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ABSTRACT

Adverse childhood experiences are regularly implicated as a risk factor in the development of Obsessive-Compulsive Personality Traits (OCPT). Nevertheless, the majority of individuals exposed to adverse childhood experiences do not go on to develop adult OCPT. This study aimed to investigate whether attachment or metacognition best mediate the association between adverse childhood experiences and OCPT. Undergraduate psychology students ($N = 194$) participated in a 30-minute anonymous online survey, and completed a retrospective adverse childhood experiences measure, along with measures of current attachment, metacognition, OCPT, and depression. Bootstrapped mediation revealed that attachment-anxiety positively mediated between adverse childhood experiences and OCPT. Mediation was not found for either attachment-avoidance or metacognition. These findings provide preliminary evidence that attachment-anxiety may be important for understanding the effects of adverse childhood experiences on OCPT development. Additionally, the findings suggest that future research should investigate the predictive role of specific types of adverse childhood experiences. The potential clinical utility for both assessment and treatment effects based on the co-occurrence of adverse childhood experiences and heightened attachment-anxiety on OCPT are discussed.

KEYWORDS

adverse childhood experiences; mediation; metacognition; personality; obsessive-compulsive

INTRODUCTION

Adverse childhood experiences (ACEs), such as childhood abuse, neglect, and traumatic household environments, are associated with numerous poor physical and mental health, and social and behavioural outcomes in a dose-dependent relationship (Petrucci et al., 2019). One such outcome is OCPT, which encompasses Obsessive-Compulsive Personality Disorder (OCPD)-related characteristics including preoccupation with details, devotion to productivity, overconscientious, perfectionism, and interpersonal and affective difficulty (APA, 2022). While OCPD represents the clinical diagnosis of these traits, OCPT are present in sub-clinical populations and are associated with reduced quality of life and moderate psychosocial, interpersonal, and occupational impairment (Soeteman et al., 2008). Despite this, research regarding OCPT etiology is generally both limited and indeterminate (Diedrich & Voderholzer, 2015).

There is, however, substantial evidence for the link between ACEs and adult obsessive-compulsive personality pathology. Several clinical and self-report sub-clinical studies demonstrate that ACEs are positively associated with both OCPT and OCPD (Afifi et al., 2011; Hengartner et al., 2013; Lobbestael et al., 2010). Nevertheless, there is a general consensus that disordered personality traits are a culmination of recurrent interactions between individual vulnerabilities and environmental influences (Diedrich & Voderholzer, 2015; Graybar & Boutilier, 2002). On this view, a sole causal factor, such as ACEs, is insufficient to fully account for the development of OCPT (Cicchetti, 2006, 2016; Cicchetti et al., 1988; Diedrich & Voderholzer, 2015). However, the factors that mediate this established relationship between ACEs and OCPT remain poorly elucidated. Consequently, this led the present study to examine what mediating variables may help explain the development of OCPT following ACE-exposure. Possible candidates include attachment (Zakiei et al., 2017) and metacognition (Rees & Anderson, 2013) since both are associated with ACEs and OCPT independently.

Attachment is an individual's characteristic manner of relating to and receiving intimacy from attachment figures (Levy et al., 2011). Central to attachment is the quality of caregiving provided by a primary caregiver, with this forming the psychological foundation from which a child develops internal working models of self and others (Levy et al., 2011). ACEs, of which poor quality caregiving is typically characteristic, disrupt the formation of secure internal working models of self and others. Instead, internal working models of the self as worthless and of others being both rejecting and unreliable may develop (Yumbul et al., 2010). Such internal working models underly insecure attachment, which, broadly speaking, typically develops along the continua of attachment-anxiety and attachment-avoidance (Lin et al., 2020). Unsurprisingly, there is considerable evidence that ACEs contribute to insecure attachment: child physical, sexual, and emotional abuse, and neglect are all positively associated with adult insecure attachment within student and community samples (Erozkan, 2016; Lin et al., 2020; Yumbul et al., 2010).

Internal working models associated with insecure attachment are also associated with obsessive-compulsive personality pathology. Patients with OCPD report significantly greater fearful attachment than non-OCPD controls (Wiltgen et al., 2015). Additionally, self-reported attachment insecurity positively associates with OCPT amongst undergraduates (Zakiei et al., 2017). Internal working models of the self and others underlying OCPT relate to the belief of needing absolute internal and external control, which may perpetuate attachment insecurity (Lyddon & Sherry, 2001). Thus, stable, inflexible perfectionistic behaviours may result and develop into adult OCPT. Given that evidence indicates that ACEs precede insecure attachment, and that insecure attachment positively associates with OCPT, insecure attachment might plausibly mediate between ACEs and OCPT.

An alternative potential mechanism underlying the relationship between ACEs and OCPT is metacognition. Defined as one's beliefs about thinking, as well as strategies used to control, monitor, and appraise thinking, metacognition develops throughout childhood and adolescence (Rees &

Anderson, 2013). Myers and Wells (2015) propose that ACE-exposed individuals tend to develop dysfunctional metacognitive beliefs about the need to use worry and threat monitoring to avoid emotional distress. This subsequently triggers a cognitive-attentional syndrome entailing rumination, attentional focusing on threat, and maladaptive coping strategies. This cognitive-attentional syndrome then maintains a metacognitive inflexibility that inhibits implementing alternate thought styles. Ultimately, this emotion regulation dysfunction descends into psychopathological states. Several research findings demonstrate a positive relationship between ACEs and dysfunctional metacognition. For example, Scarpa et al. (2009) found child sexual abuse severity positively correlates with maladaptive metacognitive control strategies. Similarly, child emotional abuse positively correlates with metacognitive rumination (Raes & Hermans, 2008) and metacognitive beliefs (Myers & Wells, 2015).

