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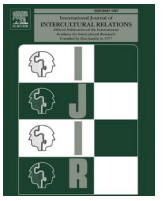

Subjective well-being and attitudes toward outgroup members

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ABSTRACT

There is a large body of literature on the effect of negative attitudes toward outgroup members on target individuals and groups. However, less attention was devoted to their effects on those who hold these attitudes. The current study hypothesized that there would be a bidirectional relationship between subjective well-being and attitudes toward outgroup members. In Study 1, data from the Integrated Values Surveys, the Ecology-Culture Dataset, and the World Happiness Report 2022 were used. In Study 2, a random intercept cross-lagged panel model was implemented using longitudinal data over a six-year period from the GESIS Panel (n = 6783 people living in Germany). Results of Study 1 demonstrated a significant negative relationship between subjective well-being and negative attitudes toward outgroup members both at the country level (118 countries) and at the individual level (663,965 participants in 120 countries around the world). In Study 2, a random intercept cross-lagged panel model revealed significant within-person reciprocal relations between life satisfaction and negative attitudes toward refugees. This study provides evidence for a bidirectional relationship between subjective well-being and negative attitudes toward outgroup members.

Introduction

The nature, the predictors, and the consequences of prejudice have been a long-standing topic of interest in the social psychology literature (e.g., Dovidio, Hewstone, Glick, & Esses, 2010; Kite, Whitley Jr, & Wagner, 2022; Nelson, 2016; Sibley & Barlow, 2017; Tileaga, Augoustinos, & Durrheim, 2022; Tropp & Molina, 2012). A great deal of research has focused on the consequences of prejudice for those who are their targets (e.g., Benuto, Duckworth, Masuda, & o'Donohue, 2020; Dover, Hunger, & Major, 2020; Dovidio et al., 2010; Nelson, 2016; Sibley & Barlow, 2017). While there is quite a lot of research on the consequences of being the target of prejudice, there is a marked dearth of research about the costs of holding prejudicial attitudes (e.g., Sanders, Rose, Booker, & King, 2023). For instance, a recent study showed that holding negative views of the aging process and about older adults in general can impose costs on well-being (Prati, 2024). Therefore, holding prejudicial attitudes can have negative consequences for well-being. In addition, well-being may be the driver of prejudicial attitudes (e.g., Sanders et al., 2023; Sirgy, 2021), thereby generating a vicious circle.

The rest of this manuscript is structured as follows. Firstly, the main theoretical models predicting (1) the negative consequences for people holding prejudicial attitudes and (2) the influence of subjective well-being on attitudes toward outgroup members were briefly introduced. Next, a very brief discussion of previous research and an identification of gaps in the existing literature were presented. Third, the hypotheses of the current research were presented.

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Theoretical background

The integrated threat theory of prejudice (e.g., Stephan & Stephan, 2000) identifies other three types of threats that play a role in prejudice: Perceived realistic threats, symbolic threats, and negative stereotypes. Perceived realistic threats include threats to the material or physical well-being of the ingroup members or the ingroup as a whole (e.g., war, competition for scarce resources, economic and political power, and health). For instance, a perceived threat to the health of ingroup members, such as the Ebola Outbreak, is associated with an increase in negative attitudes toward outgroup members (Prati & Pietrantoni, 2016). Symbolic threats are threats posed by the outgroup to morals, values, standards, beliefs, and attitudes held by the ingroup. According to the integrated threat theory of prejudice (Stephan & Stephan, 2000), the challenges posed to the ingroup's value system (symbolic threats) or material or physical well-being (perceived realistic threats) generate feelings of threat. The fourth type of threat (i.e., negative stereotypes) primarily involves expectations concerning the actions of outgroup members. Negative stereotypes can generate a fear of negative consequences, and that represents the essence of this threat. It is possible to assume that feelings of threat generated by perceived realistic threats, symbolic threats, and negative stereotypes take a toll on subjective well-being. Based on the theoretical assumptions of the integrated threat theory of prejudice (Stephan & Stephan, 2000), it is reasonable to hypothesize that negative attitudes toward outgroup members can have an impact on ingroup members' subjective well-being.

The existing literature proposes some theoretical arguments that the direction of effect may be not only from negative attitudes toward outgroup members to subjective well-being but also from subjective well-being to negative attitudes toward outgroup members. There is a long-established literature in social psychology suggesting that negative life circumstances (e.g., loss of job, financial hardship) are associated with negative attitudes toward outgroup members (Brown, 2011). In addition to the literature in social psychology, the positive and cognitive psychology literature offers insights into the potential effect of subjective well-being on negative attitudes toward outgroup members. According to the general positivity model (e.g., Oishi & Diener, 2001), people with lower subjective well-being are more sensitive to negative (e.g., threatening) information and more likely to experience negative emotion than people with higher subjective well-being. Mood-congruency theories (Rusting, 1998) posit that unhappy individuals tend to notice and interpret their reality in an overly negative light (e.g., overestimating the threat posed by outgroup members). In line with these theoretical considerations, Tenenbaum, Capelos, Lorimer, and Stocks (2018) argue and demonstrate that inducing feelings of happiness can promote more tolerant attitudes toward asylum seekers. Based on the theoretical assumptions of the general positivity model (e.g., Oishi & Diener, 2001) and mood-congruency theories (Rusting, 1998), it was hypothesized that subjective well-being can influence attitudes toward outgroup members.

