identification with Humanity

According to self-categorization theory (Turner et al. 1987), individuals define themselves at different levels of abstraction (i.e., personal, social, and human level). At the least abstract level, people self-define as single individuals (i.e., personal identity) and interact with others on the basis of their personal characteristics. At the intermediate level of self-categorization (i.e., social identity), individuals define themselves on the basis of the social categories/groups they belong to. Finally, the most abstract level of self-categorization is that of human identity, through which individuals identify with the superordinate group of human beings, as the most inclusive group that encompasses all the variety of social groups. In this vein, the prototype of humanity is the most abstract one given that it includes all the characteristics of social groups (Albarello et al. 2019a; Prati et al. 2015; Turner et al. 1987).

This latter level of identification requires more cognitively abstract and complex cognition and understanding. In this vein, studying identification with humanity, by examining the extent to which an individual identifies with the most inclusive human group and feels connected with its member, irrespectively of the differences between social groups (Albarello et al. 2019), can be of utmost importance. In fact, self-categorization as human beings can disrupt ingroup versus outgroup dichotomous thinking, which under conditions of high salience and high identification of group members has been proved to have heinous implications (e.g., social discrimination, prejudice or also denial of full humanness to all outgroupers or to stigmatized social groups; cf. Albarello and Rubini 2008) for intergroup relationships. An empirical test of this has been provided by research on the Common Ingroup Identity Model (Gaertner and Dovidio 2000), showing that recategorization of ingroupers and outgroupers into a common superordinate ingroup can reduce prejudice and discrimination towards former outgroupers (for empirical demonstrations on the role of human identification in reducing prejudice, see Albarello et al. 2018b; Albarello and Rubini 2012).

Given these premises, it remains to investigate whether identifications with close and proximal social groups, which can include both similar (like in the case of the group of out-of-school friends; cf. Brown and Larson 2009), but also dissimilar others (like classmates, who can come from different social and migration backgrounds), pave the ground to identify with the more abstract and distant group of humanity (which encompasses all different social groups) at a later time. In line with the fundamental developmental

trajectory according to which cognitive, moral, and affective development proceeds from concrete experiences to abstract cognition (e.g., Kuhn 2009; Van Zalk and Kerr 2014), it could be argued that identifications with proximal groups might pose the basis for developing higher identification with the superordinate, abstract human group. Furthermore, going beyond the consolidated evidence that identifications with social groups lead to individual outcomes, such as self-esteem (e.g., Smith and Silva 2011; Tajfel and Turner 1979), another issue that should be taken into consideration is how identifications with both proximal and abstract groups also impact a collective outcome, such as adolescents' appraisal of the social world and their level of integration within the society. In this vein, social well-being (Keyes 2005) might be fruitfully considered to tackle the outcomes of identifications with different groups.

From Social Identification to Social Well-Being

One way in which adolescents can adjust and adapt to their increasingly complex social environment (cf. Sani and Bennett 2011) is aiming to achieve social well-being. In this respect, Keyes (1998) enlarged the conception of individuals' well-being by highlighting the need to move from considering well-being as a primarily private phenomenon to an approach emphasizing that individuals are embedded in social structures and communities. More specifically, social well-being refers to the extent to which individuals feel part of the groups and the society in which they live and perceive that they can contribute something valuable to the common good. It also indicates trust and positive attitudes towards others and the ability to recognize quality, organization, and functioning of the social world, and to find a meaning to events. In this vein, social well-being can be conceived as "an appraisal of one's circumstance and functioning in society" (Keyes 1998, p. 122), thus representing a "good indicator for capturing the well-being of individuals nested with social contexts" (Capone et al. 2018, p. 374).

Along this line of thought, it is important that individuals perceive that they can contribute in an agentic way to the common good. Social well-being can be regarded as a crucial achievement of adolescence, since it is informative of the extent to which young people are willing to, and they feel entitled and able to positively affect their community and society in view of the fact that they will soon be asked to take on young adults' roles (e.g., participating in political elections, entering in the job market, etc.). Thus, feeling connected to their communities and feeling empowered to affect them represent signs of positive youth development (Cicognani et al. 2008).

Building upon Keyes' (1998) contribution, social well-being has been studied in adolescence, tackling different

aspects. Specifically, it has been highlighted that the school context forms a fundamental domain for adolescents' social well-being (Keyes 2005). For instance, good relationships with both classmates and teachers positively affected individuals' perceptions of justice and sense of community, leading to high levels of collective efficacy and, in turn, to high social well-being (Capone et al. 2018). Similarly, students reporting high attachment to school and teacher support (Anderman 2003) and an open classroom climate for discussion also had high social well-being (Pilkauskaite-Valickiene and Gabrielaviciute 2015). Such evidence, even though quite limited, highlights the critical role of classroom relationships for adolescents' social well-being.

