

# Linking Recent Discrimination-Related Experiences and Wellbeing via Social Cohesion and Resilience

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## Abstract

The current study examined the relationship between recent experiences of discrimination and wellbeing and the mediating effects that social cohesion and resilience had on this relationship. Using online sampling, participants ( $N=255$ ) from a South London community rated the levels of discrimination related experiences in the past 6 months, alongside measures of social cohesion, resilience, and wellbeing (happiness and depressive symptoms). Results revealed a negative relationship between recent experiences of discrimination and wellbeing which was explained by a serial mediation relationship between social cohesion and resilience, and singly by resilience alone. The study highlights how recent experiences of discrimination can lead to a depletion of personal resources and social resources (which in turn also lead to reduced personal resources) and in turn, to lower levels of wellbeing.

**Keywords:** Discrimination, well-being, resilience, social cohesion, individual differences

## Introduction

Beyond the practical hardship and obstacles embedded in discrimination, including limited access to resources and opportunities (e.g. work, education, health etc; Crandall & Eshleman, 2003; Sidanius & Pratto, 1999), discrimination has a considerable negative psychological impact on wellbeing, mental health, worldviews and self-perceptions (Jost & Hunyady, 2002; Leary & Baumeister, 2000; Pyszczynski, Greenberg, & Solomon, 1997; Tajfel & Turner, 1986; Tesser, 1988). For some, it can be experienced as traumatic (e.g., Carter & Forsyth, 2010), with an increased activation of the sympathetic nervous system similar to that found in responses to traumatic or major life events (Mays, Cochran, & Barnes, 2007).

Indeed, discrimination, whether on the grounds of race/ethnicity (e.g., Brody et al., 2006; Wong, Eccles, & Sameroff, 2003; Gravlee, 2009; Hausmann, Jeong, Bost, & Ibrahim, 2008; Ryan, Howarter & Bennett, Gee, & Laflamme, 2006; Schulz, Gravlee, Williams, Israel, Mentz, & Rowe, 2006; Wallace, Nazroo, & Becares, 2016), gender (e.g., Kapoor et al., 2019; Pavalko,

Mossakowski & Hamilton, 2003), sexual orientation (e.g. Diamant & Wold, 2004; Sandfort, Bakker, Schellevis & Vanwesenbeeck, 2006) or other factors (e.g., Ahern, Stuber, & Galea, 2007; Sutin, Stephan, Carretta, & Terracciano, 2015; Wingood et al., 2007), has been linked with decreased physical health and mental health outcomes. In two meta-analyses (Pascoe & Smart Richman, 2009; Schmitt, Branscombe, Postmes, & Garcia, 2014), negative relationships were found between discrimination (on the grounds of gender, age and/ sexual orientation) and both psychological and physical wellbeing. The current study expands this well-established connection between experiences of discrimination and wellbeing by looking at how interpersonal (i.e., social coherence) and personal (i.e., resilience) factors mediate this relationship.

Several theories delineate the paths by which discrimination impacts health and wellbeing. For example, experiences of discrimination can be perceived as social rejection, and in line with theories that highlight the importance of seeking inclusion and avoiding exclusion from important social groups as a primary

motive with a survival value (e.g. Leary, Tambor, Terdal, & Downs, 1995), these experience can lead to decrease in self-esteem which will then lead to reduced wellbeing, increased stress, and poorer health. It should be noted, however, that a meta-analysis on rejection) found that while evidence from non-laboratory studies was consistent with the above self-esteem model, laboratory induced rejection and exclusion manipulations did not produce a significant drop in self-esteem (Blackhart, Nelson, Knowles, & Baumeister 2009). The authors distinguished between a single rejection event and more recurrent and chronic experiences of rejection/exclusion. The internalisation of discrimination was also argued to be a cause for distress and negative psychological impact, or as Allport argues, “so heavy is the prevailing cultural pressure that members of minority groups sometimes look at themselves through the same lens as other groups” (1954/1979, p. 198). Jost and Banaji (1994) showed that less powerful/dominant groups can adopt a genuine, internalized sense of inferiority, akin to false consciousness, unjustly taking responsibility (or self-blame) for being in a state of disadvantage; a process which Jost and Banaji (1994) argued was a result of our basic need to maintain the view of a just social order, also called the system justification theory. The system justification theory (Jost & Banaji, 1994; Jost & Hunyady, 2002) itself suggests that by undermining our basic need to believe that social structures and systems (as well as political or economic ones, etc.) are fair and just, discrimination will cause distress (Jost, Banaji & Nosek, 2004).

