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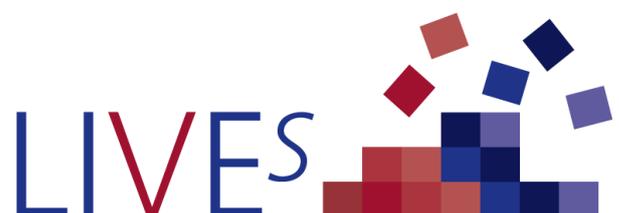
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A b s t r a c t

During critical life transitions like the transition to adulthood, young people are required to actively deal with a number of adjustments. The challenges and demands are even more complex for members of socially disadvantaged groups (i.e., immigrants). In line with previous accounts of the critical role of co-agency during transitions, we develop and test a model that examines proximal groups' connectedness as an outcome of individual needs satisfaction and argue for its empowering role both at the personal and the collective level, thus predicting: 1) greater self-esteem and 2) higher commitment to social change actions.

While previous group-based models of psychological empowerment are located at the intergroup level of analysis and based on the relevance of a particular categorical identity, this study suggests an understanding of the role of ingroups in terms of the sense of connectedness they provide and the resulting efficacy beliefs. The study thereby focuses on the less explored meso-level of interactions in individuals' direct environment.

The model was tested and supported using survey data of youth populations (15-30) from different backgrounds (N = 521). The results point out the importance of this proximal level of connectedness for both personal and societal dynamics, especially amongst immigrants.

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The emergence and the consequences of strong bonds between the self and the social groups to which one belongs has been a central question for a variety of research traditions, e.g., belongingness theories (Baumeister & Leary, 1995), social identity and self-categorization theories (Tajfel, 1978; Turner, 1985), social capital (Putnam, 2001) and connectedness theories (Lee & Robbins, 1998), as well as classical sociological and anthropological approaches to community and solidarity (Cohen, 1985; Durkheim, 1893; Weber, 1947). Recently, a large and growing body of empirical studies has documented how relationships with ingroups are critical for both psychological and societal outcomes. Studies from the social identity tradition have shown for example the importance of meaningful ingroups in shaping coping and regulation processes at the personal level (Jetten, Haslam, & Haslam, 2012; Jones & Jetten, 2011; Knowles & Gardner, 2008) as well as their importance for group-level outcomes, e.g., social change and collective action (Drury & Reicher, 2009; Van Zomeren, Leach, & Spears, 2012; Van Zomeren, Spears, & Leach, 2008). In a similar vein, social capital literature has documented the role of involvement with groups (family, neighbours, community) for well-being and health (Helliwell & Putnam, 2004), but also for societal outcomes (e.g., social cohesion) or what Putnam himself termed *public returns to social capital* (Putnam, 2001; Putnam, 2007). Given this growing evidence for the centrality of ingroups, understanding how people become to see themselves in close relationship with their groups, and the mechanisms mediating the link between ingroup connectedness – that is, the perceived strength of bonds between the self and social groups – and outcomes, become more and more needed.

We develop and test a model that links proximal group connectedness to individual needs satisfaction and argues for its centrality for psychological empowerment. By proximal groups we refer to groups directly surrounding the individual; namely family, friends and peers. Specifically, we argue that the more people feel that their needs for help and recognition are satisfied by surrounding others, the greater will be their sense of connectedness to proximal groups. This sense of connectedness in turn fosters their efficacy beliefs both at an individual and collective level predicting thus positive outcomes.

The idea of psychological empowerment through ingroups is not novel and the large research from the social identity tradition provides many models explaining the psychological mechanisms underlying it. Those mechanisms are however based on the relevance of a particular categorical identity. For instance, in the majority of studies predicting personal-level outcomes, the group one identifies with is directly related to the particular stressor/challenge one is facing (for example,

organizational stress and organizational identification; Haslam, Jetten, & Waghorn, 2009; Haslam, O'Brien, Jetten, Vormedal, & Penna, 2005, stigmatization and identification with the stigmatized group; Crabtree, Haslam, Postmes, & Haslam, 2010). In models predicting social change commitment (Van Zomeren et al., 2012; Van Zomeren et al., 2008), the categorical identities are *those made relevant* by the disadvantage experienced, and operating through an ideological consciousness of its illegitimacy. Moreover, being empowered as a group member is according to those models contingent on intergroup perceptions switching the *personal* identity and goals to the background.

The model we develop in this study suggests a different understanding of the role of ingroups. First, this role is understood mainly in terms of the sense of connectedness they provide and the resulting efficacy beliefs, and not in relation to the content or the level of ideological consciousness due to a particular group identity. Second, the common view that collective empowerment requires downplaying personal identities and goals is challenged by examining the impact of connectedness *simultaneously* at a personal level (i.e., efficacy to handle personal challenges) and a societal level (i.e., efficacy of collective action). Third, and in relation to the nature of the groups studied, the model points out the importance of *proximal* groups for personal-level dynamics, but also for societal-level ones, which has been neglected in the past.

Ingroup connectedness and individual needs satisfaction

The first claim of our model is that the strength of self-group bonds depends on groups' responsiveness to individual needs and motives. Individuals generally belong to different groups responding to different needs. Given the current study's focus on proximal groups (family, friends, peers), ingroup connectedness will be studied as a function of the satisfaction of needs that people generally receive from close others. This support is classified in two types: instrumental and symbolic/emotional (Schulz & Schwarzer, 2003; Taylor & Seeman, 1999). The instrumental aspect reflects the degree to which others are willing to offer tangible and concrete help in relevant situations (e.g., money, time, care…). The symbolic aspect refers to the degree to which others' actions and attitudes make one feel loved, cared of and recognized (Taylor & Seeman, 1999). We argue that the more people feel that surrounding others provide them with the needed *help* and *recognition*, the higher will be their sense of connectedness to those groups. In addition, and contrary to the self-categorization theory view putting individuality against groupness (one

depersonalizes in order to be a group member), we argue that this sense of connectedness does not involve any loss of individuality, and may even be a factor strengthening one's personal identity.

By this claim we stress the importance to conceive the self-group relation as a bidirectional concept. When people feel a strong connectedness to a group, they are likely to endorse and work for group goals. Conversely, feeling of group connectedness is contingent on the group's ability to satisfy individual needs and accomplish important functions for the individual. As noted by Hornsey and colleagues (Hornsey, Grice, & Jetten, 2007) and earlier by Moreland and Levine (1989), the process by which *groups change individuals* to conform to group norms and endorse group goals (i.e., the assimilation process) received much more attention in the literature than the one by which *members change the group* to suit themselves (i.e., the accommodation process). These processes considered theoretically as concomitant or even as components of the same process (e.g., Breakwell, 1988, see also Brandtstädter & Rothermund, 2002) have, however, not received equal amount of attention empirically. For instance, empirical research has extensively documented how the salience of group membership is associated with an unidirectional group-to-self flow pushing the individual to self-stereotype as an interchangeable exemplar of a group and work for group goals, but paid only scant attention to the opposite direction, looking for example at the degree to which groups' existence and cohesiveness is contingent on satisfying individual needs and motives (e.g., meaning, purpose, efficacy, understanding and support). By defining individual needs satisfaction as an antecedent of connectedness in our model, we contribute to filling this gap.

A partial explanation for this trend can be found in the now dominant perspective to psychological group formation, namely self-categorization theory, which considers that psychological group formation has primarily a perceptive and cognitive basis, and therefore see factors enhancing the cognitive salience of category membership as key antecedents of group formation (Turner, 1982, 1985). The impact of intergroup perceptions and categorical explanations of the self-group relationship should not however divert the focus of the importance of individual needs satisfaction in intragroup contexts as motives for affiliation.

Needs satisfaction was indeed central in classical accounts of psychological group formation, placing the degree to which interaction between parties mediated important goals and needs for the individual as a key determinant of the self-group relation. This is rooted in Lewin's definition of a group as a "dynamic whole based on interdependence of parties" (1948, p. 184), Sherif's (1966) notion of *goals that necessitate mutual realization* and Deutsch's (1949) notion of *goals*

promotively interdependent as the definitional characteristics of psychological groups. The importance of individual needs as a determinant of the self-group relation is also at the core of the group socialization model (Levine & Moreland, 1994), that describes the relation between the individual and the group as involving efforts by both parties to assess and fulfil the other's goals and needs. The model views "both parties as potential influence agents" (p. 306). Thus, individuals are not passive subjects of group pressure, but agents who actively change the group in a way that it best reflects their own needs and goals.

