Comparing social contact and group identification as predictors of mental health

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Abstract

Current research on social integration and mental health operationalizes social integration as frequency of interactions and participation in social activities (i.e., social contact). This neglects the subjective dimension of social integration, namely group identification. We present two studies comparing the effect exerted by social contact and group identification on mental health (e.g., depression, stress) across two different groups (family; army unit), demonstrating that group identification predicts mental health better than social contact. Methodologically, our findings show the necessity to include group identification measures as indicators of social integration, in empirical research; theoretically, they support social identity researchers' contention that group identification is a central mechanism in the processes leading from social integration to health.

Key words:

Group identification; social integration; social support; mental health; depression.

Comparing social contact and group identification as predictors of mental health

Research has revealed that greater social integration is linked to better mental health (Kawachi & Berkman, 2001). For instance, Glass et al. (2006) found that social engagement predicted lower levels of depression over time in a large sample of community-dwelling older adults. According to researchers, greater social integration enhances mental health by providing people with normative expectations that afford a sense of meaning, purpose, belonging, and stability (Thoits, 1983), and by increasing their received or perceived social support (Cohen, 2004).

While the importance of this literature is unquestionable, we believe that the way in which social integration has been measured is limited. Although social integration is broadly defined as one's active engagement in a range of interpersonal relationships and social activities (Brissette, Cohen, & Seeman, 2000), measuring instruments focus almost exclusively on *social contact*. For instance, the most typical measures of social integration ask participants to specify how often they see or talk to other individuals such as their spouse, children and co-workers over a certain period of time (e.g., Cohen et al., 1997), or to list the number of social activities (e.g., doing charity work; playing cards) that they are involved in (e.g. Hanson et al., 1989). This virtually ignores the *subjective* dimension of people's integration in the social world. In particular, it neglects the fact that social ties are formed and maintained within the context of relatively circumscribed groups (e.g., family, school, work-place, sport team), and that we establish psychological links with these groups *as groups*, above and beyond their individual constituents (Turner et al., 1987). We ask ourselves questions such as: What does this group mean to me? Do I feel part of it? Do this group's views reflect my own views? The answers we give to these questions determine the degree of our *group identification* (Tajfel & Turner, 1986), that is the subjective sense of belonging to the group and of commonality with other in-group members.

Social psychologists endorsing a social identity approach to group processes and social relationships (Haslam, 2004) have found that group identification has positive consequences for the quality of one's interactions with others. For instance, Platow et al. (2007) showed that experimental participants undertaking a physically painful activity (i.e., immersing a hand into a bath of ice water) reported feeling less pain when they received support by a member of a group with which the participant identified than when support was received by a member of a group that was irrelevant to the participant. Social identity researchers have also found that group identification provides one with a sense of meaning, permanence, and stability, which protects against existential anxiety. For instance, Sani, Herrera and Bowe (2009) found that people who are asked to reflect upon their own mortality (and therefore have to face existential anxiety) are more likely to emphasise the temporal persistence of, and identification with their national in-group, compared to people who are asked to think about a university exam (which also raises anxiety but not of an existential type).

Clearly, if group identification predicts properties of social relationships such as perceived support, which is known to exert positive effects on mental health (Lincoln & Chae, in press), and shields people against negative mental states such as existential anxiety, then greater group identification should be associated with better mental health. Indeed, this is exactly what a growing body of literature is demonstrating (see Jetten, Haslam, & Haslam, 2012, for a recent collection). For instance, in their BBC Prison Study, Reicher and Haslam (1996) divided 15 participants into a group of prisoners and a group of guards within a purpose-built environment. Here, participants' degree of group identification and several other variables, including depressive symptoms, were monitored over a period of nine days. Results revealed that, over time, prisoners achieved high degrees of group identification that in turn led to a decrease in depressive symptoms, while guards' group identification remained relatively low, which was associated with higher levels of depression. Consistent with that, Sani et al. (2010) studied a sample of guards in an Italian prison and found that higher levels of identification with the group of prison guards led to lower levels of psychiatric disturbance and perceived

stress, while Haslam et al. (2005) studied professional groups exposed to high levels of stress, such as bomb disposal officers, and found that greater group identification predicted lower perceived stress.

