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Brexit and Wellbeing: Strained Intergroup Relations and Positive Intergroup Contact Predict Wellbeing of Remainers and Leavers Post Brexit

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ABSTRACT

Britain's exit from the European Union has divided the public, making it crucial to understand its implications for wellbeing. In two survey studies ($N = 280$, April 2020; $N = 575$, Nov 2020–July 2021) we examined how subjective wellbeing (mental wellbeing, MW; life satisfaction, LS) is predicted by Brexit attitudes and strained intergroup relations between UK Remainers and Leavers. We further tested whether positive intergroup contact is associated with wellbeing outcomes, via intergroup anxiety. Wellbeing was higher among Leavers than Remainers in Study 2. Negative intergroup emotions predicted lower MW for Remainers (Study 1). Perceived outgroup respect predicted higher MW for both groups, more so for Leavers (Study 2). Brexit identity negatively predicted wellbeing (Study 2), while contact quality positively predicted wellbeing (MW, Studies 1 and 2; LS, Study 2), via intergroup anxiety. Positive Brexit attitudes predicted greater wellbeing, especially for Leavers (Study 2). Greater wellbeing among Leavers may be attributed to the congruence between personal and perceived environmental values in the aftermath of Brexit. Strained intergroup relations were linked with lower wellbeing and positive contact was associated with higher wellbeing, via intergroup anxiety. Our research offers insights for interventions aimed at promoting wellbeing in polarized contexts by considering intergroup dynamics.

Britain's exit from the European Union has led to widespread societal conflict, from ideological clashes to interpersonal hostility and violence. While political and affective polarization is increasing globally, its impact on wellbeing remains underexplored. Emerging evidence suggests that Brexit may affect the mental health of both Remainers and Leavers (Bentall et al. 2024; Hervy et al. 2022; Kavetsos et al. 2018; Liew et al. 2020; Powdthavee et al. 2019). Possible explanations include increased polarization and division in social networks, changing national identities and identity threat, anti-immigrant sentiment, negative political and economic consequences, negative media coverage, and uncertainty about the future (Hervy et al. 2022). However, research examining causes and remedies is scarce.

Our work responds to the call for research to understand and address the health implications of sociopolitical conflict, with polarization being an overlooked but significant determinant of health (Van Bavel et al. 2024). Political and affective polarization can increase stress and isolation. Especially individuals who hold political views that are extreme or incongruent with their immediate communities report worse physical and mental health (Fraser et al. 2022).

Our research assessed wellbeing among UK Remainers and Leavers 4 to 5 years after the Brexit referendum, focusing on value incongruence and intergroup dynamics as potential links with reduced wellbeing related to Brexit. Across two studies, we extend prior work by examining how wellbeing is predicted by

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Brexit attitudes and perceived strained relationships between opposing Brexit identities. We also test whether and how positive intergroup contact predicts better wellbeing outcomes.

1 | Brexit and Wellbeing

On 23 June 2016, the UK voted to leave the EU by 52% to 48%, with one of the highest voter turnouts in UK history (72%). Brexit formally took effect on 31 January 2020, following 4.5 years of negotiations and fears of a potential “no-deal” scenario. Explanations for the Leave vote include austerity, immigration concerns, backlash against cultural change, and economic misinformation (Powdthavee et al. 2019). While referenda can enhance democratic engagement, they may also reduce democratic satisfaction among the losing side. This winner-loser gap may extend to subjective wellbeing and life satisfaction, though little is known about the longer-term health implications among “winners” and “losers” (Toshkov and Mazepus 2023). Research from Switzerland suggests referenda may improve wellbeing (Frey and Stutzer 2000), but in the UK, the EU referendum intensified affective polarization (Tausch et al. 2024), marked by division and mutual hostility (affective polarization) rather than mere policy disagreement (political polarization), fueled by media campaigns attacking both sides (Iyengar et al. 2012; Mason 2018).

These emerging political identities not only caused affective polarization, they have been linked to mental health outcomes both immediately after the vote and years later (Bentall et al. 2024). Data from the UK Household Longitudinal Study showed an increase in mental distress among both Brexit groups, though life satisfaction remained stable overall. Leavers reported a short-term rise in life satisfaction that later diminished (Powdthavee et al. 2019). Younger people, those with higher education, and residents of Remain-majority areas were especially affected (Hervy et al. 2022). Mental health outcomes were also better for individuals living in politically aligned communities (“Brexit density effect”; Saville 2020). Cross-national Eurobarometer data from 2015 to 2017 showed a post-referendum decline in UK life satisfaction compared to other EU countries. This drop was especially pronounced among those who identified closely with the EU, with an effect that was 1.3 times greater than that of widowhood (Kavetsos et al. 2018). National survey data from 2019 to 2021 revealed that strong identification with a Brexit position predicted identity-related stress, which in turn was associated with higher depression and anxiety symptoms, particularly among Remainers (Bentall et al. 2024). Anti-depressant prescriptions also increased post-referendum, especially among Leavers (Liew et al. 2020; Vandoros et al. 2019).

In sum, the EU referendum had both short- and long-term effects on wellbeing for Remainers and Leavers. While findings are mixed, some report declines among Remainers (Bentall et al. 2024; Kavetsos et al. 2018), others note short-term gains for Leavers (Liew et al. 2020; Powdthavee et al. 2019), and some show effects on both (Bentall et al. 2024; Hervy et al. 2022; Kavetsos et al. 2018). Our research builds on this by examining how Brexit values and intergroup dynamics predict wellbeing in both groups.

2 | Value Incongruence and Wellbeing

Subjective wellbeing encompasses how individuals feel, function, and relate to others. It is commonly measured through dimensions such as mental wellbeing (positive emotions and psychological functioning) and life satisfaction, defined as a global cognitive evaluation of one’s life (Ruggeri et al. 2020). Both are influenced by the alignment between personal values and those of the environment (Sagiv and Schwartz 2000; Verquer et al. 2003), even when people do not interact but only share sociodemographic characteristics with the comparison group (Khaptsova and Schwartz 2016). Brexit may have created widespread value conflict, with discrepancies between personal (Brexit attitudes) and environmental (Brexit implementation) values at the level of their everyday environment (e.g., family members, neighbors, or colleagues having different values) or the UK as a whole (where half of the people have opposing Brexit views). Remainers likely experienced heightened value conflict after the vote, as their views became politically marginalized. For Leavers, value conflict may have been greater prior to the vote and reduced afterward, as they succeeded in challenging the status quo. Value incongruence can create psychological tension, leading to stress and reduced wellbeing.

Although the margin of “winning” in the EU referendum was small, Remainers and their Brexit views were now in the minority. Being in the minority carries psychological costs (Haslam et al. 2009; Jetten et al. 2015). The mental health of a minority group is positively associated with the proportion of the local population belonging to the same group, also known as the group density effect (Shaw et al. 2012). This is a pattern observed in the Brexit context as well, those living in areas supporting their view on Brexit reported better mental health than those living in areas where their view is in the minority (Brexit density effect, Saville 2020). For Remainers, living in Leave-majority areas was a risk factor for distress. Therefore, Leavers, as the new political majority, may experience reduced dissonance and improved wellbeing. Remainers, as the new political minority, may experience lower wellbeing, due to the value conflict between personal and environmental values. In our research, we measured personal values via attitudes towards the main points of contention in the Brexit debate.

3 | Intergroup Dynamics and Wellbeing

The EU referendum created new, salient social identities that produced affective polarization, often exceeding traditional partisanship and cutting across party lines (Hobolt et al. 2021). A positive social identity is important for wellbeing, offering meaning, support, and belonging, while identity loss or stigmatization can harm mental health (Tajfel and Turner 1979; Haslam et al. 2009; Jetten et al. 2015). Qualitative data collected at the Unite for Europe march in March 2017 point to reasons why mental health and wellbeing may affect Remainers: Remainers described Brexit as being robbed of their European identity and as bereavement from Europe and being heartbroken (Brändle et al. 2018). We examined whether polarized Brexit identities (i.e., being a Leaver vs. Remain) are linked to wellbeing.