In line with these theories, the role of self-esteem as a mediator in the relationship between experiences of discrimination and its negative consequences was supported by various studies (e.g. Davis et al., 2012; Fischer & Shaw, 1999; Feng & Xu, 2015; Glendinning, 1998; Moksnes & Espnes, 2012; Verkuyten & Nekuee, 1999; Twenge & Crocker, 2002). While more limited in terms of scope, some studies have highlighted other related but different mediating factors including; optimism and anxiety among Hispanic Americans (Howarter & Bennett, 2013); access to cultural resources among Latino immigrants (Organista & Ngo, 2019); social support among migrant workers (Liu, Li, & Lin, 2013); and identification with religious and community groups when looking at mental health stigma rather than discrimination (Kearns, Muldoon, Msetfi & Surgenor, 2018). These internal and social factors, together with self-esteem, can be considered as resilience factors, a term more frequently used in studies on adverse/traumatic life experiences.

Resilience points to individuals’ ability to minimise negative outcomes when exposed to adversity or risk (Rutter 1990; Garmezy 1993; Lee & Cranford, 2008; Masten 2001) or to recover (or even grow) after significant adverse conditions (Leipold & Greve, 2009). Resilience can be seen as a trait, i.e., a stable personal consolation/personality quality (Block & Block, 1980) which facilitates positive adaptation to adversity (Connor & Davidson, 2003), or as a process that fluctuates and changes over time and circumstances (Luthar et al., 2000), i.e., in certain times in life or contexts one might be able to adapt positively to adversity while in other they might not. The Reserve Capacity Model (Gallo, Bogart, Vranceanu, & Matthews, 2005; Gallo & Matthews, 2003) which was developed as a broad organizing framework for research to examine the role of psychosocial variables in the frequently found relationship between social economic status and health outcomes, posits that socioeconomic contexts and their subsequent experiences can shape and deplete resilient resources, leading to a reduced reserve capacity which will then lead to risk behaviours and poorer health related outcomes (Gallo, de Los Monteros & Shivpuri, 2009). To our knowledge, very little research has focused directly on the relationship between resilience and experiences of discrimination, and the studies that we have found; e.g., Foster and Dion (2003) on hardy women and discrimination and Szymanski and Feltman, (2014) on experiences of sexual objectification among young heterosexual women, looked at resilience as a moderator, buffering the impact of discrimination rather than as a mediator for that negative impact. Furthermore, none of the studies that we have found took into consideration the potential role that social support, and on a more community level of reference - social cohesion, plays in the relationship between experiences of discrimination and resilience.

Alongside the psychological mechanism about the way in which experiences of discrimination can lead to reduced levels of resilience related factors (e.g. self esteem) and wellbeing, social factors were also explored in this context. The most prevalent factor explored is social support and its buffering impact on the negative impact of discrimination is well documented (e.g., Bradshaw, Jay, McNamara, Stevenson, & Muldoon, 2016; Braksmajer, Simmons, Aidala & McMahan, 2018; Fan & Chen, 2012; Park, Wang, Williams and Alegría, 2019; Wright and Wachs, 2019). In contrast, the role of social cohesion is less explored within this area.

Theoretically, social cohesion is composed of social capital and networks within communities (i.e.,

accumulation of social relationships); a sense of belonging and identity to place; shared values, codes of conduct and goals; social order and control; equal distribution of wealth; and willingness to help others for the maintenance of social solidarity (Forrest & Kearns, 2001). Saleem, Busby and Lambert (2018) noted that supportive and cohesive neighbourhoods can help reduce the negative impact of racial discrimination by providing support (Sampson, 2008), facilitative sharing experiences and coping mechanisms (Stevenson, 1998), or even through direct intervention when witnessing discrimination. Similarly, Brondolo, ver Halen, Pencille, Beatty and Contrada (2009) indicated that a supportive social network promotes a sense of security and connectedness, helping the individual to understand that discrimination is a shared experience. Group members can serve as models, guiding the individual in effective methods for responding to and coping with discrimination.