Recent empirical work on the self-group relation has also confirmed the importance of individual needs and motives in shaping this relation. For example, work by Amiot and colleagues has shown that the degree to which ingroups participate in coping and adaptation is a cause for integrating them to the self (Amiot, Terry, Wirawan, & Grice, 2010). Bettencourt and Sheldon found that people who perceived they are accepted for who they are and their contributions are valued within the group, reported higher group identification (Bettencourt & Sheldon, 2001). Self-Determination Theory (SDT), a contemporary theory of psychological needs, also defines individual needs and motives' satisfaction as a determinant of the self-group relation (Deci & Ryan, 2000). Based on this theory, Guardia and colleagues found for example that in a sample of university students individual needs satisfaction significantly accounted for the variability on felt security about one's relationships with family members and friends (Guardia et al., 2000). This literature highlights that the degree to which intragroup interaction satisfies individual needs is central for the member's sense of connectedness to those groups.

Individual and Collective Empowerment through Ingroup Connectedness

The second claim of our model is that this sense of connectedness, in turn, empowers the individual both at the personal and the collective level. This claim is based on a view of group connectedness and personal agency as complementary rather than contradictory forces. The intersection between connectedness and agency has been the subject of a long lasting debate. While traditionally considered as conflicting forces (for example Eidelson' notion of conflict between affiliation and autonomy (1981; 1980) and Bakan's conflict theory opposing connectedness (communion) to agency, 1966), there are many theoretical and empirical reasons to think of their relationship as more complex, and as complementary rather than conflicting. For example, Kagitcibasi (2005, 1996) proposed from a cross-cultural developmental perspective, that the two dimensions underlying connectedness (i.e., the degree to which the self is distanced from

others vs. connected to them) and agency (i.e., the degree to which the self is self-governed vs. governed from outside) are independent: One can be high in agency; in the sense of acting willingly toward desired outcomes with a high sense of self-efficacy and without a feeling of coercion, and be simultaneously highly connected with others, in the sense of having self-boundaries fused rather than separated from others. Recognizing the independence of these two dimensions, Kagitcibasi argues that agency and autonomy (she uses interchangeably) do not preclude emotional interdependence and closeness with others as commonly presumed. Similarly, and also from a cross cultural perspective, Green and colleagues provided empirical support for the independence of the two dimensions of self-reliance and interdependence (Green, Deschamps, & Paez, 2005).

A similar claim has been advanced by self-determination theorists (Chirkov, Ryan, Kim, & Kaplan, 2003; Ryan, Deci, & Grolnick, 1995; Ryan & Lynch, 1989), who take the reasoning a step further by considering that not only interpersonal connectedness and personal agency are not conflicting, but that they are in many cases positively linked. Specifically, they stress that the constructs of autonomy need to be distinguished from commonly related constructs such as independence (Chirkov et al., 2003) and detachment (Ryan & Lynch, 1989), and that the development of autonomy, understood as "the experience of volition and the self-endorsement of one's actions" (Chirkov et al., 2003; p. 107), does not entail detachment or independence from others but can rather be positively linked with the development of relatedness (Ryan et al., 1995).

In line with self-determination theory, we think of connectedness and agency as complementary rather than conflicting forces, and argue that in social contexts where the demands are high or require interdependent efforts, connectedness may contribute to an enhanced sense of agency. To empirically examine their link, we test if a higher sense of connectedness to proximal groups can be associated with increased efficacy beliefs, considered a central mechanism in human agency, and defined as the expected attainment of valued outcomes (Bandura, 1995, 2001). We test the link between connectedness with proximal groups and efficacy beliefs at both personal and collective levels. We chose the transition to adulthood (a situation characterized with high demands) and social change (a situation requiring interdependent efforts) as the contexts in which to study the relation between connectedness and efficacy beliefs.

At the personal level, we argue that psychological connectedness with proximal groups can empower young people dealing with the transition to adulthood, through the belief that they can effectively cope with their life challenges (i.e., coping efficacy), thus predicting better

psychological outcomes. At the collective level, we focus on beliefs on the efficacy of unified efforts of the disadvantaged to bring social change—in terms of a more just society—and we test whether connectedness to proximal groups can enhance these beliefs, and in turn the willingness to participate in social change actions, specifically among the most disadvantaged.

Proximal groups and critical life transitions. Relations to psychological groups as basis for efficacy beliefs has been largely studied in relation to group and collective goals (Van Zomeren, Spears, Fischer, & Leach, 2004; Van Zomeren & Spears, 2009). However, relations to ingroups may help not only to feel efficacious about the realization of common goals and motives, but also the efficacy of each group member to effectively resolve one's own challenges (i.e., coping efficacy). We choose the transition to adulthood as the context in which to study the relation between connectedness and efficacy beliefs at the personal level. We focus on this critical life course transition, as a period where adolescents and young adults are required to actively deal with a number of adjustments and difficulties that often exceed their usual resources (Heinz, 2009; Nurmi, Salmela-Aro, & Koivisto, 2002). It is then an adequate context in which to study the relation between connectedness and efficacy beliefs, specially that studies from a life span perspective have documented the critical role of co-agency (Salmela-Aro, 2009) during this transition.

Developmental psychologists are increasingly examining connectedness to both peers and adults as a main factor of psychological growth among adolescents, with an increased sense of self-worth and motivation as key component of this growth (Townsend & McWhirter, 2005). For instance, relationships to teacher, parents and friends has been found to be a predictor of self-esteem among early adolescents (Ryan, Stiller, & Lynch, 1994). The positive relationship between a sense of connectedness and different aspects of self-esteem has been examined and confirmed with a sample of undergraduate female students (Lee & Robbins, 1998).

We argue that connectedness to proximal groups will be positively related to self-esteem and that their relationship can be explained, at least partially, by the role of this sense of connectedness in empowering young people through the belief that they can effectively cope with their life challenges. Important for our claim is the result from SDT based studies showing a positive relationship between interpersonal connectedness (relatedness) and a sense of autonomy and agency (Ryan et al., 1995; Ryan & Lynch, 1989) suggesting that the link between connectedness and positive psychological outcomes can be due to an enhanced sense of confidence about one's own abilities. Our claim is also in line with the general finding from social

identity based literature showing that psychologically meaningful ingroups are a resilience factor in periods of transition (Iyer, Jetten, Tsivrikos, Postmes, & Haslam, 2009; Jetten et al., 2012). More specifically, several studies from this tradition show that *coping-efficacy beliefs* significantly mediate the positive relationship between group connectedness on the one hand (i.e., identification) and self-esteem and other indicators of psychological well-being on the other (Khan, Hopkins, Tewari, Srinivasan, Reicher & Ozakinci, 2014; Outten, Schmitt, Garcia, & Branscombe, 2009). Although those studies examined connectedness to large-scale groups (racial and religious groups), studies based on the self-expansion model also confirmed that close relationships are associated with increased efficacy beliefs (Aron, Paris, & Aron, 1995; Aron, Aron, & Norman, 2004).

Taken together, these results coming from independent research lines suggest that psychological connections to others, either based on interpersonal relations or on categorical memberships, are associated with an enhanced sense of self-efficacy. Based on this argument, a recent study with adolescents and young adults found that identities that are source of connectedness (relational and larger-scale collective identities), helped participants cope with perceived barriers to their life projects (Bakouri and Staerklé, in press). Importantly for our hypothesis, the effect of those identities was mediated by their role in fostering one's sense of efficacy to better cope with life challenges. In line with those results, we hypothesize that ingroup connectedness will positively affect psychological outcomes, namely self-esteem, and that this relation may be mediated by a sense of enhanced efficacy to cope with life challenges.