In the light of these findings, it becomes legitimate to wonder how group identification and social contact compare as predictors of mental health. In our opinion, this question has theoretical implications for a broad range of disciplines (e.g., social epidemiology, sociology, health and clinical psychology) and therefore deserves to be addressed.

The objective of this paper is to address this question. Our hypothesis is that group identification predicts mental health better than social contact. This is because group identification invariably facilitates positive social relationships and interactions, and it affords meaning, structure and stability. On the other hand, social contact does not necessarily imply positive affect; in fact, in some circumstances social contact may be a source of negative affect (Rook, 1984), and therefore it may be detrimental to health. For instance, Hooley (2004) found that contact and interactions with family members characterized by high levels of criticism, hostility, and emotional over-involvement led to increased risk of relapse in patients with schizophrenia and mood disorders, and to less favourable treatment outcomes for patients with anxiety and post-traumatic stress disorder.

This paper presents two studies testing our hypotheses. In the first study, we tested the predictions with reference to the family group. That is, we assessed both contact with individual members of the family group and family identification, and then assessed the effects of each variable on mental health. The family group was considered ideal for the investigation of the effects of social contact and group identification on health because the impact of families on people's mental health is well-documented (Elliott & Umberson, 2004).

Study 1

Method

Participants and Procedure

A sample of 194 Polish people (85 males, 109 females; mean age = 34 years, range: 18-70 years) were recruited from the general public. Of these, 100 lived in the UK and 94 in Poland. We used these two sub-samples to assess the possibility that contact with family members and family identification might impact on mental health differently, depending on whether people are based in their own country of origin or whether they are migrants. Both sub-samples were selected using a snowball sampling approach. Participants completed a questionnaire with the aid of a researcher.

Measures

To measure *family identification* we used an adapted version of the 4 item scale of group identification by Doosje et al. (1995). Items (e.g. "I identify with other members of my family") were rated using a scale ranging from 1 ('I totally disagree') to 7 ('I totally agree').

Social contact within the family was measured by using the specific section of the Social Network Index (SNI; Cohen et al., 1997) concerned with interactions with family members. More specifically, we asked participants if they were married, and how many children, parents, in-laws, and relatives they were seeing or talking to on the telephone at least once every two weeks. We assigned one point when the participant was married, and one point for every child, parent, and in-law that the participant declared to see or talk to on the telephone. Concerning relatives, we assigned one point if the participant specified that he or she saw or talked to one of them, two points if participants said to be seeing or talking to either two, three or four of them, and three points if the participant were seeing or talking to five or more of them.

To assess mental health we used three different indicators. First, we assessed *depression* using the 20-item Centre for Epidemiological Studies Depression Scale (CESD) (Radloff, 1977). Respondents specify how often they had felt or behaved in a certain way during the

previous week (e.g., "I had crying spells"), using a scale ranging from 1 ('rarely or none of the time') to 4 ('most of the time'). Second, we used the *Satisfaction with Life* (SWL) scale by Diener et al. (1985). This is a 5-item scale of global cognitive judgment about one's life (e.g., "In most ways my life is close to my ideal"). Respondents specify their degree of disagreement or agreement (1=strongly disagree, 7=strongly agree) with each item. Our third mental health indicator was the *Perceived Stress Scale* (PSS) (Cohen, Kamarck, & Mermelstein, 1983), a 10-item instrument tapping into one's ability to feel in control of emotions and everyday problems. Items concern questions about specific feelings and situations that one may have experienced in the last month (e.g., "In the last month, how often have you felt that you were unable to control the important things in your life?"). Participants respond using a scale ranging from 0 ('never') to 4 ('very often').

Finally, we assessed two variables to be used as controls in the statistical analyses: *age* and *level of education*. Concerning education, we assigned the score 1 to participants with less than an undergraduate degree, 2 to participants pursuing or having achieved an undergraduate degree, and 3 to participants pursuing of having achieved a postgraduate degree. This was used as a continuous variable in the analyses.

Results

Only results for the overall sample are reported because analyses conducted separately for sub-samples (i.e., the two gender groups, and the Poland and UK groups) produced very similar results.

Descriptives, reliabilities, and inter-correlations

Means, standard deviations, and reliabilities (where applicable) for all the variables as well as the inter-correlations among the variables, are reported in Table 1a.