Instead, the association between experiences with friends and social well-being has received less attention (cf. Ciarrochi et al. 2017). Little evidence is available on the role of close friends' support in enhancing well-being (also impacting social well-being; Ciarrochi et al. 2017) and on the role of the group of friends (i.e., best friends, friends of the same sex, friends of a different sex; Vieno et al. 2007) in affecting adolescents' psychosocial well-being expressed in terms of high life satisfaction and low levels of psychological complaints (Vieno et al. 2007). Thus, clear evidence on the role of identification with the group of friends in promoting also adolescents' social well-being is mostly missing.

More in general, the evidence highlighted above stresses the importance that experiences in concrete social groups can have on adolescents' life satisfaction and, potentially, on their social well-being. It could thus be that the extent to which adolescents experience a positive and strong psychological bond (i.e., they identify with) with close social groups (such as classmates and friends) affects the extent to which they identify with humanity and also has positive implications for their perceived social well-being. That is, the more adolescents identify with close social groups, the more they can accept diversity within the human group (i.e., identify with humanity), the more they feel able and entitled to act in favor of society improvement.

The Current Study

The purpose of this longitudinal study was to provide novel evidence to unfold the associations between adolescents' identifications with proximal (i.e., more concrete) and distant (i.e., more abstract) groups and social well-being. Specifically, it considered two proximal social identifications that are very important for adolescents (i.e., identification with classmates and with friends; cf. Albarello et al. 2018a) and a more abstract and complex identification, referring to the extent to which adolescents identify with humanity (Albarello et al. 2018, 2019). The study also investigated social well-being

(Keyes 1998), as an indicator of adolescents' adaptation to their communities and societies.

Drawing from the literature summarized above (e.g., Kuhn 2009; Moshman 2011), the study sought to examine the directionality of effects. First, it was expected that social identifications with classmates and friends would be positively related to identification with humanity at a later time, and not the other way around (Hypothesis 1). Moreover, social identifications with classmates and friends and identification with humanity were expected to be positively related to social well-being over time (Hypothesis 2a). In addition to these direct effects, it was also expected that the effect of identifications with proximal groups (i.e., classmates and friends) on social well-being would be mediated by the more complex identification with humanity. That is, the more adolescents identify with their proximal social groups, the more they identify with humanity (i.e., the more they appreciate the variety of human beings, encompassing all different social groups), and the more they show social well-being at a later time (Hypothesis 2b).

Methods

Participants

Participants were 304 adolescents (61.84% female; $M_{\text{age}} = 17.49$, $SD_{\text{age}} = 0.79$) attending the last two years (i.e., 11th and 12th grades) of secondary high school in the North-East of Italy (i.e., in the region of Emilia-Romagna). In view of the aims of the study, 11th and 12th graders were considered, since at this age individuals are able to deal with complex abstract cognitions (Aboud 2008) and can become engaged citizens in their community (Crocetti et al. 2014; Jahromi et al. 2012). A large school complex consisting of two different tracks (six classrooms from a lyceum, that is a school that prepares students to attend higher-level education; eight classrooms from a technical school where students are trained to become accountants) was selected for participation. Regarding nationality, most of the participants were Italian (95.06%) and, among the non-Italian participants, the majority (4.29%) came from Eastern European countries. These data are consistent with official statistics from the Italian Ministry of Education (MIUR 2018) relative to the year in which the study was conducted (i.e., academic year 2016/2017), indicating that in 11th and 12th grades non-Italian students represented 6 and 5.40% of the total student population, respectively, and the most represented groups were those coming from Eastern European countries (e.g., Romanians and Albanians). Moreover, the study involved participants from a specific geographical area (Emilia-Romagna), which is the Italian region with the highest average percentage of immigrants (i.e., 16% across

all levels of education; 12.7% at high school) among the student population (MIUR 2018). This means that the sampled participants experienced a relatively multicultural context at school. With reference to family structure, 75.08% of participants came from two-parent families, 18.61% reported that their parents were separated or divorced, and 6.31% reported other family situations (e.g., one deceased parent). Most adolescents (97.35%) were living with one or both parents, while 2.65% were living with other relatives (e.g., grandparents). The educational level of adolescents' parents was heterogeneous: low (i.e., less than high school diploma) for 46.47% of fathers and 34.00% of mothers; medium (i.e., high school diploma) for 43.43% of fathers and 53.33% of mothers; and high (i.e., university degree) for 10.10% of fathers and 12.67% of mothers, respectively.

Sample attrition was 0.98% across the three waves (the total sample consisted of 307 participants but 3 of them left the study, resulting in a final sample of 304 participants as described above). The results of Little's (1988) Missing Completely at Random (MCAR) test conducted on the study variables yielded a significant result, $\chi^2(109) = 144.503$ $p = 0.013$. However, the normed χ^2 , which can be used to correct for the sensitivity of the χ^2 to sample size (Bollen 1989), was low ($\chi^2/df = 1.33$), indicating that data were likely missing at random. Therefore, all participants were included in the analyses, and missing data on one or more variables were handled with the Full Information Maximum Likelihood procedure available in *Mplus* 8.3 (Kelloway 2015).