Intergroup conflict. According to intergroup emotions theory (Mackie and Smith 2018), identification with a social group can

evoke negative group-based emotions (e.g., anger, contempt) toward outgroups in response to identity threat (Pauketat et al. 2020). Such strain can trigger intergroup anxiety (Stephan and Stephan 1985) and physiological stress (Blascovich et al. 2001), and intergroup stress through conflict and identity threat is associated with lower wellbeing (Major and O'Brien 2005). We tested whether strained intergroup relations in the form of intergroup anxiety, intergroup emotions and perceived outgroup respect predict wellbeing. Due to the Remainers being in the minority with their Brexit views, and their conflict between personal values (contra Brexit vote) and values of the environment (the majority in the country votes pro Brexit), we expected Remainers to experience greater intergroup anxiety.

Intergroup contact. Meta-analyses have established that meaningful high-quality contact between polarized groups (intergroup contact, Allport 1954) consistently predicts positive intergroup relations (Van Assche et al. 2023), with empirical evidence from both laboratory settings (Pettigrew and Tropp 2006) as well as real world contexts characterized by severe intergroup conflict (Lemmer and Wagner 2015). In the polarized Brexit context, Tausch et al. (2024) employed a randomized controlled trial to test the effectiveness of an intervention based on theories of intergroup contact and respectful communication in reducing affective polarization between Remainers and Leavers. The intervention reduced affective polarization in the short-term, by increasing warmth toward the outgroup, reducing unfavorable attributions of the sources of outgroup positions, and increasing willingness to compromise, though the effects did not last and those with extreme political views were more likely to drop out.

Research testing the link between contact and wellbeing is scarce (Böttcher and Friehs 2022). Initial exposure to outgroup members can result in a “diversity shock” (Birtel et al. 2019), however, intergroup contact alleviates the initial negative effects of diversity change on reduced quality of life in the long-term (Ramos et al. 2019). Postwar contact in Bosnia was associated with reduced morbidity and posttraumatic stress disorder symptoms via intergroup forgiveness and social distance (Voci et al. 2017). Intergroup contact can mitigate intergroup stress and facilitate physiological recovery (Page-Gould et al. 2010). One of the mechanisms by which contact reduces conflict is by reducing intergroup anxiety (Pettigrew and Tropp 2008). While intergroup anxiety is a key mediator between intergroup contact and conflict, we hypothesized that it will also be a mediator between intergroup contact and wellbeing. Therefore, we tested whether positive contact between Remainers and Leavers may be associated with higher wellbeing, via reduced intergroup anxiety.

Importantly, rather than simply the quantity or opportunity of contact, it is the quality of contact that matters in reducing intergroup conflict (Davies et al. 2011; see also Drury et al. 2023). Quality contact (e.g., positive, equal, respectful) is known to improve intergroup relations in the long-term (Van Assche et al. 2023). Therefore, we predicted that quality, rather than quantity, will be associated with wellbeing.

4 | The Present Research

The present research had the overall aim of linking intergroup dynamics (including intergroup emotions, outgroup respect and intergroup contact) to subjective wellbeing in the context of

Brexit. Specifically, its aims were: 1) To examine group differences in wellbeing among people with different Brexit identities during the Brexit implementation period. 2) To investigate whether wellbeing is predicted by attitudes towards Brexit and by perceived strained intergroup relations (negative intergroup emotions towards and perceived lack of respect from the outgroup). 3) To test whether and how positive intergroup contact is associated with wellbeing, via intergroup anxiety.

We tested the following hypotheses:

Hypothesis 1. *Strained intergroup relations (negative intergroup emotions, perceived outgroup disrespect) predict lower wellbeing (mental wellbeing, life satisfaction) for both Remainers and Leavers (Studies 1 and 2).*

Hypothesis 2. *Brexit identity (being a Remainer or Leaver) negatively predicts wellbeing (mental wellbeing, life satisfaction) through increased intergroup anxiety, with Remainers experiencing greater intergroup anxiety and in return lower wellbeing than Leavers (Studies 1 and 2).*

Hypothesis 3. *Intergroup contact quality predicts higher levels of wellbeing (mental wellbeing, life satisfaction) through reduced intergroup anxiety (Studies 1 and 2).*

Hypothesis 4. *Stronger pro-Brexit attitudes predict higher levels of wellbeing (mental wellbeing, life satisfaction) for both Remainers and Leavers (Study 2).*

4.1 | Timing of the Research and Relevance of Brexit Identities

Study 1 data were collected in April 2020 and Study 2 data between November 2020 and July 2021, during the formalization of Brexit, when it remained a salient and divisive public issue. Brexit identities stayed relatively stable over time, often stronger than party affiliations, with nearly two-thirds still identifying as Remainers or Leavers in October 2022. While there is some overlap with partisanship, for example on economic policy positions, Brexit identities differ notably on social values such as immigration, indicating that these are separate identities going beyond views on the EU (Tilley and Hobolt 2023). As of 2024, Brexit remains salient (National Centre for Social Research 2024), with a majority (56% vs. 32%) now viewing it as a mistake, and many Leavers expressing regret (YouGov 2022; The Policy Institute King's College London 2022), suggesting continued relevance for wellbeing.

5 | Study 1

5.1 | Method

5.1.1 | Participants and Procedure

A total of 302 participants completed the online survey on Qualtrics via an online participant panel (Prolific) on “social relations after Brexit” in April 2020, 4 years after the 2016 EU referendum and 3 months after the Brexit implementation on 31 January 2020. Only participants who had voted in the 2016 EU referendum and who self-identified as either a Remainer or Leaver were eligible to take part. Participants received a small payment of £1.25 as reward for their participation. Informed consent was obtained from all participants prior to participation.

Of the recruited sample, 22 participants were excluded from the data analysis because they did not meet the inclusion criteria: Eight responses indicated an age under 22, which was under 18 in the year of 2016 EU referendum and therefore they were not eligible to vote, and three did not indicate an age. Also, 31 responses did not or preferred not to identify with a Brexit identity (Leaver, Remainder), and nine indicated that they did not vote in the referendum. Data from two respondents who completed the study in less than 4 min were removed to ensure data quality. The final sample consisted of 280 participants. For the full socio-demographic characteristics see Supporting Material Table S1.

For a mediation analysis to detect a medium effect for both α and β paths ($M = 0.39$) using the percentile bootstrap test of mediation with an α of 0.05 and a power of 0.80, the required sample size is $N = 78$ (Fritz and MacKinnon 2007). For a moderation analysis, to detect a small-to-medium effect size of $f^2 = 0.065$ using a linear multiple regression (fixed model, R^2 increase, number of tested predictors: 1, total number of predictors: 3) with an α of 0.05 and a power of 0.80, the required sample size is $N = 123$ (GPower, Faul et al. 2007). The sample accessible for data collection was also restricted for practical and resource reasons, hence a sample size based on a small effect ($f^2 = 0.02$; $N = 395$) was not feasible for Study 1 (see Aguinis et al. 2005). The study received ethical approval from the local institutional ethics committee.

5.1.2 | Measures

Composite scores were created by the mean of the relevant items (items were recoded where appropriate), which yielded reliable scales.

Demographics. Participants indicated their age, gender, highest education level completed (1 = *no formal schooling*, 2 = *primary school*, 3 = *secondary school*, 4 = *GCSE or similar*, 5 = *A-level or similar*, 6 = *undergraduate education*, 7 = *post-graduate education*), and their country of residence (*England, Scotland, Wales, Northern Ireland, other*).

5.1.2.1 | Brexit Stance

Referendum Vote, Current Brexit Identity. Participants were asked how they voted in the 2016 EU Referendum (*Leave, Remain*) and whether they currently consider themselves as a Leaver or Remainder. Only participants who indicated to have voted in the 2016 EU referendum and who currently self-identified as either Leaver or Remainder were eligible to participate in the study.

