# POST PRINT VERSION

Personality and the 'Social Cure': The Role of Ego-Resiliency in the Social Identity

Approach to Health

\*Emanuele Fino<sup>1</sup>, Clifford Stevenson<sup>2</sup>, Sarah Morris<sup>2</sup>, Eerika Finell<sup>3</sup>, Ian Shuttleworth<sup>1</sup> & Thor Bjarnason<sup>4</sup>

<sup>1</sup> Queens University Belfast

<sup>2</sup> Nottingham Trent University

<sup>3</sup>University of Eastern Finland

<sup>4</sup>University of Helsinki

\*Corresponding Author: Emanuele Fino, School of Psychology, Queen's University Belfast UK. Email: e.fino@qub.ac.uk

**To cite: Fino, E., Stevenson, C., Morris, S., Finell, E., Shuttleworth I., & Bjarnason T.** (forthcoming). Personality and the 'Social Cure': The Role of Ego-Resiliency in the Social Identity Approach to Health. *Social Psychological and Personality Science*.

# Personality and the 'Social Cure': The Role of Ego-Resiliency in the Social Identity Approach to Health

# Abstract

This work integrates personality theory with the Social Identity Approach to Health (SIAH), examining the interplay between personality, local community group identification, perceived support, and wellbeing. Three studies investigated: (i) latent personality profiles based on the Five Factor Model (N = 49,692); (ii) the relationships between local community identification, perceived support, and wellbeing across personality profiles (N = 1,254); (iii) whether perceived support moderates the indirect effect of salient personal vs. local community group identities on wellbeing through support (N = 167). Study 1 identified two profiles, respectively high vs. low ego-resilient. Study 2 found no moderation but positive associations among local community identification, support, and wellbeing. Study 3 found no moderated mediation, though the high ego-resilient reported greater perceived support when personal vs. local community group identity as salient. These findings advance theoretical integration and inform community based intervention by addressing the role of personality in the SIAH.

#### Introduction

Social identity, the aspect of self-concept derived from group memberships (Tajfel & Turner, 1979), is a key psychological resource that influences individuals' mental and physical health (Haslam et al., 2018, 2021). Group-based interventions that target social identity have been shown to reduce loneliness, anxiety, and depression across vulnerable populations (Charles et al., 2023; Cruwys et al., 2022; Stevenson et al., 2020). These include community-based interventions focused on community and neighbourhood identifications (Charles et al., 2023; McNamara et al., 2021; Stevenson et al., 2020), and despite conceptual differences between the two, findings concur on the protective and cumulative effect of local group identities upon loneliness, stress, and wellbeing (Charles et al., 2023; Haslam et al., 2024; McNamara et al., 2021; Stevenson et al., 2020).

Social Identity Theory (Tajfel & Turner, 1979) provides a theoretical explanation for these effects. Tajfel's (1978) early work defined social identity as a stable, trait-like perception that stems from individuals' awareness of belonging to one or more groups, along with the personal significance and emotional value that they associate to those memberships (Tajfel, 1981). Later, Turner et al.'s (1987) reconceptualised it as situationally contingent, through the lenses of Social Categorisation Theory. This posits that contextual cues can make different identities more or less salient, and as a consequence, affect the readiness of individuals to adopt or shift specific social categories at a given time (Haslam et al., 1999). When social, rather than personal identities are salient, individuals are more likely to define themselves as group members by integrating group stereotypes into their self-concept (Tajfel & Turner, 1987), prioritise group norms over personal standards, and regulate behaviours to align with the salient identities (Reynolds & Turner, 2006). Consistently, social identity research typically combines survey-based assessments and experimental manipulations, aiming to capture the spectrum of social identity dynamics, addressing both trait-like and situationally contingent manifestations and their relationships with other psychological processes and outcomes (Hornsey, 2008).

More recently, the Social Identity Approach to Health (SIAH; Haslam et al., 2018) has framed and evidenced the role of community identity wellbeing in terms of a 'social cure' (Jetten et al., 2011), highlighting its impact on individuals' adjustment, coping, and resilience. Specifically, findings from both survey-based and experimental research have shown that identifying with local communities and community groups unlocks key psychological resources, primarily perceived group support (Junker et al., 2019; McNamara et al., 2021). In turn, this influences stress appraisal processes, helping individuals cope more effectively with potential threats by fulfilling their needs for belonging, meaning, and selfworth (Greenaway et al., 2016; Haslam et al., 2004, 2005).

However, individuals differ in the extent to which they would typically prioritise personal vs. group identities, with personality playing a major role in regulating this balance (Tamir & Nadler, 2007; Witkin & Goodenough, 1981). In this regard, evidence suggests that perceptions of autonomy, conformity, and social engagement within group settings vary according to individuals' levels of positive affect and emotional expressiveness (extraversion, emotional stability), openness and commitment to establish and maintain interpersonal interactions (openness, extraversion, agreeableness), and goal orientation (conscientiousness; Olesen, 2011; Vukasović Hlupić et al., 2023). Nevertheless, the interplay between SIAH dynamics and personality has thus far been examined in a fragmented manner, largely due to the historical divide between research traditions (Hogg, 2008; Tamir & Nadler, 2007), with personality often treated in SIAH research as a control variable to account for confounding effects on group identity processes (Steffens et al., 2016). Despite this fragmentation, there is substantial evidence that when personality and group characteristics align, group identification processes are enhanced (Bizumic et al., 2012; Ellemers et al., 1999; Spears et al., 1997). For example, congruent personal and group goals were found to influence individuals' tendencies to join local community groups (Stuart et al., 2022), fulfil their needs (Greenaway et al., 2016), ultimately shaping identity processes over time (Bizumic et al., 2012).

Furthermore, personality theory has evolved significantly over the last two decades. Traditional formulations, often criticised for their static and deterministic perspectives on human behaviour (Bandura, 1999; Hogg, 2008), have been superseded by more dynamic frameworks that emphasise the interplay between personality traits, states, and goals (Di Sarno et al., 2021). This shift presents a clear opportunity to bridge the gap between SIAH and personality research. Indeed, research can offer a more nuanced understanding of how individual differences shape and are shaped by salient community identity processes, including perceptions of group support, ultimately enriching both fields. In fact, studies evidenced stable individual differences in perceptions of available support in the locale, with adaptive personality configurations being associated with greater perceived support and helpseeking behaviour (Barańczuk, 2019; Swickert et al., 2010; Udayar et al., 2020). Building upon this evidence, the present study tested an integrative model of personality and SIAH dynamics, hypothesising that an adaptive personality structure would not only provide protection from external stressors, but also help individuals harness key psychological resources through community identification processes, such as perceived support, to enhance their wellbeing.

## Person-centred Models of Personality

The Five-Factor Model (FFM) of personality (Goldberg, 1981; John & Srivastava, 1999; McCrae & Costa., 1987) conceptualises personality structure through five broad traits, defined as consistent patterns of thought, emotion, and behaviour, namely, emotional stability, extraversion, openness, agreeableness, and conscientiousness. Person-centred FFM models have typically derived sets of discrete profiles underlying two dynamic functions of ego-resiliency and self-control (Fisher & Robie, 2019; Yin et al., 2021). Ego-resiliency enables flexible adaptation, while ego-control regulates behaviour (Block & Block, 1980). Optimal psychological functioning is associated with a balance between the two, specifically in terms of adjustment, positive social interactions, and life satisfaction (DeYoung, 2010; Rossi et al., 2021, Yin et al., 2021). This framework presents several theoretical and applied advantages. First, it is based on evolutionary theory, linking personality to life history strategies and principles that favour the selection of adaptive trait configurations (Montag & Panksepp, 2017; van der Linden et al., 2016, 2024). Second, it offers a parsimonious personcentred FFM solution associated with variations in ego-resiliency and control, which in turn, were found to be linked with social effectiveness (Dunkel et al., 2021; van der Linden et al., 2016). Third, it emphasises individuals' ability to exploit local resources and maintain optimal levels of health and wellbeing (Block, 1965; Dunkel et al., 2021).

Although the original model by Block and Block (1980) considered three profiles (resilient, overcontrolled, undercontrolled), recent meta-analyses have pointed out variations in the number of profiles identified across the FFM literature (see Fisher & Robie, 2019; Yin et al., 2021). Several studies have consistently reported on at least one profile that presents higher scores across all FFM traits, indicating high ego-resiliency, and one or more additional profiles characterised by various combinations of low to mid-level trait scores, representing variations in the interplay of ego-resiliency and ego-control. The present work goes further by integrating this theoretical framework with the SIAH literature, hypothesising that FFMderived profiles would not only represent differences in individuals' ability to cope with stress, but also and specifically their capacity to dynamically harness psychological resources available in their local community and groups within it, and use them to enhance their wellbeing.

# **Research plan and aims**

The present research builds upon the hypothesis that personality would moderate the indirect effect of community identity on wellbeing through perceived community support (Figure 1).