Procedure

The Ethics Committee of Alma Mater Studiorum University of Bologna (Italy) approved the study. Before initiating the research, permission from the school principal to administer a questionnaire during class time was obtained. Then, all adolescents attending the 11th and 12th grades were contacted to present the study and asked for their active consent to participate. They received oral and written information about the study and were asked to sign the informed consent form. Almost all (99.35%) approached students agreed to participate in the study. For minors ($n = 168$; 55.26%), parental consent was also obtained (all contacted parents provided their active consent by signing the forms).

The data were collected throughout one academic year, with an interval of three months between measurements (i.e., the first week of November 2016; the first week of February 2017; the first week of May 2017). At each wave, the adolescents completed the same paper-and-pencil questionnaire in their classrooms, during school hours, at the presence of the researchers. All teachers were informed by the school (through a written and a digital circular) about the project and the scheduled time of data collection. They

could then decide whether to remain in or leave the classroom during the questionnaire administration. In order to link participants' responses across the three waves while ensuring their confidentiality, each participant generated a unique code with five digits (i.e., third letter of participant's name; day of birth of the respondent; first letter of mother's name; day of birth of participant's mother; first letter of father's name). Participation in the study was voluntary. At each wave, students could choose not to fill in the questionnaires and do other school activities instead.

Measures

Identification with classmates and friends

Participants' identification with classmates and with friends was assessed with the Group Identification scale (for English and Italian versions, see Thomas et al. 2017). This measure consists of 6 items with a response scale ranging from 1 (completely untrue) to 5 (completely true) that were repeated twice, for the two groups. A sample item is: "Belonging to the group of my classmates/friends is very important for who I am". Cronbach's Alphas were 0.85, 0.87, and 0.89 for identification with classmates; 0.85, 0.86, and 0.88 for identification with friends at T1, T2, and T3, respectively. Low scores of identification mean that such groups are not important for individuals' self-definition and social identity (cf. Tajfel and Turner 1979). At each wave, participants indicated also the percentage of overlap between the two groups (e.g., "Thinking about the group of your classmates, how many of them also belong to the group of your friends?").

Identification with humanity

The four-items identification with humanity scale (Albarello and Rubini 2008, 2012) was employed. This scale was originally developed in the Italian language. The items measure the extent to which an individual identifies with, is proud of belonging to humanity as the most inclusive category encompassing all human beings, and feels strong ties with all human beings irrespectively of their differences. A sample item is: "I identify with all human beings". Adolescents rated the items on a 5-point Likert type scale from 1 (completely false) to 5 (completely true). Cronbach's Alphas were 0.80, 0.81, and 0.84 at T1, T2, and T3, respectively.

Social well-being

Social well-being was assessed with a subscale of the Mental Health Continuum–Short Form (MHC–SF; Keyes 2005; Italian validation by Petrillo et al. 2015). The social well-being subscale consists of 5 items referred to the last month. The items included in this measure were: "How

often did you feel that...” “you had something important to contribute to society?”; “you belonged to a community (like a social group, or your neighborhood)?”; “our society is a good place, or is becoming, a better place, for all people?”; “people are basically good?”; “the way that society works makes sense to you?”. Ratings were expressed on 6-point Likert type scales from 0 (never) to 5 (every day). Cronbach’s Alphas were 0.73, 0.74, and, 0.79 at T1, T2, and T3, respectively.

Results

Preliminary Analyses

Means and standard deviations and correlations among study variables are reported in Table 1. As can be seen, correlations between identification with classmates and with friends were small both within ($0.187 \leq r \leq 0.326$) and across ($0.139 \leq r \leq 0.230$) waves. In addition, participants reported a limited degree of overlap between the two groups (18.88%, 19.27%, and 22.73% of classmates were also member of the group of friends and viceversa, at T1, T2, and T3, respectively). Taken together, these findings indicate that although there is some overlap, classmates and friends are two distinct peer groups. Similarly, bivariate correlations between identification with classmates and with friends on one side, and identification with humanity on the other side, were generally small both within ($0.119 \leq r \leq 0.312$) and across ($0.121 \leq r \leq 0.275$) waves.

As a preliminary step, longitudinal measurement invariance (Van de Schoot et al. 2012) was examined. Analyses were conducted in *Mplus* 8.3 (Muthén and Muthén 1998–2017), using the Maximum Likelihood Robust (MLR) estimator (Satorra and Bentler 2001). First, a measurement model with three latent variables (one for each measurement wave), with single items as observed indicators, was tested for each construct (i.e., identification with classmates, identification with friends, identification with humanity, and social well-being). This model represents the configural (baseline) model (M1). Second, the configural model with the metric model (M2), in which factor loadings are constrained to be equal across time, was compared. Model fit was evaluated considering the Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI), with values higher than 0.90 indicative of an acceptable fit and values higher than 0.95 suggesting an excellent fit, and the Standardized Root Mean Square Residual (SRMR) and the Root Mean Square Error of Approximation (RMSEA), with values below 0.08 indicative of an acceptable fit and values less than 0.05 representing a very good fit (Byrne 2012). Also, the 90% confidence interval (CI) of the RMSEA was examined: when the upper bound of this confidence interval