Identification as Leaver/Remainder. Level of identification with the ingroup (Leaver/Remainder) was measured using five items on a 7-point Likert scale, ranging from 1 = *strongly disagree* to 7 = *strongly agree* (adapted from Leach et al. 2008). Example items were: “I have a lot in common with other Remainders/Leavers” and “Being a Remainder/Leaver is an important part of how I see myself”. Higher scores represent greater identification with the ingroup (Cronbach’s $\alpha = 0.82$).

5.1.2.2 | Strained Intergroup Relations

Intergroup Emotions. Participants reported to what extent they feel *anger, disgust, contempt, respect* (R) toward the outgroup on four items on a scale ranging from 1 = *not at all* to 7 = *extremely*

(based on Mackie and Smith 2018). Higher scores represent more negative intergroup emotions (Cronbach’s $\alpha = 0.81$).

Perceived Outgroup Respect. Participants indicated on two items whether “[Outgroup members] always communicate with [ingroup members] as with people of equal worth” and “[Ingroup members] are consistently treated by [outgroup members] as counterparts that are to be taken seriously” on a 7-point Likert scale ranging from 1 = *strongly disagree* to 7 = *strongly agree* (adapted from Renger and Reese 2017). Higher scores represent greater perceived outgroup respect ($r = 0.66$, $p < 0.001$).

Intergroup Anxiety. Participants reported their level of intergroup anxiety on six items on a 7-point Likert scale, common stem: “If you were the only [ingroup member] interacting with a group of [outgroup members], how would you feel?”, item-specific completion examples were: *anxious, tense*, and *nervous*, ranging from 1 = *not at all* to 7 = *extremely* (Stephan and Stephan 1985). Higher scores represent higher intergroup anxiety (Cronbach’s $\alpha = 0.92$).

5.1.2.3 | Intergroup Contact

Contact Quantity. Participants reported the frequency of their contact with the outgroup overall using a single item. They indicated how frequently they (knowingly) interacted with Remainders/Leavers over the last few months (1 = *never*, 2 = *rarely*, 3 = *occasionally*, 4 = *often*, 5 = *very often*). Higher scores represent greater contact quantity.

Contact Quality. Participants rated the extent to which their contact with outgroup members was overall on four items (e.g., *respectful, equal*) on a 7-point Likert scale ranging from 1 to 7 (Birtel et al. 2024). Only participants who indicated that they had contact with the outgroup on the contact quantity index were included on the contact quality scale ($N = 270$). Higher scores represent greater contact quality (Cronbach’s $\alpha = 0.91$).

5.1.2.4 | Subjective Wellbeing

Mental Wellbeing. Participants completed the seven items from the Short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS, Ng Fat et al. 2017) that describe their experience over the last 2 weeks on a 5-point Likert scale ranging from 1 = *none of the time* to 5 = *all of the time*. Example items were: “I’ve been feeling optimistic about the future” and “I’ve been feeling useful”. Higher scores represent greater mental wellbeing (Cronbach’s $\alpha = 0.81$).

Life Satisfaction. Participants responded to a single item asking “All things considered, how satisfied or dissatisfied are you with your life overall?” on a 7-point Likert scale ranging from 1 = *extremely dissatisfied* to 7 = *extremely satisfied*, also used in the World Values Surveys (World Values Survey Association 2022). Higher scores represent higher life satisfaction.

This study was part of a larger research project. We only present measures relevant for the current paper here.

5.2 | Results

Although not pre-registered, analyses were conducted after data collection was complete. Correlations between all measures are reported in the Supporting Material Table S2.

5.2.1 | Preliminary Analyses: Differences between Remainers and Leavers

Remainers differed on sociodemographic characteristics and variables relating to Brexit stance (see Table 1). On average, Remainers were significantly younger than Leavers and reported higher levels of completed education (see Supporting Material A). Leavers also reported higher ingroup identification than Remainers. Comparing Remainers and Leavers on variables of intergroup relations, Leavers reported significantly higher frequency and higher quality of contact with Remainers. Remainers reported significantly more negative intergroup emotions towards Leavers. Remainers and Leavers did not differ in perceived outgroup respect, intergroup anxiety, mental wellbeing and life satisfaction. As there were no Brexit identity differences in intergroup anxiety or wellbeing, the mediation analyses for H2 were not carried out.

5.2.2 | Strained Intergroup Relations and Subjective Wellbeing

To assess whether the associations between strained intergroup relations (intergroup emotions, perceived outgroup respect) and wellbeing (mental wellbeing, life satisfaction) were moderated by Brexit identity, we conducted moderation analyses. Bootstrapping analyses (5,000 subsamples, 95% confidence interval) were conducted using the PROCESS macro by Hayes (2022, Model 1). Brexit identity was coded as Leavers = 0 and Remainers = 1. The conditional effect of intergroup emotions on mental wellbeing was significant for Remainers, but not Leavers, partially supporting H1 (see Table 2). The more negative intergroup emotions Remainers reported, the lower their mental wellbeing. Brexit identity did not moderate the association between intergroup emotions and life satisfaction, or between perceived outgroup respect and wellbeing (mental wellbeing, life satisfaction; see Supplement B, Table S5).

5.2.3 | Intergroup Contact and Subjective Wellbeing

We computed mediation analyses to assess whether intergroup anxiety mediated the relationship between contact quality and wellbeing (mental wellbeing, life satisfaction). Analyses were

carried out using the PROCESS macro (Hayes 2022, Model 4). The significance of the mediation was tested using the bootstrapping procedure with 5000 resamples (see Figure 1). Contact quality was negatively associated with intergroup anxiety ($B = -0.28$, $SE = 0.08$, $p < 0.001$). Intergroup anxiety was negatively associated with mental wellbeing ($B = -0.09$, $SE = 0.03$, $p = 0.001$). There was a significant indirect effect through intergroup anxiety ($B = 0.03$, $SE = 0.01$, 95% $CI [0.01, 0.05]$), but no significant direct effect ($B = 0.02$, $SE = 0.03$, $p = 0.598$) or total effect ($B = 0.04$, $SE = 0.03$, $p = 0.206$). In sum, the relationship between contact quality and mental wellbeing was mediated by intergroup anxiety. Higher contact quality was associated with lower intergroup anxiety and in return with higher mental wellbeing, supporting H3. There was no significant mediation for life satisfaction (indirect effect: $B = 0.01$, $SE = 0.02$, 95% $CI [-0.03, 0.06]$).

Adding contact quantity as a second predictor to the mediation analysis, contact quality remained significant for mental wellbeing (indirect effect: $B = 0.02$, $SE = 0.01$, 95% $CI [0.01, 0.05]$), whereas contact quantity was not significant (indirect effect: $B = 0.01$, $SE = 0.01$, 95% $CI [-0.01, 0.03]$). Adding contact quantity for life satisfaction, contact quality remained non-significant (indirect effect: $B = 0.01$, $SE = 0.02$, 95% $CI [-0.03, 0.06]$), contact quantity was also not significant (indirect effect: $B = 0.01$, $SE = 0.01$, 95% $CI [-0.02, 0.04]$).

5.2.4 | Summary

Comparing Remainers and Leavers in their wellbeing, Study 1 found no differences, reflecting the mixed evidence in the literature, Bentall et al. 2024; Hery et al. 2022; Kavetsos et al. 2018; Liew et al. 2020; Powdthavee et al. 2019). Identification with a Brexit side was stronger for Leavers than Remainers. There was partial support for H1: Strained intergroup relations (negative intergroup emotions but not outgroup respect) predicted mental wellbeing (but not life satisfaction) for Remainers, but not Leavers. There was no support for H2: Intergroup anxiety did not mediate the relationship between Brexit identity and wellbeing. There was partial support for H3: Intergroup contact quality predicted mental wellbeing (but not life satisfaction) via intergroup anxiety in both Remainers and Leavers.