While the body of research on social cohesion and its moderating impact on the effects of discrimination is fairly limited, a few studies on ethnic/racial discrimination found that neighbourhood cohesiveness (Riina et al., 2013; Saleem et al., 2018), community identity (Bradshaw et al., 2016), and social connectedness in the ethnic community (Wei, Wang, Heppner & Du, 2012) reduced the negative impact of racial discrimination among adolescents (Bradshaw et al., 2016; Riina et al., 2013; Saleem et al., 2018, Stevenson & Muldoon, 2016) and international students (Wei, Wang, Heppner & Du, 2012). Furthermore, social cohesion was found to moderate the relationship between experiences of discrimination and psychological distress among Vietnamese, Chinese and Filipino American (Syed & Juan, 2012) and among Somali youth in a longitudinal study Cardeli, Sideridis, Lincoln, Abdi, Ellis and Jan (2019). In the same longitudinal study Cardeli et al. (2019) also found that social cohesion and social disconnection fully mediated the relationship between discrimination and outcome variables, which is in line with a few other studies which have found a mediating effect for social cohesiveness on discrimination/related constructs (e.g. stigma) and wellbeing. Kondrat, Sullivan, Wilkins, Barrett, and Beerbower (2018), for example, found that social support partially mediated the relationship between perceived stigma and mental health, so that perceived stigma led to reduced social support which then leads to lower mental health. Interestingly, they did not find any moderating effect which was expected in line with the risk/buffering effects theory. Similarly, Heim, Hunter,

and Jones (2011) found that social capital (a dimension of social cohesion) mediated between discrimination and wellbeing.

In relation to resilience, generally speaking, higher levels of social cohesion are associated with greater physical and psychological wellbeing (Bures, 2003; Delhey & Dragolov, 2016; Hutchinson et al., 2009; Robinette, Charles, Mogle & Almeida, 2013) and in a review of resilient outcomes for survivors of childhood sexual abuse (CSA) (Marriott, Hamilton-Giachritsis & Harrop, 2014) it was found that personal resources (e.g. coping skills, interpretation of experiences and self-esteem) and social (e.g., family, friends) and community resources (e.g. church or school) as closely linked with resilience. A positive correlation between social cohesion and resilience was found also in various contexts including among survivors of natural disasters (e.g., Greene, Paranjothy, & Palmer, 2015; Jaffee, Caspi, Moffitt, Polo-Tomás, & Taylor, 2007; Welton-Mitchell et al., 2018), school children (Chai, Li, Ye, Li, & Lin, 2019), people with HIV (Dageid, & Grønlie, 2015), and religious communities (Kaplan, 2005). Welton-Mitchell et al. (2018) note that social cohesion strengthens social bonds among individuals, increases peer-based activities (such as help-seeking and help-giving) and through that increases opportunities to establish networks and receive social support, which in turn promote resilience. Similarly, Greene et al. (2015) argue that through providing meaningful contact with other and increasing the sense of purpose, social cohesion facilitates interaction and communication, which then reduces individual's self-reliance and perceived inequity; all of which contribute to increased resilience at an individual and community levels.

In line with the above theories and evidence on the roles that resilience and social cohesion play in the relationship between discrimination and wellbeing, and by also recognising that social cohesion in itself is positively correlated with resilience (e.g. Zhang, Yu, Zhang & Zhou, 2017), we hypothesise that: perceived recent experiences of discrimination would be significantly negatively associated with wellbeing (Hypothesis 1) and that the relationship between perceived experiences of discrimination and wellbeing will be mediated serially by social cohesion and resilience so that discrimination will lead to lower social cohesion which will then lead to lower levels of resilience which then will lead to lower levels of wellbeing and mental health (Hypothesis 2).

This study focused on participants residing within the London borough of Lewisham, as part of a larger project

which investigated wellbeing. Lewisham has an ethnically diverse population, with 46% of adults and 76% school-children reporting a minority ethnic heritage identity (ONS, 2014). The Index of Multiple Deprivation places Lewisham within 20% of the most deprived local authorities in England (48/326; Indices of Multiple Deprivation, 2015). Relatedly, Lewisham has been identified as one of the lowest scoring local authorities in the UK for wellbeing (ONS, 2017). Thus, one of the main aims of the current study were to situate the processes of discrimination and wellbeing within a community which has experienced barriers to wellbeing.

## Method

### Participants

Overall, there were 255 participants, age of 18 to 65 ( $M = 38.23$ ,  $Sd = 13.43$ ) with 49.8% women ( $n = 127$ ) and 50.2% men ( $n = 128$ ) participants. Out of the sample, 56.9% ( $n = 145$ ) had an academic degree and 79.6% ( $n = 203$ ) were in full time or part time employment. Furthermore, 24.9% ( $n = 63$ ) self-identified as being part of Black and Minority Ethnic groups; 10.2% ( $n = 26$ ) noted their sexual orientation as homosexual/bisexual; and 7.1% ( $n = 18$ ) noted that they have a physical, mental and/or other disability. Table 1 depicts participants' demographic details.