Table 1 Means (M), standard deviations (SD), and bivariate correlations between study variables

	M	SD	2	3	4	5	6	7	8	9	10	11	12
1. Identification with classmates T1	2.95	0.71	0.187**	0.162**	0.323***	0.741***	0.139*	0.262***	0.339***	0.669**	0.141*	0.278***	0.394***
2. Identification with friends T1	4.09	0.64		0.119*	0.315***	0.230***	0.608***	0.121*	0.251***	0.217***	0.546***	0.146*	0.280***
3. Identification with humanity T1	3.15	0.84			0.212**	0.112	0.109	0.622***	0.171**	0.172**	0.065	0.693***	0.231***
4. Social well-being T1	1.62	0.95				0.261***	0.198**	0.176**	0.537***	0.256**	0.181**	0.192**	0.528***
5. Identification with classmates T2	2.86	0.75					0.236***	0.290***	0.361***	0.752***	0.216**	0.275***	0.442***
6. Identification with friends T2	4.01	0.67						0.300	0.215**	0.176**	0.609***	0.072	0.253**
7. Identification with humanity T2	3.10	0.75							0.263***	0.278**	0.116	0.713***	0.351***
8. Social well-being T2	1.77	0.97								0.365***	0.170**	0.219***	0.594***
9. Identification with classmates T3	2.85	0.83									0.212**	0.312***	0.524***
10. Identification with friends T3	3.89	0.71										0.104	0.172**
11. Identification with with humanity T3	3.05	0.89											0.356***
12. Social well-being T3	1.89	1.03											

T time

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 2 Cross-lagged models: Model fit indices and model comparisons

Models	Model fit indices						Model comparison					
	χ_{SB}^2	df	CFI	TLI	SRMR	RMSEA [90% CI]	Models	$\Delta \chi_{SB}^2$	Δdf	p	ΔCFI	$\Delta RMSEA$
M1: Baseline model	4.795	12	1.000	1.032	0.009	0.000 [0.000, 0.000]						
M2: Model with time-invariance of stability paths	16.147	16	1.000	1.000	0.035	0.005 [0.000, 0.053]	M2-M1	13.304	4	0.010	0.000	0.005
M3: Model with time-invariance of stability paths and cross-lagged paths	27.118	28	1.000	1.002	0.041	0.000 [0.000, 0.043]	M3-M2	10.724	12	0.553	0.000	-0.005
M4: Model with time-invariance of stability paths, cross-lagged paths, and T2-T3 correlations	31.477	34	1.000	1.004	0.041	0.000 [0.000, 0.037]	M4-M3	4.648	6	0.590	0.000	0.000

χ_{SB} Satorra–Bentler scaled chi-square, df degrees of freedom, CFI comparative fit index, TLI Tucker–Lewis Index, $SRMR$ standardized root mean square residual, $RMSEA$ [90% CI] root mean square error of approximation and 90% confidence interval, Δ change in the parameter

is ≤ 0.10 the model fit can be considered acceptable (Chen et al. 2008).

To compare nested models corresponding to different hierarchical levels of invariance, both the chi-square difference test as well as changes in fit indices (e.g., Cheung and Rensvold 2002) were considered. Thus, for establishing differences between models, at least two out of the three criteria reported below had to be matched: $\Delta \chi_{SB}^2$ significant at $p < 0.05$ (Satorra and Bentler 2001), $\Delta CFI \geq -0.010$, and $\Delta RMSEA \geq 0.015$ (Chen 2007). Findings indicated that metric invariance could be established for each construct as well as for the total measurement model including all variables (detailed results of model testing and comparisons are reported in Appendix 1). Based on the results of these measurement invariance tests, it was reliably possible to proceed with analyses aimed at disentangling over time associations among all study variables (Little 2013).

Cross-Lagged Analyses

To achieve the goal of examining the longitudinal associations among identification with classmates, identification with friends, identification with humanity, and social well-being, cross-lagged analyses in *Mplus* with the MLR estimator were conducted. To keep a proper balance between the sample size and the number of parameters in the model (Bentler and Chou 1987; Kelloway 2015) and based on the preliminary results showing metric invariance, the model using observed variables was tested. Specifically, (a) cross-lagged paths controlling for (b) stability paths (T1 \rightarrow T2, T2 \rightarrow T3, and T1 \rightarrow T3); and (c) within-time correlations among all variables (at T1, and correlated changes at T2 and T3) were estimated. Since participants were nested within classrooms, the “type = complex” command in *Mplus* (Muthén and Muthén 1998–2017), indicating the classroom as a cluster variable, to adjust the standard errors was used.