# [Figure 1: About Here]

The work is structured in three studies. Study 1 modelled data from a large representative sample of UK residents to derive a person-centred model FFM model. This solution was expected to primarily capture variations in ego-resiliency, with at least one profile characterised by high scores across all FFM traits (high ego-resilient). Differences in individual functioning were hypothesised between this profile and the others identified profiles (H1). Study 2 examined differences in the paths linking community identity, perceived support, and wellbeing. Specifically, based on previous research on the impact of personality on support perception and uptake (Bizumic et al., 2012; Ellemers et al., 1999; Spears et al., 1997), and literature on the role of community identity on perceptions of support and wellbeing (Junker et al., 2019; McNamara et al., 2021), those with a high egoresilient profile were expected to show comparatively greater associations between community identity and support (H2a) and between support and wellbeing (H2b). Study 3 adapted the model to incorporate an experimental manipulation from Haslam et al. (2016) and provide more robust evidence of the impact of personality on SIAH processes. The study tested the hypothesis that the personality profiles predicted from Study 1 would moderate the indirect effect of perceived support between salient type of identity (personal vs. community) group) and wellbeing. Specifically, the hypothesis considered the effect of community group rather than personal identity to be mediated (H3i), further expecting greater indirect effects in the high resilient vs. the other profiles, in line with literature suggesting a link between egoresiliency and social effectiveness (Dunkel et al., 2021; van der Linden et al., 2016). Lastly,

Study 3 explored whether personality would moderate between salient community group identity and support (H3a), support and wellbeing (H3b), and salient community group identity and wellbeing (H3c).

# Study 1 – Methods

## **Participants and Procedure**

Study 1 used data from *Understanding Society* (University of Essex, Institute for Social and Economic Research, 2022), a longitudinal survey launched in 2009 to track social and economic trends in the UK, using a representative sample by region, age, education, and social background. Although the dataset includes 13 annual waves, the present study focuses on cross-sectional data from Wave 3 (January 2011-July 2013), the only wave including the measures of interest. Data were collected via telephone and computer-assisted personal interviews. The sample includes 49,692 residents: 26,924 women (54.18%) and 22,768 men (45.82%), aged 15-103 ( $M_{age} = 47.14$ ,  $SD_{age} = 18.51$ ).

#### Measures

Fifteen items from the Big Five Inventory (BFI; John & Srivastava, 1999) measured FFM traits. Participants rated items on a 1-7 scale (*does not apply to me at all-applies to me perfectly*). SF-12 Mental Component Summary scores (Ware et al., 2001) were used to validate the latent profiles identified through LPA, assuming higher individual functioning in the high ego-resilient profile across four sub-dimensions: Mental health, vitality, social, and emotional functioning (Table 1).

#### [Table 1: About Here]

#### Analytical Plan

The study used Latent Profile Analysis (LPA; Lazarsfeld & Henry, 1968; Nylund et al., 2007). LPA models unobserved heterogeneity to derive a set of discrete profiles based on response similarities to observed variables (Muthén, 2004). Two parameterisations were

tested: (i) equal variances with covariances fixed to zero (EEI) and (ii) free variances and covariances (VVV Scrucca et al., 2016). The resulting solutions were evaluated using information criteria (AIC, BIC, SABIC), entropy, classification probabilities, visual inspection, and theoretical considerations (Marsh et al., 2009; Nylund et al., 2007).

# Transparency and Openness in Research

Total scores were calculated by averaging item responses. Sample size, exclusion criteria, and all methods followed JARS guidelines (Kazak, 2018). Data, code, and supplementary materials are available at

<u>https://osf.io/smy2f/?view\_only=ff7075f2162d45de93836ee7e28a92a3</u>, along with details on statistical software, tables, and figures.

# Study 1 – Results

There were 9,099 fully missing cases, one with 80%, three with 60%, six with 40%, and 39 with 20% missing data. Little's test rejected the hypothesis of data missing completely at random ( $\chi^2_{(39)}$ = 49,742.11, *p* < .001). Data with up to 50% missing were retained and imputed using the *MissForest* algorithm (Stekhoven & Bühlmann, 2012). Thirty-nine cases had 20% and six had 40% missing data imputed. Multivariate outlier detection (Mahalanobis' *D*, Alpha = .001) removed 198 cases, yielding a final sample of 40,391. Table 2 reports descriptive statistics.

## [Table 2: About Here]

The 3-profile solution under the VVV parameterisation (VVV-3; AIC = 634,651.79, BIC = 635,185.39, SABIC = 634,988.35, BRLT = 1,409.16, p = .01) showed the best fit, followed by the 2-profile solution (VVV-2; AIC = 636,018.95, BIC = 636,371.81, SABIC = 636,241.51, BLRT = 5,645.38, p = .01). VVV-2 indicated better minimum and maximum probabilities (min = .85, max = .90, entropy = .58) than VVV-3 (min = .61, max = .82, entropy = .49; Table 3).

#### [Table 3: About here]

Visual inspection confirmed that VVV-2 provided better interpretability than VVV-3, reflecting a parsimonious solution capturing contrasting poles of ego-resiliency levels: High vs. low ego-resilient personality (Figure 2).

# [Figure 2: About Here]

There were 25,559 cases (63.28%) classified as low ego-resilient, and 14,832 cases (36.72%) classified as high ego-resilient. A *t*-test confirmed greater wellbeing in the high ego-resilient ( $t_{(40,326)} = 34.44$ , p < .001, d = 0.36), assuming unequal variances ( $F_{(1, 40,326)} = 391.50$ , p < .001). These findings streamline the traditional three-profile theoretical framework (resilient, overcontrolled, undercontrolled Block & Block, 1980) into a two-profile solution, capturing opposing poles of ego-resiliency related to individuals' stability, adaptiveness, and social effectiveness, in line with evidence from recent literature (van der Linden et al., 2016). While the broadband FFM measures might have missed facet-level complexity (e.g., see Kowalski, 2001), the two-profile solution was parsimonious and highly interpretable, and it was retained for subsequent studies.

# Study 2 – Methods

# Participants and Procedure

Study 2 used secondary data from two samples ( $N_1 = 455$ ;  $N_2 = 800$ ) totalling 1,255 individuals aged  $\geq 18$ . Participants were recruited for a study on personality, community identity, and residential mobility. Inclusion criteria were residency in England (first sample) vs. birth in England with a history of residential mobility (second sample). Data were collected through *Prolific* (prolific.com), using *Qualtrics* (qualtrics.com). The study received ethical approval and funding from the first and fourth authors' institution (*Agility Fund*). Respondents were aged 18-90 (M = 41.33, SD = 13.42) including 756 (60.24%) females, 486 (38.73%) males, and 13 (1.04%) who did not report their gender.

### Material and Measures

The same BFI items from Study 1 were used for personality. Community identity was measured using an adapted version of Postmes et al.'s (2012) *Single Item Social Identity Measure* (SISI) rated 1-7 (*strongly disagree-agree*). Perceived support through an adapted version of Haslam et al.'s (2005) four-item *Social Support Scale*, with items rated 1-7 (*do not agree at all-agree completely*). General well-being was measured through the *WHO-5 Wellbeing Index* (Topp et al., 2015; World Health Organization, 1988), with items rated on a 1-5 scale (*at no time-all the time*; Table 4).

#### [Table 4: About Here]

# Analytic Approach

Study 2 used Spearman's correlations and multiple-groups structural equation modelling. MLM estimation was used to address violated multivariate normality (b1,p = 1.50, p < .001). Given the observational study design, no direct or indirect effects were hypothesised. Model fit was evaluated using AIC, RMSEA (90% CI), and CFI, comparing models with and without the grouping variable (personality profiles). Latent variables included perceived support (emotional, help, advice, resources) and wellbeing (cheerfulness, calmness, vigour, restfulness, fulfilment). Monte Carlo 95% confidence intervals were used for inference (5,000 repetitions). Personality profiles were predicted through the *predict.Mclust* function (Scrucca et al., 2016), based on the model from Study 1.

#### Study 2 – Results

Multivariate outlier detection removed one case (Mahalanobis' *D*, Alpha = .001; final N = 1,254). LPA classified 958 cases (76.40%) as low and 296 (23.60%) as high ego-resilient (Table 5).

[Table 5: About here]

Both profiles showed significant regression weights for path *a* (low resilient: *b* = 0.55,  $\beta = 0.57, 95\%$  CI [0.50, 0.61]; high resilient: *b* = 0.68,  $\beta = 0.58, 95\%$  CI [0.52, 0.82]) and path *b* (low resilient: *b* = 0.21,  $\beta = 0.26, 95\%$  CI [0.15, 0.28]; high resilient: *b* = 0.15,  $\beta = 0.23, 95\%$  CI [0.04, 0.26]), but no differences were found between profiles, thus not supporting H2a or H2b. Community identity significantly predicted wellbeing for the low resilient (*b* = 0.07,  $\beta = 0.09, 95\%$  CI [0.01, 0.13]) but not the high resilient (*b* = 0.06,  $\beta = 0.08, 95\%$  CI [-0.05, 0.18]) (Table 6).