Proximal group connectedness and social change. At the collective level, we examine the relation between connectedness to proximal groups and willingness to participate in social change, and a potential mediation of this relation by collective efficacy beliefs. The question of what predicts commitment to social change strategies has been studied from different perspectives (e.g., social identity and relative deprivation as social psychological perspectives, resource mobilization, political processes and collective identity theories as more sociological perspectives). Scholars have focused largely on the role of ideological/structural factors, for example social identity scholars have mainly focused on perceptions of permeability and legitimacy of the intergroup system (Haslam & Reicher, 2012). Limited attention has been devoted in our view to the role of bonds to surrounding others that are perceived in people's direct contexts in predicting social change actions. Social change requires, like many other desired societal outcomes (e.g., living in clean neighbourhoods, less polluted planet), interdependent, unified and enduring efforts. To bring

social change, individual efforts are indeed fruitless unless a critical mass of others is equally committed to those actions. What is important then is not only the degree to which I desire this change, but also what I know about others' commitment, and about our capacity to unify our efforts. Given that people build their understanding of the world and possibilities to act in it from their direct experiences and interactions, we suggest that the feeling of connectedness to directly surrounding others can be a key ingredient for their commitment to social change actions. The important role of individuals' direct networks and more crucially the bonds that characterize those networks in predicting their mobilization have been previously evidenced in relational perspectives to collective action (e.g., Diani, 1997; Mische, 2003). In line with this thinking, we test in this study weather a sense of connectedness to proximal groups may predict people's willingness to personally engage in social change actions.

We suggest moreover that connectedness can impact social change commitment also indirectly, especially among disadvantaged group member, by fostering their beliefs about the efficacy of *the disadvantaged as a group*, to change their situation through common efforts. Indeed, social change can be a desired outcome but fail to translate into commitment to social change actions when people believe they have no chance to bring about the desired change. In line with this reasoning, the construct of group efficacy has become central as a proximal predictor of social change strategies (Drury & Reicher, 2000; Drury & Reicher, 2005; Hornsey & Blackwood, 2006; Mummendey, Kessler, Klink, & Mielke, 1999). In models predicting social change commitment, the group refers often to the larger category of the *socially disadvantaged* or *the most disadvantaged*. An important question to ask is then: how people come to build their beliefs about the efficacy of such a *large-scale social category*? We argue that when people perceive themselves to be member of this large social category, the strength of connections and the networks of trust they perceive in their direct social environments are a proximal predictor of larger-scale efficacy beliefs, which in turns predicts willingness to commit to social change actions.

Hypothesized associations. The full structural model is present in figure 1. We argue that the more people perceive their direct environment as responsive to their both instrumental and symbolic needs, the higher will be their sense of connectedness to proximal groups. We hypothesize that ingroup connectedness will in turn foster efficacy beliefs. We test this link between connectedness and efficacy beliefs both at personal and collective level.

At the personal level, we hypothesize that connectedness to proximal groups will positively affect psychological outcomes (namely self-esteem) and that this relation is mediated by a sense of enhanced efficacy to cope with life challenges.

At the collective level, we hypothesize that connectedness to proximal groups will predict more willingness to engage in social change actions and that this relation is mediated, by an enhanced sense of collective efficacy. Additionally, we hypothesize that connectedness will be more relevant in predicting commitment to social change actions among (disadvantaged) non-Swiss compared to (more advantaged) Swiss participants.

Method

Participants

To test our theoretical model, we collected data in French speaking Switzerland with a standardized questionnaire of youth populations from different backgrounds, aged 15 to 30 (see table 1 for participants demographic information). Thanks to the agreement with three institutions hosting these young, a vocational school (pre-apprentices and apprentices), a high school (students), and the municipality of a major city (apprentices and young employees), we constituted a mixed sample that reflects the diversity of pathways characteristic of this age period. In addition to reflecting the diversity of pathways, our choice of those institutions was also guided by our hypothesis related to the link between connectedness and efficacy beliefs among the most disadvantaged, which led us to include an important portion of young who are potentially disadvantaged (having an immigrant background and/or low educational attainment). Here is a brief description of the context of each institution:

Preparatory vocational school (PVS). This centre is attended by adolescents who express difficulty in managing the transition from compulsory schooling to vocational training. Participants from the PVS, 18 years old average, were either apprentices (have already started an apprenticeship but need specialized coaching by vocational teachers), or pre-apprentices (are still looking for an apprenticeship at the end of their compulsory schooling and are benefiting from the aide of this institution in their research procedure). Apprentices were distributed across various sectors: construction, carpentry, the service-sector, rural work and mechanical work. A high proportion of immigrants and people with an immigrant background attend this centre (47% don't have Swiss nationality).

Municipality. All employees and apprentices affiliated to the municipality of a major city in Switzerland aged between 15 and 30 years were contacted by letter. As for apprentices from PVS, apprentices affiliated to the municipality were distributed across the various sectors. Employees were also distributed across the various services of the municipality (construction workers, police officers, social workers, administrative personnel…). They also differ in their educational achievement, and only 39% of these employees had achieved higher education.

High School (HS). The third institution is a high school preparing students who aspire for higher education to the maturity diploma (obtained around the age of 18/19) which leads to admission in universities. Table 1 gives a description of the whole sample.

Table 1: Means, standard deviations and percentages of socio-demographic variables of the whole sample

	PVS (Pre)Apprentices	HS Students	Municipality Apprentices	Municipality Employees	Total
Age: M (SD)	18.42 (2.61)	18.79 (1.00)	19.61 (2.36)	27.45 (2.34)	**20.83 (4.27)**
Women: valid %	42%	62%	42%	55%	**49%**
Non Swiss: valid %	47%	12%	20%	9%	**79%**
N	151	207	35	127	**521**

The distribution of our sample shows that non-Swiss are highly represented among apprentices and pre-apprentices (47%, see table 1) contrary to a low representation among students (12%) and employees (9%), suggesting that non-Swiss in our sample hold lower social position compared to Swiss participants. We additionally compared Swiss to non-Swiss participants according to different indicators of social position, objective (educational attainment of parents) and subjective (perceived material vulnerability). Results revealed the educational attainment of parents is limited to the obligatory schooling for 47% among non-Swiss participants compared to 9% among Swiss, $\chi^2(1) = 76.52$, $p < .001$. With regards to differences in perceived material vulnerability, we found that 59% among non-Swiss participants are *somewhat* or *strongly* worried about "not having enough money to cover living expenses, to pay bills, rent or food" (compared to 45% among Swiss, $\chi^2(1) = 6.40$, $p = .01$) and 35% are *somewhat* or *strongly* worried about "being in need of social

assistance, unemployment benefits or other institutional support" (compared to 22% among Swiss, $\chi^2(1) = 7.37$, $p = .01$).

Given these consistent status differences between Swiss and non-Swiss participants, our hypothesis related to a greater relevance of connectedness in predicting social change commitment among disadvantaged participants will be tested using nationality as a proxy for status, comparing thus disadvantaged non-Swiss ($n = 109$) to advantaged Swiss participants ($n = 404$).

Procedure

521 adolescents and young adults (15-30) from the three mentioned institutions completed our questionnaire. This questionnaire is part of a larger longitudinal survey that started one year before. Participants from the high school and the municipality were contacted by email. However, given the risk of having a low response rate among the preparatory vocational school (the most vulnerable population), we negotiated with the institution the possibility to collect data in special sessions in the institution. The same questionnaire distributed in those sessions was sent by email to participants from the municipality and the high school with a return envelope.

Measures

We only describe the measures of direct relevance for the present paper. Unless otherwise stated, scales ranged from 1 (no, not at all) to 6 (yes, completely).

Needs responsiveness: help and recognition. Received instrumental help was measured using two items from the instrumental subscale of the Berlin social support scale (Schulz & Schwarzer, 2003): "There are people who offer me help when I need it" and "When I am worried, there is someone who helps me". Satisfaction of symbolic needs was measured by asking to which degree they feel loved and recognized by surrounding others ("I feel recognized by those around me" and "I feel loved by those around me").