To model the longitudinal associations as parsimoniously as possible, time-invariance of (a) adjacent stability paths

(T1 \rightarrow T2, T2 \rightarrow T3); (b) cross-lagged effects (T1 \rightarrow T2, T2 \rightarrow T3); (c) correlated changes (within-time correlations at T2 and T3) was tested. Applying the same procedure used for the measurement invariance analyses, differences between models were established when two out of these three criteria were matched: $\Delta \chi_{SB}^2$ significant at $p < 0.05$ (Satorra and Bentler 2001), $\Delta CFI \geq -0.010$, and $\Delta RMSEA \geq 0.015$ (Chen 2007).

The results (see Table 2) confirmed that time-invariance could be established for stability paths, cross-lagged effects, and correlated changes. Thus, the more parsimonious model (M4), including all time-invariance constraints, could be retained as the final one. The fit of this model was very good (Table 2). Complete model results are available in Table 3¹.

The significant cross-lagged effects are reported in Fig. 1. As can be seen, identification with the proximal group of classmates was related to identification with humanity at a later time, whereas the effect in the other direction (i.e., from identification with humanity to identification with classmates) was not significant (Hypothesis 1). Identification with friends was not related to identification with humanity across time. Thus, the first hypothesis was confirmed for identification with classmates, but not for identification with friends. Identification with classmates was also positively associated with identification with friends. Moreover, as expected (Hypothesis 2a), identification with classmates, identification with friends, and identification with humanity were positively related to social well-being over time. In this respect, a bidirectional influence between identification with classmates and social well-being could also be detected.

Indirect effects (Hypothesis 2b), using the indirect command procedure available in *Mplus* (Muthén and Muthén 1998–2017) were tested. In this way, it is possible

¹ Sensitivity analyses indicated that results were replicated also when controlling for adolescents’ gender and for maternal and paternal educational background.

Table 3 Standardized results of the cross-lagged model

Stability paths	T1 → T2	T2 → T3	T1 → T3
Identification with classmates	0.691***	0.608***	0.186***
Identification with friends	0.558***	0.499***	0.234
Identification with humanity	0.571***	0.495***	0.352***
Social well-being	0.391***	0.383***	0.250***
Cross-lagged paths	T1 → T2	T2 → T3	
Identification with classmates → Identification with friends	0.038**	0.034**	
Identification with classmates → Identification with humanity	0.122***	0.112***	
Identification with classmates → Social well-being	0.191***	0.186***	
Identification with friends → Identification with classmates	0.045	0.039	
Identification with friends → Human identification	−0.006	−0.005	
Identification with friends → Social well-being	0.088***	0.085***	
Identification with humanity → Identification with classmates	0.000	0.000	
Identification with humanity → Identification with friends	0.029	0.025	
Identification with humanity → Social well-being	0.092***	0.084***	
Social well-being → Identification with classmates	0.057**	0.051**	
Social well-being → Identification with friends	0.009	0.008	
Social well-being → Identification with humanity	−0.014	−0.013	
Correlations	T1	T2	T3
Identification with classmates ↔ Identification with friends	0.180***	0.131***	0.124***
Identification with classmates ↔ Identification with humanity	0.168*	0.174***	0.197***
Identification with classmates ↔ Social well-being	0.322***	0.221***	0.239***
Identification with friends ↔ Identification with humanity	0.122***	0.001	0.001
Identification with friends ↔ Social well-being	0.314***	−0.008	−0.009
Identification with humanity ↔ Social well-being	0.216***	0.148**	0.195*

T time

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

to test whether a predictor (measured at T1) influences an outcome (measured at T3) via a mediator (assessed at T2). In line with expectations, the findings indicated two significant indirect effects: Identification with classmates T1 → Identification with humanity T2 → Social well-being T3 (standardized indirect effect = 0.010 [0.002, 0.018], $p = 0.010$); Identification with classmates T1 → Identification with friends T2 → Social well-being T3 (standardized indirect effect = 0.003 [0.002, 0.004], $p = 0.000$).

Regarding within-time correlations (see Table 3), the findings highlighted that at T1 all associations between study variables were statistically significant. Specifically, identification with classmates was positively associated with identification with friends, identification with humanity, and social well-being; identification with friends was positively associated with identification with humanity and social well-being; and identification with humanity was positively related to social well-being. Most correlations at T2 and T3 (correlated changes) were also statistically significant except for identification with friends,

which was unrelated to identification with humanity and social well-being.

The results discussed so far were obtained after controlling for stability paths (see Table 3). The overall explained variance was high for all study variables: identification with classmates (52% and 62% at T2 and T3, respectively); identification with friends (33% and 46% at T2 and T3, respectively); identification with humanity (36% and 62% at T2 and T3, respectively); and social well-being (30% and 50% at T2 and T3, respectively).