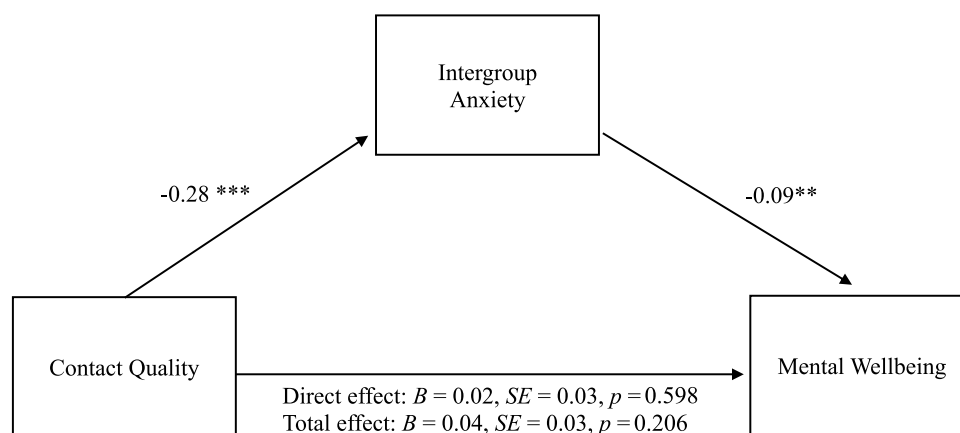
TABLE 1 | Means (Standard Deviations), Significance Tests and Effect Sizes for all Measures as a Function of Brexit Identity (Study 1).

Measure	Range	N	Brexit identity		t	p	Cohen's d
			Remainer	Leaver			
Age	22–76	280	34.76 (10.38)	41.22 (12.42)	4.40	< 0.001	0.59
Education	1–7	280	5.84 (0.97)	5.23 (1.12)	−4.16	< 0.001	−0.59
Ingroup identification	1–7	280	2.98 (0.99)	3.37 (1.09)	2.87	0.004	0.38
Intergroup anxiety	1–7	280	3.97 (1.42)	3.93 (1.48)	−0.22	0.827	−0.03
Negative intergroup emotions	1–7	279	3.79 (1.32)	2.77 (1.22)	−5.84	< 0.001	−0.78
Perceived outgroup respect	1–7	267	2.66 (1.15)	2.97 (1.51)	1.56	0.122	0.25
Contact quantity	1–5	278	3.29 (1.03)	3.87 (1.06)	4.19	< 0.001	0.56
Contact quality	1–7	270	5.80 (1.04)	6.11 (1.26)	2.05	0.041	0.28
Mental wellbeing	1–5	280	3.24 (0.64)	3.26 (0.64)	0.20	0.845	0.03
Life satisfaction	1–7	280	4.62 (1.79)	4.53 (1.79)	−0.35	0.728	−0.05

TABLE 2 | Moderation Analysis for the Association between Intergroup Emotions and Mental Wellbeing, Moderator: Brexit Identity (Study 1).

	<i>B</i>	<i>SE (B)</i>	<i>t</i>	<i>p</i>	95% CI [LL, UL]
Main analysis					
Constant	3.15	0.18	17.51	< 0.0001	[2.80, 3.51]
Negative intergroup emotions	0.04	0.06	0.62	0.537	[-0.08, 0.15]
Brexit identity	0.42	0.23	1.87	0.063	[-0.02, 0.86]
Negative intergroup emotions X Brexit identity	-0.13	0.07	-1.84	0.067	[-0.26, 0.01]
Simple slopes					
Leavers	0.04	0.06	0.62	0.537	[-0.08, 0.15]
Remainers	-0.09	0.03	-2.64	0.009	[-0.16, -0.02]

Note: $N = 279$. B = unstandardized coefficient, SE = standard error, p reported two-tailed, CI = percentile confidence interval, 95% CI bootstrapping (5000 resamples), LL = lower limit, UL = upper limit. R^2 change = 0.01, $F(1, 275) = 5.95$, $p = 0.067$. Brexit identity was coded as Leavers = 0 and Remainers = 1.

**FIGURE 1** | Intergroup Anxiety as a Mediator of the Relationship between Contact Quality and Mental Wellbeing (Study 1, $N = 270$). Note: Unstandardized coefficients are reported. Indirect effect: $B = 0.03$, $SE = 0.01$, 95% CI [0.01, 0.05]. ** $p < 0.01$, *** $p < 0.001$.

The lack of findings related to life satisfaction mirrors findings from previous research that found effects on mental wellbeing rather than life satisfaction (Hervy et al. 2022; Powdthavee et al. 2019).

6 | Study 2

Study 1 revealed that negative intergroup emotions (but not perceived outgroup respect) were associated with mental wellbeing for Remainers but not Leavers. Contact quality was positively associated with mental wellbeing, via reduced intergroup anxiety, for both Remainers and Leavers. Study 2 tested our hypotheses in a larger sample, 6–12 months later. It also included a measure of attitudes towards Brexit to examine the link between Brexit attitudes and wellbeing (H4).

6.1 | Method

6.1.1 | Participants and Procedure

A total of 585 completed the online survey on Qualtrics on “social relations after Brexit” between November 2020 and July 2021, 4.5–5 years after the 2016 referendum of Britain’s exit from the European Union. Participants were recruited through social media adverts on Facebook sites related to Brexit and UK politics more generally, representing a range of political views (e.g., Brexit means Brexit, Remainers United, UK Politics

Debate, Politics & Beyond), and Prolific. As in Study 1, only participants who had voted in the 2016 EU referendum and who self-identified as either a Remainer or Leaver were eligible to take part. The current data were recruited as baseline data for an experimental study unrelated to wellbeing, 120 participants of the current sample continued to take part in time 2 and 3 of the research (see Tausch et al. 2024). Participants recruited on Prolific received a small payment of £2.50 for time 1, participants recruited on social media were entered into a prize draw as reward for their participation. Of the recruited sample, ten participants were excluded from the data analysis because they did not meet the inclusion criteria: Six responses indicated an age under 22, which was under 18 in the year of 2016 EU referendum and therefore they were not eligible to vote, and four did not indicate an age. The final sample consisted of 575 participants for the full sociodemographic characteristics see Supporting Material Table S3. Sample size and power calculations were the same as for Study 1. As we had more resources for Study 2, a sample size based on a small effect ($f^2 = 0.02$; $N = 395$) was feasible, as recommended by Aguinis et al. (2005). The study received ethical approval from the local institutional ethics committee.

6.1.2 | Measures

Demographics and measures relating to Brexit stance (referendum vote; current Brexit identity; identification as Leaver/Remainer,

TABLE 3 | Means (Standard Deviations), Significance Tests and Effect Sizes for all Measures as a Function of Brexit Identity (Study 2).

Measure	Range	N	Brexit identity		t	p	Cohen's d
			Remainer	Leaver			
Age	23–79	575	44.13 (13.96)	45.68 (13.41)	1.27	0.205	0.11
Education	1–7	574	5.96 (1.00)	5.46 (1.08)	–5.45	< 0.001	–0.50
Ingroup identification	1–7	575	5.23 (1.12)	4.62 (1.23)	–6.01	< 0.001	–0.53
Brexit attitudes	1–7	575	5.34 (0.99)	2.41 (0.79)	–38.23	< 0.001	–3.15
Intergroup anxiety	1–7	573	4.10 (1.51)	3.77 (1.63)	–2.36	0.019	–0.21
Negative intergroup emotions	1–7	572	3.97 (1.42)	2.57 (1.17)	–12.49	< 0.001	–1.04
Perceived outgroup respect	1–7	573	3.09 (1.38)	3.40 (1.42)	2.53	0.012	0.22
Contact quantity	1–5	572	2.99 (1.04)	3.51 (1.06)	5.51	< 0.001	0.50
Contact quality	1–7	544	5.16 (1.47)	6.08 (1.09)	8.24	< 0.001	0.68
Mental wellbeing	1–5	575	3.45 (0.66)	3.71 (0.70)	4.43	< 0.001	0.39
Life satisfaction	1–7	575	4.93 (1.71)	5.41 (1.53)	3.36	< 0.001	0.29

$\alpha = 0.87$), strained intergroup relations, (intergroup emotions, $\alpha = 0.84$; perceived outgroup respect, $r = 0.65$ $p < 0.001$; intergroup anxiety, $\alpha = 0.92$), intergroup contact (contact quantity; contact quality, $\alpha = 0.91$), and subjective wellbeing (mental wellbeing, $\alpha = 0.87$; life satisfaction) were measured as in Study 1. Only participants who indicated that they had contact with the outgroup on the contact quantity index were included on the contact quality scale ($N = 544$).