Empirical evidence also exists for a link between metacognition and obsessive-compulsive pathology (Rees & Anderson, 2013). Several cross-sectional self-report studies demonstrate that metacognition is positively associated with obsessive-compulsive symptoms in both student and clinical samples (Myers et al., 2009; Solem et al., 2010). One recent study suggests the link between family abuse and obsessive-compulsive symptoms is fully mediated by post-traumatic and obsessive cognitions (Despotes et al., 2021). However, Despotes et al. (2021) did not examine metacognition specifically, but rather cognition primarily and elements of metacognition. Nevertheless, from a neurocognitive perspective, undergraduates with pronounced OCPT displayed executive dysfunction in attentional shifting—a phenomenon referred to as obsessional slowness (García-Villamizar & Dattilo, 2015). Such slowness is proposed to result from preservation and rumination (i.e., elements of cognitive attentional syndrome; García-Villamizar & Dattilo, 2015; Veale, 1993). Given that evidence demonstrates that ACEs contribute to dysfunctional metacognition, and that dysfunctional metacognition contributes to obsessive-compulsive pathology, metacognition may also possibly mediate between ACEs and OCPT.

To our knowledge, no study has yet integrated both attachment and metacognition to examine whether these variables can contribute to accounting for why ACEs sometimes lead to OCPT and not at other times. Some empirical evidence exists for a relationship between attachment and metacognition (Myers & Wells, 2015; Yavuz et al., 2019), although the specific sequence remains unclear. Myers and Wells (2015), on the one hand, posit that metacognition serves as a mediator between child emotional abuse and attachment, whereas Yavuz et al. (2019) suggest a mediated pathway from attachment to somatization through metacognition, implying a potential temporal precedence of attachment over metacognition. Nevertheless, it is still unclear whether either metacognition or attachment even mediate the ACEs-OCPT link in the first place. This raises concerns about the suitability of examining attachment and metacognition within a single model, as parallel mediation presumes mediators are not causally associated, while serial mediation assumes a temporal precedence among mediators (Hayes, 2018).

Empirical support for a postulated mediation simply indicates the data is consistent with that model *as well as* other possible models, while failure to find mediation is a disconfirmation of the postulated chain (Hayes, 2018; Salthouse, 2011). Thus, examining multiple postulated mediation models using the same data allows for the disconfirmation and elimination of possible alternative models, thereby increasing confidence in a target model/s (Hayes, 2018; Salthouse, 2011). Hence, the aim of this paper was to investigate whether attachment or metacognition mediate the relationship between ACEs and OCPT in separate alternative analyses. All hypotheses are examined controlling for depression. As depression is found to distort reports of OCPT due to obsessive-compulsive personality psychopathology closely approximating the distress of mood disorders (Case et al., 2007), controlling for depression is considered best practice when assessing ACEs and OCPT. Thus, we hypothesised that (1) attachment-anxiety will significantly positively mediate the association between ACEs and OCPT; (2) attachment-avoidance will significantly positively mediate the association between ACEs and OCPT, and; (3) metacognition will significantly positively mediate the association between ACEs and OCPT.

METHODS

PARTICIPANTS AND PROCEDURE

Two hundred undergraduate first-year psychology students completing research for course credit were recruited via an undergraduate online participant pool system. Six participants were excluded for failing more than one attention check, leaving a total of 194 participants. The sample was aged 18 to 54 ($M = 21.6$, $SD = 7.2$), and females constituted 82.99% ($n = 161$) of the sample. Ethnicity was reported as 110 as White/Caucasian (56.70%), 31 as Asian (15.98%), 15 as South Asian (7.73%), 13 as Middle Eastern (6.70%), two as Hispanic or Latino (1.03%), one as Aboriginal or Torres Strait Islander (0.52%), and 22 as other (11.34%). Inclusion criteria was 18-years of age or older and fluent English. This study was granted ethical approval by Macquarie University's Human Research Ethics Committee (reference number 520221114836842).

All participants, who were blind to the study's hypotheses, completed a 30-minute anonymous online Qualtrics survey as part of a larger project. All participants completed a series of demographic questions regarding gender, age, and ethnicity, followed by a battery of self-report questionnaires including the Child Abuse and Trauma Scale, Experiences in Close Relationships – Revised, Metacognition Questionnaire – 30, Schedule for Nonadaptive and Adaptive Personality – 2 OCPD scale, the Five Factor Obsessive-Compulsive Inventory – Short Form, and the International Personality Item Pool Depression Scale. All participants provided consent to participate and were presented a post-participation debrief statement.

MEASURES

CHILD ABUSE AND TRAUMA SCALE (CATS)

The CATS (Sanders & Becker-Lausen, 1995) retrospectively assesses the frequency of adverse childhood and adolescent experiences perpetrated by principal caretakers. The CATS has 38 self-report items, with a total score and three sub-scales: neglect/negative home atmosphere (14-items), sexual abuse (6-items) and punishment (6-items). Items are rated on a 5-point Likert scale ranging from 0 (*never*) to 4 (*always*), with higher total and sub-scale average scores (0-4) indicating greater ACE severity. The CATS has displayed strong temporal stability, good convergent validity, and strong internal consistency ($\alpha = 0.90$; Sanders & Becker-Lausen, 1995). The CATS was found to have excellent reliability ($\alpha = .96$).

EXPERIENCES IN CLOSE RELATIONSHIPS – REVISED QUESTIONNAIRE (ECR-R)

The ECR-R (Fraley et al., 2000) assesses underlying adult attachment patterns in intimate relationships. The ECR-R has 36 self-report items that form two dimensions: an 18-item attachment-anxiety scale and an 18-item attachment-avoidance scale. Items are rated on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), with higher average total scores (1-7) for both scales indicating greater attachment-anxiety and avoidance. The ECR-R has good temporal stability, good convergent validity, and excellent internal consistency with Cronbach's alphas exceeding .90 for both scales (Sibley et al., 2005). The ECR-R was found to have excellent reliability ($\alpha = 0.95$ for both scales).

THE METACOGNITIONS QUESTIONNAIRE – 30 (MCQ-30)

The MCQ-30 (Wells & Cartwright-Hatton, 2004) measures individual differences in metacognitions. The MCQ-30 has 30 self-report items rated on a 4-point Likert scale ranging from 1 (*do not agree*) to 4 (*agree very much*), with higher total sum scores (30-120) indicating greater dysfunctional

metacognition. The MCQ-30 has displayed good convergent validity, acceptable-to-good temporal stability, and excellent internal reliability ($\alpha = 0.93$; Wells & Cartwright-Hatton, 2004). The MCQ-30 was found to have excellent reliability ($\alpha = 0.92$).