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Table 1a

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Measurement instruments had good reliabilities, with Cronbach alphas ranging from .85 to .91. Family identification was significantly correlated with depression (r = -.46), satisfaction with life (r = .43), and stress (r = -.33). Social contact was significantly correlated with depression (r = -.22) and satisfaction with life (r = .26). Also, family identification and social contact were significantly correlated with each other (r = .34). It should also be noted that education was significantly correlated with all three mental health indicators, with coefficients being in the high .20s and low 30s.

Regression analysis

To test our hypothesis that mental health is better predicted by family identification than by mere contact with family members, we assessed the unique effects that either family identification or social contact exerted on the mental health indicators, using multiple regression. Specifically, we performed three multiple regressions each including group identification, social contact, and two control variables (education and age) as predictors. Each regression used a particular mental health indicator (either depression, satisfaction with life, or stress) as outcome. Tables 1b, c, and d report the results.

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Tables 1b, c, and d

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Family identification had significant effects on all three health outcomes; betas were -.41, .38, and -.24 respectively when depression, satisfaction with life, and stress were used as outcomes. On the other hand, social contact had a significant effect only on satisfaction with life (β = .16). Among the control variables, education had a significant effect on all three health outcomes too, with betas being -.17, .17, and -.24 respectively when depression, satisfaction with life, and stress were used as outcomes.

Discussion

These results confirm that family identification is more beneficial to mental health than merely having contact with family members. The strength of the effects exerted by family

identification is particularly striking, especially when considering that the effects of education and age – two variables that were substantially correlated with both family identification and mental health indicators - were partialled out.

It could be argued, however, that these findings are especially applicable to the family group, because of the particularly high degree of meaning that people tend to attach to the family, irrespective of how much contact people have with family members. In order to assess this possibility, we replicated this study using an army unit, a type of group that places great importance on working together and on contact between group members.

Study 2

Method

Participants and Procedure

One-hundred-and-fifty members of an army unit (102 males, 48 females; mean age: 39 years; age range: 25-56 years) from a European country volunteered to participate in the study. Participants completed a questionnaire individually at their leisure.

Measures

To assess *army identification*, we used an adaptation of the 14-item scale of group identification developed by Leach et al. (2008), which is based on two sub-scales. One subscale concerns group-based self-investment, that is the extent to which one is pleased to be a member of the group and sees it as important to the self (e.g., "I am glad to be a member of this Army"). The other subscale concerns group-based self-definition, which refers to the degree to which the self is perceived as sharing characteristics in common with other in-group members (e.g., "I have a lot in common with the average member of this Army"). Participants rated items using a scale ranging from 1 ('I totally disagree') to 7 ('I totally agree'). In our analyses we focussed on scores on the scale as a whole.

To measure *social contact* within the army unit we created a new instrument that, in our opinion, captures the intensity of social contact within this type of group more adequately than a SNI-type instrument (which is what we used in our previous study). This scale was

based on three questions, respectively asking the participant about (i) the number of different members of the army with whom he or she has a face-to-face conversation on a single day, (ii) the number of different members of the army with whom he or she has a telephone conversation on a single day, and (iii) the number of social events related to the army (parties, reunions, sports events, dinners, picnics, excursions, gatherings, etc.) attended in an average month.

As far as mental health is concerned, we used three indicators. First, we assessed *depression* using the Beck Depression Inventory II (BDI II) (Beck, Steer, & Brown, 1996). This is a 21-item measure that is commonly used as a screening instrument of depressive symptoms in normal populations. Items tap into several dimensions (e.g., sadness, loss of pleasure, worthlessness, pessimism, and suicidal thoughts) and are responded to on 0-3 scale where higher scores indicate higher severity of symptoms. Second, we assessed *satisfaction with life* using the scale by Diener et al. (1985) that we had also used in Study 1. Third, we assessed *job satisfaction* by asking participants to specify their disagreement or agreement with two items (e.g., "I find my profession enjoyable") on a 7-point scale ranging from 1 ('I totally disagree') to 7 ('I totally agree').