Previous research and research gaps

The existing research, albeit scant, suggests that negative attitudes toward outgroup members have a negative impact not only on their targets but also on those holding such prejudicial attitudes (Paleari, Brambilla, & Fincham, 2019; Prati, 2024). More recently, researchers have begun to consider the relationship between well-being and prejudice (e.g., Sanders et al., 2023; Sirgy, 2021). Evidence from cross-sectional studies revealed that negative attitudes toward outgroup members are negatively associated with well-being (e.g., Ahuja, Banerjee, Chaudhary, & Gidwani, 2020; Bazán-Monasterio, Gil-Lacruz, & Gil-Lacruz, 2021; Dinh, Holmberg, Ho, & Haynes, 2014; Gordon, 2018; Panno, 2018). However, it is difficult to argue for causation given the cross-sectional nature of these studies. Finally, most studies were conducted in Western cultural settings, and the generalizability of their results may therefore be limited.

Preliminary longitudinal evidence of a bidirectional relationship between negative attitudes toward outgroup members and subjective well-being was provided by a longitudinal survey collected for the Political Socialization Program. Specifically, using a two-wave longitudinal study among young adults in Sweden over a period of two years, it was found that subjective well-being did not have a significant effect on anti-immigrant attitudes, while anti-immigrant attitudes predicted subjective well-being (Korol & Bevelander, 2023; Korol, Fietzer, Bevelander, & Pasichnyk, 2022). However, the use of a cross-lagged panel model to examine the relationship between subjective well-being and anti-immigrant attitudes provides lagged parameters that do not represent the actual within-person reciprocal processes and are biased (Hamaker, Kuiper, & Grasman, 2015). Therefore, the use of a cross-lagged panel model may lead to the misidentification of the underlying causal pattern (Hamaker et al., 2015; Lucas, 2023). Therefore, the findings from this two-wave longitudinal study cannot rule out the hypothesis that the effect between negative attitudes toward outgroup members and subjective well-being is bidirectional.

The present study

This study attempts to address two research gaps in the literature on the relationship between subjective well-being and negative attitudes toward outgroups. First, given that research on the relationship between subjective well-being and negative attitudes toward outgroups remains scarce and restricted to Western countries, the results cannot be generalized to other countries worldwide. The study, therefore, addresses this research gap by empirically investigating the relationship between subjective well-being and negative attitudes toward outgroups across many countries around the world. The hypothesis is that a negative relationship between subjective well-being and negative attitudes toward outgroups will hold across many countries around the world (H1).

Second, it is well known that correlation does not imply causation; therefore, a way to study causal influences (using the concept of Granger causality) is through the use of longitudinal panel data (e.g., Hamaker et al., 2015; Lucas, 2023). Previous longitudinal research on the relationship between subjective well-being and negative attitudes toward outgroups did not investigate within-person

processes while controlling for stable between-person trait-like differences. The estimation of regression parameters that confound the within-person level with the between-person level may lead to erroneous conclusions regarding the underlying causal mechanism (Hamaker et al., 2015; Lucas, 2023). The lack of longitudinal studies investigating within-person dynamics was identified as the second research gap. The second study of this manuscript aims to address this research gap by examining the bidirectional within-person relations between subjective well-being and negative attitudes toward outgroups. Specifically, two hypotheses were posed:

Subjective well-being will lead to lower negative attitudes toward outgroup members (H2a).

Negative attitudes toward outgroup members will lead to lower subjective well-being (H2b).

Study 1

Method

Sample and design

The present study used data from the Integrated Values Surveys dataset (IVS), the Ecology-Culture Dataset (Wormley, Kwon, Barlev, & Varnum, 2022), and the World Happiness Report 2022 (Helliwell et al., 2022). The ISV data were used for analyses at the individual-level data, whereas the data from the Ecology-Culture Dataset and the World Happiness Report 2022 were used for analyses at the country level. The Ecology-Culture Dataset (Wormley et al., 2022) provides data on prejudice at the country level for 216 countries, while the World Happiness Report 2022 (Helliwell et al., 2022) includes data on subjective well-being and GDP per capita for 146 countries.