INTERNATIONAL PERSONALITY ITEM POOL DEPRESSION SCALE (IPIP-DEP)

The IPIP-DEP (Goldberg et al., 2006; freely accessed online via <https://ipip.ori.org>) assesses the tendency to experience negative affect and was used to control for depression. The IPIP-DEP has 10 self-report items rated on a 5-point Likert scale from 1 (*very inaccurate*) to 5 (*very accurate*), with higher total sum scores (10-50) reflecting greater negative affect. The IPIP-DEP has demonstrated good convergent validity (Donnellan et al., 2006) and internal consistency ($\alpha = .88$; Goldberg et al., 2006). The IPIP-DEP was found to have similarly good reliability ($\alpha = 0.88$).

OUTCOME MEASURES

Two measures were selected for testing OCPT to assess differing conceptualisations of these traits. The literature is currently still debating whether measuring personality pathology is best approached via either a maladaptive trait or a DSM criteria-based approach (Widiger & Hines, 2022). As such, the FFOCI-SF is derived from maladaptive variants of the Five Factor Model of personality (Costa & McCrae, 1992), while the SNAP-2 measures the OCPD DSM-5 criteria (American Psychiatric Association, 2013). Utilising both measures will consequently help assess a broader spectrum of OCPT, while also providing grounds for determining convergent validity.

Schedule for Nonadaptive and Adaptive Personality – 2 (SNAP-2). The SNAP-2 (Clark, 2014) is designed to measure both healthy and pathological personality traits. This study used only the OCPD scale (SNAP-2 OCPD) which dimensionally assesses the DSM-5 (APA, 2013) OCPD criteria. The SNAP-2 OCPD has 25 self-report items rated on a dichotomous 'True' or 'False' scale, with higher total sum scores (0-25) indicating greater OCPD symptomology. The SNAP-2 OCPD has demonstrated good convergent validity (Clark, 2014), adequate temporal stability, and acceptable internal consistency ($\alpha = .79$; Samuel et al., 2012). The SNAP-2 was found to have acceptable reliability ($\alpha = 0.70$).

Five Factor Obsessive-Compulsive Inventory – Short Form (FFOCI-SF). The FFOCI-SF (Griffin et al., 2018) measures maladaptive traits associated with OCPD based on the Five-Factor Model of personality. The FFOCI-SF has 48 self-report items rated on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), with higher total sum scores (48-240) indicative of greater OCPD trait presence. The FFOCI-SF has exhibited acceptable-to-good internal consistency ($\alpha = .71$ to $.85$) and good convergent validity, including with the SNAP-2 ($r = .47$; Samuel et al., 2012). The FFOCI-SF was found to have excellent reliability ($\alpha = 0.91$).

STATISTICAL ANALYSIS

Data analysis was conducted using Stata/MP 17.0. Initially, Spearman's rank-order correlation was used to explore bivariate relationships. For the primary analysis, on the recommendation of Hayes (2009), bootstrapped mediation with 5000 iterations was used. Bootstrapping has greater power and tests for significance by calculating confidence intervals as opposed to inferentially testing the indirect effect (Hayes, 2009). Attachment-anxiety, attachment-avoidance, and metacognition were independently assessed as a mediator between ACEs (predictor variable) and OCPT (outcome variable). For each mediator, two models were assessed; one where OCPT was measured by the SNAP-2 and once as measured by the FFOCI-SF. Depression was controlled for in all models. For the statistically significant mediation models, standardized seemingly unrelated regressions between the model paths were used to obtain path values.

RESULTS

DESCRIPTIVE STATISTICS

Examination of distance and influence revealed no outliers in the present sample. Firstly, Table 1 presents the descriptive statistics for this study's variables. The CATS scores had adequate variability and central tendency comparable to what is previously found within small undergraduate samples (Sanders & Becker-Lausen, 1995).

Table 1. Descriptive Statistics for Study Variables

Variable	M	SD	Min	Max	Skew	Kurtosis	Shapiro-wilk
Child Abuse and Trauma Scale	1.1	0.7	0.05	3.10	0.78	2.88	$p < .001$
ECR-R Attachment-Anxiety	3.8	1.4	1	6.67	-0.01	2.13	$p = .007$
ECR-R Attachment-Avoidance	3.0	1.2	1	6.22	0.10	2.21	$p = .003$
Metacognitions Questionnaire – 30	67.0	15.9	33	113	0.27	2.79	$p = .317$
FFOCI-SF	143.6	22.6	81	214	-0.02	3.41	$p = .434$
SNAP-2	13.8	4.2	3	23	-0.07	2.31	$p = .152$
International Personality Item Pool Depression Scale	28.5	8.7	10	49	0.18	2.37	$p = .067$

Note. $N = 194$. ECR-R = Experiences in Close Relationships – Revised; FFOCI-SF = Five Factor Obsessive-Compulsive Inventory – Short Form; SNAP-2 = Schedule for Nonadaptive and Adaptive Personality – 2.

CORRELATIONAL ANALYSIS

To analyse the bivariate relationships, Spearman's rank-order correlations were conducted. As displayed in Table 2, all the correlations were as expected except attachment-avoidance scores were not significantly correlated with FFOCI-SF OCPT scores. Convergent validity of the OCPT scales was displayed through a significant strong positive correlation between FFOCI-SF and SNAP-2 scores.

Table 2. Correlations Between Study Variables

Variable	1.	2.	3.	4.	5.	6.
1. Child Abuse and Trauma Scale						
2. ECR-R Attachment-Anxiety	.42***					
3. ECR-R Attachment-Avoidance	.28***	.45***				
4. Metacognitions Questionnaire – 30	.36***	.53***	.24***			
5. FFOCI-SF	.21**	.23**	.07	.36***		
6. SNAP-2	.32***	.38***	.16*	.45***	.61***	
7. IPIP-DEP	.45***	.65***	.42***	.64***	.26***	.31***

Note. $N = 194$. ECR-R = Experiences in Close Relationships – Revised; FFOCI-SF = Five Factor Obsessive-Compulsive Inventory – Short Form; SNAP-2 = Schedule for Nonadaptive and Adaptive Personality – 2; IPIP-DEP = International Personality Item Pool Depression Scale.