### Procedure

Participants were recruited from one South London Borough, Lewisham, as part of a larger study looking more closely at wellbeing predictors in this borough. Participants were recruited through an online survey via Qualtrics Panels, which targeted a representative sample of participants residing within the London borough of Lewisham using their panel database and local partners. As part of the selection criteria, participants were recruited based on reporting their resident borough as Lewisham and the following postcodes: SE4, SE5, SE6, SE8, SE13, SE14, and SE15). To take part, participants had to be 18 or over.

### Measures

**Demographic Questionnaire.** Participants were asked several demographic questions including age, gender, ethnicity, marital status, annual income, sexual orientation and disability.

**Individual Experience of Discrimination (Binder et al., 2009).** The scale measures recent (last 6 months) discrimination experienced by the individual and their perceived threat due to their identity, on a scale of 1(not at all) to 5(very much). The overall score in this study was calculated by the sum of ratings across the items. Higher scores on this measure indicate more experiences of discrimination. The scale was adapted to measure

general discrimination based on the participants' 'identity', where ethnicity, religion, sexual orientation and gender were suggested as identities participants could refer to. The scale consisted of 4 items, e.g., "In the past 6 months have you experienced name calling or other abuse because you were a member of your identity group?" and "Have you ever felt threatened in the street because you are a member of your identity group?" In previous studies (e.g., Binder et al., 2009) Cronbach's  $\alpha$  was reported to be between 0.80 and 0.82 and in the current sample Cronbach's  $\alpha = 0.86$ .

### The Social Cohesion Scale (ISC) (Collins et al., 2017).

The scale measures neighbourhood social cohesion with 5 items (e.g. "People in my neighbourhood are willing to help their neighbours", "People in my neighbourhood can be trusted") on a scale from 1(very unlikely) to 5 (very likely). The overall score in this study was calculated by the sum of ratings across the items. Higher scores on this measure indicate more social cohesion. In the original study (Collins et al., 2017) Cronbach's  $\alpha$  was 0.68 and in the current study Cronbach's  $\alpha = 0.64$ .

### Brief Resilience Scale (BRS; Smith et al., 2008).

The scale measures participants' the ability to bounce back or recover from stress. It includes 6 items (3 of which are reverse-scored items), such as "I usually come through difficult times with little trouble", "I have a hard time making it through stressful events {Negative item} ". Items are rated on a scale from 1 (strongly disagree) to 5 (strongly agree) and the overall score in the study was the sum of all ratings. Higher scores on this measure indicate higher levels of resilience. In previous studies Cronbach's ranged between 0.80–0.91 (Smith et al., 2008) and in the current study Cronbach's  $\alpha = 0.77$ .

### The Patient Health Questionnaire (PHQ; Kroenke et al., 2001).

Measures symptoms of depression and includes nine items pertaining to the DSM-IV criteria for Major Depression Disorder [9]: (1) anhedonia; (2) depressed mood; (3) trouble sleeping; (4) feeling tired; (5) change in appetite; (6) guilt, self-blame, or worthlessness; (7) trouble concentrating; (8) feeling slowed down or restless; and (9) thoughts of being better off dead or hurting oneself. Each item is rated on a 4-point scale from 0 (0 – never) to 3 (nearly every day) during the two weeks prior to and including the day of survey completion. In our study the overall score was the sum of all ratings across the different items. Higher scores on this measure indicate higher levels of depression. In previous studies (e.g., Kroenke, 2001), Cronbach's  $\alpha$  was 0.89 and in the current study Cronbach's  $\alpha = 0.93$ .