Brexit Attitudes. We developed a new scale to measure attitudes towards the main points of contention in the Brexit debate, using 11 items on a scale ranging from 1 = *strongly agree* to 7 = *strongly disagree* (see Supporting Material C). Example statements were: “Brexit will allow the UK to take back control over immigration and its borders” and “Brexit threatens worker’s rights in this country” (R). Higher scores represent more *negative* attitudes towards Brexit (Cronbach’s $\alpha = 0.96$).

Composite scores were created by the mean of the relevant items (items were recoded where appropriate), which yielded reliable scales. As this study was part of a larger research project, we only present measures relevant for the current paper here.

6.2 | Results

Although not pre-registered, analyses were conducted after data collection was complete. Correlations between all measures are reported in see Supporting Material Table S4.

6.2.1 | Preliminary Analyses: Differences Between Remainers and Leavers

Remainers differed on sociodemographic characteristics and variables relating to Brexit stance (see Table 3). As in Study 1, Remainers reported significantly higher levels of completed education than Leavers (see also Supporting Material A). They did not differ in age. In contrast to Study 1, Remainers reported higher ingroup identification than Leavers. As expected, they also reported more negative attitudes towards Brexit than Leavers. Comparing Remainers and Leavers on variables of intergroup relations, Remainers reported significantly more

negative perceptions on all variables than Leavers, that is, greater intergroup anxiety, more negative intergroup emotions, and lower perceived outgroup respect. Leavers reported significantly higher frequency and higher quality of contact with Remainers. Leavers also reported significantly greater mental wellbeing and life satisfaction than Remainers.

6.2.2 | Strained Intergroup Relations and Subjective Wellbeing

6.2.2.1 | Moderation

To assess whether the associations between strained intergroup relations (intergroup emotions, perceived outgroup respect) and wellbeing (mental wellbeing, life satisfaction) were moderated by Brexit identity, we conducted the same moderation analyses as in Study 1 (see Table 4). There was a significant main effect of perceived outgroup respect on mental wellbeing. Higher perceived outgroup respect was associated with higher mental wellbeing. Importantly, there was a significant interaction between perceived outgroup respect and Brexit identity, that is, Brexit identity moderated the association between perceived outgroup respect and mental wellbeing. The conditional effect of perceived outgroup respect on mental wellbeing was significant for both, but stronger for Leavers, supporting H1. The higher perceived outgroup respect, the higher mental wellbeing. Brexit identity did not moderate the association between perceived outgroup respect and life satisfaction, or between intergroup emotions and wellbeing (mental wellbeing, life satisfaction; see Supplement B, Table S6).

6.2.2.2 | Mediation

We computed mediation analyses to assess whether intergroup anxiety mediated the relationship between Brexit identity and wellbeing (mental wellbeing, life satisfaction). Analyses were carried out using the PROCESS macro (Hayes 2022, Model 4). Brexit identity was coded as Leavers = 0 and Remainers = 1. The significance of the mediation was tested using the bootstrapping procedure with 5000 resamples (see Table 5). Brexit identity was positively associated with intergroup anxiety ($B = 0.32$, $SE = 0.14$, $p = 0.019$).

TABLE 4 | Moderation Analysis for the Association between Outgroup Respect/Brexit Attitudes and Wellbeing, Moderator: Brexit Identity (Study 2).

Predictor/outcome	<i>B</i>	<i>SE (B)</i>	<i>t</i>	<i>p</i>	95% CI [LL, UL]
<i>1. Outgroup respect/mental wellbeing</i>					
Main analysis					
Constant	3.22	0.13	25.54	< 0.0001	[2.97, 3.47]
Outgroup respect	0.15	0.03	4.26	< 0.0001	[0.08, 0.21]
Brexit identity (0 = Leavers, 1 = Remainers)	0.07	0.15	0.45	0.654	[-0.23, 0.37]
Outgroup respect X Brexit identity	-0.09	0.04	-2.21	0.027	[-0.18, -0.01]
Simple slopes					
Leavers	0.15	0.03	4.26	< 0.0001	[0.08, 0.21]
Remainers	0.05	0.02	2.11	0.035	[0.003, 0.1]
<i>2. Brexit attitudes/mental wellbeing</i>					
Main analysis					
Constant	4.66	0.15	30.59	< 0.0001	[4.36, 4.95]
Brexit attitudes	-0.39	0.06	-6.5	< 0.0001	[-0.51, -0.27]
Brexit identity	-0.83	0.24	-3.5	0.0005	[-1.3, -0.37]
Brexit attitudes X Brexit identity	0.32	0.07	4.65	< 0.0001	[0.18, 0.45]
Simple slopes					
Leavers	-0.39	0.06	-6.50	< 0.0001	[-0.51, -0.27]
Remainers	-0.07	0.03	-2.10	.037	[-0.14, -0.004]
<i>3. Brexit attitudes/life satisfaction</i>					
Main analysis					
Constant	6.80	0.38	17.82	< 0.0001	[6.05, 7.55]
Brexit attitudes	-0.58	0.15	-3.85	< 0.0001	[-0.87, -0.28]
Brexit identity	-1.34	0.60	-2.25	.025	[-2.51, -0.17]
Brexit attitudes X Brexit identity	0.48	0.17	2.78	.006	[0.14, 0.82]
Simple slopes					
Leavers	-0.58	0.15	-3.85	< 0.0001	[-0.87, -0.28]
Remainers	-0.10	0.08	-1.18	.237	[-0.26, 0.07]

Note: *B* = unstandardized coefficient, *SE* = standard error, *p* reported two-tailed, CI = percentile confidence interval, 95% CI bootstrapping (5000 resamples), *LL* = lower limit, *UL* = upper limit. *R*² changes: 1. *N* = 573; *R*² change = 0.01, *F*(1, 569) = 4.89, *p* = 0.027. 2. *N* = 575; *R*² change = 0.03, *F*(1, 571) = 21.67, *p* < 0.0001; 3. *N* = 575; *R*² change = 0.01, *F*(1, 571) = 7.74, *p* = 0.006. Brexit identity was coded as Leavers = 0 and Remainers = 1.

Mental wellbeing. Intergroup anxiety was negatively associated with mental wellbeing ($B = -0.10$, $SE = 0.02$, $p < 0.0001$). There was a significant indirect effect through intergroup anxiety, and significant direct and total effects. In sum, the relationship between Brexit identity and mental wellbeing was mediated by intergroup anxiety, supporting H2 (see Figure 2). Being a Remainer was associated with higher intergroup anxiety and in return with lower mental wellbeing.

Life satisfaction. Intergroup anxiety was negatively associated with life satisfaction ($B = -0.19$, $SE = 0.04$, $p < 0.0001$). There was a significant indirect effect through intergroup anxiety, and significant direct and total effects. In sum, the relationship between Brexit identity and life satisfaction was mediated by intergroup anxiety, supporting H2 (see Figure 3). Being a Remainer was associated with higher intergroup anxiety and in return with lower life satisfaction.