* $p < .05$. ** $p < .01$. *** $p < .001$.

MEDIATION ANALYSES

Regarding hypothesis 1, the mediation results demonstrated that the standardised indirect effect of ACEs on FFOCI-SF OCPT via attachment-anxiety was non-significant ($ab = .02$, $p = .272$, BC 95% CI $[-.008, .086]$). Comparatively, as seen in Figure 1, the results demonstrated that the standardised indirect effect of ACEs on SNAP-2 OCPT via attachment-anxiety was significant and positive ($ab = .05$, $p = .041$, BC 95% CI $[.012, .023]$). Moreover, the bootstrapped

standardised seemingly unrelated regression (5000 resamples) results demonstrated the standardised direct effect of ACEs on SNAP-2 OCPT was significant and positive ($c' = .14, p = .042$, BC 95% CI [.008, .282]). Thus, attachment-anxiety appears to mediate between ACEs and OCPT when measured by the SNAP-2 but not the FFOCI-SF¹.

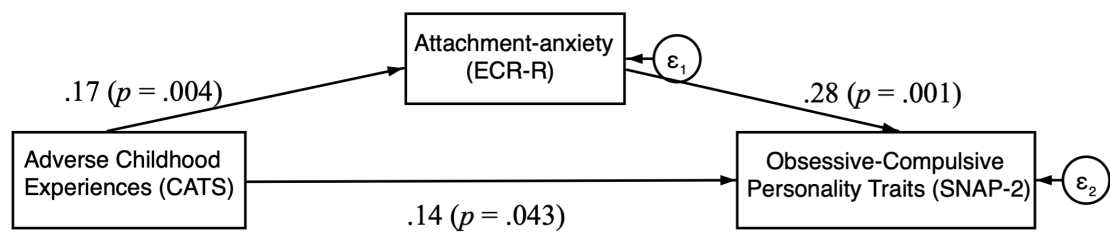


Figure 1. Mediation Model with Attachment-anxiety as the Mediator and SNAP-2 as the Outcome. Note. CATS = Child Abuse and Trauma Scale; ECR-R = Experiences in Close Relationships - Revised; SNAP-2 = Schedule for Nonadaptive and Adaptive Personality - 2; ϵ_1, ϵ_2 = unobserved errors

Regarding hypothesis 2, the mediation results demonstrated that the standardised indirect effects of ACEs on FFOCI-SF OCPT ($ab = -.002, p = .800$, BC 95% CI [-.031, .012]) and SNAP-2 OCPT ($ab = .002, p = .797$, BC 95% CI [-.011, .031]) via attachment-avoidance were both non-significant. Thus, unexpectedly, attachment-avoidance does not appear to mediate between ACEs and OCPT².

Regarding hypothesis 3, the mediation results demonstrated that the standardised indirect effects of ACEs on FFOCI-SF OCPT ($ab = .04, p = .212$, BC 95% CI [-.008, .120]) and SNAP-2 OCPT ($ab = .04, p = .184$, BC 95% CI [-.018, .094]) via metacognition were both non-significant. Thus, unexpectedly, metacognition does not appear to mediate between ACEs and OCPT³. Upon encountering this unexpected finding, a post-hoc hypothesis derived from the existing literature referenced earlier (Scarpa et al., 2009) was posed (Hollenbeck & Wright, 2017)—could this mediation relationship be contingent upon a specific ACE subtype, notably sexual abuse (Scarpa et al., 2009), as opposed to ACEs as a general class? Thus, we performed a post-hoc exploratory bootstrapped mediation analyses with child sexual abuse as the predictor. The results showed that the standardised indirect effects of child sexual abuse on FFOCI-SF OCPT ($ab = .003, p = .927$, BC 95% CI [-.052, .068]) and SNAP-2 OCPT ($ab = .003, p = .925$, BC 95% CI [-.056, .063]) via metacognition were both non-significant.

DISCUSSION

This study, to our knowledge, is the first to investigate whether attachment and metacognition best account for the relationship between ACEs and OCPT. Our first hypothesis, that attachment-anxiety would be a significant positive mediator between ACEs and OCPT controlling for depression, was partially supported. Bootstrapped mediation analyses demonstrated that attachment-anxiety appeared to positively mediate when OCPT were measured by the SNAP-2 but not the FFOCI-SF. While causal conclusions cannot be drawn due to our study's cross-sectional design, this finding is consistent with recent research which finds that ACEs are positively associated with adult insecure attachment (Erozkan, 2016; Lin et al., 2020); and adult insecure attachment

¹ Statistical significance of all the direct and indirect paths remains the same when additionally controlling for age, gender, and ethnicity.

² Statistical significance of all the direct and indirect paths remains the same when additionally controlling for age, gender, and ethnicity.

³ Statistical significance of all the direct and indirect paths remains the same when additionally controlling for age, gender, and ethnicity.

is associated with greater OCPT (Wiltgen et al., 2015; Zakiei et al., 2017). Moreover, this preliminary evidence extends the literature and suggests that attachment-anxiety may help account for why ACEs, at times, lead to OCPT and not at others.

In the context of attachment theory, this finding suggests that exposure to the adverse caregiving typical in ACE environments likely induces attachment-anxiety (Lin et al., 2020). Attachment-anxiety is associated with an internal working model of the self as needing absolute control and anguishing over abandonment and rejection. As such, attachment-anxiety may increase OCPT-related characteristics and interpersonal difficulties via internal working models aimed at obtaining this control (Lin et al., 2020). Ultimately, these behaviours may be a coping mechanism in childhood, but precipitate maladaptive OCPT in adulthood (Lyddon & Sherry, 2001).