The IVS covers a 40-year period (1981–2022) and includes data from 663,965 participants in 120 countries around the world. The IVS comprises data from the European Values Study (EVS) and the World Values Survey (WVS). The EVS and the WVS are two large-scale, cross-national, repeated cross-sectional survey research programs. Specifically, the EVS Trend File 1981–2017 (EVS, 2022) and the World Values Survey time-series dataset covering the years from 1981 to 2022 (Inglehart et al., 2022) were used. A mixed-mode data collection approach was implemented in the EVS and WVS, including face-to-face interviews and self-administered online and paper-and-pencil surveys. In the IVS, the percentage of female participants was 52.9 %, while the participants' mean age was 42.96 (SD = 16.91).

Instrument

In the IVS, subjective well-being was evaluated using two questions:

- "All things considered, how satisfied are you with your life as a whole these days?" (Satisfaction with life)
- "Taking all things together, would you say that you are very happy, rather happy, not very happy, or not at all happy?" (Happiness)

A four-point response option ranging from 1 (*very happy*) to 4 (*not at all happy*) and a ten-point response option ranging from 1 (*completely dissatisfied*) to 10 (*completely satisfied*) were used to measure life happiness and satisfaction, respectively. Responses to happiness were re-coded so that higher values mean higher happiness.

In the IVS, negative attitudes toward different outgroup members were assessed. In the current study, two social groups were considered: People of a different race and immigrants/foreign workers. Participants were asked which of the groups they would not like to have as neighbors. The responses were coded as 0 = *Not mentioned* and 1 = *Mentioned*.

Country-level data on subjective well-being and the gross domestic product (GDP) per capita in terms of purchasing power parity (derived from the World Development Indicators) were obtained by the World Happiness Report 2022 (Helliwell et al., 2022) which is powered by the Gallup World Poll data. The natural log of GDP per capita was used in the World Happiness Report 2022 because it fits the data better than GDP per capita. To assess life evaluations, the Cantril ladder life-evaluation question (Cantril, 1965) was employed. Using the Cantril ladder, participants were asked to respond to this question: "Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?" The response options ranged from 0 (*the worst possible life*) to 10 (*the best possible life*). In addition to life evaluation, positive affect was assessed using the following questions: "Did you experience the following feelings (i.e., enjoyment, laughter) during a lot of the day yesterday?" and "Did you learn or do something interesting yesterday?" The average of individual yes or no answers for enjoyment, laughter, and doing or learning something interesting was used to construct a measure of positive affect. More information on these measures and their validity is available in the World Happiness Report 2022 (Helliwell et al., 2022).

The Ecology-Culture Dataset (Wormley et al., 2022) provides a measure of prejudice at the country level for 216 countries. This measure was constructed by Van de Vliert (2020) as an index of differentiation and discrimination between ingroup and outgroup (e.g., intergroup differentiation and discrimination) by inhabitants of different countries around the world.

Analytic strategy

When analyzing data from the IVS, multilevel correlation coefficients were calculated to take into account the clustering of the participants within countries. Full information maximum likelihood (FIML) estimation in Mplus was used as a means of handling the missing data. A maximum likelihood estimation with robust standard errors was used. To estimate the correlation between a dichotomous (i.e., negative attitudes toward outgroup members) and a continuous variable (i.e., subjective well-being), the point-biserial correlation was used. According to McGrath and Meyer (2006), the benchmarks for small, medium, and large point-biserial

correlations are.10,.24, and.37, respectively. However, these benchmarks are appropriate when the base rates are equal. In the case of substantially unequal base rates (base rate =.75), the adjusted benchmarks for small, medium, and large point-biserial correlations are.09,.21, and.33, respectively.

Pearson's correlation coefficient was used to estimate the relationship between prejudice and subjective well-being at the country level. The partial correlation coefficient (PCC) was used to estimate the relationship between prejudice and subjective well-being while taking into account/controlling for GDP. According to the effect size guidelines of Gignac and Szodorai (2016), the benchmarks for small, medium, and large correlations are.10,.20, and.30, respectively.

Results and discussion

Correlations at the country level

The scatterplots presented in Fig. 1 illustrate the relationship between prejudice and life evaluations and between prejudice and positive emotions. The correlation between life evaluations (i.e., the Cantril ladder life-evaluation scale) and prejudice was negative and significant, $r(118) = -.69$ [−.58; −.77], $p < .001$. Also, the relationship between positive emotions and prejudice was negative and significant, $r(118) = -.22$ [−.04; −.39], $p = .016$. In accordance with Hypothesis 1, negative relationships between subjective well-being and negative attitudes toward outgroups were found at the country level including 118 countries around the world. Specifically, medium and large correlations were found between positive emotions and prejudice and between life evaluations and prejudice, respectively. It should be noted that in their analysis of meta-analytically derived correlations, Gignac and Szodorai (2016) found that only 2.7 % of the correlations were 0.50 or greater.