6.2.3 | Intergroup Contact and Wellbeing

We computed similar mediation analyses to assess whether intergroup anxiety mediated the relationship between contact

quality and wellbeing (mental wellbeing, life satisfaction) (see Table 5). Contact quality was negatively associated with intergroup anxiety ($B = -0.28$, $SE = 0.05$, $p < 0.0001$).

Mental wellbeing. Intergroup anxiety was negatively associated with mental wellbeing ($B = -0.09$, $SE = 0.02$, $p < 0.0001$). There was a significant indirect effect through intergroup anxiety, and a significant total effect (but not direct effect). In sum, the relationship between contact quality and mental wellbeing was mediated by intergroup anxiety, supporting H3 (see Figure 4). Higher contact quality was associated with lower intergroup anxiety and in return with higher mental wellbeing.

Life satisfaction. Intergroup anxiety was negatively associated with life satisfaction ($B = -0.15$, $SE = 0.05$, $p = 0.002$). There was a significant indirect effect through intergroup anxiety, and significant direct and total effects. In sum, the relationship between contact quality and life satisfaction was mediated by intergroup anxiety, supporting H3 (see Figure 5). Higher contact quality was associated with lower intergroup anxiety and in return with higher life satisfaction.

TABLE 5 | Total, Direct, and Indirect Effects of Brexit Identity and Contact Quality on Wellbeing, Mediator: Intergroup Anxiety (Study 2).

Predictor/outcome	<i>B</i>	<i>SE (B)</i>	<i>p</i>	95% CI [LL, UL]
1. Brexit identity/mental wellbeing				
Total effect	-0.27	0.06	< 0.0001	—
Direct effect	-0.23	0.06	< 0.0001	—
Indirect effect	-0.03	0.02	—	[-0.07, -0.005]
2. Brexit identity/life satisfaction				
Total effect	-0.48	0.15	0.001	—
Direct effect	-0.42	0.15	0.004	—
Indirect effect	-0.06	0.03	—	[-0.13, -0.01]
3. Contact quality/mental wellbeing				
Total effect	0.06	0.02	0.002	—
Direct effect	0.04	0.02	0.063	—
Indirect effect	0.02	0.01	—	[0.01, 0.04]
4. Contact quality/life satisfaction				
Total effect	0.20	0.05	< 0.0001	—
Direct effect	0.15	0.05	0.003	—
Indirect effect	0.04	0.01	—	[0.02, 0.07]

Note: *N* = 573 for Brexit Identity, *N* = 542 for Contact Quality. *B* = unstandardized coefficient, *SE* = standard error, *p* reported two-tailed, *CI* = percentile confidence interval, 95% *CI* bootstrapping (5000 resamples), *LL* = lower limit, *UL* = upper limit. Brexit identity was coded as Leavers = 0 and Remainers = 1.

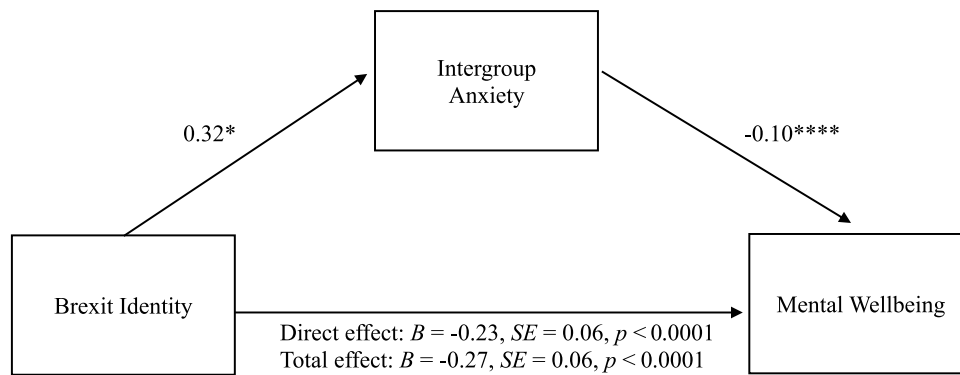


FIGURE 2 | Intergroup Anxiety as a Mediator of the Relationship between Brexit Identity and Mental Wellbeing (Study 2, *N* = 573). Note: Brexit identity was coded as Leavers = 0 and Remainers = 1. Unstandardized coefficients are reported. Indirect effect: *B* = -0.03, *SE* = 0.02, 95% *CI* [-0.07, -0.005]. **p* < 0.05, *****p* < 0.0001.

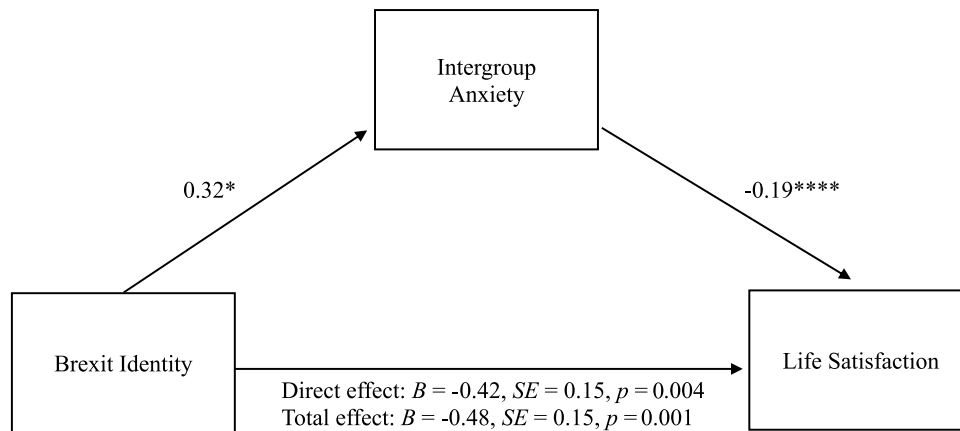


FIGURE 3 | Intergroup Anxiety as a Mediator of the Relationship between Brexit Identity and Life Satisfaction (Study 2, *N* = 573). Note: Brexit identity was coded as Leavers = 0 and Remainers = 1. Unstandardized coefficients are reported. Indirect effect: *B* = -0.06, *SE* = 0.03, 95% *CI* [-0.13, -0.01]. **p* < 0.05, *****p* < 0.0001.

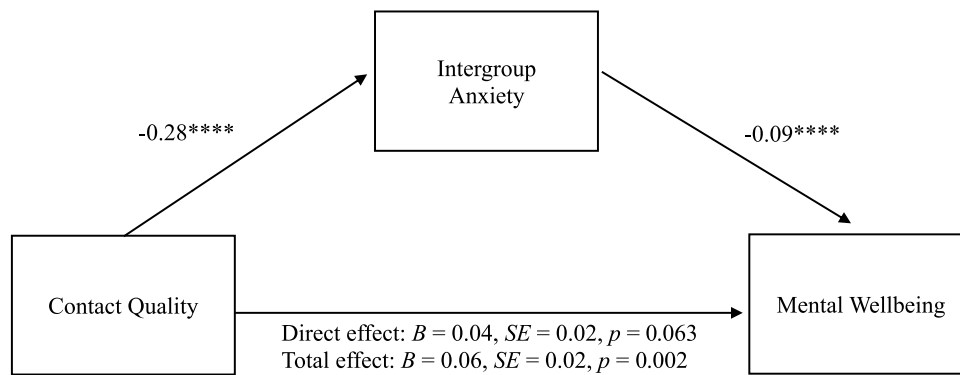


FIGURE 4 | Intergroup Anxiety as a Mediator of the Relationship between Contact Quality and Mental Wellbeing (Study 2, $N = 542$). Note: Unstandardized coefficients are reported. Indirect effect: $B = 0.02$, $SE = 0.01$, 95% $CI [0.01, 0.04]$. **** $p < 0.0001$.