**Table 1.** Demographic details ( $N = 255$ )

Employment	Full time employment	58.4% ( $n = 149$ )
	Part time employment	12.2% ( $n = 31$ )
	Self employed	9% ( $n = 23$ )
	Unemployed	4.7% ( $n = 12$ )
	Retired / Unable to work	8.2% ( $n = 21$ )
	Student/ Other	7.5% ( $n = 19$ )
Annual Income	0-£9,999	7.1% ( $n = 18$ )
	£10,000-£19,999	20% ( $n = 51$ )
	£20,000-£19,999	14.1% ( $n = 36$ )
	£30,000-£19,999	14.9% ( $n = 38$ )
	£40,000-£19,999	10.2% ( $n = 26$ )
	£50,000-£19,999	16.5% ( $n = 42$ )
	£75,000-£19,999	10.2% ( $n = 10$ )
£100,000+	7.1% ( $n = 18$ )	
Ethnicity	White/ White British	47.8% ( $n = 122$ )
	Black /Black British	13.5% ( $n = 34$ )
	Asian	4.3% ( $n = 11$ )
	Mixed	7.1% ( $n = 18$ )
	Prefers not to say	15.3% ( $n = 39$ )
	Other <sup>1</sup>	12.2% ( $n = 31$ )
Marital Status	Married/Civil partnership/ Cohabiting	45.3% ( $n = 115$ )
	In a relationship	11% ( $n = 28$ )
	Single	38.4% ( $n = 98$ )
	Divorced/ Widowed	5.1% ( $n = 13$ )
	Unspecified	0.4% ( $n = 1$ )
Education	No formal education	0.4% ( $n = 1$ )
	GCSE/Lower High School/Equivalent	17.3% ( $n = 44$ )
	A-Levels/Upper High School/Equivalent	12.2% ( $n = 31$ )
	Professional Diploma/NVQ/Equivalent	13.3% ( $n = 34$ )
	Bachelor Degree/Equivalent	31.8% ( $n = 81$ )
	Postgraduate Degree/Equivalent	25.1% ( $n = 64$ )
Sexual Orientation	Heterosexual	75.5% ( $n = 185$ )
	Homosexual/Bisexual	10.2% ( $n = 26$ )
	Prefer not to say	14.1% ( $n = 36$ )
Disability	No disability	81.2% ( $n = 207$ )
	Physical/mental/other disability	7.1% ( $n = 18$ )
	Prefer not to say	11.8% ( $n = 30$ )
Religion	Christian	32.9% ( $n = 86$ )
	Muslim	3.5% ( $n = 9$ )
	Hindu/Buddhist	3.6% ( $n = 9$ )
	Agnostic/other	6.3% ( $n = 16$ )
	Prefer not to say	15.7% ( $n = 40$ )

<sup>1</sup> "Other" category included: British ( $n = 18$ ), European/Eastern European ( $n = 6$ ), Hispanic ( $n = 3$ ), Greek ( $n = 2$ ), Turkish ( $n = 2$ )

**Table 2.** Pearson correlations among the study's variable

Variables	1	2	3	4	5
1. Discrimination					
2. Resilience	-.269**				
3. Social cohesion	-.23**	.27**			
4. Happiness	-.187**	.216**	.22**		
5. Depressive symptoms	.626**	-.217**	-.21**	-.158*	
<i>M</i>		3.15	13.26	18.08	17.44
<i>SD</i>		0.69	2.84	4.74	6.99

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

**The Subjective Happiness Scale (Lyubomirsky & Lepper, 1999).** The scale measures general happiness on a scale of 1 (not very happy/less happy/not at all) to 7 (a very happy person/more happy/a great deal). It consisted of 4 items, e.g., "In general, I consider myself:" and "Some people are generally not very happy. Although they are not depressed, they never seem happy as they might be. To what extent does this characterization describe you?" The overall score was the sum of all items. Higher scores on this measure indicate higher levels of happiness. In previous studies (e.g., Lyubomirsky & Lepper, 1999) Cronbach's  $\alpha$  was reported between 0.7 and 0.94 and in the current sample Cronbach's  $\alpha = 0.78$ .