However, the finding that attachment-anxiety did not appear to mediate when OCPT were measured with the FFOCI-SF is possibly due to differences in the way the FFOCI-SF and the SNAP-2 conceptualise OCPT. The FFOCI-SF measures the maladaptive traits of disordered personality (i.e., OCPD), whereas the SNAP-2 measures the spectrum of healthy and disordered personality traits associated with OCPD. Given the ongoing refinement of dimensional models of personality disorder traits (e.g., Krueger & Hobbs, 2020), this finding may offer tentative preliminary support that the SNAP-2 better captures pathological personality variation within non-clinical samples due to assessing both degree of pathological trait and aspects of functional impairment (Sleep et al., 2021).

The mediation results, however, did not support our second hypothesis that attachment-avoidance would be a significant positive mediator between ACEs and OCPT. We believe this non-significant finding makes a valuable contribution, nonetheless, given that the current results replicated associations previously demonstrated in the literature, *viz.* attachment-avoidance positively associating with both ACEs and OCPT (Erozkan, 2016; Zakiei et al., 2017). Accordingly, we can say with relative confidence, that mediation does not occur between ACEs and OCPT via attachment-avoidance. This lack of mediation is potentially explicable in terms of attachment deactivation. Attachment-avoidance tends to engage deactivating behaviours (e.g., emotional suppression) and avoidant coping strategies (Levy et al., 2011), whereas OCPT reflect excessive control and anxious-type behaviours, more characteristic of attachment-hyperactivation (i.e., attachment-anxiety).

The current findings also did not support our third hypothesis that metacognition would be a significant positive mediator between ACEs and OCPT. Again, we believe that this non-significant finding makes a valuable contribution given that the current results replicated associations previously demonstrated in the literature, *viz.* dysfunctional metacognition positively associating with both ACEs and obsessive-compulsive symptoms (Myers & Wells, 2015; Solem et al., 2010). There are several considerations when addressing this finding. Previous research suggests that metacognition is positively associated with child sexual (Scarpa et al., 2009) and emotional abuse specifically (Myers & Wells, 2015). While our exploratory analysis with child sexual abuse as a predictor did not find a mediating effect, this may be a methodological artefact as previous research typically assesses single abuse types (e.g., a modified version of the Child Abuse Survey consisting of only the child sexual abuse items; Scarpa et al., 2009). Myers and Wells (2015) also suggest that metacognition mediates between child emotional abuse and attachment-anxiety. Given that our findings now indicate that attachment-anxiety does mediate between ACEs and OCPT, we extrapolate a hypothesised serial mediation model whereby metacognition is involved in the association between child emotional abuse specifically and OCPT, with attachment-anxiety.

There are both future research and clinical implications based on our findings. As previously mentioned, our inability to find a mediating role of metacognition invites further enquiry. Specifically, as the relationship between metacognition and ACEs is specific to child sexual and emotional abuse, future research should replicate this study with a greater range of measures to explore whether metacognition mediates between sexual and emotional abuse, and OCPT. Additionally, future research could employ a larger sample size and path analysis to investigate whether both

metacognition and attachment-anxiety have an indirect serial role between child emotional abuse and OCPT.

In terms of contributions, our findings provide preliminary evidence for why ACEs at times lead to OCPT and not at other times which has potential clinical implications. Our results suggest assessing for presence of attachment-anxiety in patients with OCPT and a history of ACEs may aid clinician understanding of symptoms as a potential distress regulator. Current treatment evidence for obsessive-compulsive personality pathology suggests cognitive therapy and cognitive-behavioural therapy have a moderate effect (Diedrich & Voderholzer, 2015). Thus, integrating an attachment-informed psychotherapy approach into these treatments aimed at improving attachment security may be beneficial.

However, this study's results should be considered in light of important limitations. Firstly, this study employed a cross-sectional design to examine mediation which limits directionality and causal conclusions (Maxwell & Cole, 2007). However, given the nature of ACEs, demonstrating causality is ethically and methodologically challenging. Thus, consistent with past methodological practices, this study used cross-sectional quasi-longitudinal mediation to investigate whether there were patterns consistent with mediation. To move further toward elucidating direction and causality, future research should utilise a quasi-experimental or prospective design. Our use of a retrospective self-report measure of ACEs may also have led to under-reporting, over-reporting, or refusal to report (Hengartner et al., 2013). However, retrospective self-reporting of ACEs and victimization is generally reliable and accurate, has little recall bias, and is both appropriate and ethical (Hardt & Rutter, 2004). Finally, our use of an undergraduate, non-clinical sample means results may not generalise to clinical populations. However, both the SNAP-2 (Clark, 2014) and FFO-CI-SF (Hall-Jones et al., 2021) have been found to generalise to clinical groups. Moreover, the use of psychology undergraduates as participants means they may have been aware of the objectives of the study. Although the participants were blinded to the study hypotheses, future research utilising undergraduate samples would benefit from recruiting from diverse disciplines.

CONCLUSION

This study was the first to examine whether attachment or metacognition mediate the relationship between ACEs and OCPT. The results provide preliminary evidence that attachment-anxiety may help account for why ACEs sometimes lead to OCPT and not at other times. In line with an attachment theory perspective, this suggests exposure to childhood adversity likely increases attachment-anxiety which, in turn, motivates a need for control that is likely met by performance of OCPT-like characteristics. Ultimately, these behaviours, initially employed for coping, may develop into maladaptive adult OCPT. The results further indicate that mediation is neither occurring for attachment-avoidance nor metacognition, although both are implicated in OCPT. Although future longitudinal research is needed for addressing questions of causality, considering the effects of the co-occurrence of ACEs and heightened attachment-anxiety on OCPT may have clinical utility for both assessment and treatment.

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LANGUAGE FRAMING INFLUENCES INTEREST IN SOCIAL-ISSUE-BASED PROSOCIAL BEHAVIOR

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ABSTRACT

Social activism has become an increasingly ubiquitous route to address perceived inequalities, with racial issues oftentimes being a salient example. Those looking to recruit activists for their cause are oftentimes interested in strategies to elicit participation. Two studies examined how linguistic framings of activism influence interest in such displays. Participants viewed generic low-cost and high-cost prosocial behaviors, described as being in the service of social justice, social activism, or volunteering on a between participants basis. Prosocial interest was highest for behaviors described as serving social justice purposes (Study 1). When the same prosocial behaviors were tied to specific social issues, interest in low-cost prosocial behaviors were higher when they were described as serving social activism (Study 2). Black participants reported more activism interest than White participants in both studies, regardless of framing. Findings could inform best practices for garnering support for various social causes.