#### [Table 6: About here]

Fit indices showed no significant improvement when accounting for personality (AIC: 30,518.81 vs. 30,590.13 for the baseline model; RMSEA: 0.09 [0.08, 0.10] vs. 0.09 [0.08, 0.09]; CFI: 0.96 vs. 0.97). It is important to note that community identity was examined as a single entity. Previous research indicates that memberships of specific community groups can have a pronounced effect on wellbeing (Charles et al., 2023; Kellezi et al., 2019), which may have been elided by examining identity as related to a single group. To address these limitations, Study 3 tested the model from Study 2 after incorporating a manipulation of identity to better unpack its causal effects on perceived support and wellbeing, focusing on local community group identity in contrast to personal identity. Furthermore, it tested the moderating role of personality profiles in the indirect effect of support on the path between type of identity and wellbeing.

#### Study 3 – Methods

# Participants and Procedure

Study 3 recruited 167 UK adults (aged 18-70, M = 42.19, SD = 13.09) through Prolific, including 91 females (54.49%) and 76 males (45.51%). Participants completed a 15minute online questionnaire using Qualtrics. Inclusion criteria were being  $\geq$  18, UK residents and fluent in English. The study received ethics approval from the faculty ethics committee of the second and third authors.

#### Material and Measures

The manipulation of salient personal vs. community group identity was adapted from Haslam et al. (2016) and involved four steps: (i) participants identified a meaningful local community group; (ii) were randomly assigned to reflect on either themselves as *individuals* vs. their *community group*; (iii) selected traits describing themselves or their community group from a list of 84; and (iv) completed three self-reported items on ease of trait selection, expected agreement with other group members, and importance of personal or community group traits. Participants then rated the importance of belonging to a community group on a 1-9 scale (*not at all-very much*).

Individual wellbeing was measured using the UK ONS-4 (Dolan & Metcalfe, 2012), summarising facets of life satisfaction, sense of purpose, happiness, and anxiety on a 0-10 scale (*not at all-completely*). Personality was measured using the 60-item BFI-2 (Soto & John, 2017), a more comprehensive version of the measure used in Studies 1 and 2. Perceived support was assessed using the same measure as in Study 2 (Haslam et al., 2005), while the SISI (Postmes et al., 2012) served as a manipulation check (Table 7).

[Table 7: About Here]

# Analytical Plan

Study 3 employed the same methods as Study 2, including MLM estimation for violated multivariate normality ( $b_{I,p} = 6.57$ , p < .001).

#### Study 3 – Results

Two outliers were removed. A one-tailed *t*-test (equal variances assumed) showed significant differences in SISI scores ( $F_{(1, 163)} = 0.02$ , p = .877), with lower scores for personal

vs. community group identity ( $t_{(139.39)} = -1.69$ , p = .046). LPA classified 46 participants (27.88%) as high- and 119 (72.12%) as low ego-resilient Table 7 reports descriptive statistics.

# [Table 8: About here]

Path analysis found no moderated mediation (H3i), indirect effects, or significant differences between paths, not supporting H3a, H3b, or H3c. For path *a*, the high egoresilient showed significantly higher support in personal vs. community group identity conditions (b = 1.03,  $\beta = 0.32$ , 95% CI [0.10, 1.92]), while low ego-resilient participants did not (b = 0.19,  $\beta = 0.07$ , 95% CI [-0.37, 0.75]). Both profiles showed positive *b* paths (high: b = 0.24,  $\beta = 0.30$ , 95% CI [0.01, 0.47]; low: b = 0.54,  $\beta = 0.36$ , 95% CI [0.27, 0.81]) (Table 8). Although the interaction plot displayed higher wellbeing at below-average support levels for the low ego-resilient and at above-average support levels for the high ego-resilient, those differences were not significant (Figure 3).

# [Figure 3: About Here]

[Table 9: About here]

The multiple-groups model showed better fit (AIC = 4617.85, CFI = 0.98) compared to the baseline model (AIC = 4679.77, CFI = 0.96), except for the RMSEA, which was only slightly higher for the multiple-groups model (0.10, 95% CI [0.07, 0.13] vs. 0.07, 95% CI [0.03, 0.10]). These results outline distinct pathways linking different types of salient identity and perceived support across personality profiles, especially the link between different types of identity and support. These variations in ego-resiliency may influence individuals' readiness to use these perceptions of support to satisfy their personal needs, supporting previous findings on the links between identity and needs satisfaction (Haslam et al., 2018). These findings further characterise these links in terms of the dynamic interplay between personality and different types of salient identities in shaping individuals' perceptions of support.

#### **General Discussion**

This work integrates personality theory and SIAH by clarifying their complex interplay upon well-being. Study 1 used a person-centred approach to model unobserved heterogeneity in FFM responses. A large, representative UK sample yielded a parsimonious two-profile solution, reflecting low and high ego-resiliency, consistent with established personality theory (Block & Block, 1980; Dunkel et al., 2021; van der Linden et al., 2016). Study 2 found positive relationships in both profiles from community identity to perceived support and from support to well-being, confirming the theoretical and empirical foundations of SIAH (Haslam et al., 2018; Junker et al., 2019; McNamara et al., 2021; Stevenson et al., 2020). Lastly, Study 3 tested the model from Study 2 after incorporating a manipulation of salient personal vs. community group identity and examined ego-resiliency's moderating role in the indirect effect of identity on well-being via support. No moderated mediation or indirect effects were found. However, highly ego-resilient individuals reported greater perceived support in the personal identity condition than in the community group identity condition.

These results suggest that individual differences in personality may regulate the impact of different types of salient identities on perceptions of support. In other words, personality may influence the extent to which individuals perceive support as available, depending on the type of identity that is salient at a given time. Indeed, variations in egoresiliency may shape individuals' readiness to use these perceptions to satisfy their needs, supporting previous findings linking social identity, personality, and needs satisfaction (Greenaway et al., 2016). Furthermore, the relationship between perceived support and wellbeing was replicated across two studies, in line with research showing that perceived support can enhance individuals' sense of control, esteem, meaning and belonging (Greenaway et al., 2016) and optimise stress appraisal (Haslam et al., 2021).

#### ADDIN ZOTERO\_ITEM CSL\_CITATION

{"citationID":"0fAl3Z8b","properties":{"formattedCitation":"(Olesen, 2011; Vukasovi\\uc0\\u263{} Hlupi\\uc0\\u263{} et al., 2023)","plainCitation":"(Olesen, 2011; Vukasović Hlupić et al.,

2023)", "noteIndex":0}, "citationItems":[{"id":6606, "uris":["http://zotero.org/users/1232227/it ems/WB6FNEJJ"], "itemData": {"id":6606, "type": "article-journal", "abstract": "This study examines overlaps and distinctions between concepts of individual differences in the fivefactor model and self-determination theory. Participants were 223 Danish adults (age M=43.74; 60.09% women) originating in a national probability sample. Participants completed questionnaires of personality traits (NEO-FFI) and general causality orientations (GCOS). Distinct and overlapping latent models were tested using structural equation modeling, statistical re-sampling, and confirmatory factor analysis. Results indicate that all three causality orientations are distinct from but related to traits. From a perspective of integrative personality psychology, general causality orientations can be conceived of as characteristic adaptations.", "collection-title":"Digit Ratio (2D:4D) and Individual Differences Research", "container-title":"Personality and Individual

Differences", "DOI": "10.1016/j.paid.2011.04.015", "ISSN": "0191-

8869", "issue": "4", "journalAbbreviation": "Personality and Individual

Differences", "page": "460-465", "source": "ScienceDirect", "title": "General causality

orientations are distinct from but related to dispositional

traits","volume":"51","author":[{"family":"Olesen","given":"Martin

Hammershøj"}],"issued":{"date-

parts":[["2011",9,1]]}}},{"id":6609,"uris":["http://zotero.org/users/1232227/items/LLQ4NZI E"],"itemData":{"id":6609,"type":"article-journal","abstract":"The aim of this meta-analysis was to systematize available empirical findings in the field of basic psychological needs and personality traits overlap. Study eligibility criteria were: three basic psychological needs defined within Self-Determination Theory (autonomy, competence, relatedness), Five-factor model/Big Five model of personality traits, self-reported data, essential statistical indicators, and independent samples. The final sample included 16 primary studies, 17 independent samples, with 206 independent effect sizes representing more than 10 500 participants. Fifteen independent meta-analysis were performed resulting in 15 statistically significant, small to moderate in size, correlation coefficients between needs and traits. All three needs (autonomy, competence, relatedness) had negative correlations with neuroticism, and positive correlations with extraversion, openness, agreeableness, and conscientiousness. Multiple publication bias indicators left this conclusion unaltered. Due to a relatively small number of primary studies, additional moderator analyses were not performed even though a large amount of heterogeneity was identified. This study is the first to empirically summarize and calculate the existing overlap between constructs from two theoretical perspectives of individual differences.", "container-title": "Current Psychology", "DOI": "10.1007/s12144-022-04158-9","ISSN":"1936-4733","issue":"35","journalAbbreviation":"Curr Psychol", "language": "en", "page": "31559-31578", "source": "Springer Link", "title": "The relationship between three basic psychological needs and big five personality traits: A metaanalysis", "title-short": "The relationship between three basic psychological needs and big five personality traits", "volume": "42", "author": [{"family": "Vukasović Hlupić", "given": "Tena"}, {"family": "Butković", "given": "Ana"}, {"family": "Pocrnić", "given": "Martina"},{"family":"Bratko","given":"Denis"}],"issued":{"dateparts":[["2023",12,1]]}}],"schema":"https://github.com/citation-stylelanguage/schema/raw/master/csl-citation.json"} (Olesen, 2011; Vukasović Hlupić et al., 2023)Moreover, ego-resiliency was linked to lower perceived support when community identity was salient and higher support when personal identity was, though these effects were