Since the literature on cross-national differences in subjective well-being has highlighted the role of national income, as measured by GDP per capita, as a major predictor of subjective well-being (e.g., Jorm & Ryan, 2014; Tov & Diener, 2009; Veenhoven, 2018), additional analyses were conducted to control for the effect of this variable. After taking into account GDP, the partial correlation between life evaluations and prejudice was negative and significant, $r(111) = -.27$ [−.11; −.43], $p = .005$. However, when controlling for GDP, the partial correlation between positive emotions and prejudice was non-significant, $r(111) = -.04$ [−.13; −.21], $p = .672$.

This is the first study to demonstrate that subjective well-being and negative attitudes toward outgroup members are related across a vast number of countries with diverse cultures. However, this study cannot rule out the hypothesis that ecological fallacy may be at play. Indeed, it is not possible to draw conclusions about relationships at the individual level when using macro-level data. Macro-level data and individual data may have unique properties. Therefore, it is also important to investigate the relationships at the individual level.

Correlations at the individual level (IVS Data)

The multilevel correlations between negative attitudes toward outgroup members and subjective well-being are presented in Table 1. The findings indicate that there are significant negative correlations. Consistent with Hypothesis 1, negative relationships between subjective well-being and negative attitudes toward outgroups were found at the individual level across 120 countries around the world. However, the effect sizes were generally small, even when taking into account unequal base rates.

The correlations at the individual levels confirmed the same negative relationship between negative attitudes toward outgroup members and subjective well-being. However, the effect size of the relationships was small at the individual level and larger at the

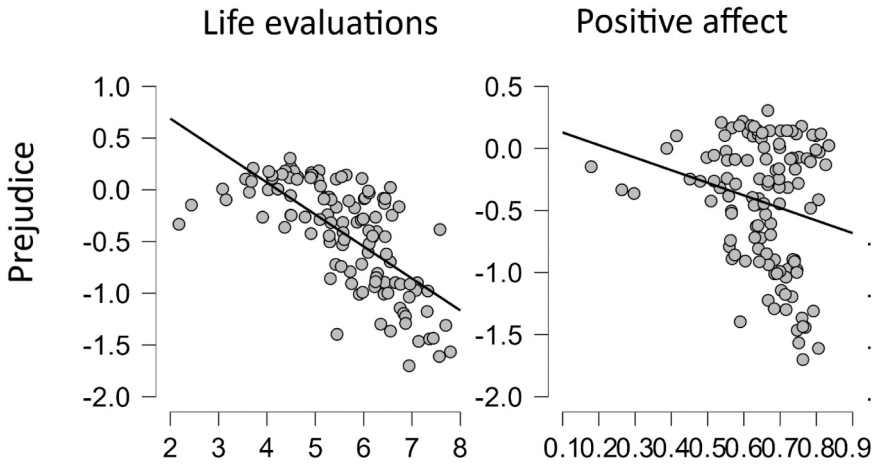

Fig. 1. Scatterplots Depicting the Correlations Between Prejudice and Life Evaluations (Left Panel) and Between Prejudice and Positive Affect (Right Panel).

Table 1
Multilevel Correlations Between Negative Attitudes Toward Outgroup Members and Subjective Well-Being.

Neighbors	p_1	Happiness		Life satisfaction	
		r_{pb}	95 % CI	r_{pb}	95 % CI
People of a different race	.84	−.04	−.06, −.02	−.07	−.08, −.05
Immigrants/foreign workers	.80	−.04	−.05, −.02	−.06	−.08, −.05

Note. p_1 indicate the base rates.

country level. Taken together, the findings of the present study suggest that conclusions regarding the relationship between negative attitudes toward outgroup members and subjective well-being are generalizable beyond Western culture.

The three domains of subjective well-being did not exhibit similar effect sizes. Specifically, the effect sizes of life satisfaction/life evaluation were greater than those of positive affect and happiness. In addition, compared to happiness, life satisfaction is more closely related to indicators of life circumstances and sociopolitical issues (Prati, 2022a, 2022b).

Notwithstanding, the findings of this study are limited by the cross-sectional nature of the data, implying that no interpretations can be made regarding the direction of effects. Longitudinal research on within-person processes will help elucidate the link between negative attitudes toward outgroup members and subjective well-being.