Ingroup connectedness. Ingroup connectedness was measured using 6 items, each two referring to one of these three proximal ingroups: family, friends and peers. Peers referred respectively to: other apprentices, other employees and other students according to the vocational status of the participant himself. Using confirmatory factor analyses, we compared two measurement models for connectedness: a one-factor model obtained directly from the six items and a second-factor model, obtained from the three first-order connectedness factors: family-connectedness, friends-connectedness and peers-connectedness. Comparisons of the one-, and second-factor models showed that the one-factor model did not fit the data and confirmed the superiority of the second-

order factor. For each first-order factor, two items assessed the strength of ties one feels with the corresponding ingroup ("I am very attached to my family, friends, other apprentices/students/employees" and " I have strong ties with my family/friends/other apprentices/students/employees"). Those items are commonly used to measure the affective component of group identification, also referred to as internal ties (Cameron, 2004).

Individual coping-efficacy. Efficacy beliefs, a central mechanism in human agency, refer to expected attainment of valued outcomes (Bandura, 1982, 1989). The majority of scales that measures efficacy beliefs are domain specific (e.g., Self-efficacy for academic achievement, self-efficacy to regulate eating habits; Bandura, 2006). Given that we were interested in a general sense of being able to cope with everyday adversity, we used two items adapted from Chwarzer & Jerusalem's general self-efficacy scale (1995): "I am confident in my ability to overcome personal problems" and "For each problem, I can think of a solution". The original scale was created with the aim to predict coping and adaptation with different types of stressful life events and was thus adapted to our need.

Collective-efficacy. Collective-efficacy refers to perceptions of the efficacy of a large social category—the most disadvantaged people—to achieve social change. It was measured using the two items: "By working together, the most disadvantaged people can help to reduce inequalities they suffer", and, "By being united, the most disadvantaged people can participate in reducing prejudice against them". Independently of whether the person perceive himself to be a member of this category or not, this measure can predict commitment to social change actions because it entails a belief that a large social category is committed to this change and that this change is in turn more probable. However, a differential meaning of this measure according the subjective perception of one's status must be pointed out: for people who think they are themselves disadvantaged, it is a measure of self-efficacy at the collective-level, while for those who don't believe they are themselves disadvantaged, it reflects a measure of group-efficacy attributed to an outgroup.

Self-Esteem. Self-esteem was assessed using a five-item scale, adapted from the Rosenberg Global Self-Esteem Scale (Rosenberg, 1979). Example items are "I feel that I have a number of good qualities" and "In general, I feel good about myself".

Social change commitment. Social change commitment reflects the degree to which the person is willing to commit to social change actions. To assess willingness to participate in social change actions we used the two items included in the European social survey (round 4): "I am ready to commit myself for that people are all treated with the same respect and have the same

opportunities", and "I am ready to commit myself for a more just society where differences in living standards would be smaller".

Individuality variables. We had additional data looking to which degree participants perceive themselves as unique individuals ("I am unique"), independent individuals ("I am independent"), and as having a strong personality ("I have a strong personality"). Those variables were added to check whether connectedness entailed any loss of individuality or personality strength.

Data analysis

All analyses were conducted with the Lavaan package of R. To test our model, we proceeded in various steps. We first examined the measurement model for our latent variables using confirmatory factor analysis. After examination of the fit of this model, confirming that our items are adequate indicators of latent concepts as will be detailed, we tested the full structural model including the structural paths between the latent variables as indicated in figure 1. We then conducted multiple group analysis to compare the model between Swiss and immigrant participants.

Results

Measurement model

Each item was allowed to load only on the construct it was expected to specify, and no item errors were allowed to correlate. All first-order constructs were measured by at least two items and the three connectedness constructs (family-connectedness, friends-connectedness and peers-connectedness) were specified as indicating a second-order factor of ingroup connectedness.

The fit indices of the global measurement model indicate that the model (the latent constructs) fits well the data. The χ^2 statistic was significant ($\chi2 = 387.47$ df $= 165$, N $= 521$, $p < .001$), however this statistic is known to be very sensitive to sample size and is often significant with large samples even if the model is a good one (Hu and Bentler, 1999). Given the large sample size, the ratio of χ^2 to the degrees of freedom is a more meaningful statistic (Marsh & Hocevar, 1985). It was 2.35 indicating that the model fits adequately the data ($\chi2$/df-ratio < 3). We examined additionally other recommended and commonly used fit indices (Hooper et al, 2008): the Comparative Fit Index (CFI) was .955 (cut-off criterion of 0.90 but a value of CFI ≥ 0.95 recommended for good fit; Hu & Bentler, 1999), the root mean squared error of approximation (RMSEA) was .051 (90 % CI [0.044, 0.057], cut-off value of .06; Hu and Bentler, 1999) and the standardised root mean square residual (SRMR) was .039 (upper limit of .05 for well-fitting models; Byrne, 1998; values close to 0.08 are

acceptable; Hu and Bentler, 1999). Accordingly, all indices indicated good fit. Additionally, factor loadings were all significant (< .001) and ranged from .56 to .94.

Latent constructs correlations

Table 2 presents the correlations among the latent constructs of the model. To give information about participants' scores on those constructs, the relevant items in each scale were averaged and the scale means and standard deviations are also presented in table 2.

Table 2: Correlations, means and standard deviations for all latent variables

	M (SD)	1	2	3	4	5	6	7
1. Instrumental N.S.	4.87(.88)	-	.55***	.41***	.22***	.11+	.28***	.12*
2. Symbolic N. S.	5.02(.83)		-	.70***	.31***	.10	.47***	.10+
3. Ingroup connectedness	4.66(.72)			-	.22**	.23**	.45***	.22**
4. Individual efficacy	4.52(.77)				-	.10	.47**	.10+
5. Collective efficacy	4.26(.89)					-	.09	.47***
6. Self-esteem	4.37(.82)						-	.03
7. Social change commitment	4.59(.99)							-

M: Mean, SD: Standard Deviation. + < .10, * < .05, ** < .01, *** < .001

Connectedness correlations with individuality variables. Highly connected participants did not score lower in uniqueness *(r = .02, ns)* and independence *(r = -.03, ns)*, and they perceived themselves as having stronger personality than those who are less connected *(r = .15, p < .01)*, suggesting that contrary to a view opposing group connectedness to individual distinctiveness, the two dimensions are independent. Moreover, connectedness contributed to a higher sense of identity strength.

Full structural model

Once we confirmed that the measurement model fits the data, we introduced in a second step the hypothesized structural relations between the latent variables and we tested the full structural model. We first compared the model thus defined to the measurement model where each latent variable was correlated with all others. Results showed that the structural model (χ^2= 405.16, df = 177, n = 521, $p < .001$)—the parsimonious one, that is the one with more degrees of freedom—does not fit worse the data than the measurement model ($\Delta\chi^2$= 17.69, df = 12, p = 0.125). Moreover, all fit indices indicated good fit (CFI = .954, RMSEA = .050 (90 % CI [0.043, 0.056]), SRMR = .044).