not statistically significant. If replicated, this pattern may suggest that individuals high in positive affect, emotional expressiveness, openness to social interaction, and goal orientation experience greater fulfilment of autonomy, competence, and relatedness needs, regardless of group identifications (Montag & Panksepp, 2017; Olesen, 2011; Vukasović Hlupić et al., 2023). Previous research also found higher normative trait scores in association with stable internal working models and interpersonal security (Iliceto et al., 2016, 2020), which may explain greater perceived support in the personal identity condition. Additionally, egoresilient individuals, being socially competent and attuned to interpersonal dynamics, may develop higher expectations for meaningful interactions (Taylor et al., 2014). Conversely, low ego-resilient individuals may be more sensitive to social exclusion, heightening perceptions of a lack of support (Abrams et al., 2005). However, these results do not rule out the possibility that community identity fosters other psychological resources, such as belonging (Greenaway et al., 2016) or social connectedness (Mehrpour et al., 2024), which traditional support measures do not capture. Interestingly, the path from support to well-being was positive for both profiles, with no differences between them, and this result was replicated across studies. However, Study 3 found no mediation, suggesting that perceived support only partly explains the link between group identification and well-being, consistent with previous research (Kellezi et al., 2019; McNamara et al., 2021). Future studies should use larger samples to detect smaller effects and, importantly, designs that randomise both predictors and mediators.

The main originality and innovation of this work lie in establishing a theoretical rapprochement between personality theory and SIAH. The integrative model of personality and community identity dynamics was tested with both survey-based and experimental methods, demonstrating methodological rigour across multiple, diverse datasets. In the same vein, a key strength of the research is represented by the model's robustness, as the person-

centred approach to personality was consistently replicated across both comprehensive and brief Big Five inventories in three distinct datasets and using slightly different conceptual approaches to group identities (i.e., community and salient personal vs. community group identity). These results confirm the protective and cumulative effect of local group identity on well-being, despite conceptual differences in the definition of local groups across several studies (Charles et al., 2023; Haslam et al., 2024; McNamara et al., 2021; Stevenson et al., 2020). Likewise, findings related to the relationship between support and wellbeing were reproduced across two datasets, despite different definitions and operationalisations of wellbeing being used, specifically, those entailed by the WHO-5 (Topp et al., 2015), a measure of general wellbeing through positive emotions, and the ONS-4 (Dolan & Metcalfe, 2012), which more specifically targets life satisfaction, happiness, worthwhileness, and anxiety.

These findings also contribute to important theoretical advancements by demonstrating that personality shapes the way individuals identify with groups within their local communities and derive support from them. Grounded in evolutionary theory (Block, 1995; Block & Block, 1980; Dunkel et al., 2021; van der Linden et al., 2016, 2018, 2024) and a dynamic view of personality and social identity, the present study supports the view that personality can inform a better understanding of SIAH processes in relation to wellbeing, emphasising the importance of integrating individual differences into the SIAH framework. Such integration is not only warranted to advance our theoretical and empirical understanding of those processes, but also mutually beneficial for the development of both fields.

Research is still needed to examine how individual goals influence tendencies to join groups, identify with them, and perceive their support. Individuals high in ego-resiliency may be better equipped to regulate the impact of any salient identifications onto their self-concept, including deriving greater perceptions of support and wellbeing. This also opens to the possibility that high ego-resilient individuals are more likely to gravitate towards groups that promote individual adaptiveness and autonomy, in the first place (Postmes & Jetten, 2006). Individuals with low ego-resiliency may seek group affiliations that reinforce dependency and conformity, deriving limited benefits, and future research should explore whether, how, and to what extent matching personality with group ethos characteristics affects SIAH processes. In highly groups promoting individual autonomy and self-regulation, high egoresilient members may feel greater support and well-being than low ego-resilient members. Conversely, when a group fails to align with individual priorities, feelings of marginalisation may arise, reducing perceived access to shared resources (Bizumic et al., 2012).

The current work has limitations. As previously mentioned, different measures of community identity were used across the studies (Study 2: identification with the local community; Study 3: salient personal vs. community group identity). Although there are commonalities between these concepts, the findings would benefit from replication through research implementing targeted assessments of both. Moreover, Studies 1 and 2 did not investigate moderated mediation as they did not meet the fundamental assumptions of causal mediation analysis (Imai et al., 2010). On the other hand, Study 3 involved a randomised allocation of participants into two groups to manipulate the salience of personal vs. community group identity. It is important to note that this approach does not eliminate confounding bias and cannot address violations of sequential ignorability, requiring replication. Approaches that go beyond personality structure and employ longitudinal methods to capture their interplay with states and goals (e.g., ecological momentary assessments and intensive longitudinal designs), could also improve the understanding of the interplay of personality and SIAH variables, allowing for targeting within-person fluctuations in personality processes and group dynamics and differentiating them from stable individual differences. Future research may additionally benefit from exploring SIAH dynamics in

relation to personality processes and development. Lastly, while personality is likely to moderate social cohesion, it is reasonable to assume that its influence may vary according to interaction norms and emotional display rules among group members. In other words, the associations discussed in this work may obscure nuanced and subtle fluctuations and developmental trajectories that shape personality across the lifespan, which would deserve further investigation.

Despite its limitations, the present work has important implications for intervention targeting the wellbeing of community residents. In fact, the results offer a conceptual bridge between personality theory and the SIAH that allow for these trait-level insights into the design and implementation of community-based interventions. While the health impacts of community-level group-based interventions are well established (e.g. Cruwys et al., 2022), interventions may benefit from optimising fit between individuals' personality and group characteristics, goals, and values. Interventions such as those based on 'social prescribing', i.e., a healthcare intervention method relying on community resources to improve the residents' wellbeing (see Stevenson et al., 2019), could use reliable assessments of personality to ascertain which personality profiles may benefit the most from a group-based intervention, in particular, those with low resilient personality profile. Conversely, for those high in ego-resiliency, helping set realistic goals and expectations might favour greater community engagement, perceptions of support, and in turn, subjective wellbeing.

#### **Conclusions**

The present research integrates personality theory and the Social Identity Approach to Health by modelling the links between ego-resiliency, community identity, perceived community support, and wellbeing, across a range of methods and multiple data sets. Future studies should consider expanding on this work by investigating whether and to what extent personality structure, process, and development act as facilitators vs. barriers to community identification and perceived community support. This could help profiling individuals with a view to identifying those who may need additional support or scaffolding to benefit from group-level approaches, which in turn, could help designing interventions that acknowledge and leverage individual differences in personality.

# References

- Abrams, D., Hogg, M., & Marques, J. (2005). *The Social Psychology of Inclusion and Exclusion*.
- Bandura, A. (1999). Social cognitive theory of personality. In Handbook of personality: Theory and research (2nd ed., pp. 154–196). Guilford Press.
- Barańczuk, U. (2019). The five factor model of personality and emotion regulation: A metaanalysis. *Personality and Individual Differences*, 139, 217–227. https://doi.org/10.1016/j.paid.2018.11.025
- Bizumic, B., Reynolds, K. J., & Meyers, B. (2012). Predicting social identification over time: The role of group and personality factors. *Personality and Individual Differences*, 53(4), 453–458. https://doi.org/10.1016/j.paid.2012.04.009
- Block, J. (1965). The challenge of response sets: Unconfounding meaning, acquiescence, and social desirability in the MMPI (p. 142). Appleton-Century-Crofts.
- Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin*, *117*(2), 187–215. https://doi.org/10.1037/0033
- Block, J. H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In W. A. Collins (Ed.), Development of cognition, affect, and social relations (Vol. 13, pp. 49–112).
- Charles, S. J., Stevenson, C., Wakefield, J. R. H., & Fino, E. (2023). Diversity of group memberships predicts well-being: Cross-sectional and longitudinal evidence. *Personality and Social Psychology Bulletin*, 1–14. https://doi.org/10.1177/01461672231202278
- Cooper, M., Avery, L., Scott, J., Ashley, K., Jordan, C., Errington, L., & Flynn, D. (2022). Effectiveness and active ingredients of social prescribing interventions targeting mental health: A systematic review. https://doi.org/10.1136/bmjopen-2021-060214
- Cruwys, T., Haslam, C., Rathbone, J. A., Williams, E., Haslam, S. A., & Walter, Z. C. (2022). Groups 4 Health versus cognitive-behavioural therapy for depression and loneliness in young people: Randomised phase 3 non-inferiority trial with 12-month

follow-up. *The British Journal of Psychiatry: The Journal of Mental Science*, 220(3), 140–147. https://doi.org/10.1192/bjp.2021.128