Study 2

Method

Sample and design

Data from the GESIS Panel (Bosnjak et al., 2018; GESIS, 2023) were used. The GESIS panel is a probability-based mixed-mode panel of the German-speaking population aged between 18 and 70 years (at the time of recruitment) who reside in Germany. The GESIS Panel team contacted the nationally representative probability sample members through a prenotification letter and then personally by an interviewer. The members of the probability sample who expressed their willingness to participate in the panel had the option of participating either via a paper-and-pencil questionnaire sent via postal mail or via an online questionnaire. In this ongoing, longitudinal survey, data collection took place every two/three months, resulting in six/four waves per year. GESIS Panel comprises the first, initial cohort as well as refreshment samples. At the time of writing, the GESIS Panel currently comprises four cohorts (2013, 2016, 2018, and 2021). For more information regarding the sampling strategy, the multistep recruitment process, recruitment rate, and sample composition discrepancies for key demographic variables, see Bosnjak et al. (2018).

In the GESIS Panel, attitudes toward refugees were assessed over a six-year period, from 2017 to 2022. Therefore, data from this six-year period were used. Participants who responded to at least one measurement occasion were included in the analysis ($n = 6783$). In this subsample, the percentage of female participants was 50.9 %, whereas the mean age at the first measurement occasion was 51.46 ($SD = 14.41$). The first measurement occasion for each year was used in the analyses.

Instrument

In the GESIS panel, life satisfaction was measured by seven rating scale items. One item refers to global life satisfaction (e.g., how satisfied participants were all in all with their current life on a scale ranging from 0 = *extremely unsatisfied* to 10 = *extremely satisfied*), while the remaining items are six domain-specific life satisfaction. Specifically, participants reported how satisfied they were with specific domains of their life, namely, work, their family, leisure, neighbors, friends, and financial situation. Responses options ranged from 1 (*very unsatisfied*) to 7 (*very satisfied*). Cronbach's Alpha for this scale was good, ranging from.79 to.83 across waves. This scale exhibited scalar measurement invariance over time in a previous study using data from the GESIS panel (Grosz, Schwartz, & Lechner, 2021).

Attitudes toward refugees were measured using a six-item scale. The wording of the items was as follows:

1. How strongly do you sympathize with refugees? (0 = *Not at all*, 5 = *Very strongly*)
2. How likeable are refugees to you? (0 = *Not at all likeable*, 5 = *Very likeable*)
3. Do refugees represent a threat or an enrichment for the values in Germany? (0 = *Threat*, 5 = *Enrichment*)
4. Do refugees represent a threat or an enrichment for the wealth in Germany? (0 = *Threat*, 5 = *Enrichment*)
5. I can imagine working with refugees (0 = *Does not apply at all*, 5 = *Totally applies*)
6. I would not object against the presence of refugees in my residential area (0 = *Does not apply at all*, 5 = *Totally applies*)

These items were reverse-coded so that the higher scores indicate more negative attitudes toward refugees. Cronbach's Alpha for this scale ranged from.90 to.93 across waves. Measurement invariance over time was investigated in a global test by comparing the fit of the configural model with that of a scalar model. The configural model provided a good fit to the data (CFI =.975, TLI =.973, SRMR =.036). Also, the scalar model provided a good fit to the data (CFI =.976, TLI =.969, SRMR =.036). Changes in fit indexes did not exceed the recommended cutoff scores for the fit indexes (ΔCFI <.010, ΔSRMR <.010; Chen, 2007). Therefore, scalar (or "strong") measurement invariance over time was supported.

Analytic strategy

The random intercept cross-lagged panel model (e.g., Hamaker et al., 2015; Lucas, 2023) was used to test the hypotheses. Specifically, the two-variable random intercept cross-lagged panel model including life satisfaction and attitudes toward refugees used in the current study is illustrated in Fig. 2. The residual structural equation model (RSEM) framework (Asparouhov & Muthén, 2023) was applied to panel data analysis. To handle missing data, FIML estimation in Mplus was used. The estimator was maximum likelihood estimation with robust standard errors. Equality constraints were imposed on the effects because this should lead to more precise estimates of cross-lagged paths (Lucas, 2023) and there are no plausible theoretical reasons to expect unstable effects across the observed timespan. The use of latent variables in the model led to model convergence issues. To address convergence issues and to account for measurement error, a two-stage path analysis (2S-PA) with definition variables and categorical indicators (Lai & Hsiao, 2022) was employed. According to the recommendations of Orth et al. (2022), the benchmarks for small, medium, and large cross-lagged effects are.03,.07, and.12, respectively.

Results and discussion

The random intercept cross-lagged panel model exhibited a good fit to the data, $\chi^2(75) = 490.270$, $p < .001$, RMSEA = .029 (95 % CI:.026,.031), CFI = .985, TLI = .986. The results of the random intercept cross-lagged panel are displayed in Table 2. Consistent with Hypothesis 2a (i.e., subjective well-being predicts a reduction in negative attitudes toward outgroups), it was found a negative cross-lagged effect of life satisfaction on negative attitudes toward refugees ($b = -.03$, 95 %, CI: −.01, −.05). In other words, within-person elevations in life satisfaction were related to subsequent within-person reduction in negative attitudes toward refugees in the next year. In accordance with Hypothesis 2b (i.e., negative attitudes toward outgroups predict a reduction in subjective well-being), it was found a negative cross-lagged effect of negative attitudes toward refugees on life satisfaction ($b = -.03$, 95 %, CI: −.01, −.05).