The estimated paths for all the hypothesized associations are presented in figure 1. Age and gender were added as control variables for all latent constructs. Results showed that all associations were in a direction consistent with our hypothesis even though some are not significant (Instrumental needs→ Connectedness and Connectedness→ Social Change Commitment). With regard to the control variables, results showed no significant effect of age and gender on connectedness. Moreover, men compared to women reported significantly higher individual efficacy (B = .35, SE = .08, $p < .001$) and Self-esteem (B = .14, SE = .06, p = .02), lower collective efficacy (B = -.16, SE = .09, p = .07) and marginally lower commitment to social change actions (B = -.18, SE = .08, p = .07). Additionally age had a marginal positive effect on individual efficacy (B = .01, SE = .00, p = .08), and a significant negative effect on collective efficacy (B = -.02, SE = .01, p = .01) and Self-Esteem (B = -.01, SE = .00, p = .03).
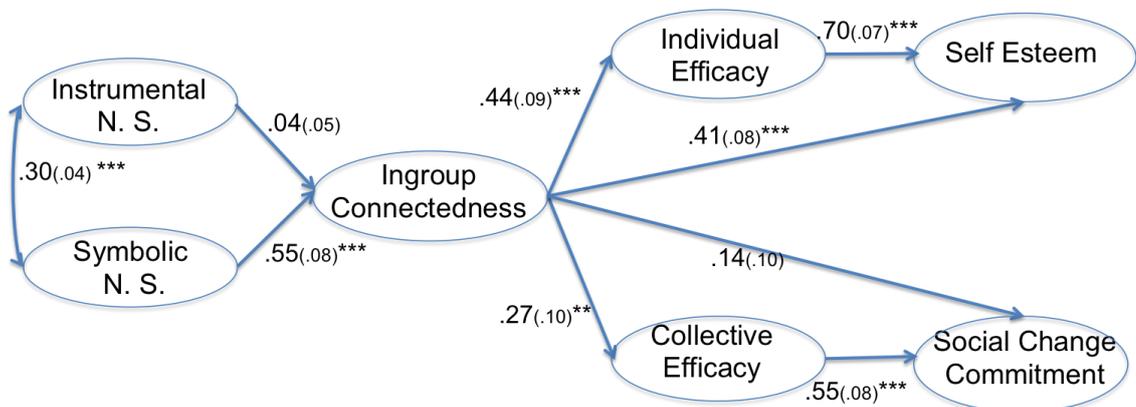
N. S.: Need Satisfaction. + < .10, * < .05, ** < .01, *** < .001

Figure 1: The full structural model showing path estimates (unstandarized coefficients with standard errors) between Needs satisfaction (instrumental and symbolic), connectedness, efficacy beliefs (individual and collective), and outcomes (self-esteem and social change commitment).

Mediation Analyses

Additional tests for mediation were conducted to test the degree to which efficacy beliefs mediate the effect of connectedness on positive outcomes: indirect effects (the product of the two regression coefficients) and total effects (the sum of indirect and direct effect) were estimated and tested for significance. Thus, at the individual level, ingroup connectedness had a positive total effect on well-being (total effect = .67, SE = .16, p <.001, CI [.41, 1]) which was partially mediated through perceived coping-efficacy (indirect effect = .29, SE = .10, p <.01, CI [.12, .52]). At the societal level, ingroup connectedness enhanced one's willingness to participate in social change (total effect = .30, SE = .13, p = .02, CI [.03, .51]) and this total effect was mediated through perceived collective efficacy (Indirect effect = .16, SE = .07, p = .02, [.03, .32]).

Status differences: Multiple group analysis

We hypothesized that ingroup connectedness will be more strongly associated with collective-efficacy beliefs among (disadvantaged) non-Swiss compared to (more advantaged) Swiss participants and thus to be more relevant in predicting commitment to social change actions. This leads us to conduct multiple group analysis to compare the model between Swiss and non-Swiss participants. We then explored whether our structural model differs between socially advantaged (Swiss participants) and disadvantaged ones (Non-Swiss participants) by conducting multiple group analyses in various steps.

Configural model. First, we tested a configural model without any invariance (same models for both groups but all parameters are free to vary between groups, χ^2= 741.512, df = 418, N1 = 109, N2 = 404, p < .001). This model was reasonable as fit indices indicated an acceptable fit (CFI = .934, RMSEA = .055 (90% CI [0.049, 0.062]), SRMR = .055). This model was used as a basis for comparison to test invariance of factor loadings between groups.

Invariance of factor loadings. In a second step we tested a model where all factor loadings were constrained to be equal (χ^2= 754.543, df = 432, N1 =109, N2 = 404, p < .001) and then compared it to the configural model. All fit indices were acceptable (CFI = .935, RMSEA = .054 (90% CI [0.048, 0.061]), SRMR = .057). The model with equality constraints on the factor loading across groups does not fit worse the data than the configural model where loading were allowed to vary between groups ($\Delta \chi^2$= 13.03, df = 14, p = .52).

Paths analyses. Once we confirmed the invariance of factor loadings between groups, we proceeded to test whether the causal model differs between groups. To do this, we fitted a model

with equality constraints on both the factor loadings and structural paths and compared it to the previous model where only factor loadings were constrained. Results showed that the fit of the model with equality constraints on the paths (χ^2 =790.72, df = 450, CFI = .931, RMSEA = .055 (90 % CI [0.048, 0.061], SRMR = .064) was worse than the model where those paths were free to vary between groups ($\Delta\chi^2$ = 36.119, df = 18, p = .007). This result suggests that groups vary at least in one of the paths of the model. By examining the model where paths were free to vary, we identified the paths that differed most between groups: Connectedness→ Collective efficacy (Swiss: .08(10), ns, Non-Swiss: .80(.19), p < .001) and Instrumental needs→Connectedness (Swiss: -.01(.06), ns, Non-Swiss: .28(.12), p = .02). We started releasing the constraints on those paths one by one. By allowing the path linking connectedness to collective efficacy to vary between groups, the fit of the model (χ^2 =776.678, df = 449, CFI = .933, RMSEA = .054 (90 % CI[0.049, 0.060, SRMR = .059) is no longer significantly worse than the equal loading model ($\Delta\chi^2$= 22.13, df = 17, p = .17) suggesting that the two groups differ in the strength of this association, and that all other associations are not significantly different between them. The link between ingroup connectedness and collective efficacy was not significantly different from zero for Swiss participants while it was significant and particularly strong among immigrant participants (see figure 2).

Swiss participants/ Non-Swiss participants
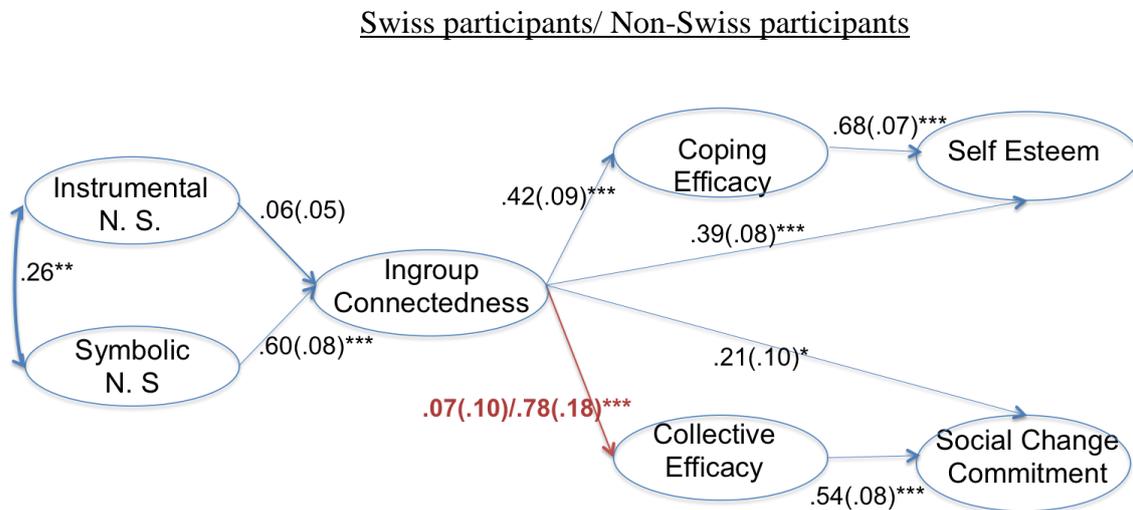
N. S.: Need Satisfaction. + < .10, * < .05, ** < .01, *** < .001

Figure 2: Path estimates (unstandardized coefficients) for Swiss and non-Swiss participants

Discussion

The model developed and tested in the present study puts individual needs satisfaction as antecedents of a proximal sense of connectedness, which is in turn a source of personal agency, but also of collective agency amongst the most disadvantaged. It thus stressed the importance of *proximal-level connections* for individual empowerment, and more interestingly for collective empowerment, an aspect neglected in existing social psychological models of social change.

Generally, the suggested model points out the relevance of a framework that understands self-group relation and groups' role by relating them to intragroup processes. It did so by focusing on needs of help and recognition as antecedents of the self-group relation, and on efficacy beliefs derived from intragroup bonds as the mechanism explaining the role of groups in predicting personal-level and collective-level outcomes.