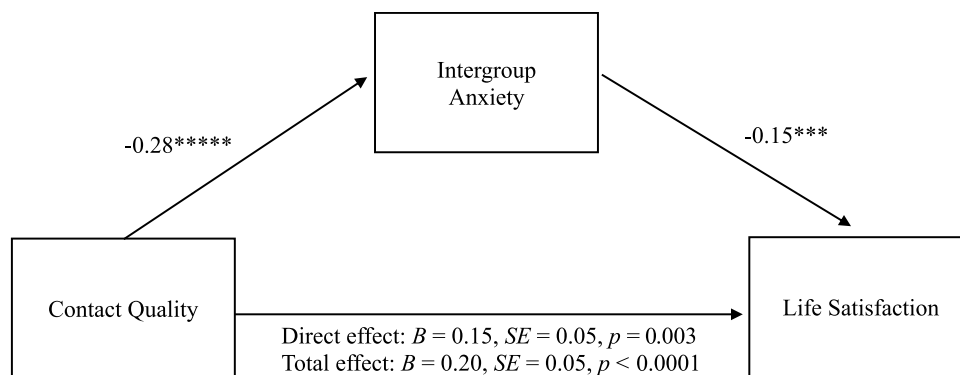


FIGURE 5 | Intergroup Anxiety as a Mediator of the Relationship between Contact Quality and Life Satisfaction (Study 2, $N = 542$). Note: Unstandardized coefficients are reported. Indirect effect: $B = 0.04$, $SE = 0.01$, 95% $CI [0.02, 0.07]$. *** $p < 0.001$.

Adding contact quantity as a second predictor to the mediation analysis, contact quality remained significant for mental wellbeing (indirect effect: $B = 0.02$, $SE = 0.01$, 95% $CI [0.01, 0.04]$) and for life satisfaction (indirect effect: $B = 0.04$, $SE = 0.01$, 95% $CI [0.01, 0.07]$), whereas contact quantity was not significant for mental wellbeing (indirect effect: $B = 0.01$, $SE = 0.01$, 95% $CI [-0.002, 0.02]$) or life satisfaction (indirect effect: $B = 0.02$, $SE = 0.01$, 95% $CI [-0.004, 0.04]$).

6.2.4 | Brexit and Subjective Wellbeing

To assess whether the associations between Brexit attitudes and wellbeing (mental wellbeing, life satisfaction) were moderated by Brexit identity, we computed a moderation analysis (see Table 4). Bootstrapping analyses (5,000 subsamples, 95% confidence interval) were conducted using the PROCESS macro by Hayes (2022, Model 1).

There were significant main effects of Brexit attitudes and Brexit identity on mental wellbeing and on life satisfaction. More negative Brexit attitudes and identifying as a Remainer were associated with lower mental wellbeing and lower life satisfaction. Additionally, there was a significant interaction between Brexit attitudes and Brexit identity, that is, Brexit identity moderated the association between Brexit attitudes and mental wellbeing as well as life satisfaction. For mental wellbeing, the conditional effect of Brexit attitudes on mental wellbeing was significant for both Remainers and Leavers, but was stronger for Leavers. The more positive the views towards

Brexit, the higher mental wellbeing, especially for Leavers. For life satisfaction, the conditional effect of Brexit attitudes on life satisfaction was significant for Leavers only. The more positive the views towards Brexit, the higher life satisfaction for Leavers. These results partially support H4, pro-Brexit attitudes were associated with higher levels of wellbeing, however this was more so the case for Leavers.

6.2.5 | Summary

In contrast to Study 1 that found no differences, Leavers reported greater mental wellbeing and life satisfaction than Remainers in Study 2. Identification with a Brexit side was stronger for Remainers than Leavers, showing the opposite pattern to Study 1. There was partial support for H1: Strained intergroup relations (outgroup respect but not negative intergroup emotions) predicted mental wellbeing (but not life satisfaction) for Leavers but not Remainers. In Study 1, negative intergroup emotions (but not outgroup respect) were significant for Remainers. There was partial support for H2: Intergroup anxiety mediated the relationship between Brexit identity and wellbeing (mental wellbeing and life satisfaction). There was full support for H3: Intergroup contact quality predicted wellbeing (mental wellbeing and life satisfaction) via intergroup anxiety in both Remainers and Leavers. There was partial support for H4: More positive Brexit attitudes predicted higher levels of mental wellbeing for both Remainers and Leavers, and higher life satisfaction for Leavers.

6.3 | Discussion

Responding to the call for research to understand and address the health implications of sociopolitical conflict (Van Bavel et al. 2024), our research adds to the literature on the link between political and affective polarization and poorer wellbeing (Fraser et al. 2022). We link intergroup dynamics (including intergroup emotions, outgroup respect, and intergroup contact) to subjective wellbeing in the context of Brexit: First, we show group differences in wellbeing among people with different Brexit identities during the Brexit implementation period. Second, we demonstrate that wellbeing is predicted by attitudes towards Brexit and by perceived strained intergroup relations (negative intergroup emotions towards and perceived lack of respect from the outgroup). Third, we reveal that positive intergroup contact is associated with wellbeing, via intergroup anxiety. Below we discuss possible explanations why the EU referendum and Brexit may be associated with wellbeing, focusing on the role of person-environment value incongruence and intergroup dynamics.

6.3.1 | *Brexit Values and Subjective Wellbeing*

Comparing Remainers and Leavers in terms of their wellbeing, Study 1 found no differences, whereas Study 2 revealed higher subjective wellbeing (mental wellbeing and life satisfaction) in Leavers than Remainers. This is in line with the mixed evidence in the literature, which indicated that both Remainers and Leavers had a decrease in wellbeing (Bentall et al. 2024; Hervy et al. 2022; Kavetsos et al. 2018) or an increase in Leavers (Liew et al. 2020; Powdthavee et al. 2019), while others found a decrease in Remainers (Bentall et al. 2024; Kavetsos et al. 2018).

More positive Brexit attitudes towards the main points of contention in the Brexit debate predicted higher levels of wellbeing for both Remainers and Leavers in Study 2, although this association was stronger for Leavers for mental wellbeing, and significant only for Leavers for life satisfaction (H4). Mental wellbeing and life satisfaction have been linked to a congruence between personal values and the values of the environment (Khaptsova and Schwartz 2016; Sagiv and Schwartz 2000; Verquer et al. 2003). In case of Brexit, personal (Brexit attitude) and environmental (Brexit implementation) were incongruent after the EU referendum, this incongruence was resolved for Leavers. Our data suggest that resolving the incongruence may explain higher reported wellbeing in Leavers. In the aftermath of Brexit, having more positive views towards Brexit is associated with higher wellbeing. For Leavers, whose personal values (positive Brexit attitudes) aligned with the environmental values during Brexit implementation, their previous incongruence is now resolved. Similarly, in the US, individuals who hold political views that are incongruent with their immediate communities reported worse physical and mental health (Fraser et al. 2022).

The strength of ingroup identification shifted between Study 1 and Study 2, possibly due to evolving political context and group-based threat or validation processes. Remainers reported stronger ingroup identification in Study 1 whereas Leavers reported stronger ingroup identification in Study 2. This could be due to a shift in the national context. Study 1 data were collected when Brexit had just been formalized but not fully implemented yet. Study 2 data were collected when the UK had

fully exited the EU and the implementation has become more salient in the public discourse, this may have increased a sense of validation and ownership among Leavers, possibly strengthening their identification. Furthermore, Remainers' identification may have decreased over time due to resignation, whereas Leavers' identity may have become more salient for them in the process of Brexit implementation.

6.3.2 | *Strained Intergroup Relations and Wellbeing*

Strained intergroup relations predicted mental wellbeing, but not life satisfaction. In Study 1, negative intergroup emotions (anger, disgust, contempt, low respect) negatively predicted mental wellbeing for Remainers but not Leavers (H1). In Study 2, perceived outgroup respect positively predicted mental wellbeing for both Remainers and Leavers (H1). In early stages, when the UK had just left the EU in Study 1, political outcomes may have been more unsettling for Remainers. They were dealing with the Brexit decision that conflicted with their values, resulting in negative intergroup emotions that were associated with their wellbeing. In later stages of the Brexit implementation phase in Study 2, when the conflict between Remainers and Leavers has become more routine rather than an immediate political threat, outgroup respect may have become more important for wellbeing, especially for Leavers, who may have been more likely to experience social disapproval and scrutiny from Remainers for their decision, and outgroup respect may have been protective for Leavers.