Concerning the control variables, we assessed *age* and an indicator of status, namely *rank* within the Army. We opted for rank instead of a more traditional socio-economic status indicator such as education because participants in this sample have very similar degrees of education. Also, rank is an important control variable because status within specific professions and organisations is known to have effects on health (Marmot 2004). Rank was assessed by assigning participants a number ranging from 1 to 12, with each number corresponding to a specific rank; higher numbers indicated higher ranks (e.g., 1= Sergeant; 12=Colonel). This was used as a continuous variable in the analyses.

Results

Analyses conducted separately for the two gender groups produced very similar results; therefore we report results only for the overall sample.

Descriptives, reliabilities, and inter-correlations

Table 2a shows the means, standard deviations, and reliabilities (where applicable) for all the variables as well as the inter-correlations among the variables. (Note that, to calculate the overall score for social contact, we standardised scores on the three items and then added these scores together.)

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Table 2a

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The measures had good reliability, with Cronbach alphas ranging from .86 to .90, and the two job satisfaction items being substantially correlated (r = .51). Army identification was significantly correlated with all mental health indicators; correlation with satisfaction with life (r = .47) and job satisfaction (r = .59) were especially high. Social contact was significantly correlated only with job satisfaction (r = .25) among the three mental health indicators. However, social contact was correlated significantly with both rank (r = .21) and age (r = .20). This is presumably because older, higher ranking people are involved in a higher number of interactions and conversation aimed at coordinating activities, and are under stronger obligations to attend group events. Concerning the relationship between army identification and social contact, a significant but relatively modest correlation was observed (r = .19).

Regression analysis

Multiple regression analyses were performed in order to assess the unique effects of either army identification or social contact on mental health indicators. Specifically, we conducted three multiple regressions. In each regression we entered not only army identification and social contact, but also rank and age as predictors. Each regression used a different mental health indicator (either depression, satisfaction with life, or job satisfaction) as outcome. Results are reported in Tables 2b, c, and d.

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Tables 2b, c, and d

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Army identification had significant unique effects on all three mental health outcomes; impact on both satisfaction with life (β = .46) and job satisfaction (β = .55) was remarkable. On the other hand, social contact had a significant, albeit relatively modest impact only on job satisfaction (β = .16). Rank and age had no significant impact on any mental health outcome.

Discussion

These results are consistent with those of the previous study, and confirm that subjective identification with a group has stronger implications for mental health than mere contact with other members of the group.

General Discussion

Across two studies involving two different social groups (i.e., the family and an army unit) we found that, in line with expectations, measures of group identification are better than traditional measures of social integration based on social contact (i.e., intensity of interactions with group members and participation in group-related activities) at predicting mental health.

These findings have methodological and theoretical implications for research on social integration and mental health. At the methodological level, these findings demonstrate the necessity to include measures of group identification among the indicators of social integration. To be precise, occasionally researchers have acknowledged that social integration is about both concrete involvement with other network members and the way the network is subjectively experienced (e.g., Brissette, Cohen, & Seeman, 2000). Unfortunately, however, the subjective dimension is almost always ignored in empirical research about social integration and mental health. Group identification is an ideal indicator of this subjective dimension, as it is based on how the group is perceived and experienced, especially in terms of its relationship to the self (Jetten, Haslam, & Haslam, 2012).

At a theoretical level, our findings strengthen social identity researchers' contention that group identification is a central construct for the explanation of how social integration leads to health (Haslam et al., 2008). These researches argue that group identification affords a sense of structure and meaning, and that it constitutes a precondition for positive social relationships based on trust, support, and respect; as a consequence, group identification is believed to pave the way for positive mental states and health. We believe that the strong effects of group identification on mental health that has emerged from our studies can be explained by such theoretical assumption.

Obviously, our studies are not without limitations. In particular, they are based on a cross-sectional design, which limits our ability to speculate about causal paths. Therefore, our data alone cannot demonstrate that it is group identification that leads to poor mental health, rather than the opposite. Future research should seek confirmation that this is indeed the case, using experimental and longitudinal studies. It should be noted, however, that existing research on the effects of social integration on mental health (Cohen et al., 1997) and on the effects of group identification on mental health (Reicher & Haslam, 1996) has convincingly showed that social ties and group life have substantial causal impact on mental health, thereby making our interpretation of the results of this study plausible and theoretically grounded.