### Results

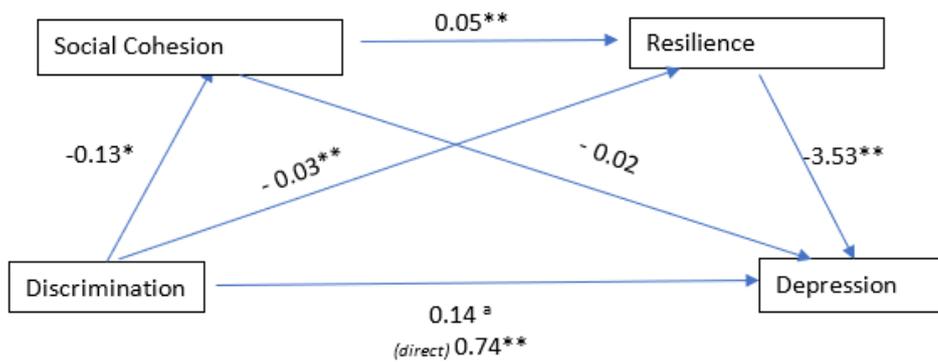
When looking at participants' recent experience of discrimination, 36.1% on the sample ( $n = 92$ ) directly experienced, and 40.8% ( $n = 104$ ) knew someone from their identity group who experienced, some level of name calling/abuse because of their identity (e.g. ethnicity, religion, sexual orientation, gender, etc.) in the last 6 months. Furthermore, 45.9% ( $n = 117$ ) have at some time in their lives felt threatened in the street because they were a member of their identity group; and 49% ( $n = 125$ ) said that there were certain neighbourhoods to which they did not go because they felt threatened as a member of their identity group. In terms of demographic variable and experiences of experiences of discrimination, being part of a Black and Ethnic Minority group (BME) was linked to higher levels of reported discriminatory experiences ( $t = -4.08$ ,  $p < 0.001$ )<sup>i</sup> while age was negatively correlated with experiences of discrimination ( $r = -0.31$ ,  $p < 0.001$ ). Neither gender nor education were significantly correlated with experiences of discrimination ( $r = 0.11$ ,  $p = 0.09$  and  $r = 0.1$ ,  $p = 0.1$ , respectively).

In order to test Hypothesis 1 a correlational matrix was calculated. Results, and mean and standard deviations for variables are reported in Table 2.

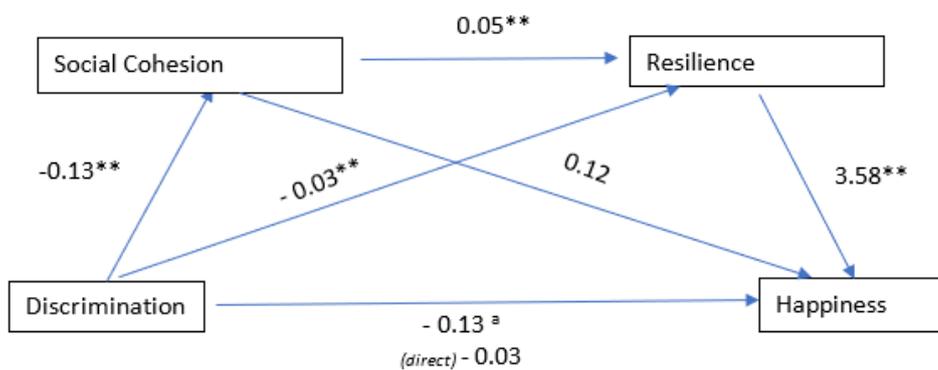
As can be seen from Table 2 Hypothesis 1 was partially supported as perceived experiences of discrimination was negatively linked to levels of happiness ( $r = -0.187$ ;  $p = 0.03$ ) and positively significantly related to depressive symptoms ( $r = 0.626$ ;  $p < 0.0001$ ).

In order to test Hypothesis 2, we examined the potential mediation effect of social cohesion and resilience on wellbeing. Two mediation models were performed by using Hayes's Process application on SPSS and applying Model 6 (i.e., a serial mediation model with 2 mediators); one for the relationship between experiences of discrimination and happiness and one for the relationship between experiences of discrimination and depression. Throughout the analyses, participants' age was used as a covariate. The results of the analyses can be seen in Figure 1.

As can be seen from Figure 1 and as hypothesised, while using participants' age as a covariate, experiences of discrimination negatively predicted social cohesion ( $R^2 = 0.06$ ;  $p = 0.001$ ) and both experiences of discrimination and social cohesion significantly predicted participants' resilience ( $R^2 = 0.13$ ;  $p < 0.001$ ). In terms of wellbeing, participants' levels of depression were significantly predicted by experiences of discrimination (direct effect was 0.74; LLCI = 0.06 and ULCI = 0.88) but also indirectly through resilience (indirect effect was 0.09; LLCI = 0.03 and ULCI = 0.16) and through social cohesion and resilience (indirect effect was 0.02; LLCI = 0.004 and ULCI = 0.05) reflecting a partial mediation. Overall, the model predicted 53.72% of the depressive symptoms' variance ( $R^2 = 0.54$ ;  $p < 0.001$ ).



Note: \*  $p < .05$ ; \*\*  $p < .01$ . Overall indirect effects were 0.14 (LLCI = 0.05 and ULCI = 0.2) with -0.002 (LLCI = -0.04 and ULCI = 0.03) for Discrimination and Depression via Social Cohesion; 0.09 (LLCI = 0.03 and ULCI = 0.16) for Discrimination and Depression via Resilience; and 0.02 (LLCI = 0.004 and ULCI = 0.05) for Discrimination and Depression via Social Cohesion and Resilience.