Furthermore, Brexit identity predicted wellbeing via intergroup anxiety in Study 2. Leavers reported lower intergroup anxiety and in return greater mental wellbeing and life satisfaction (H2). This is in line with previous research showing that strained intergroup relations and intergroup stress are linked to lower wellbeing (Blascovich et al. 2001; Major and O'Brien 2005).

Mental wellbeing appeared to be the more important outcome than life satisfaction. There was no association between pro-Brexit attitudes and life satisfaction for Remainers in Study 2. There were no associations between strained intergroup relations and life satisfaction in Studies 1 and 2. This mirrors previous research in which mental wellbeing rather than life satisfaction changed after the EU referendum (Hervy et al. 2022; Powdthavee et al. 2019). One reason for these diverging findings could be the different temporal sensitivity of the wellbeing measures. Mental wellbeing was measured asking participants to reflect on the past 2 weeks, whereas life satisfaction was measured considering their life overall. In that sense, mental wellbeing reflects current emotional and psychological functioning, while life satisfaction reflects a broader cognitive evaluation of one's life (Ruggeri et al. 2020). Therefore, the Brexit implementation period and intergroup dynamics may have influenced mental wellbeing more than life satisfaction. Furthermore, as intergroup processes elicit emotional responses such as intergroup emotions, mental wellbeing measures may be more sensitive to map these processes than life satisfaction measures, which may depend on more stable factors.

6.3.3 | *Intergroup Contact and Wellbeing*

Intergroup contact quality predicted wellbeing via intergroup anxiety in both Remainers and Leavers (H4). Those who

reported greater contact quality, reported lower intergroup anxiety, and in return greater mental wellbeing (Studies 1 and 2) and life satisfaction (Study 2). In line with previous research, we provide further evidence that intergroup contact may mitigate intergroup stress (Page-Gould et al. 2010) and negative effects of diversity change (Ramos et al. 2019), and is associated with greater wellbeing (Voci et al. 2017), via intergroup anxiety (Pettigrew and Tropp 2008).

Across both studies, we find a consistent pattern that strained intergroup relations are negatively associated with wellbeing, via intergroup anxiety. Negative intergroup emotions appeared to play a larger role for Remainers (Study 1) and perceived outgroup respect for Leavers (Study 2). In both studies, there was an indirect effect of intergroup contact on mental wellbeing via intergroup anxiety, for both Remainers and Leavers.

6.3.4 | Limitations

Notwithstanding the value of our research studying possible predictors and remedies of wellbeing in the context of Brexit, we acknowledge some shortcomings of our research. First, our cross-sectional design limits causal inference. However, our findings build on longitudinal studies on Brexit and wellbeing (Hervy et al. 2022; Kavetsos et al. 2018; Powdthavee et al. 2019) as well as intergroup contact (Pettigrew and Tropp 2006; Ramos et al. 2019), offering direction for future research and interventions. Although cross-sectional mediation cannot capture temporal dynamics, it can still offer valuable insight when the goal is to test theoretically informed pathways rather than make strong causal claims. Our use of mediation is therefore intended as a theoretically guided test of pattern consistency rather than a causal adjudication of mechanisms. We specified the models based on well-established accounts of intergroup contact, anxiety, and wellbeing. In this context, mediation serves to evaluate whether the associations in the data align with the structure predicted by theory and by longitudinal and experimental work in related domains. This approach allows us to identify plausible processes and to highlight which links are most promising to examine with stronger designs. The present findings should thus be interpreted as offering provisional evidence about how intergroup dynamics may be linked with wellbeing, and as a foundation for future longitudinal or experimental studies that can more definitively test these pathways.

Second, our samples included more Remainers than Leavers (Study 1: 72.5% Remainers, 27.5% Leavers; Study 2: 67.1% Remainers, 32.87% Leavers), reflecting challenges in recruiting Leavers. Even though we advertised Study 1 on diverse social media sites representing a range of political views, and both studies on Prolific with users from both Brexit identities, there appears to be a self-selection bias, suggesting higher skepticism in participating in Brexit research. Future research should identify ways to engage both Brexit identities as well as those with extreme political views.

6.3.5 | Implications

Our findings highlight the importance of political events such as referenda and identities in human wellbeing. They also underscore the potential importance of considering intergroup dynamics in interventions aimed at promoting wellbeing in polarized contexts. Strained intergroup relations, such as experiencing negative intergroup emotions and intergroup anxiety

or perceiving low outgroup respect may not only be detrimental to political dialogue, but also to wellbeing. In contrast, positive intergroup relations may mitigate negative consequences of polarization.

A consistent pattern of findings across both studies was that high-quality intergroup contact is associated with better wellbeing for both Remainers and Leavers, via reduced intergroup anxiety. According to a meta-analysis (Pettigrew and Tropp 2008), intergroup anxiety is a key mechanism for intergroup contact effects on prejudice. We show that intergroup anxiety is also relevant for wellbeing. Anxiety at the prospect of interacting with outgroup members can lead to stress. Intergroup contact can be considered as a form of exposure that reduces anxiety, and promote psychological resilience (Birtel and Crisp 2012; Birtel and Crisp 2015). In that sense, intergroup contact may not only reduce intergroup stress and anxiety but also counteract the stressors of political polarization and promote better wellbeing.

We aim to stimulate future research by suggesting that intergroup interventions may not only mitigate intergroup conflict, but also poor wellbeing. Sociopolitical polarization is on the rise in societies around the world, eroding democracy and separates people into isolation between polarized groups. Brexit is a prominent example that calls for an urgent need to understand the wellbeing impacts of political events. This is important as lower subjective wellbeing can lead to lower political participation and voting for extreme parties (Kavanagh et al. 2021). Indeed, lower life satisfaction in 2015 resulted in pro-Brexit attitudes in 2016 (Powdthavee et al. 2019). Future research should also investigate whether our findings hold in other contexts marked by political polarization, such as currently in the United States.

7 | Conclusions

Britain's exit from the European Union has contributed to societal division and lower wellbeing in the UK. In two studies 4–5 years after the referendum during the Brexit implementation period, this research provides evidence regarding the negative relationship between Brexit and wellbeing. It also expands the previous literature by suggesting that resolving person-environment incongruence in attitudes about Brexit and perceiving strained relationships between the two opposing Brexit identities are negatively associated with wellbeing, in particular regarding negative intergroup emotions and perceived outgroup respect. We also provide evidence that positive intergroup contact experiences are associated with greater wellbeing, via reduced intergroup anxiety. These findings highlight not only potential psychological consequences of polarization, but also the potential of interventions to promote wellbeing in polarized contexts by considering intergroup dynamics.

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Ethics Statement

The research received ethical approval from the University Teaching and Research Ethics Committee at the University of St Andrews.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

Material and data are available at https://osf.io/v54ny/?view_only=aaa785e250fc4840b9c65c617772d005.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section.

Table S1: Sociodemographic Characteristics of Participants in Study 1 (Frequencies). **Table S2:** Pearson Correlations between all Measures in Study 1, for Remainers (Below the Diagonal) and for Leavers (Above the Diagonal). **Table S3:** Sociodemographic Characteristics of Participants in Study 2 (Frequencies). **Table S4:** Pearson Correlations between all Measures in Study 2, for Remainers (Below the Diagonal) and for Leavers (Above the Diagonal). **Table S5:** Moderation Analysis for the Association between Intergroup Emotions/Outgroup Respect and Wellbeing, Moderator: Brexit Identity (Study 1). **Table S6:** Moderation Analysis for the Association between Outgroup Respect/Intergroup Emotions and Wellbeing, Moderator: Brexit Identity (Study 2).