KEYWORDS

social language, activism, framing, prosocial behavior

INTRODUCTION

Various contemporary social and cultural events have increased interest in social activism. This surge in involvement can at least be partly attributed to mounting dissatisfaction with perceived social inequalities, particularly those ostensibly affecting historically marginalized communities. Though engagement may occur in pursuit of social change, participants may ascribe their engagement through various labels and reasons, highlighting the significance of social language in shaping collective efforts. The spirit of volunteerism drives the actions of some (Chambré & Einolf, 2008). Others might align themselves with the principles of social justice, viewing their participation as rectification for perceived imbalances (e.g., Jost & Kay, 2010; Rothschild & Keefer, 2018). There are also individuals who fully embrace the *social activist* identity, with their engagement oftentimes being confrontational to demand immediate change (Fox & Quinn, 2012).

Despite such motives sharing an interest in tangible social change, variations in the language used within these communities can foster differing perceptions of what a given motive for social change could mean. Stereotypes and biases linked to such terminology may influence self-identification with one label and dissociation from another (Bernburg, 2019; Breakwell, 2014). This research sought to examine the influence of social language on diverse individuals. More specifically, we explored the potential impact of social language on individuals' interest in activism by understanding the epistemic basis for this interest. It could be that specific language use (i.e., volunteerism, social justice, social activism) promotes higher engagement in these activities due to the preference of specific language use or labels (Bashir et al., 2013; Breakwell, 2014; Cermak et al., 2011; Zlobina et al., 2021). Such understandings of the language employed by individuals involved in social movements could inform what measures could elicit great engagement in their causes.

IMPACT OF BIASED LANGUAGE ON ACTIVISM

The nuanced interplay of language assumes a pivotal role by influencing the trajectory and efficacy of social change efforts. Biased language and strategic language framing are critically linked to the success or impediment of social change activities. While resonating with those who see collective action as necessary for social change (Seyranian, 2014), certain linguistic framings have the potential to isolate and estrange individuals who may view the drastic actions of others as counterproductive. However, presentation is not merely a communicative act but a strategic endeavor. The specific articulation and word choice inform the reception and support garnered (Tarlau, 2014). Language framing emerges as pivotal to shaping reactions that drive social outcomes (Snow & Benford, 2005). Linguistic choices have historically wielded significant influence over public opinion, shaping perceptions and responses to social issues (Crotty et al., 2023). Extending beyond individual communication, recent studies emphasize the broader impact of language framing on political narratives, ideologies, distribution of resources within societies and global movements (Aalberg et al., 2012; Capraro & Vanzo, 2019; Dai et al., 2022; Mayer et al., 2019).

Specific labels have influenced individuals' interest in activism. Labels associated with social change carry various stereotypes that exhibit positive and negative connotations (Ashford et al., 2019; Vaes et al., 2019). One's identification with activism based on its specific label has had a shift in its connotations, often from positive to negative (Handayani et al., 2022). Negative connotations could discourage participation in activism (Bashir et al., 2013; Bobel, 2007). Additionally, the increasing prevalence of especially confrontational, almost dogmatic, approaches to social change has led to a derision of activism in light of the perceived rigidity, or even destructiveness, from these approaches (Burrows et al., 2023). This acknowledgment could lead to a conflation between earnest attempts at positive change with radical stances that become authoritarian (Costello et al., 2022). A conflation between these two could lead to a homogenization of what constitutes justice and

preclude appropriate corrections for societal problems (for discussions, see Honeycutt & Jussim, 2020; O'Donohue et al., in press).

Perceptions of one's own prosocial behavior could reflect their interest in social change beyond labels. When categorizing one's behavior as either activism or volunteering, the former is closely linked to an interest in social change and the latter with charity (Zlobina et al., 2021). This discrepancy may be increasingly apparent for individuals who face criticism for supporting activities perceived as charitable but not specifically aimed at affecting perceived societal transformations. Moreover, individuals who pursue social justice are often ascribed the label of a "social justice warrior," which has also shifted from positive to negative connotations (Handayani et al., 2022). Consequently, individuals participating in social change activities may resist embracing labels consistent with social activism to avoid negative stereotypes (Stuart, 2013). Moreover, the competing labels on self-presentation could impede one's association and engagement in activism (Conlin & Heesacker, 2018).

COSTS ASSOCIATED WITH ACTIVISM BEHAVIORS

Human evolutionary history has favored individuals with prosocial tendencies. Cooperation and mutual aid have been crucial for survival as they facilitated the overall well-being of groups and the propagation of shared genes (Darwin, 1859; Hamilton, 1964; Simpson & Beckes, 2010). As societies evolved, this predisposition to cooperate persisted and became engrained into human social structures. Membership in cohesive, cooperative groups enhanced inclusive fitness (Lenzi et al., 2012, Vogt et al., 2020). In contemporary times, challenges facing humanity have become increasingly complex (e.g., poverty, climate change). As a response, prosocial behavior has expanded to encompass a broader spectrum of activities, which may include activism.

Like with other ostensibly prosocial behaviors, activism presents unique costs and benefits that an actor must consider prior to engaging (Lehmann & Keller, 2006). Although the net benefit of prosociality would improve one's inclusive fitness, such actions present immediate costs to the actor that may preclude one from contributing to superordinate group goals. The magnitude of sacrifice in activism can be classified as high-cost or low-cost behaviors. High-cost behaviors benefit others but require personal sacrifice or significant effort (Wilson & Kahn, 1975). Examples include putting oneself in harm's way or extending valuable resources to achieve broader goals of helping. In contrast, low-cost behaviors can afford more immediate benefits to the recipient with little cost to the donor. Examples of low-cost include signing a petition, opening a door, or donating a dollar. Typically, low-cost situations garner increased participation from individuals, even in the presence of available high-cost opportunities as a strategy to conserve personal resources (Boyd, 2014; Halbesleben et al., 2014).