Note: \*  $p < .05$ ; \*\*  $p < .01$ . Overall indirect effects were -0.13 (LLCI = -0.21 and ULCI = -0.06) with -0.01 (LLCI = -0.05 and ULCI = 0.01) for Discrimination and Depression via Social Cohesion; -0.09 (LLCI = -0.17 and ULCI = -0.03) for Discrimination and Depression via Resilience; and 0.02 (LLCI = -0.05 and ULCI = -0.01) for Discrimination and Depression via Social Cohesion and Resilience.

**Figure 1.** Mediation analysis for social cohesion and resilience as mediating the relationship between experiences of discrimination and well being

As for levels of happiness, happiness was not significantly directly predicted by experiences of discrimination (direct effect was -0.03 LLCI = -0.15 and ULCI = 0.09) but rather was only indirectly predicted by experiences of discrimination through resilience (indirect effect was -0.09; LLCI = -0.17 and ULCI = -0.03) and through social cohesion and resilience (indirect effect was -0.02; LLCI = -0.05 and ULCI = -0.01) reflecting a full mediation. Overall, the model predicted 30.69% of the variance ( $R^2 = 0.31$ ;  $p < 0.001$ ). The pathway of prediction of depression or happiness by experience of discrimination and social cohesion on its own, was not significant. Overall, the results suggest discrimination was associated with decreased social cohesion and resilience; in turn, social cohesion and resilience were linked with increased happiness and fewer depressive symptoms. Thus, both social cohesion and resilience play a buffering role on the detrimental

impact of discrimination on wellbeing, thus supporting Hypothesis 2<sup>ii</sup>.

**Discussion**

The aim of this paper was to examine the ways in which social cohesion and resilience play a role in the impact that recent experiences of discrimination have on wellbeing. Our results revealed that a considerable percentage of our sample have experienced recent discrimination related experiences directly and indirectly and that the levels of these experiences were significantly and negatively correlated with wellbeing, resilience and levels of social cohesion. We also found that resilience and the combination of social cohesion and resilience partially mediated the relationship between recent experiences of discrimination and depression and fully mediated the relationship between these experiences and happiness.

Our findings on the link between experiences of discrimination and lower levels of wellbeing are not surprising and are in line with other previous studies in the area (e.g. Jost & Hunyady, 2002; Leary & Baumeister, 2000; Pascoe & Smart Richman, 2009; Schmitt et al., 2014); however the percentage of participants who reported experiencing discrimination in the last 6 months (around 35%) was unexpected. Nevertheless, when taking into account that our sample was ethnically diverse, reflecting the London community from which participants were sampled, and that the discrimination experiences cut across specific grounds for discrimination (e.g. gender, sex, ethnicity etc.), these percentages are not considerably dissimilar to other recent surveys in the UK which measured discrimination experiences on specific grounds (e.g. Waldersee, 2018, on ethnicity). Using a measure which assessed discrimination experiences as a general scale without differentiating between the basis for the discriminatory experience (e.g. gender-based discrimination, race-based discrimination, etc.), our findings imply that beyond specific contexts the discriminatory act itself has a psychological negative impact on individuals, at least in the short term. This could occur, as suggested in the literature, through feelings of rejection (Leary et al., 1995), negative internalisations (Jost & Banaji, 1994) or undermining fundamental belief in social structures (Jost et al. 2004) that these experiences provoke. Finally, the strength of the linear relationship between the levels of recent discrimination experiences, which in this study were rated on a scale from 1 (not at all) to 5 (very much), and depression may suggest that future research could explore the impact of cumulative discrimination experiences (rather than recent ones) to see whether similarly to findings from the area of traumatic events (Karam et al., 2014) the more experiences ones encounter throughout life, the worse is the impact.

In relation to resilience, our findings are in line with views of resilience as a process that fluctuates and changes over time and circumstances (Luthar et al., 2000) and with the Reserve Capacity Model (Gallo et al., 2005; Gallo & Matthews, 2003) where resilience reduces in accordance to an increase in experiences of discrimination and a decrease in levels of social cohesion. Moreover, the mediation analyses in our study suggest that both resilience and social cohesion play a role in the consequences of recent discrimination experiences, so that recent discrimination experiences lead to lower levels of social cohesion (including a sense of belonging and identity, shared values, social order and control, social solidarity, etc.), which then lead to a

reduction in personal resilience, which then leads to lower levels of wellbeing. This pathway highlights the interplay between personal and interpersonal aspects of discrimination-based experiences, where both personal and social factors are impacted and interlinked to create an overall negative impact. As far as we are aware, no previous studies have tested this pathway, which lends support to a view where discrimination-based experiences (similar to traumatic events) can trigger a process of depletion of personal resources which ultimately leads to reduced levels of wellbeing and mental health.