By its first claim, linking proximal group connectedness to the satisfaction of individual needs of help and recognition from surrounding others, we aimed to point out a possible route to self-group merging and to group-based psychological empowerment that took individual needs rather than the relevance of a categorical identity as its starting point. While in previous models of group-based psychological empowerment grounded in social identity theorizing, self-group relation is analysed as, or is assumed to be, the result of the degree to which the individual matches the group prototype, our model examines it in relation to the satisfaction of personal needs of help and recognition within the context of interactions with surrounding others. The results show that the degree to which the person's needs, especially the symbolic needs of love and recognition, are satisfied by the surroundings others is a strong predictor of the strength of affective ties to proximal groups. It is worth noting here that some youth development scholars go as far as to include received support and perceived affection and warmth from others in measures of connectedness. By putting them as antecedents in our model we aim however to stress, with others (Karcher, Holcomb, & Zambrano, 2008), the importance to conceptually distinguish between what the person *receives from others* and connectedness which is the *reciprocation* of received support and affection, in our case in form of bonds *toward others*. Our result is consistent with previous work based on Self-Determination theory showing that individual needs satisfaction predicts one's sense of bonds to family members and friends. This result also confirms a central argument in social support theory that the perception of supportive interactions promotes a sense of connectedness (Cutrona, 1986; Sarason, Sarason, & Shearin, 1986).

Even if the model presented good fit, the path between instrumental help and connectedness was not significant in the overall sample. Further path analyses comparing the model between groups show that the association was significant among immigrant participants, suggesting that (high vs. low) status may moderates this association. It is however careful not to go further in this interpretation given that the multiple group analyses showed that the only path that significantly differed between groups is the one linking ingroup connectedness to collective efficacy believes.

Generally, results suggest that the degree to which groups respond to individual needs is an important determinant of the self-group relation. It is often a neglected aspect that deserves further attention in the self-group literature. Recently, many perspectives try to restore equilibrium between intragroup and inter-group accounts of the self-group relation. Yzerbyt and colleagues for example argue for the primacy of the ingroup and the idea that the role of ingroups need not to be contingent on the differentiation from an outgroup (Yzerbyt, Castano, Leyens, & Paladino, 2000), while Gaertner and colleagues' argument highlights the importance to understand group phenomena from a framework that relates them to intragroup rather than intergroup processes (Gaertner & Insko, 2000; Gaertner & Schopler, 1998). More recently, Hamilton and colleagues (Crump, Hamilton, Sherman, Lickel, & Thakkar, 2010; Hamilton, Sherman, & Castelli, 2002; Hamilton, 2007; Lickel & Hamilton, 2000) stressed the importance to recognize antecedents of group formation independent of categorization processes. Those studies showed that frequency of interactions, common goals and needs can be a trigger for group formation and that intergroup categorization and comparison are not a necessary prerequisite for the development of a cohesive psychological group. Other routes to a strong self-group relation based on interactions and needs satisfaction are needed to understand instances where connectedness and individuality work simultaneously rather than being at odds with each other. Indeed, while the categorical explanation of the self-group merging presents individuality and group connectedness as contradictory forces, we found that participants who feel highly connected to their proximal groups did not report any loss of their sense of distinctiveness and independence as individuals, and reported higher perceived personality strength compared to participants who scored lower on connectedness.

Regarding the consequences of connectedness, our results highlight two levels at which group connectedness and individual agency work simultaneously (connectedness enhances efficacy) to predict positive outcomes. The model has the advantage to test the empowering role of ingroup connectedness simultaneously at a personal and collective level. Doing so, it advanced previous models of collective empowerment in showing that being empowered as a group member does not

necessarily entails downplaying personal goals and identity. Indeed, an extensive literature shows that connectedness functions as a trigger for group-level agency, but most of this literature is based on the assumption that group-level self-definition entails a shift of personal identity to the background. This study constitutes therefore an important contribution to the literature on how ingroup connectedness can independently enhance efficacy-beliefs about the realization of a common goal as a group member (i.e., collective action), and the personal efficacy of group members to effectively handle their personal challenges (i.e. coping efficacy).

At the personal level, the strong association we found between connectedness and self-esteem, both directly and indirectly through coping efficacy beliefs, provides support to the idea that connectedness and agency are forces that can work simultaneously rather than being at odds. The result showing that the strength of the relationship among the three variables (connectedness, efficacy, and self-esteem) did not differ between Swiss and immigrant participants highlights the importance of *both* connectedness and efficacy beliefs for adolescents' self-esteem, independently of their cultural background.

At the collective level, we found that the direct link between connectedness and social change commitment is positive for both advantaged (Swiss participants) and disadvantaged (non-Swiss participants), suggesting a positive role of proximal connections in predicting willingness to engage in social change independently of one's status. Importantly, this proximal-level seems to play an even more crucial role in predicting social change commitment among (disadvantaged) immigrant participants. In addition to its direct effect, proximal connectedness also predicted commitment to social change through its effect on enhancing the belief about the efficacy of the disadvantaged as a group to change their situations through common effort. This indirect effect existed only for the disadvantaged group, but its absence among the advantaged is not surprising given that our measure of collective efficacy reflects—in the case of those who do not self-define as disadvantaged themselves—a belief about the efficacy of "the most disadvantaged" *outgroup*. For those who perceive themselves to be disadvantaged, this same measure is an assessment of the efficacy of a large-scale *ingroup* (we, the disadvantaged). The strength of connections a person perceives in direct environment within the context of proximal groups seems thus to be a key factor predicting this large-scale sense of collective efficacy.

How can we interpret this strong association? We think that this result owes to the fact that people build their understanding of the world and possibilities to act in it from their day-to-day experience. When one is in a situation of social disadvantage, the feeling of connectedness at a local

level, and the resulting capacity of coordination and mutual trust, can be important in building beliefs about the efficacy of the *most disadvantaged*, as a larger social category, to work co-ordinately toward the desired change.

This points out a bottom-up account of collective-efficacy beliefs based on local connections and networks of affection and trust. While accounts of social change commitment are dominated by a focus on ideological and structural variables, further attention should be given to proximal relations in people's direct environment. We believe that the bottom-up route to collective efficacy beliefs our model suggests is not conflicting with a top-down account based on the consciousness of the illegitimacy of group-based disadvantaged made relevant by intergroup relations. Rather, it complements it and may replace it when those relations are too complex and too ambivalent to translate into concrete occasions for building a clear categorical consciousness. Contrary to the hypothesis of some scholars that internal connections among the disadvantaged can be psychologically beneficial, but socially harmful by precluding comparisons with the most advantaged and the likelihood of protest and desire for change that may result from such comparisons, we argued and found that they are a factor of psychological empowerment both at the personal and the societal level. People live most their lives in small intragroup contexts, the role of proximal groups deserve then much more attention than what we have done until now.

References

Amiot, C. E., Terry, D. J., Wirawan, D., & Grice, T. A. (2010). Changes in social identities over time: the role of coping and adaptation processes. *The British Journal of Social Psychology / the British Psychological Society*, *49*(Pt 4), 803–26. doi:10.1348/014466609X480624

Aron, A., Aron, E. N., & Norman, C. (2004). Self-expansion model of motivation and cognition in close relationships and beyond. In M. B. Brewer & M. Hewstone (Eds.), *Self and Social Identity* (pp. 99–123). Malden, MA: Blackwell.

Aron, A., Paris, M., & Aron, E. (1995). Falling in love: Prospective studies of self-concept change. *Journal of Personality and Social Psychology*, *69*(6), 1102–1112. doi:10.1037/0022-3514.69.6.1102

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, *37*(2), 122–147. doi:10.1037//0003-066X.37.2.122

Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, *44*(9), 1175–1184. doi:10.1037//0003-066X.44.9.1175

Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. In A. Bandura (Ed.), *Self-efficacy in changing societies* (pp. 1–45). Cambridge: Cambridge University Press.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, *52*, 1–26. doi:10.1146/annurev.psych.52.1.1

Bandura, A. (2006). Guide for constructing self-efficacy scales. In F. Pajares & T. Urdan (Eds.), *Self-efficacy Beliefs of Adolescents* (pp. 307–337). Greenwich, CT: Information Age.