Both high-cost and low-cost behaviors have positive effects on the recipient and the performer. However, the costs associated with these behaviors may constrain the willingness or ability of an individual to engage in helping altogether. Thus, empirical evidence suggests that a potential helper may be further enticed by the specific framing of the prosocial act. Recent studies have suggested that framing altruistic acts in a "not to harm" versus "to help" tone elicits different outcomes wherein individuals are more motivated to prevent harm than to apply help. Thus, the phrase "not to harm" elicited more impactful framing outcomes versus "to help" (Böhm et al., 2018). This trend of framing effects is more pronounced when such framing cues are presented in the recipient's native language. In light of this evidence, the principal objective of the current study sought to investigate the impact of language framing on high-cost and low-cost helping behaviors to explore if specific framing elicits different outcomes.

RACE AND ACTIVISM

Racial factors in social activism efforts are multifaceted while significantly shaping the priorities, strategies, and overarching themes within Black and White communities. The motivations and challenges faced by individuals from historically underrepresented backgrounds play a pivotal role in shaping their involvement. Black individuals often find inspiration in historic contexts marked by the struggles that preceded, and were part of, the Civil Rights Movement (Chong, 2014). Current movements approach these issues as more multifaceted, focusing on community issues and oftentimes invoking concerns of so-called intersectionality (Bailey et al., 2013; Bell, 2013; Mustaffa, 2017). However, barriers such as burnout, historical distrust in institutions, and resource constraints may impede sustained participation (Gorski & Erakat, 2019; Peña et al., 2023).

In White communities, activism can also be prevalent. However, the issues and motivations may differ from those in Black communities, given a different history of how civil rights issues would have affected them. Moreover, White people may be motivated by allyship as means to engage other groups and address perceived inequalities faced by historically marginalized communities (Case, 2012; Smith & Crowley, 2018). Nevertheless, various barriers could emerge for some White individuals that may prevent them from being willing to engage in activism (e.g., fears of missteps; Simi & Futrell, 2009).

CURRENT RESEARCH

The central theme of the findings above is that prosocial behavior has evolved to include complex displays of cooperation, notably seen in activism. Despite a shared goal of advancing social change, the costs associated with these behaviors may constrain the willingness of such participation. Additionally, the language used within these communities plays a crucial role in shaping perceptions. The presence of stereotypes and biases associated with different labels can influence self-identification with certain terms and the avoidance of others (Bernburg, 2019; Breakwell, 2014).

Assessing the labels that foster the embracement of activism could identify potential barriers that may impede prosociality. This research sought to identify the linguistic and behavioral economic barriers. We considered how the designation of prosocial behavior as activism fosters a willingness to engage in behaviors that could promote positive social change while also considering whether controversial labels can be more enticing for action based on whether the actions are costly. These studies addressed both a general approach to activism (Study 1) and for specific causes (Study 2). Data and materials for these studies are provided: https://osf.io/47f5g/?view_only=764f069efe344375a8411b58b8780dd0

STUDY 1

The purpose of this study was to identify potential racial differences in an interest in activism based on whether such activism was described as low-cost or high-cost, in addition to the label ascribed to it. We predicted that individuals would be most interested in low-cost prosocial behaviors overall due to a preference of conserving personal resources (Ferreira, 2022). Additionally, we hypothesized that participants would be most enticed by the label “volunteer” over “social justice” or “social activism,” because it presents less loaded language that may minimize social costs for the actor (Snow & Benford, 2005; Tarlau, 2014; Crotty et al., 2023). Last, we predicted that Black participants would be more prone to activist behaviors at a higher rate than White participants

due to the salience of activism within this community (Jee-Lyn Garcia & Sharif, 2015; Clayton, 2018; Leitch et al., 2021).

METHODS

PARTICIPANTS

We recruited 300 participants through Prolific who identified as either Black or White for \$0.50 (USD). A power analysis using G*Power indicated that such a sample would adequately detect small effects at 80% power (Cohen's $f = .25$; Faul et al., 2007). One participant was excluded for failing to disclose race ($n=299$; 149 men, 145 women, 6 undisclosed; 148 Black, 151 White; $M_{Age} = 36.92$ years, $SD = 12.30$ years).

Materials and Procedure

Participants viewed a set of instructions describing prosocial behavior in one of three ways, wherein they indicated the extent to which that they would engage in each behavior. These instructions described the behaviors as social activism, social justice, or volunteer behaviors. Participants were randomly assigned to read instructions for one of these conditions on a between-subjects basis.

After reviewing these instructions, participants viewed a series of 6 low-cost and 6 high-cost prosocial behaviors. These behaviors were manually and congruently constructed based on time, effort and money. More specifically, the low-cost items (i.e., donating \$5 to a social cause) were very similar to the high-cost items (i.e. donating \$100 to a social cause) with clear variations in the costliness of each behavior. Participants viewed these behaviors in a randomized order and indicated their interest in participating in each (1=*Not at All*; 9=*Very Much*). We aggregated these items into separate composites for high-cost and low-cost behaviors ($\alpha > .93$).

RESULTS

We conducted a 2 (Participant Race: Black vs White) \times 3 (Language: Social Justice vs. Social Activism vs. Volunteerism) \times 2 (Activism Type: Low vs. High) mixed model ANOVA with the latter factor as a repeated factor. An Activism Type main effect indicated that participants preferred low-cost activism ($M=6.22$, $SD=1.78$) over high-cost activism ($M=4.06$, $SD=1.85$), $F(1, 293)=650.15$, $p < .001$, $\eta^2 = .689$. A Race main effect indicated that Black participants expressed greater interest in participating overall ($M=5.38$, $SD=1.74$) than White participants ($M=4.90$, $SD=1.56$) $F(1, 293)=7.15$, $p = .008$, $\eta^2 = .024$.

A Condition main effect also emerged, $F(2, 293) = 4.63$, $p = .010$, $\eta^2 = .031$. LSD post hoc comparisons indicated that participants were more interested in participating in prosocial behaviors framed in terms of social justice ($M=5.54$, $SD=1.58$) compared to volunteerism language framing ($M=5.04$, $SD=1.78$), $p = .042$, $d = .30$, and social activism language framing ($M=4.87$, $SD=1.59$), $p = .004$, $d = .42$. Interest in prosocial behavior did not differ between social activism and volunteering language framings, $p = .459$, $d = .10$. No interactions emerged.