Discussion

Adolescence can be a fundamental phase to understand the psychological processes through which individuals develop inclusive identities. A wide corpus of evidence highlights that cognitive, moral, and affective development proceeds from concrete operations to abstract information processing. Adolescents also enlarge their social world by experiencing

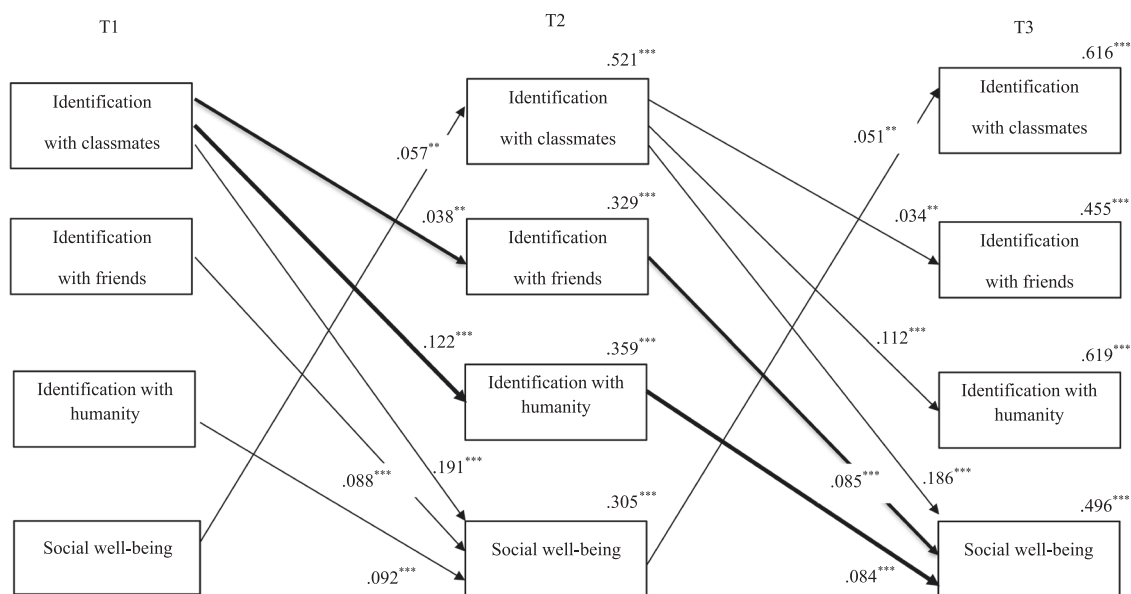


Fig. 1 Significant standardized results of the cross-lagged model. For sake of clarity, only significant cross-lagged effects are displayed. Bold arrows indicate indirect effects. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

membership of various social groups. However, it is not yet known whether social identification with close groups pave the way to identify with the most inclusive group of humanity. In a unique way, drawing from previous contributions showing the importance of identification with proximal social groups such as classmates and friends (Albarello et al. 2018a) and from research on identification with humanity as an indicator of youth social inclusivity (Albarello et al. 2019a), this study adopted a longitudinal design to unravel the associations among identification with classmates and friends, identification with humanity, and adolescents' social well-being.

This study contributed to advance knowledge on such issues. First, the evidence suggested that the fundamental developmental trajectory, according to which human psychological development proceeds from concrete operations to abstract cognition (e.g., Kuhn 2009; Moshman 2015), can be revealed also by how identification with close groups affects identification with abstract ones. In fact, identification with the proximal group of classmates leads to higher identification with humanity over time. Second, findings highlighted that identifications with such different groups had positive implications for adolescents' social well-being. Importantly, both direct effects (i.e., identification with proximal groups of classmates and friends as well as identification with humanity contributed positively to increase adolescents' social well-being) and indirect effects (i.e., identification with classmates affected social well-being at a later time through the mediation of identification with friends and with humanity) were obtained. Overall, this evidence advances

knowledge on the benefits of being identified with peer groups in adolescence.

The Fundamental Developmental Trajectory of Social Identification

This longitudinal study provided evidence that the fundamental developmental trajectory, characterized by a progression from concrete to abstract processes in multiple domains (e.g., Lerner and Steinberg 2009; Van Zalk and Kerr 2014), might apply to how identification with close groups drives identification with abstract ones. Specifically, it was found that especially identification with classmates affected the extent to which adolescents identified with humanity, as the most inclusive superordinate group (Albarello and Rubini 2012), that is, a group that is characterized by a variety of different sub-groups (cf. Albarello et al. 2019a; Prati et al. 2016). Importantly, evidence revealed that this relation was not bidirectional: It was the experience with the proximal group of classmates that affected the identification with the more abstract and complex group of humanity and not vice-versa.

The current findings extend prior knowledge encompassed in the self-categorization theory (Turner et al. 1987) by indicating that the intermediate level of self-categorization from which social identity is derived affects not only the personal identity level, as found in prior research (Albarello et al. 2018a), but also the human level. In this respect, this study contributes to the ongoing discussion about the importance of increasing the understanding of how different identifications are intertwined and

influence each other at different levels (Crocetti and Salmela-Aro 2018; Vignoles 2018). Importantly, all these identities “form a fundamental symbolic tool that individuals use to adapt to the multiple domains of their lives” (Crocetti et al. 2018, p. 306).