- Di Sarno, M., Costantini, G., Richetin, J., Preti, E., & Perugini, M. (2021). Why are you (un)conscientious? The dynamic interplay of goals, states, and traits in everyday life. *Journal of Personality*, *91*, 977–991. https://doi.org/10.1111/jopy.12701
- Dolan, P., & Metcalfe, R. (2012). Measuring subjective wellbeing: Recommendations on measures for use by national governments. *Journal of Social Policy*, 41(2), 409–427. https://doi.org/10.1017/S0047279411000833
- Dunkel, C. S., van der Linden, D., Kawamoto, T., & Oshio, A. (2021). The general factor of personality as ego-resiliency. *Frontiers in Psychology*, 12, 741462. https://doi.org/10.3389/fpsyg.2021.741462
- Ellemers, N., Kortekaas, P., & Ouwerkerk, J. W. (1999). Self-categorisation, commitment to the group and group self-esteem as related but distinct aspects of social identity. *European Journal of Social Psychology*, 29(2–3), 371–389. https://doi.org/10.1002/(SICI)1099-0992(199903/05)29:2/3<371::AID-EJSP932>3.0.CO;2-U
- Fisher, P. A., & Robie, C. (2019). A latent profile analysis of the five factor model of personality: A constructive replication and extension. *Personality and Individual Differences*, 139, 343–348. https://doi.org/10.1016/j.paid.2018.12.002
- Goldberg, L. R. (1981). Language and individual differences: The search for universals in personality lexicons. *Review of Personality and Social Psychology*, 141–165.
- Greenaway, K. H., Cruwys, T., Haslam, S. A., & Jetten, J. (2016). Social identities promote well-being because they satisfy global psychological needs. *European Journal of Social Psychology*, 46(3), 294–307. https://doi.org/10.1002/ejsp.2169
- Haslam, C., Haslam, S. A., Jetten, J., Cruwys, T., & Steffens, N. K. (2021). Life change, social identity, and health. *Annual Review of Psychology*, 72, 635–661. https://doi.org/10.1146/annurev-psych-060120-111721
- Haslam, C., Jetten, J., Cruwys, T., Dingle, G., & Haslam, S. A. (2018). *The New Psychology* of *Health: Unlocking the Social Cure*. Routledge. https://doi.org/10.4324/9781315648569
- Haslam, S. A., Fong, P., Haslam, C., & Cruwys, T. (2024). Connecting to community: A social identity approach to neighborhood mental health. *Personality and Social Psychology Review*, 28(3), 251–275. https://doi.org/10.1177/10888683231216136
- Haslam, S. A., Jetten, J., O'Brien, A., & 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(1), 3–9. https://doi.org/10.1002/smi.995

- Haslam, S. A., Oakes, P. J., Reynolds, K. J., & Turner, J. C. (2016). Social identity salience and the emergence of stereotype consensus. *Personality and Social Psychology Bulletin*, 25(7), 809–818. https://doi.org/10.1177/0146167299025007004
- 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. *The British Journal of Social Psychology*, 44(Pt 3), 355–370. https://doi.org/10.1348/014466605X37468
- Hogg, M. (2008). Personality, individuality, and social identity. In *Personality and social behavior* (pp. 177–196). Psychology Press.
- Hornsey, M. J. (2008). Social identity theory and self-categorization theory: A historical review. *Social and Personality Psychology Compass*, 2(1), 204–222. https://doi.org/10.1111/j.1751-9004.2007.00066.x
- Imai, K., Keele, L., & Tingley, D. (2010). A general approach to causal mediation analysis. *Psychological Methods*, *15*(4), 309–334. https://doi.org/10.1037/a0020761
- Jetten, J., Haslam, C., & Haslam, S. A. (Eds.). (2011). *The Social Cure: Identity, Health and Well-Being* (1st ed.). Psychology Press.
- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 102–139). Guilford.
- Junker, N. M., van Dick, R., Avanzi, L., Häusser, J. A., & Mojzisch, A. (2019). Exploring the mechanisms underlying the social identity–ill-health link: Longitudinal and experimental evidence. *British Journal of Social Psychology*, 58(4), 991–1007
- Kazak, A. E. (2018). Editorial: Journal article reporting standards. *American Psychologist*, 73(1), 1–2. https://doi.org/10.1037/amp0000263
- Kellezi, B., Wakefield, J. R. H., Stevenson, C., McNamara, N., Mair, E., Bowe, M., Wilson, I., & Halder, M. M. (2019). The social cure of social prescribing: A mixed-methods study on the benefits of social connectedness on quality and effectiveness of care provision. *BMJ Open*, 9(11), e033137. https://doi.org/10.1136/bmjopen-2019-033137
- Kowalski, R. M. (Ed.). (2001). Behaving Badly: Aversive Behaviors in Interpersonal Relationships. American Psychological Association. https://www.apa.org/pubs/books/431759A

Lazarsfeld, P. F., & Henry, N. W. (1968). Latent Structure Analysis. Houghton Mifflin.

Marsh, H. W., Lüdtke, O., Trautwein, U., & Morin, A. J. S. (2009). Classical latent profile analysis of academic self-concept dimensions: Synergy of person- and variable-centered approaches to theoretical models of self-concept. *Structural Equation Modeling: A Multidisciplinary Journal, 16*, 191–225. https://doi.org/10.1080/10705510902751010

- McCrae, R. R., & Costa, P. T., Jr. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, *52*, 81–90. https://doi.org/10.1037/0022-3514.52.1.81
- McNamara, N., Stevenson, C., Costa, S., Bowe, M., Wakefield, J., Kellezi, B., Wilson, I.,
  Halder, M., & Mair, E. (2021). Community identification, social support, and loneliness:
  The benefits of social identification for personal well-being. *The British Journal of Social Psychology*, 60(4), 1379–1402. https://doi.org/10.1111/bjso.12456
- Mehrpour, A., Hoffman, A., Widmer, E. D., & Staerklé, C. (2024). Social ties and social identification: Influences on well-being in young adults. *Journal of Social and Personal Relationships*, 41(10), 3085–3108. https://doi.org/10.1177/02654075241263239
- Montag, C., & Panksepp, J. (2017). Primary emotional systems and personality: An evolutionary perspective. *Frontiers in Psychology*, 8. https://doi.org/10.3389/fpsyg.2017.00464
- Muthén, B. (2004). Latent variable analysis: Growth mixture modeling and related techniques for longitudinal data. In D. Kaplan (Ed.), *Handbook of Quantitative Methodology for the Social Sciences* (pp. 345–368).
- Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling: A Multidisciplinary Journal*, 14, 535– 569. https://doi.org/10.1080/10705510701575396
- Olesen, M. H. (2011). General causality orientations are distinct from but related to dispositional traits. *Personality and Individual Differences*, 51(4), 460– 465. https://doi.org/10.1016/j.paid.2011.04.015
- Postmes, T., Haslam, S. A., & Jans, L. (2012). A single-item measure of social identification: Reliability, validity, and utility. *British Journal of Social Psychology*, 52(4), 597– 617. https://doi.org/10.1111/bjso.12006
- Postmes, T., & Jetten, J. (2006). *Individuality and the Group: Advances in Social Identity* (pp. vi, 286). Sage Publications, Inc.
- Reynolds, K. J., & Turner, J. C. (2006). Individuality and the prejudiced personality. *European Review of Social Psychology*, 17, 233– 270. https://doi.org/10.1080/10463280601050880
- Rossi, G., Weekers, L. C., & Hutsebaut, J. (2021). Resilient, undercontrolled, and overcontrolled personality types based upon DSM-5 maladaptive personality traits. *Heliyon*, 7(5), e06938. https://doi.org/10.1016/j.heliyon.2021.e06938
- Scrucca, L., Fop, M., Murphy, T. B., & Raftery, A. E. (2016). mclust 5: Clustering, classification and density estimation using Gaussian finite mixture models. *The R Journal*, 8(1), 289–317.

- Soto, C. J., & John, O. P. (2017). The next Big Five Inventory (BFI-2): Developing and assessing a hierarchical model with 15 facets to enhance bandwidth, fidelity, and predictive power. *Journal of Personality and Social Psychology*, *113*, 117– 143. https://doi.org/10.1037/pspp0000096
- Spears, R., Doosje, B., & Ellemers, N. (1997). Self-stereotyping in the face of threats to group status and distinctiveness: The role of group identification. *Personality and Social Psychology Bulletin*, 23(5), 538–553. https://doi.org/10.1177/0146167297235009
- Steffens, N. K., Gocłowska, M. A., Cruwys, T., & Galinsky, A. D. (2016). How multiple social identities are related to creativity. *Personality and Social Psychology Bulletin*, 42(2), 188–203. https://doi.org/10.1177/0146167215619875
- Stevenson, C., Costa, S., Easterbrook, M. J., McNamara, N., & Kellezi, B. (2020). Social cure processes help lower intergroup anxiety among neighborhood residents. *Political Psychology*, 41(6), 1093–1111. https://doi.org/10.1111/pops.12667
- Swickert, R. J., Hittner, J. B., & Foster, A. (2010). Big Five traits interact to predict perceived social support. *Personality and Individual Differences*, 48(6), 736– 741. https://doi.org/10.1016/j.paid.2010.01.018
- Tajfel, H. (1978). Differentiation between Social Groups: Studies in the Social Psychology of Intergroup Relations (pp. xv, 474). Academic Press.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of inter-group conflict. In W. G. Austin & S. Worchel (Eds.), *The Social Psychology of Inter-group Relations* (pp. 33–47).
- Tamir, Y., & Nadler, A. (2007). The role of personality in social identity: Effects of field dependence and context on reactions to threat to group distinctiveness. *Journal of Personality*, 75(5), 927–954. https://doi.org/10.1111/j.1467-6494.2007.00461.x
- Topp, C. W., Østergaard, S. D., Søndergaard, S., & Bech, P. (2015). The WHO-5 well-being index: A systematic review of the literature. *Psychotherapy and Psychosomatics*, 84, 167–176. https://doi.org/10.1159/000376585
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the Social Group: A Self-categorization Theory*.
- Udayar, S., Urbanaviciute, I., & Rossier, J. (2020). Perceived social support and Big-Five personality traits in middle adulthood: A 4-year cross-lagged path analysis. *Applied Research in Quality of Life*, *15*(2), 395–414. https://doi.org/10.1007/s11482-018-9694-0
- University of Essex, Institute for Social and Economic Research. (2022). Understanding Society: Waves 1-12, 2009-2021 and Harmonised BHPS: Waves 1-18, 1991-2009. [Data collection]. 17th Edition. [Dataset]. UK Data Service. http://doi.org/10.5255/UKDA-SN-6614-18
- van der Linden, D., Dunkel, C. S., Musek, J., & Petrides, K. V. (2024). Construct-overlap in trait measures and the general factor of personality. OSF. https://doi.org/10.31234/osf.io/fa8ny