The above results should be reviewed within the study's own limitations. First, the sample in the study was an online sample. Some authors (e.g., Chiauzzi, DasMahapatra, Lobo & Barratt, 2013; or Johnson, 2002) note that online samples often includes non-representative self-selected samples. While this is a shortcoming of online sampling, our current sample does not seem to considerably deviate from the population it represents and includes variability across different demographic variables. Additionally, our sample was recruited using an online panel-based approach in collaboration with local partners; indeed, online samples recruited through services such as Qualtrics or Amazon MTurk tend to be more ethnically and socioeconomically diverse, and therefore more representative than other (e.g. student) samples (Boas, Christenson, & Glick, 2018; Burhmester, Kwang, & Gosling, 2011; Casler, Bickel, & Hackett, 2013). In this study the measure for experiences of discrimination referred to recent discrimination experiences (i.e., in the last 6 months). It may therefore be possible that a participant would have experienced discrimination in the past but not in the last 6 months. In that way, we accept that the results of this study cannot be fully generalised to any experience of discrimination or to the long terms rather the more immediate impact of discrimination experiences. In addition, the Cronbach's alpha for the Social Cohesion scale in this study was low when compared to other scales in our study; however, Helms, Henze, Sass, and Mifsud (2006) suggested that the benchmarks (i.e., rules of thumb) for judging the adequacy of reliability coefficients historically have ranged from .50 to .90, and in a review of various definitions of Cronbach's alpha, Taber (2018) indicated that alpha values in the range of (0.64–0.85) as adequate (with alpha below 0.45 considered as not satisfactory). Furthermore, the alpha levels found in our study were very similar to the values found in the original paper (Collins et al., 2017) which implies that they may be a result of the scale itself rather

than special characteristics of our sample. Finally, this study is a cross-sectional study based on self-reports and therefore it has limitations in terms of common method variance and does not enable us to infer any causation between variables.

With these limitations in mind, the current study documents the extent of recent experiences of discrimination and their impact in a London community and provides new and important information on the paths in which recent experiences of discrimination impact individuals' wellbeing by reducing social and personal resources that in turn reduce levels of personal happiness and increase levels of depression.

### Conclusion

The current study adds further support to previous findings regarding the negative impact that experiences of discrimination have on individuals, and goes beyond that to delineate the path of this impact which through a combination of social and individual factors. Importantly, it situates this relationship within a local cultural context, reflecting the barriers to wellbeing within a community which has one of the lowest national scores for this measure of life quality (ONS, 2017). Discrimination is a personal experience which occurs within a social context and our study highlights that this distressing and stressful life experience may take a psychosocial path, negatively impacting individuals' social connections which are central to individuals' resilience and together impact one's wellbeing. This psychosocial path of impact is a significant and novel addition to research in the area and has important practical implications. The results suggest that breaking the chain of impact on either the social-community end and/or the personal resilience end may mitigate the adverse impact that discrimination has on an individual. They also highlight the importance of restoring community ties and connections in order to strengthen personal resilience when trying to help individuals cope and overcome discriminatory experiences.

### Notes

<sup>i</sup> Non BME participants were coded as "1" and BME participants as "2"

<sup>ii</sup> As part of additional analyses we have examined for a moderation effect for social cohesion and resilience on the relationship between recent discrimination experiences and wellbeing. Two multiple regressions (one for each of the wellbeing variables) were performed by using Hayes's Process application on SPSS and applying Model 2 (i.e., a moderation model with 2 moderators) with participants' age used as a covariate.

Results revealed that neither participants' resilience ( $R^2$  change(resilience X discrimination) = 0.0001,  $P = 0.87$  for happiness, and  $R^2$  change(resilience X discrimination) = 0.0001,  $P = 0.86$  for Depression) nor their reported levels of social cohesion ( $R^2$  change (social cohesion X discrimination) = 0.0042,  $P = 0.22$  for happiness, and  $R^2$  change (social cohesion X discrimination) = 0.0008,  $P = 0.5$  for Depression) moderated the relationship between recent experiences of discrimination and well-being.

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The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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