The random intercept cross-lagged panel model revealed a significant negative covariance between the random intercepts, coef. = -−.15, 95 %, CI: −.11, −.18, indicating that people who have higher levels of subjective well-being, in general, are also less likely to report negative attitudes toward outgroup members in general. However, such a relationship does not represent a causal mechanism. Rather, it indicates a correlation between trait-like differences. For instance, previous studies revealed that individual traits may be predictive of both prejudice (Sibley & Duckitt, 2008; Sibley, Harding, Perry, Asbrock, & Duckitt, 2010) and subjective well-being (Anglim, Horwood, Smillie, Marrero, & Wood, 2020). Therefore, a focus on cross-lagged relationships alone (as it was done in previous research; Korol & Bevelander, 2023; Korol et al., 2022) may fail to adequately account for trait-like differences. The random intercept cross-lagged panel model employed in this study demonstrated the existence of within-person reciprocal processes.

General discussion

The current study focused on the relationship between subjective well-being and attitudes toward outgroup members. The findings of Study 1 revealed that subjective well-being and attitudes toward outgroup members are interrelated (H1). To date, this is the first study that has investigated the relationship between subjective well-being and attitudes toward outgroup members in a large number of countries worldwide ($n = 118$) and over a wide time period (40 years). It is interesting to note that the magnitude of the relationship

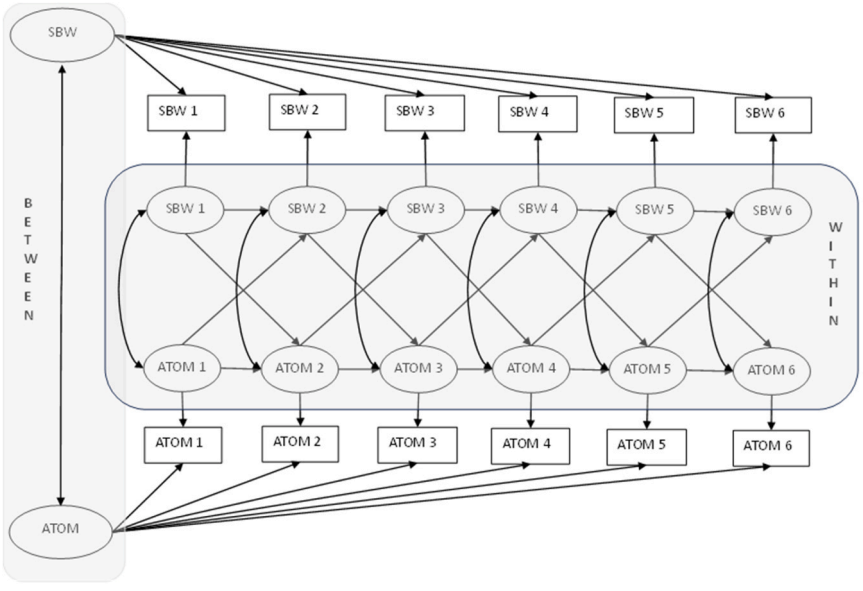

Fig. 2. Illustration of the Six-Wave Random Intercept Cross-Lagged Panel Model for Subjective Well-Being (SWB) and Attitudes Toward Outgroup Members (ATOM). Note. Ovals represent latent variables and squares observed variables.

Table 2
Results from Random Intercept Cross-Lagged Panel Model of Life Satisfaction (LS) and Attitudes toward Outgroup Members (ATOM).

	Coef.	95 % CI
Correlations among random intercepts		
ATOM ↔ LS	−.15	−.11, −.18
Autoregressive coefficients		
ATOM → ATOM	.25	.22,.28
LS → LS	.16	.13,.19
Cross-lagged coefficients		
LS → ATOM	−.03	−.01, −.05
ATOM → LS	−.03	−.01, −.05

Note. $\chi^2(75) = 490.270$, $p < .001$, RMSEA = .029 (95 % CI:.026,.031), CFI = .985, TLI = .986. $N = 6783$. All coefficients are standardized. LS = life satisfaction. ATOM = attitudes toward outgroup members (i.e., refugees).

between subjective well-being and attitudes toward outgroup members is stronger when considering the variables at the country level rather than at the individual level. The results of the second study corroborate this reasoning, revealing that the magnitude of the (individual-level) cross-lagged effects is small, albeit significant (H2a and H2b). In the second study, within-person dynamics were investigated, while controlling for stable between-person trait-like differences. This is the first study investigating the bidirectional within-person relations between subjective well-being and attitudes toward outgroup members.