Baumeister, R., & Leary, M. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–529. doi:10.1037/0033-2909.117.3.497

Bettencourt, B. A., & Sheldon, K. (2001). Social roles as mechanism for psychological need satisfaction within social groups. *Journal of Personality and Social Psychology*, *81*(6), 1131–1143. doi:10.1037/0022-3514.81.6.1131

Brandtstädter, J., & Rothermund, K. (2002). The Life-Course Dynamics of Goal Pursuit and Goal Adjustment: A Two-Process Framework. *Developmental Review*, *22*(1), 117–150. doi:10.1006/drev.2001.0539

Breakwell, G. M. (1988). Strategies adopted when identity is threatened. *Revue Internationale de Psychologie Sociale*, 189–203.

Byrne, B. (1998). *Structural equation modeling with LISREL, PRELIS, and SIMPLIS: Basic concepts, applications, and programming*. Mahwah, NJ: Lawrence Erlbaum.

Cameron, J. (2004). A three-factor model of social identity. *Self and Identity*, *3*(3), 239–262. doi:10.1080/13576500444000047

Chirkov, V., Ryan, R., Kim, Y., & Kaplan, U. (2003). Differentiating autonomy from individualism and independence: a self-determination theory perspective on internalization of cultural orientations and well-being. *Journal of Personality and Social Psychology*, *84*(1), 97–110. doi:10.1037/0022-3514.84.1.97

Cohen, A. (1985). *Symbolic construction of community*. Chichester: Ellis Horwood.

Crabtree, J. W., Haslam, S. A., Postmes, T., & Haslam, C. (2010). Mental Health Support Groups, Stigma, and Self Esteem: Positive and Negative Implications of Group Identification. *Journal of Social Issues*, *66*(3), 553–569. doi:10.1111/j.1540-4560.2010.01662.x

Crump, S. A., Hamilton, D. L., Sherman, S. J., Lickel, B., & Thakkar, V. (2010). Group entitativity and similarity: Their differing patterns in perceptions of groups. *European Journal of Social Psychology*, *40*(7), 1212–1230. doi:10.1002/ejsp.716

Cutrona, C. (1986). Objective determinants of perceived social support. *Journal of Personality and Social Psychology*, *50*(2), 349–355. doi:10.1037/0022-3514.50.2.349

Deci, E., & Ryan, R. (2000). The" what" and" why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227–268. doi:10.1207/S15327965PLI1104_01

Deutsch, M. (1949). A theory of co-operation and competition. *Human Relations*, *2*, 129–152. doi:10.1177/001872674900200204

Diani, M. (1997). Social movements and social capital: a network perspective on movement outcomes. *Mobilization: An International Quarterly*, *2*(2), 129 – 147.

Drury, J., & Reicher, S. (2000). Collective action and psychological change: the emergence of new social identities. *British Journal of Social Psychology*, *39*, 579–604. doi:10.1348/014466600164642

Drury, J., & Reicher, S. (2005). Explaining enduring empowerment: a comparative study of collective action and psychological outcomes. *European Journal of Social Psychology*, *35*(1), 35–58. doi:10.1002/ejsp.231

Drury, J., & Reicher, S. (2009). Collective Psychological Empowerment as a Model of Social Change: Researching Crowds and Power. *Journal of Social Issues*, *65*(4), 707–725. doi:10.1111/j.1540-4560.2009.01622.x

Durkheim, E. (1893). *De la division du travail social: étude sur l'organisation des sociétés supérieures*. F. Alcan.

Eidelson, R. (1980). Interpersonal satisfaction and level of involvement: A curvilinear relationship. *Journal of Personality and Social Psychology*, *39*(3), 460–470. doi:0.1037/0022-3514.39.3.460

Eidelson, R. J. (1981). Affiliative rewards and restrictive costs in developing relationships. *British Journal of Social Psychology*, *20*(3), 197–204. doi:10.1111/j.2044-8309.1981.tb00532.x

Gaertner, L., & Insko, C. (2000). Intergroup discrimination in the minimal group paradigm: Categorization, reciprocation, or fear? *Journal of Personality and Social Psychology*, *79*(1), 77–94. doi:10.1037//O022-3514.79.1.77

Gaertner, L., & Schopler, J. (1998). Perceived ingroup entitativity and intergroup bias: an interconnection of self and others. *European Journal of Social Psychology*, *28*(6), 963–980. doi:10.1002/(SICI)1099-0992(1998110)28:6<963::AID-EJSP905>3.0.CO;2-S

Green, E. G. T., Deschamps, J. C., & Paez, D. (2005). Variation of individualism and collectivism within and between 20 countries a typological analysis. *Journal of Cross-Cultural Psychology*, *36*(3), 321–339. doi:10.1177/0022022104273654

Guardia, J. La, Ryan, R., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: a self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of Personality and Social Psychology*, *79*(3), 367–384. doi:10.1037//0022-3514.79.3367

Hamilton, D. L. (2007). Understanding the complexities of group perception: Broadening the domain. *European Journal of Social Psychology*, *37*, 1077–1101. doi:10.1002/ejsp.436

Hamilton, D. L., Sherman, S. J., & Castelli, L. (2002). A Group By Any Other Name—The Role of Entitativity in Group Perception. *European Review of Social Psychology*, *12*(1), 139–166. doi:10.1080/14792772143000049

Haslam, S. A., Jetten, J., O'Brien, A. O., & Jacobs, E. (2004). Social identity, social influence and reactions to potentially stressful tasks : support for the self-categorization model of stress. *Stress and Health*, *20*, 3–9. doi:10.1002/smi.995

Haslam, S. A., Jetten, J., & Waghorn, C. (2009). Social identification , stress and citizenship in teams : a five-phase longitudinal study. *Stress and Health*, *25*, 21–30. doi:10.1002/smi

Haslam, S. A., O'Brien, A., Jetten, J., Vormedal, K., & Penna, S. (2005). Taking the strain: Social identity, Social support, and the experience of stress. *British Journal of Social Psychology*, *44*, 355–70. doi:10.1348/014466605X37468

Haslam, S. A., & Reicher, S. D. (2012). When prisoners take over the prison a social psychology of resistance. *Personality and Social Psychology Review*, *16*(2), 154–179. doi:10.1177/1088868311419864

Heinz, W. R. (2009). Structure and agency in transition research. *Journal of Education and Work*, *22*(5), 391–404. doi:10.1080/13639080903454027

Helliwell, J., & Putnam, R. (2004). The social context of well-being. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *359*(1449), 1435–1446. doi:10.1098/rstb.2004.1522

Hornsey, M., & Blackwood, L. (2006). Why do people engage in collective action? Revisiting the role of perceived effectiveness. *Journal of Applied Social Psychology*, *36*(7), 1701–1722. doi:10.1111/j.0021-9029.2006.00077.x

Hornsey, M., Grice, T., & Jetten, J. (2007). Group-directed criticisms and recommendations for change: Why newcomers arouse more resistance than old-timers. *Personality and Social Psychology Bulletin*, *33*, 1036–1048. doi:10.1111/j.0021-9029.2006.00077.x

Hu, L., & Bentler, P. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1–55. doi:10.1080/10705519909540118

Iyer, A., Jetten, J., Tsivrikos, D., Postmes, T., & Haslam, S. A. (2009). The more (and the more compatible) the merrier: multiple group memberships and identity compatibility as predictors of adjustment after life transitions. *The British Journal of Social Psychology*, *48*(4), 707–33. doi:10.1348/014466608X397628

Jetten, J., Haslam, C., & Haslam, S. (2012). *The social cure: Identity, health and well-being*. London: UK: Psychology Press.