The evidence that identification with classmates per se directly affected identification with humanity over time brings strong support to the idea that recognizing the importance of the superordinate human group comes from appreciating daily experiences with members of one’s closer groups. In other words, school, besides representing the privileged, and thus very important, context of individuals’ education (Eccles and Roeser 2003), favors daily contacts with classmates (who can also be different from oneself, whereas friends usually are not) that across time pave the way to develop identification with the most inclusive and thus abstract group (i.e., humanity). In other words, this evidence reveals that individuals need to have meaningful relationships with close others to understand the importance of superordinate groups as humanity.

In this respect, it has to be underlined that such evidence is referred to an educational context characterized by a certain degree of difference in terms of educational background of parents as well as of ethnicity (MIUR 2018) and gender of classmates. Nonetheless, it could be that in less differentiated classrooms or in school contexts wherein diverse opinions are discouraged, such beneficial role of identification with classmates in promoting identification with humanity is less pronounced. Moreover, other factors might hinder such effects, for instance endorsement of prejudicial ideologies against others (e.g., social dominance orientation; Sidanius and Pratto 2001; right-wing authoritarianism; Altemeyer 1996) might lead to low levels of identification with humanity, thus potentially moderating the effect of identification with close groups on it. Extension of research to other contexts and consideration of potential moderating factors may provide further insights on these issues.

Identifications with Close and Abstract Groups Enhancing Social Well-Being of Adolescents

Another noteworthy evidence of this study is that identifications with both proximal (i.e., “concrete”) and abstract groups positively affect adolescents’ social well-being at a later time. First, direct effects of identification with classmates and with friends on individuals’ social well-being were detected. These results bring support to the models on the multiple functions of social identification (cf. Deaux et al. 2014), showing that identification with peers not only fulfills individual needs, such as self-esteem enhancement, self-understanding, interindividual comparison within a group (e.g., Palmonari et al. 1990; Tarrant et al. 2006), but it

also serves collective functions influencing individuals’ cognitions and functioning within their community and society (i.e., social well-being), with all it entails in terms of ideological or behavioral outcomes at a more collective level of analysis. In addition, also identification with humanity directly affected social well-being. This suggests that when adolescents have an inclusive view of themselves, they are also more likely to feel part of the society and willing to actively contribute to it.

Second, the study added to this evidence tackling how the interplay between identification with proximal and abstract groups can also be beneficial for social well-being. In fact, findings revealed that identification with classmates affected social well-being not only directly, but also indirectly, through the mediation of identification with humanity. Thus, the more adolescents identified with classmates, the higher their identification with humanity over time, the higher their social well-being. Besides this, the effect of identification with classmates on social well-being was mediated by identification with friends. Such a result indicates that adolescents’ experience in a relatively non-chosen group, such as the group of classmates, has spillover effects on the way they relate to a chosen group, such as the group of friends. This evidence mirrors findings documented for (relatively) “closed” and “open” identity domains (Meeus et al. 1999), respectively characterized by constraints limiting individual’s range of opportunities for identity change and exploration of identity alternatives or freedom of choice (see Albarello et al. 2018a). In a similar way, closed identity domains such as the educational one, can work as a “training context” in which adolescents learn and experience how to deal with different or unchosen others, and develop understanding and acceptance of them. This can lead to widespread beneficial outcomes across open identity domains, such as interpersonal choices (Klimstra et al. 2010), thus promoting and strengthening the psychological bond with chosen people such as friends. Such findings support the contention that developing identification with proximal groups leads to positive outcomes in terms of adolescents’ social adjustment and well-being over time.

In addition, also a significant path from social well-being to identification with classmates was detected. The more adolescents feel integrated within their community and able to have an impact on society, the more they feel a psychological bond with classmates, a group formed by individuals that are not chosen, with whom they are “forced” to deal with on a daily basis. This result further strengthens the argument that the flourishing of abstract abilities of adolescents might have positive outcomes for their integration and well-being in society in general, as well as in their daily life with different others.

Theoretical and Practical Implications

This contribution unfolded the longitudinal associations between identification with proximal and abstract groups in adolescence, showing that the fundamental developmental trajectory can be applied to the association between identifications with proximal/concrete social groups and identification with more abstract groups as well. Overall, the findings highlighted the crucial role of identification with classmates in shaping how adolescents feel strong connections with the common category of humanity.

Besides this, the study also added to the scarce knowledge on the role of identification with humanity of adolescents. It revealed that identification with humanity can be at the basis of how adolescents are aware and feel that they can play an agentic role in society. In view of the multicultural setting experienced by the sampled participants, given that Emilia Romagna is the Italian region with the highest percentage of immigrants among the student population (cf. MIUR 2018), this suggests that adolescents have the potential to develop inclusive social attitudes towards others, with all it entails in terms of fostering harmonious multicultural societies (cf. Albarello et al. 2019a; Fiske 2015) characterized by augmented tolerance towards diverse people (Crisp and Turner 2011).