Theoretical implications

The effect of attitudes toward outgroup members on subsequent subjective well-being is consistent with the theoretical assumptions of the integrated threat theory of prejudice (Stephan & Stephan, 2000). In addition, the impact of subjective well-being on later attitudes toward outgroup members is in line with the predictions of the general positivity model (e.g., Oishi & Diener, 2001) and mood-congruency theories (Rusting, 1998). Indeed, according to the general positivity model (e.g., Oishi & Diener, 2001) and mood-congruency theories (Rusting, 1998), happy people are more likely to view the world through rosy lenses. Therefore, the role of both subjective well-being and negative attitudes toward outgroup members in the current research can be interpreted as the product of the lens for constructing social reality (Pronin, Puccio, & Ross, 2002). Negative attitudes toward outgroup members can be considered as a way people construct their perception of reality—that is, negative expectations regarding outgroups. Moreover, according to integrated threat theory of prejudice (Stephan & Stephan, 2000), perceived threat refers to the experienced threat,

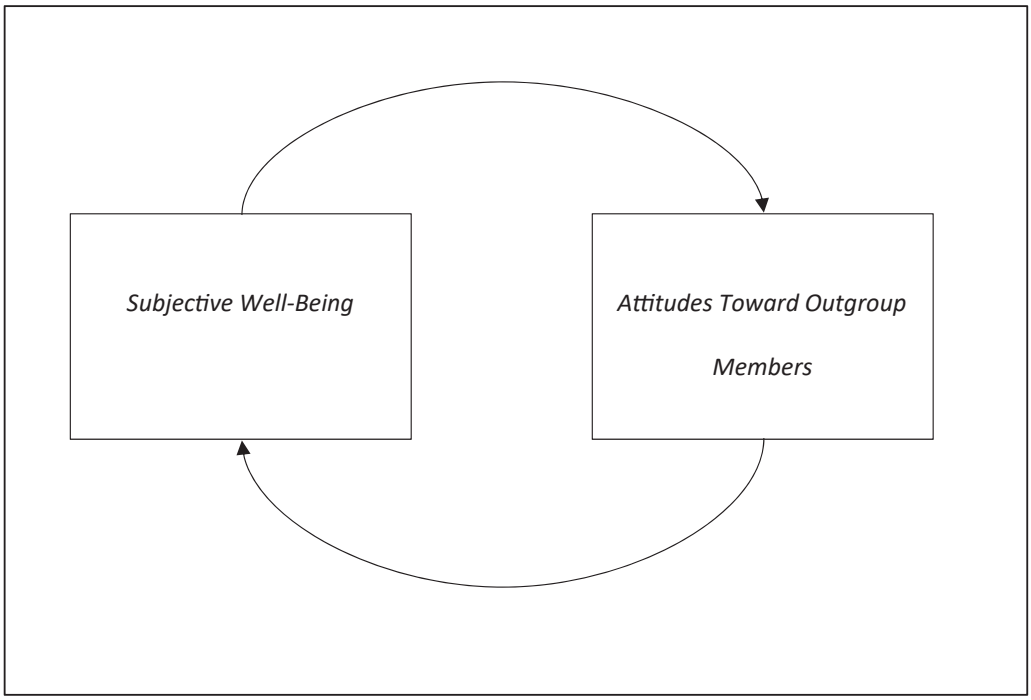

Fig. 3. A Model of the Bidirectional Relationship between Subjective Well-Being and Attitudes Toward Outgroup Members.

regardless of whether those threats actually exist. Negative attitudes toward outgroup members may undermine subjective well-being because they convey threatening interpretations of reality. Obviously, the threat should not be intended solely as a physical threat. For instance, ingroup members may perceive that outgroup members are taking advantage of them or are not respectful.

The main theoretical contribution of this study is a model of the bidirectional relationship between subjective well-being and attitudes toward outgroup members (Figure3). Integrating evidence for this bidirectional relationship between subjective well-being and attitudes toward outgroup members, a bidirectional model was proposed. According to this model, subjective well-being influences attitudes toward outgroup members (Path 1) and, in turn, attitudes toward outgroup members influence subjective well-being (Path 2; see Fig. 3).

The fact that the magnitude of the relationship between subjective well-being and attitudes toward outgroup members is stronger at the country level rather than at the individual level can be explained by systemic or structural features of social environments rather than individual predispositions. The levels of perceived realistic threats, symbolic threats, and negative stereotypes (integrated threat theory of prejudice; Stephan & Stephan, 2000) could be mutually reinforced by members of a community with greater systemic prejudice or, on the contrary, weakened by members of a community with lower systemic prejudice. Similarly, in countries with higher levels of subjective well-being, people may be more likely to experience positive cognition, attitudes toward the future, empathy, and sense of gratitude (Li, Zhang, & Lyu, 2023; Unanue et al., 2019) and these effects may be amplified at the country-level. Another theoretical contribution of this work is to highlight and explain the different magnitude of the relationships between subjective well-being and attitudes toward outgroup members at the country level and at the individual level.