- van der Linden, D., Dunkel, C. S., & Petrides, K. V. (2016). The general factor of personality (GFP) as social effectiveness: Review of the literature. *Personality and Individual Differences*, 101, 98–105. https://doi.org/10.1016/j.paid.2016.05.020
- Vukasović Hlupić, T., Butković, A., Pocrnić, M., & Bratko, D. (2023). The relationship between three basic psychological needs and big five personality traits: A metaanalysis. *Current Psychology*, 42(35), 31559–31578. https://doi.org/10.1007/s12144-022-04158-9
- Ware, J. E., Kosinski, M., Turner-Bowker, D. M., & Gandek, B. (2001). How to Score Version 2 of the SF-12 Health Survey (with a supplement documenting version 1). Quality Metric Incorporated.
- Witkin, H. A., & Goodenough, D. R. (1981). Cognitive Styles: Essence and Origins. Field Dependence and Field Independence. Psychological Issues, 51, 1–141.
- World Health Organization. (1988). Wellbeing Measures in Primary Health Care/The Depcare Project. WHO Regional Office for Europe.
- Yin, K., Lee, P., Sheldon, O. J., Li, C., & Zhao, J. (2021). Personality profiles based on the FFM: A systematic review with a person-centered approach. *Personality and Individual Differences, 180*, 110996. https://doi.org/10.1016/j.paid.2021.110996

# **Tables**

Table 1. Study 1, items' descriptive statistics (N = 40,391)												
Measure	Construct	Item Descriptor	М	SD	Min	Max	Skew ness	Kurt osis	Alph a Incre			
									ase if Delet ed			
Big Five Inventory (BFI; John & Srivastava, 1999)	Agreeableness	1. (I am someone who) is rude.	6.03	1.34	1.00	7.00	-1.65	2.38	0.03			
		2. Is of forgiving nature.	5.23	1.51	1.00	7.00	-0.83	0.14	-0.12			
		3. Is kind.	5.64	1.25	1.00	7.00	-1.17	1.59	-0.23			
	Conscientiousn ess	4. Does a thorough job.	5.52	1.59	1.00	7.00	-1.37	1.25	-0.14			
		5. Is lazy.	5.36	1.64	1.00	7.00	-0.81	-0.32	0.08			
		6. Is efficient.	5.50	1.25	1.00	7.00	-1.04	1.31	-0.24			
	Extraversion	7. Is talkative.	4.83	1.73	1.00	7.00	-0.46	-0.68	-0.21			
		8. Is sociable	4.92	1.63	1.00	7.00	-0.58	-0.43	-0.18			
		9. Is reserved.	4.03	1.73	1.00	7.00	0.08	-0.90	0.07			
	Emotional Stability	10. Worries a lot.	3.78	1.88	1.00	7.00	0.20	-1.09	-0.18			
	·	11. Is nervous.	3.41	1.83	1.00	7.00	0.37	-0.95	-0.11			
		12. Is relaxed.	3.50	1.60	1.00	7.00	0.38	-0.57	-0.01			
	Openness to Experience	13. Is original.	4.35	1.61	1.00	7.00	-0.28	-0.57	-0.12			
	-	14. Is artistic.	4.36	1.80	1.00	7.00	-0.27	-0.87	-0.02			
		15. Has an active imagination.	4.93	1.56	1.00	7.00	-0.59	-0.24	-0.15			
Mental Component Summary (SF-12 MCS; Ware et al., 2001)	Individual Functioning	1. General health.	3.50	1.10	1.00	5.00	-0.43	-0.50	-0.01			
	-	2. Health limits moderate activities.	2.66	0.62	1.00	3.00	-1.63	1.41	-0.01			
		3. Health limits several flights of stairs.	2.61	0.66	1.00	3.00	-1.45	0.76	-0.01			

4. Last four weeks: Physical health limits	4.21	1.12	1.00	5.00	-1.32	0.75	-0.02
5. Last four weeks: Physical health limits kind	4.27	1.10	1.00	5.00	-1.44	1.12	-0.02
6. Last four weeks: Mental health meant	4.36	0.98	1.00	5.00	-1.52	1.64	-0.01
7. Last four weeks: Mental health meant worked less carefully	4.38	0.92	1.00	5.00	-1.51	1.77	-0.01
8. Last four weeks: Pain interfered with work.	4.15	1.18	1.00	5.00	-1.32	0.64	0.00
9. Last four weeks: Felt calm and peaceful.	3.43	0.92	1.00	5.00	-0.65	0.14	0.00
10. Last four weeks: Had a lot of energy.	3.30	0.96	1.00	5.00	-0.57	-0.11	-0.01
11. Last four weeks: Felt downhearted and depressed.	4.04	0.97	1.00	5.00	-0.83	0.14	0.00
12. Last four weeks: Physical or mental health interfered with social life.	4.33	1.02	1.00	5.00	-1.49	1.40	-0.01

					Sp	bearman's	Correlatio	ons	
Variable	М	SD	Cronbach's alpha	1.	2.	3.	4.	5.	6.
1. Agreeableness	3.21	5.2	0.97 (0.97, 0.97)		.34***	.09***	.06***	.08***	.03***
2. Conscientiousness	3.07	5.15	0.97 (0.97, 0.97)	11***		.10***	.06***	.14***	.06***
3. Extraversion	2.36	4.86	0.96 (0.96, 0.96)	.12***	.16***		.22***	.20***	.12***
4. Emotional Stability	1.52	4.51	0.95 (0.95, 0.96)	06***	.11***	.11***		.21***	.45***
5. Openness to Experience	2.31	4.86	0.98 (0.98, 0.98)	.17***	.17***	.25***	.01		.07***
6. Individual Mental Functioning	49.32	9.82	NA	.01	.15***	.11***	.46***	.03***	
<i>Note.</i> Correlations are s .01, *** $p < .001$ .	plit by pro	ofile (upp	er triangle = Higl	n Resilient;	lower trian	gle = Low	Resilient).	* <i>p</i> < .05, *	** <i>p</i> <

Table 2. Study 1, descriptive statistics and correlations (N = 40,391)

Table	Fable 3. Study 1, latent profile analysis, fit indices ( $N = 40,391$ )											
Mo del	Profile s	LogLi k	AIC	BIC	SABIC	Entrop y	Min. Classif ication Proba bility	Max. Classif ication Proba bility	BLRT	p- value		
EEI	2	- 321,92 5.51	643,88 3.01	644,02 0.72	643,96 9.87	.56	.78	.91	11,277. 05	.010		
EEI	3	- 320,84 8.09	641,74 0.18	641,92 9.52	641,85 9.60	.53	.63	.86	2,154.8 3	.010		
EEI	4	- 320,26 7.25	640,59 0.50	640,83 1.48	640,74 2.49	.47	.62	.76	1,161.6 8	.010		
EEI	5	- 319,92 0.94	639,90 9.87	640,20 2.49	640,09 4.44	.48	.34	.78	692.63	.010		
VV V	2	- 317,96 8.47	636,01 8.95	636,37 1.81	636,24 1.51	.58	.85	.90	5,645.3 8	.010		
VV V	3	- 317,26 3.90	634,65 1.79	635,18 5.39	634,98 8.35	.49	.61	.82	1,409.1 6	.010		