Overall, this contribution highlighted the primacy of the group of classmates in adolescents' experience by underscoring the direct and indirect processes through which identification with classmates promotes adolescents' well-being. In this vein, it suggests that interventions in the educational context, improving positive relationships with classmates, can lead to positive benefits for adolescents' adjustment and promotion of their active engagement within their communities and society. This could be effectively endorsed in schools, especially when they promote a climate based on equality and inclusivity, and value cultural pluralism (Schachner et al. 2016).

Strength, Limitations, and Future Directions

This study should be considered in light of both its strengths and shortcomings, which suggest future directions for research. A strength of this investigation was its focus on adolescence since in this phase individuals enlarge their social horizon and are more able to use abstract cognitive thinking (Aboud 2008). Notably, the associations between identifications with proximal and abstract groups on social well-being were intensively studied within one academic year (with three months interval between each wave), since this time frame is meaningful in the life of adolescents (Negru-Subtirica et al. 2015, 2017). Along this line, the study provided novel knowledge on the role of adolescents' identifications with daily experienced close groups as a basis for increasing social

inclusivity in terms of identification with the superordinate group of humanity and for promoting adolescents' adjustment to their (increasingly multicultural) communities and societies. This is of crucial importance since such evidence suggests that daily interactions with proximal social groups can lead to collective benefits and activate youth to contribute actively to societal development.

Interestingly, the findings highlighted that identification with classmates, which was found to be a key driver of identification with humanity, was highly stable across short-time intervals (i.e., three months) but less stable when considering a larger time interval (i.e., six months) spanning from the first part of the academic year to the end of it. This might suggest that experiences and events happening during a school year can affect the extent to which adolescents feel a strong bond with their classmates. Future studies might investigate how the associations examined in the current study unfold over a more extended period and how the effects of each variable act across longer time-frames. In this vein, it might be important to focus on what happens when adolescents undergo key transitions (e.g., from school-to-university or school-to-work), with all it entails in terms of developing social identifications with new social groups that individuals might join.

A further strength of the study refers to the fact that, by considering social well-being, it was possible to extend the theorization on the functions of social identifications (cf. Deaux et al. 2014). Indeed, results highlighted that social identifications contribute not only to individual outcomes (such as enhancement of self-esteem), as clearly documented in prior studies (e.g., Benish-Weisman et al. 2015; Tarrant et al. 2006) but also to more collective outcomes, leading adolescents to feel integrated in the society and able to contribute to its development. In this vein, it would be very fruitful in future research to make a further step in this direction to examine whether identification with proximal and abstract groups increases not only adolescents' perception of social well-being, but also their actual citizenship behaviors (e.g., voting, engaging in collective actions aimed at increasing access to equal rights to marginalized society members). To gain more knowledge on this aspect is of paramount importance since the generalized low active engagement of adolescents is matter of concern in several democratic societies (e.g., Crocetti et al. 2014).

Besides this, a limitation of the study is that it did not compare very different educational contexts characterized by various cultural or ideological orientations (e.g., non-equalitarian institutions; institutions perpetrating socio-structural inequalities between groups). It also did not consider political or ideological orientations towards social inclusivity or democratic principles held by adolescents. Such attitudes might work as moderating factors of the associations that were examined. Thus, future studies

should consider more thoroughly these issues in order to enlarge the generalizability of findings to wider cultural and ideological contexts, educational institutions, and situations.

Conclusion

A consistent corpus of evidence highlights that human development in several domains (e.g., cognitive, moral, etc.) proceeds from concrete to abstract processes. In adolescence young people are able to perform complex, abstract processing, as well as they increase their belongingness to various social groups. However, it was not yet known whether the trajectory from concrete to abstract operations also concerns the process of social identification with close and abstract groups and whether identification with such groups is related to adolescents' social well-being. This study provided novel insights on the unexplored issue of the developmental trajectory from proximal (identification with classmates and friends) to abstract (identification with humanity) identifications in adolescence.

The gathered evidence highlighted a clear direction of effects, from concrete experiences with peers (especially classmates) with whom adolescents have daily interactions to a more abstract identification with the superordinate category of humanity. It also indicated that the experiences that young people have with classmates and friends have direct positive implications on their social well-being and that the identification with humanity they develop affects the extent to which adolescents feel integrated within the society and perceive that they can play an active role in it. Overall, this study highlights the strengths of combining a developmental approach with a social-psychological one in order to understand how individuals and social factors interact to render current societies a better place for youth.

Authors' Contributions F.A. conceived the current study, wrote the manuscript, and participated in the interpretation of the results, and in the drafting of the article; E.C. conceived the current study, performed the statistical analyses, wrote the manuscript, participated in the interpretation of the results, and in the drafting of the article; M.R. conceived the current study, participated in the interpretation of the results, and in the drafting of the article. All authors read and approved the final manuscript.

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Data Sharing and Declaration The datasets generated and/or analyzed during the current study are not publicly available but are available from the corresponding author on reasonable request.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval All procedures performed in this study involving human participants were in accordance with the ethical standards of the Ethics Committee of the Alma Mater Studiorum University of Bologna (Italy) and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants (and from their parents, if minors) included in the study.

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