Practical implications

Raising awareness of the erroneous, biased, selective, and distortive basis of well-anchored attitudes cannot only provide a path to overcoming the socio-psychological barriers to peaceful resolution of intergroup conflict (Bar-Tal & Hameiri, 2020; Nasie, Bar-Tal, Pliskin, Nahhas, & Halperin, 2014) but also to promote subjective well-being. Also, subjective well-being has the potential to influence the construction of social reality. One potential outcome of positive interventions (Flückiger, Munder, Del Re, & Solomonov, 2023; Quoidbach, Mikolajczak, & Gross, 2015) designed to increase well-being may be tolerance and improved relationships with outgroup members. By means of its effect on positive cognition, attitudes toward the future, empathy, and sense of gratitude (Li et al., 2023; Unanue et al., 2019), subjective well-being might influence the perception of reality as postulated by the general positivity model (e.g., Oishi & Diener, 2001) and mood-congruency theories (Rusting, 1998). Based on that, the promotion of the well-being of individuals and their community can be regarded as part of the socio-psychological interventions to change attitudes, especially in the context of intergroup conflict.

Limitations and future directions

It is important to bear in mind that the directional effect between negative attitudes toward outgroup members and subjective well-being does not exist in a cultural vacuum. This dynamic takes place in a specific sociopolitical context that cannot be ignored. Future research can shed light on how the sociopolitical context influences this bidirectional relationship. There are at least two potential effects that deserve further investigation. First, the experiences of people holding low levels of negative attitudes toward outgroup members may be different whether they are shared with their community members or not. For instance, in a sociopolitical context characterized by rising hostility toward outgroup members, there may be rippling effects of this hostile sociopolitical climate on the well-being of ingroup members who reject the attitudes that sustain the hostile climate. There is some evidence indicating that in the United States antiracism holds the potential to take a psychological toll not only among Black people but also among antiracist White people (Collins, Macbeth, Morgan, Kohl, & Kenney, 2023; Heberle, Wagner, & Hoch, 2022). Second, the definition and salience of ingroup and outgroup members are embedded in dynamic psychosocial/political/economic processes (e.g., Brown, 2011; Dovidio et al., 2010; Kite, Whitley, & Wagner, 2022; Nelson, 2016). Indeed, social categorization and intergroup attitudes are functions of the specific context and moment. Therefore, the directional effect between negative attitudes toward outgroup members and subjective well-being may depend on the specific definition, salience, and representation of the outgroup.

Some limitations should be acknowledged. First, the data are based on questionnaires and interviews. The limitations of both questionnaires and interviews are well known, including social desirability, recall, and response biases. A second limitation is the inability to infer strong causal relationships. It is important to highlight that only by using an experimental research design one can establish a true causal mechanism. Indeed, the omitted variable problem precludes any strong causal statements based on observational data. Therefore, the findings of the second study should be confined to the concept of Granger causality, while the findings of the first study could not infer a causal relationship given the cross-sectional design. Third, while the results of Study 1 are based on the participation of people belonging to different countries around the world, the findings of Study 2 were derived from people living in Germany. Therefore, the extent to which the results can be generalizable to other cultural settings is limited. Future research using an experimental design or a longitudinal design in a diverse cultural setting is needed to overcome the limitations of Study 2. Finally, a limitation of Study 1 concerns the use of single-item measures and categorical responses. It should be noted that single-item measures are commonly used in the subjective well-being literature (Cooper et al., 2011), and their psychometric properties are similar to those of multiple-item (e.g., Abdel-Khalek, 2006; Cheung & Lucas, 2014; Jovanović & Lazić, 2020). Notwithstanding, in Study 2, composite measures were used to determine whether these findings were replicable.

Conclusion

Much prior research rests on the well-supported assumption that negative attitudes toward outgroup members are associated with negative consequences for members of the target group. However, less is known about the consequences for those who hold such attitudes. The findings of the present study support the idea that holding such beliefs might take a psychological toll in terms of subjective well-being. In addition, subjective well-being plays a significant role in the evaluation of social and political issues. Specifically, subjective well-being seems to affect the way people orient themselves toward outgroup members. Thus, the current study supports the notion that tolerant attitudes and feelings may be relevant outcomes of positive interventions.

Ethics approval statement

Ethical approval was not required because deidentified publicly available data were used.

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CRediT authorship contribution statement

Gabriele Prati: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization.

Declaration of Competing Interest

The author certifies that he has no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

Data Availability

Data are freely available (see the Method section).

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