Table 4. Study 2, items' descriptive statistics $(N = 1, 2;$	54)								
Measure	Construct	Item Descriptor	М	SD	Min	Ma x	Ske wne ss	Kur tosi s	Alp ha Incr ease if Del eted
Big Five Inventory (BFI; John & Srivastava, 1999)	Agreeablene	1. (I am someone who) is rude.	4.36	0.82	1.00	5.00	-	1.00	-
	SS	2. Is of forgiving nature.	3.70	1.02	1.00	5.00	1.22 - 0.88	0.29	0.05
		3. Is kind.	4.15	0.70	1.00	5.00	- 0.80	1.57	0.00 - 0.17
	Conscientiou sness	4. Does a thorough job.	4.07	0.82	1.00	5.00	- 0.92	1.11	- 0.13
	511055	5. Is lazy.	3.57	1.10	1.00	5.00	-	-	-
		6. Is efficient.	3.85	0.81	1.00	5.00	- 0.91	0.75	-
	Extraversion	7. Is talkative.	3.08	1.17	1.00	5.00	0.81 - 0.17	-	0.08 - 0.11
		8. Is sociable	3.18	1.14	1.00	5.00	0.17 - 0.28	0.98 - 0.87	- 0.10
		9. Is reserved.	2.57	1.07	1.00	5.00	0.20	0.07 - 0.65	0.00
	Emotional Stability	10. Worries a lot.	3.52	1.22	1.00	5.00	- 0 49	- 0.82	- 0 11
	Stubility	11. Is nervous.	3.10	1.19	1.00	5.00	- 0.07	- 1.02	- 0.12
		12. Is relaxed.	2.78	0.98	1.00	5.00	0.30	- 0.66	0.02
	Openness to	13. Is original.	3.35	0.96	1.00	5.00	- 0 38	- 0.37	0.00
	Experience	14. Is artistic.	2.87	1.22	1.00	5.00	0.38	- 1.08	- 0.15

		15. Has an active imagination.	3.62	1.08	1.00	5.00	_	-	-
		Ç					0.64	0.30	0.16
World Health Organization's 5-item Wellbeing Index	Wellbeing	1. In the past two weeks, I have felt	3.04	1.25	0.00	5.00	-	-	-
(WHO-5; Topp et al., 2015; World Health Organization, 1988)		cheerful in good spirits.					0.62	0.66	0.03
		2. In the past two weeks, I have felt calm and relaxed.	2.98	1.25	0.00	5.00	- 0.49	- 0.73	- 0.02
		3. In the past two weeks, I have felt active and vigorous.	2.52	1.35	0.00	5.00	- 0.20	- 0.86	- 0.02
		4. In the past two weeks, I woke up feeling fresh and rested.	2.23	1.38	0.00	5.00	- 0.04	- 1.02	- 0.02
		5. In the past two weeks, my daily life has been filled with things that interest	2.84	1.32	0.00	5.00	- 0.31	- 0.91	- 0.02
		me.							
Four-item Social Support Scale (Haslam et al., 2005)	Community	1. I get the emotional support I need	3.70	1.56	1.00	7.00	-	-	-
	Support	from other people in my local community.					0.13	0.85	0.02
		2. I get the help I need from other people in my local community.	3.95	1.57	1.00	7.00	- 0.27	- 0.77	- 0.03
		3. I get the resources I need from other	3.99	1.57	1.00	7.00	-	-	-
		people in my local community.					0.35	0.72	0.02
		4. I get the advice I need from other	3.94	1.56	1.00	7.00	-	-	-
		people in my local community.					0.33	0.76	0.01
Single-Item Measure of Social Identification (SISI;	Community	1. I identify with other members of my	4.90	1.39	1.00	7.00	-	0.24	NA
Postmes et al., 2012)	Identificatio	local community.					0.82		
	n								

Table 5. Study 2, descript	ive statistic	s and corr	elations ( <i>N</i> = 1,254)								
Variable	М	SD	Cronbach's				Spearman's	correlations			
			alpha	1.	2.	3.	4.	5.	6.	7.	8.
1. Agreeableness	4.07	0.65	0.64 (0.61,								
			0.67)		.11	.08	.05	.13*	.13*	.15**	.12*
2. Conscientiousness	3.83	0.72	0.69 (0.66,								
			0.72)	03		.08	.05	.16**	.17**	05	.02
3. Extraversion	2.94	0.97	0.82 (0.8, 0.84)	.13***	.18***		.25***	.18**	.23***	.20***	.18**
4. Emotional Stability	2.87	0.99	0.84 (0.83,								
-			0.86)	05	.22***	.17***		.12*	.49***	.19**	.16**
5. Openness to	3.28	0.85	0.67 (0.64, 0.7)								
Experience				.06	.07*	.13***	05		.16**	.07	04
6. Wellbeing	2.72	1.13	0.91 (0.9, 0.92)	.03	.27***	.23***	.48***	.06		.24***	.20***
7. Community Support	3.89	1.44	0.94 (0.94,								
• • • •			0.95)	.12***	.11***	.21***	.14***	.05	.29***		.54***
8. Community	4.9	1.39	NA								
Identification				.19***	.11***	.17***	.07*	.01	.23***	.55***	
Note. Correlations are split	by profile (	upper trian	gle = High Resilient;	lower triang	le = Low Resi	lient). * $p < .0$	5, ** p < .01, **	*** <i>p</i> < .001.			

Table 6. Study	2, results of path analysis $(N = 1,254)$					
Profile	Path	b	β	SE	Monte C C	arlo 95% Is
					Lower	Upper
Low Resilient	Community Identity $\rightarrow$ Support (a1)	0.55	0.57	0.03	0.50	0.61
High Resilient	Community Identity $\rightarrow$ Support (a2)	0.68	0.58	0.08	0.52	0.82
Low Resilient	Support $\rightarrow$ Wellbeing ( <i>b1</i> )	0.21	0.26	0.03	0.14	0.28
High Resilient	Support $\rightarrow$ Wellbeing ( <i>b2</i> )	0.15	0.23	0.06	0.04	0.26
Low Resilient	Community Identity $\rightarrow$ Wellbeing (c'1)	0.07	0.09	0.03	0.01	0.13
High Resilient	Community Identity $\rightarrow$ Wellbeing					
	(c'2)	0.06	0.08	0.06	-0.05	0.18
z-test	a1-a2	-	-0.01	0.08	-0.28	0.04
		0.12				
z-test	b1 - b2	0.06	0.04	0.06	-0.06	0.19
Note. Path analy	vsis with MLM estimation and 5,000 repli	cations fo	or Monte Ca	arlo confid	ence interva	ıls.

Measure	Construct	Item Descriptor	М	SD	Min	Max	Ske wne	Kur	Alp ha Incr ease if Dele ted
The next Big Five Inventory (BFI-2; Soto & John,	Agreeablenes		171	50		171423	-	10515	-
2017)	s	2. Is compassionate, has a soft heart.	4.27	0.82	2.00	5.00	1.06	0.65	0.01
		7. Is respectful, treats others with respect.	4.52	0.69	2.00	5.00	1.41	1.73	0.01
		12. Tends to find fault with others.	3.33	1.15	1.00	5.00	0.05	1.14	0.02
		17. Feels little sympathy for others.	3.91	1.22	1.00	5.00	0.85	0.47	0.00
		22. Starts arguments with others.	4.19	0.98	1.00	5.00	1.09	0.43	0.01
		27. Has a forgiving nature.	3.48	1.15	1.00	5.00	0.58	0.48	0.01
		32. Is helpful and unselfish with others.	3.96	0.87	1.00	5.00	1.02	1.37	0.01
		37. Is sometimes rude to others.	3.70	1.16	1.00	5.00	0.52	0.84	0.02
		42. Is suspicious of others? intentions.	3.02	1.12	1.00	5.00	0.03	- 0.94	0.01
		47. Can be cold and uncaring.	3.88	1.14	1.00	5.00	- 0.67	- 0.56	0.02
		52. Is polite, courteous to others.	4.33	0.75	2.00	5.00	0.87	0.13	0.01
		57. Assumes the best about people.	3.38	1.15	1.00	5.00	- 0.51	- 0.62	0.02
	Conscientiou sness	3. Tends to be disorganized.	3.70	1.31	1.00	5.00	- 0.63	- 0.92	- 0.01
		8. Tends to be lazy.	3.48	1.25	1.00	5.00	0.23	- 1.19	-0.01
		13. Is dependable, steady.	4.10	0.88	1.00	5.00	- 1.03	1.27	0.00

	18. Is systematic, likes to keep things in order.	3.88	1.03	1.00	5.00	0.98	0.58	0.00
	23. Has difficulty getting started on tasks.	3.23	1.26	1.00	5.00	0.13	- 1.17	0.01
	28. Can be somewhat careless.	3.60	1.15	1.00	5.00	0.52	0.64	0.01
	33. Keeps things neat and tidy.	3.58	1.08	1.00	5.00	0.58	0.39	0.01
	38. Is efficient, gets things done.	3.90	1.00	1.00	5.00	0.87	0.30	0.01
	43. Is reliable, can always be counted on.	4.16	0.84	1.00	5.00	1.03	1.35	0.01
	48. Leaves a mess, doesn't clean up.	4.10	1.06	1.00	5.00	1.02	0.11	- 0.01
	finished.		0.97	1.00	5.00	1.03	1.01	0.01
	58. Sometimes behaves irresponsibly.	3.66	1.22	1.00	5.00	- 0.44	1.02	0.00
Extraversion	1. (I am someone who) is outgoing, sociable.	2.89	1.40	1.00	5.00	0.06	1.43	0.02
	6. Has an assertive personality.	2.81	1.18	1.00	5.00	0.02	- 1.04	0.01
	11. Rarely feels excited or eager.	3.52	1.23	1.00	5.00	0.51	0.73	0.01
	16. Tends to be quiet.	2.40	1.24	1.00	5.00	0.63	- 0.66	0.01
	21. Is dominant, acts as a leader.	2.42	1.25	1.00	5.00	0.33	1.08	0.01
	26. Is less active than other people.	3.35	1.24	1.00	5.00	0.19	- 1.11	0.00
	31. Is sometimes shy, introverted.	2.27	1.21	1.00	5.00	0.88	0.17	0.01
	36. Finds it hard to influence people.	3.15	1.04	1.00	5.00	0.19	0.50	0.01
	41. Is full of energy.		1.18	1.00	5.00	0.20	0.86	0.01
	46. Is talkative.	2.86	1.25	1.00	5.00	0.17	1.01	0.02