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Table 1a

Means, Standard Deviations and Reliabilities for Variables, and Intercorrelations in Study 1

Variable	1	2	3	4	5	6	7
1. Family Identification (M = 6.00; SD = 1.13; α = .91)	_						
2. Social Contact (M = 5.06; SD = 1.95)	.34**	_					
3. Depression (M = 1.72; SD = .52; α = .85)	-.46**	-.22**	_				
4. Satisfaction with Life (M = 4.62; SD = 1.16; α = .88)	.43**	.26**	-.61**	_			
5. Stress (M = 1.72; SD = .70; α = .85)	-.33**	-.10	.69**	-.46**	_		
6. Education (M = 1.85; SD = .77)	.33**	.13	-.30**	.31**	-.28**	_	
7. Age (M = 30.83; SD = 11.55)	.27**	.39	-.07	.08	-.06	.16*	_

Note: ** $p < .01$; * $p < .05$

Table 1b

Summary of Multiple Regression Analysis for Variables Predicting Depression in Study 1

	B	SE	β	
Constant	3.11	.22		
Family Identification	-.20	.04	-.41**	
Social Contact	-.03	.02	-.11	
Education	-.11	.05	-.17*	
Age	.00	.00	.12	
R^2				.26

Note: ** $p < .01$; * $p < .05$

Table 1c

Summary of Multiple Regression Analysis for Variables Predicting Satisfaction with Life in Study 1

	B	SE	β	
Constant	1.80	.46		
Family Identification	.39	.08	.38**	
Social Contact	.10	.05	.16*	
Education	.24	.11	.17*	
Age	-.01	.00	-.15	
R^2				.26

Note: ** $p < .01$; * $p < .05$

Table 1d

Summary of Multiple Regression Analysis for Variables Predicting Stress in Study 1

	B	SE	β	
Constant	2.95	.31		
Family Identification	-.16	.06	-.24**	
Social Contact	-.01	.03	-.03	
Education	-.22	.07	-.24**	
Age	.01	.01	.09	
R^2				.15

Note: ** $p < .01$; * $p < .05$

Table 2a

Means, Standard Deviations and Reliabilities for Variables, and Intercorrelations in Study 2

Variable	1	2	3	4	5	6	7
1. Army Identification (M = 5.39; SD = .74; α = .90)	_						
2. Social Contact (M = 0.03; SD = 2.17)	.19*	_					
3. Depression (M = 3.80; SD = 4.58; α = .86)	.-.18*	-.05	_				
4. Satisfaction with Life (M = 4.91; SD = 1.06; α = .86)	.47**	.12	-.33**	_			
5. Job satisfaction (M = 5.68; SD = .82; *r* = .51)	.59**	.25**	-.25**	.53**	_		
6. Rank (M = 7.49; SD = 3.28)	.06	.21*	-.01	.12	.00	_	
7. Age (M = 39.11; SD = 6.97)	-.06	.20*	.12	-.06	-.13	.48**	_

Note: ** $p < .01$; * $p < .05$

Table 2b

Summary of Multiple Regression Analysis for Variables Predicting Depression in Study 2

	B	SE	*β*	
Constant	6.63	3.98		
Army Identification	-1.13	.56	-.18*	
Social Contact	-.08	.20	-.03	
Rank	-.13	.15	-.09	
Age	.11	.07	.17	
R^2				.06

Note: ** $p < .01$; * $p < .05$

Table 2c

Summary of Multiple Regression Analysis for Variables Predicting Satisfaction with Life in Study 2

	B	SE	β	
Constant	1.57	.80		
Army Identification	.68	.11	.46**	
Social Contact	.01	.04	.02	
Rank	.04	.03	.13	
Age	-.02	.01	-.11	
R^2				.24

Note: ** $p < .01$; * $p < .05$

Table 2d

Summary of Multiple Regression Analysis for Variables Predicting Job Satisfaction in Study 2

	B	SE	β	
Constant	3.00	.56		
Army Identification	.61	.08	.55**	
Social Contact	.06	.03	.16*	
Rank	.00	.02	.00	
Age	-.02	.00	-.14	
R^2				.38

Note: ** $p < .01$; * $p < .05$

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