Jones, J., & Jetten, J. (2011). Recovering From Strain and Enduring Pain Multiple Group Memberships Promote Resilience in the Face of Physical Challenges. *Social Psychological and Personality Science*, *2*(3), 239–244. doi:10.1177/1948550610386806

Kagitcibasi, C. (2005). Autonomy and Relatedness in Cultural Context: Implications for Self and Family. *Journal of Cross-Cultural Psychology*, *36*(4), 403–422. doi:10.1177/0022022105275959

Kagitcibasi, Ç. (1996). The autonomous-relational self: A new synthesis. *European Psychologist*, *1*(3), 180–186. doi:10.1027/1016-9040.1.3.180

Karcher, M. J., Michelle R. Holcomb, & Zambrano, E. (2008). Measuring adolescent connectedness: A guide for school-based assessment and program evaluation. In *Handbook of school counseling* (pp. 649–669). Mahwah, NY: Lawrence Erlbaum.

Khan, S.S., Hopkins, N., Tewari, S., Srinivasan, N., Reicher, S.D., & Ozakinci, G. (2014). Efficacy and well-being in rural north India: The role of social identification with a large-scale community identity. *European Journal of Social Psychology*, *44*, 787–798. doi:10.1002/ejsp.2060

Knowles, M. L., & Gardner, W. L. (2008). Benefits of Membership : The Activation and Amplification of Group Identities in Response to Social Rejection. *Personality and Social Psychology Bulletin*, *34*(9), 1200–1213. doi:10.1177/0146167208320062

Lee, R., & Robbins, S. (1998). The relationship between social connectedness and anxiety, self-esteem, and social identity. *Journal of Counseling Psychology*, *45*(3), 338–345. doi:10.1037/0022-0167.45.3.338

Levine, J., & Moreland, R. (1994). Group socialization: Theory and research. *European Review of Social Psychology*, *5*(1), 305–336. doi:10.1080/14792779543000093

Lewin, K. (1948). *Resolving Social Conflicts*. (Gertrud Weiss Lewin, Ed.). New York: Harper and Row.

Lickel, B., Hamilton, D., Wieczorkowska, G., Lewis, A., Sherman, S. J., & Uhles, A. N. (2000). Varieties of groups and the perception of group entitativity. *Journal of Personality and Social Psychology*, *78*(2), 223–246. doi:10.1037//0022-3514.78.2.223

Marsh, H., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First-and higher order factor models and their invariance across groups. *Psychological Bulletin*, *97*(2), 562–582.

Mische, A. (2003). Cross-talk in movements: Reconceiving the culture-network link. In M. Diani & D. McAdam (Eds.), *Social Movements and Networks: Relational Approaches to Collective Action*. Oxford/New York: Oxford University Press.

Moreland, R., & Levine, J. (1989). Newcomers and old-timers in small groups. In *Psychology of group influence* (pp. 143–186). Hillsdale, NJ: Erlbaum.

Mummendey, A., Kessler, T., Klink, A., & Mielke, R. (1999). Strategies to cope with negative social identity: Predictions by social identity theory and relative deprivation theory. *Journal of Personality and Social Psychology*, *76*(2), 229–245. doi:10.1037/0022-3514.76.2.229

Nurmi, J. E., Salmela-Aro, K., & Koivisto, P. (2002). Goal importance and related achievement beliefs and emotions during the transition from vocational school to work: Antecedents and consequences. *Journal of Vocational Behavior*, *60*(2), 241–261. doi:10.1006/jvbe.2001.1866

Or, O., & Of, S. (2010). *GOING SOMEWHERE OR STAYING PUT? THE SOCIAL PSYCHOLOGY OF MOVEMENTS THAT CHALLENGE MINORITY-MAJORITY RELATIONS*.

Outten, H. R., Schmitt, M. T., Garcia, D. M., & Branscombe, N. R. (2009). Coping options: Missing links between minority group identification and psychological well-being. *Applied Psychology*, *58*(1), 146–170. doi:10.1111/j.1464-0597.2008.00386.x

Putnam, R. (2001). Social capital: Measurement and consequences. *Canadian Journal of Policy Research*, *2*(1), 41–51.

Putnam, R. (2007). E pluribus Unum: Diversity and community in the twenty-first century the 2006 Johan Skytte Prize Lecture. *Scandinavian Political Studies*, *30*(2), 137–174. doi:10.1111/j.1467-9477.2007.00176.x

Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.

Ryan, R. M., Deci, E. L., & Grolnick, W. S. (1995). Autonomy, relatedness, and the self: Their relation to development and psychopathology. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology, Vol. 1: Theory and methods. Wiley series on personality processes* (pp. 618–655). Oxford: John Wiley & Sons.

Ryan, R. M., & Lynch, J. H. (1989). Emotional autonomy versus detachment: Revisiting the vicissitudes of adolescence and young adulthood. *Child Development*, *60*(2), 340–356. doi:10.2307/1130981

Ryan, R. M., Stiller, J. D., & Lynch, J. H. (1994). Representations of Relationships to Teachers, Parents, and Friends as Predictors of Academic Motivation and Self-Esteem. *The Journal of Early Adolescence*, *14*(2), 226–249. doi:10.1177/027243169401400207

Salmela-Aro, K. (2009). Personal goals and well-being during critical life transitions: The four C's—Channelling, choice, co-agency and compensation. *Advances in Life Course Research*, *14*(1-2), 63–73. doi:10.1016/j.alcr.2009.03.003

Sarason, I., Sarason, B., & Shearin, E. (1986). Social support as an individual difference variable: Its stability, origins, and relational aspects. *Journal of Personality and Social Psychology*, *50*(4), 845–855. doi:10.1037/0022-3514.50.4.845

Schulz, U., & Schwarzer, R. (2003). Social support in coping with illness: the Berlin Social Support Scales (BSSS). *Diagnostica*, *49*(2), 73–82.

Sherif, M. (1966). *Group conflict and cooperation: Their social psychology*. London: Routlege & Kegan Paul.

Tajfel, H. (1978). Social categorization, social identity and social comparison. In H. Tajfel (Ed.), *Differentiation Between Social Groups: Studies in the Social Psychology of Intergroup Relations* (pp. 61–76). London: Academic Press.

Taylor, S. E., & Seeman, T. E. (1999). Psychosocial Resources and the SES – Health Relationship. *Annals New York Academy of Sciences*, *896*(1), 210–225. doi:10.1111/j.1749-6632.1999.tb08117.x

Townsend, K., & McWhirter, B. (2005). Connectedness: A review of the literature with implications for counseling, assessment, and research. *Journal of Counseling and Development*, *83*(2), 191–201. doi:10.1002/j.1556-6678.2005.tb00596.x

Turner, J. C. (1982). Towards a cognitive redefinition of the social group. In H. Tajfel (Ed.), *Social Identity and Intergroup Relations* (pp. 15–40). Cambridge: Cambridge University Press.

Turner, J. C. (1985). Social categorization and the self-concept: A social cognitive theory of group behavior. *Advances in Group Processes*.

Van Zomeren, M., Leach, C. W., & Spears, R. (2012). Protesters as "passionate economists": a dynamic dual pathway model of approach coping with collective disadvantage. *Personality and Social Psychology Review*, *16*(2), 180–99. doi:10.1177/1088868311430835

Van Zomeren, M., & Spears, R. (2009). Metaphors of Protest : A Classification of Motivations. *Journal of Social Issues*, *65*(4), 661–679. doi:10.1016/j.jesp.2010.05.006

Van Zomeren, M., Spears, R., Fischer, A. H., & Leach, C. W. (2004). Put your money where your mouth is! Explaining collective action tendencies through group-based anger and group efficacy. *Journal of Personality and Social Psychology*, *87*(5), 649–64. doi:10.1037/0022-3514.87.5.649

Van Zomeren, M., Spears, R., & Leach, C. W. (2008). Exploring psychological mechanisms of collective action: does relevance of group identity influence how people cope with collective disadvantage? *The British Journal of Social Psychology*, *47*, 353–72. doi:10.1348/014466607X231091

Weber, M. (1947). *The theory of economic and social organization. Trans. AM Henderson and Talcott Parsons.* New York: Oxford University Press.

Yzerbyt, V., Castano, E., Leyens, J.-P., & Paladino, M.-P. (2000). The Primacy of the Ingroup: The Interplay of Entitativity and Identification. *European Review of Social Psychology*, *11*(1), 257–295. doi:10.1080/14792772043000059