							-	-
	51. Prefers to have others take charge.	2.95	1.25	1.00	5.00	0.15	0.94	0.01
	56. Shows a lot of enthusiasm.	3.44	1.06	1.00	5.00	0.28	0.60	0.01
Emotional Stability	4. Is relaxed, handles stress well.	3.09	1.17	1.00	5.00	0.09	0.98	0.01
	setback.	3.32	1.14	1.00	5.00	0.27	0.93	0.00
	14. Is moody, has up and down mood swings.	3.30	1.36	1.00	5.00	0.15	1.32	0.00
	19. Can be tense.	2.92	1.21	1.00	5.00	0.39	1.03	0.01
	24. Feels secure, comfortable with self.	3.40	1.24	1.00	5.00	0.58	- 0.69	0.00
	29. Is emotionally stable, not easily upset.	3.16	1.32	1.00	5.00	0.22	1.19	0.01
	34. Worries a lot.	2.78	1.38	1.00	5.00	0.19	1.29	0.01
	39. Often feels sad.	3.18	1.34	1.00	5.00	0.10	1.20	0.01
	44. Keeps their emotions under control.	3.38	1.14	1.00	5.00	0.48	0.63	0.00
	49. Rarely feels anxious or afraid.	2.47	1.27	1.00	5.00	0.69	0.61	0.00
	54. Tends to feel depressed, blue.	3.38	1.40	1.00	5.00	0.23	1.33	0.01
0	59. Is temperamental, gets emotional easily.	3.29	1.37	1.00	5.00	0.22	1.29	0.01
Experience	5. Has few artistic interests.	3.24	1.32	1.00	5.00	0.13	- 1.17	0.00
	10. Is curious about many different things.	4.14	0.88	1.00	5.00	1.12	1.26	0.01
	15. Is inventive, finds clever ways to do things.	3.59	1.02	1.00	5.00	0.46	0.45	0.01
	<ul><li>20. Is fascinated by art, music, or literature.</li><li>25. Avoids intellectual, philosophical discussions.</li></ul>		1.30	1.00	5.00	0.37	- 0.97	0.02
			1.21	1.00	5.00	0.53	0.92	- 0.01

		30. Has little creativity.	3.73	1.15	1.00	5.00	0.59	0.74	0.02
		35. Values art and beauty.	3.63	1.18	1.00	5.00	0.52	0.73	0.02
		40. Is complex, a deep thinker.	3.82	1.04	1.00	5.00	0.81	0.21	0.00
		45. Has difficulty imagining things.	3.94	1.06	1.00	5.00	1.02	0.37	0.00
		50. Thinks poetry and plays are boring.	3.58	1.31	1.00	5.00	0.52	- 0.98	- 0.01
		55. Has little interest in abstract ideas.	3.52	1.24	1.00	5.00	0.26	- 1.11	- 0.01
		60. Is original, comes up with new ideas.	3.58	1.03	1.00	5.00	- 0.48	- 0.39	0.02
UK Office of National Statistics four subjective wellbeing questions (Dolan & Metcalfe, 2012)	Wellbeing	<ol> <li>Overall, how satisfied are you with your life nowadays?</li> <li>Overall to what extent do you feel that the</li> </ol>	6.14	2.28	0.00	10.0 0	0.72	-0.07	-0.08
		things you do in your life are worthwhile?	6.61	2.46	0.00	10.0 0 10.0	0.64	0.43	0.06
		3. Overall, how happy did you feel yesterday?	6.39	2.43	0.00	10.0 0 10.0	0.89	0.27	0.08
		yesterday?	6.18	2.88	0.00	0	0.42	0.87	0.05
Four-item Social Support Scale (Haslam et al., 2005)	Community Support	<ol> <li>I get the emotional support I need from other people in my local community.</li> <li>I get the help I need from other people in my</li> </ol>	3.52	1.70	1.00	7.00	0.01	- 1.27	0.02
		<ul> <li>2. I get the help I need from other people in my local community.</li> <li>3. I get the resources I need from other people.</li> </ul>	3.92	1.70	1.00	7.00	0.24	1.17	0.03
		in my local community.	3.79	1.64	1.00	7.00	0.22	0.97	0.01
		my local community.	3.93	1.71	1.00	7.00	0.17	0.97	0.02
Single-Item Measure of Social Identification SISI; (Postmes et al., 2012)	Community Identification	1. I identify with other members of my local community.	4.49	1.49	1.00	7.00	- 0.68	- 0.34	NA

Table 8. Study 3, descriptive statistics and correlations (N = 167)											
Variable	M	SD	Cronbach's	Spearman's correlations							
			alpha	1.	2.	3.	4.	5.	6.	7.	8.
1. Agreeableness	3.56	0.57	0.75 (0.69, 0.8)		.57***	.53***	.56***	.47***	.23	.27	12
2. Conscientiousness	3.47	0.63	0.77 (0.72,								
			0.82)	.63***		.77***	.63***	.73***	.22	.32*	.14
3. Extraversion	3.41	0.57	0.7 (0.63, 0.77)	.69***	.62***		.67***	.72***	.24	.41**	.08
4. Emotional Stability	3.53	0.59	0.74 (0.68,								
			0.79)	.71***	.60***	.72***		.58***	.14	.42**	.25
5. Openness to	3.37	0.58	0.72 (0.65,								
Experience			0.78)	.63***	.66***	.69***	.67***		.20	.39**	.10
6. Wellbeing	6.30	1.97	0.84 (0.8, 0.88)	.45***	.48***	.46***	.42***	.46***		.22	.00
7. Community Support	3.80	1.58	0.94 (0.93,								
			0.96)	.30***	.30**	.21*	.28**	.24**	.25**		.35*
8. Salience of Identity	4.49	1.51	NA								
(Personal vs. Community											
Group)				02	03	.10	.03	.05	.04	.07	
<i>Note.</i> Correlations are split by profile (upper triangle = High Resilient; lower triangle = Low Resilient). * $p < .05$ , ** $p < .01$ , *** $p < .001$ .											

Table 9. Study 3, results of path analysis $(N = 167)$									
Profile	Path	b	β	SE	Monte Carlo 95% CIs				
					Lower	Upper			
Low Resilient	Community Identity $\rightarrow$ Support (a1)	0.19	0.07	0.29	-0.38	0.76			
High Resilient	Community Identity $\rightarrow$ Support (a2)	1.03	0.32	0.47	0.12	1.94			
Low Resilient	Support $\rightarrow$ Wellbeing ( <i>b1</i> )	0.54	0.36	0.14	0.28	0.80			
High Resilient	Support $\rightarrow$ Wellbeing ( <i>b2</i> )	0.24	0.30	0.12	0.01	0.47			
Low Resilient	Community Identity $\rightarrow$ Wellbeing	-							
	(c'1)	0.10	-0.02	0.40	-0.88	0.70			
High Resilient	Community Identity $\rightarrow$ Wellbeing (c'2)	- 0.61	-0.24	0.40	-1.38	0.20			
Low Resilient	Community Identity $\rightarrow$ Support $\rightarrow$		•						
	Wellbeing (i1)	0.11	0.02	0.16	-0.20	0.46			
High Resilient	Community Identity $\rightarrow$ Support $\rightarrow$								
	Wellbeing (i2)	0.25	0.10	0.17	-0.01	0.68			
z-test	a1 - a2	-	0.26	0.55	1.80	0.25			
7_test	h1 - h2	0.85	-0.20	0.55	-1.89	0.23			
z-test	$b_1 - b_2$	0.30	0.06	0.18	-0.05	0.64			
z-test	$c \ 1 - c \ 2$	0.51	0.22	0.56	-0.61	1.62			
z-test	i1 - i2	-	0.07	0.22	0.65	0.22			
M. ( D. (l 1. '	'4 MIM	0.14	-0.07	0.23	-0.05	0.32			
<i>Note.</i> Fain analysis with MLM estimation and 5,000 replications for Monte Carlo confidence intervals.									



Personality



Identification

Wellbeing



Figure 2. Study 1, latent profile analysis, top-performing models (N = 40,391; VVV parameterisation).



Figure 3. Study 3, moderation analysis, tumble graphs for paths a (Salience of Identification  $\rightarrow$  Perceived Support) and b (Perceived Support  $\rightarrow$  Wellbeing), respectively (N = 167).