DISCUSSION

As with previous research (e.g., Ferreira, 2022), participants preferred low-cost prosocial behavior. One possible explanation for this observed preference lies in the notion that low-cost prosocial

behaviors typically demand fewer individual resources which may be perceived as naturally appealing to individuals (Boyd, 2014; Halbesleben et al., 2014). The simplicity associated with low-cost behaviors might further render them more accessible and easier to implement, fostering spontaneous engagement without extensive planning.

Second, Black participants expressed greater interest in social change-based prosocial behaviors overall. This difference could be rooted in an awareness of disproportionately higher rates of social inequalities in Black communities, which could contribute to a heightened sense of urgency and commitment to activism endeavors (Button & Rienzo, 2003; Chaney & Robertson, 2015; Hall et al., 2017). Moreover, the overall salience of civil rights within the Black community specifically could bolster a strong sense of duty and responsibility to advocate for change (Diani, 2011; Walton, 1998). Both historical and contemporary concerns may motivate an inclination towards activism among Black individuals allowing them to invest in costly behaviors (Carbado, 2017; Cheung, 2020; Fieldstein, 2005; Haines, 1984; Kelley, 2018).

Additionally, the impact of language on individuals' interest in participating in social causes underscores the importance of framing activism messages that resonate with target audiences. Social justice-oriented language unexpectedly elicited the strongest interest. One potential reason for this unexpected effect is that the issues presented to participants reflected a generic set of ideas without requiring participants to commit to specific issues for which the implications of support could be more apparent. In other words, without a specific cause to support, it could be possible that participants may not have been thinking about actual social costs (e.g., being labeled as a radical for a contentious issue). Study 2 addressed this limitation by tasking participants to indicate their interest in activism toward specific issues. Namely, we focused on affirmative action and defunding the police, two topics that were relevant issues during the study's conductance (Avery, 2023; Pereira et al., 2023; Mesic et al., 2018; Jackson et al., 2023).

STUDY 2

Research repeatedly demonstrates that the consistency between attitudes and behaviors is notably influenced by the specificity of the behavior in question (Ajzen, 2014; Ajzen et al., 2018). When examining prosocial behaviors, supporting a broad concept, such as social justice, may not translate into equivalent support for specific causes. To this end, we selected specific social issues for our second study to determine whether variability in support for specific causes based on the language used to describe them exists. In this study, we sought to utilize contemporarily relevant issues that have transitioned into recent social movements in the United States and generally evoke similar ideas regarding social inequality. Utilizing this criterion, we intentionally selected two causes: affirmative action and defunding the police. These issues have long fueled the ongoing discussion concerning equity and inclusion. In July 2023, the Supreme Court overturned affirmative action, dismantling decades of precedence (Avery, 2023; Pereira et al., 2023). This ruling posited that colleges can no longer consider race as a factor when evaluating applications for admission. Though this seemingly communicates anti-discriminatory measures, affirmative action emerged during the Civil Rights movement to remedy systemic discrimination and ensure students of color receive fair consideration for employment and educational opportunities (Sottile et al., 2024; Mujtaba 2023; Nuckols & Gregory, 2023)

Moreover, several fatal events – within marginalized communities - have led to the suggestion of defunding the police reallocation of funding from the police department to various community resources such as housing, education, and healthcare (Mesic et al., 2018; Jackson et al., 2023). Given the recency of events and the overlap in mission, we were inclined to include these issues. In Study 1, participants expressed increased interest in social justice language in the absence of tangible social issues. Thus, the purpose of the current study was to determine whether the previously

identified interest in social justice would extend when the ostensibly prosocial behaviors were associated with two specific social causes: affirmative action and defunding the police.

METHODS

PARTICIPANTS

We recruited 335 participants through Prolific who identified as either Black or White for \$0.50 (USD). A power analysis using G*Power indicated that such a sample would adequately detect small effects at 80% power (Cohen's $d = .25$ Faul, Erdfelder, & Lang, 2007). The final sample consisted of 163 Black participants, and 172 White participants garnered by a specialized feature in Prolific. Due to a programming error, no additional demographic information was collected. However, this study was exclusively interested in how race might impact prosocial engagement, so the lack of demographic information in study did not pose critical concerns. We utilized a feature in Prolific to acquire Black and White participants specifically, allowing for effective examination of data based on predictions. This study was pretested to ensure that it could be completed in an average time of 3 minutes.

Materials and Procedure. Participants responded to a similar procedure from Study 1, albeit with an additional between-subjects factor. Specifically, they were told that their behaviors would be in support of either affirmative action or defunding the police, two social issues that are oftentimes framed as relevant to social justice causes.

RESULTS

We conducted a 2 (Participant Race: Black vs. White) \times 3 (Language: Social Justice, Social Activism, Volunteerism) \times 2 (Issue: Defund the Police vs. Affirmative Action) \times 2 (Activism Type: Low Cost vs. High Cost) mixed model ANOVA, with repeated measures over the last factor. Similar to Study 1, an Activism Type main effect indicated that participants were more interested in low-cost behaviors ($M = 4.15$, $SD = 2.70$) relative to high-cost behaviors ($M = 3.41$, $SD = 2.37$), $F(1, 323) = 117.06$, $p < .001$, $\eta^2 = .226$. An Issue main effect emerged indicating that participants were more interested in prosocial activities in support of affirmative action ($M = 4.49$, $SD = 2.61$) relative to defunding the police ($M = 2.93$, $SD = 2.17$), $F(1, 323) = 31.704$, $p < .001$, $\eta^2 = .089$. A Participant Race main effect indicated that Black Participants were more interested in activism ($M = 4.77$, $SD = 2.63$) than White Participants ($M = 2.83$, $SD = 2.04$), $F(1, 323) = 55.453$, $p < .001$, $\eta^2 = .147$, which is consistent with Study 1.

The most superordinate interaction was an Activism Type \times Language \times Issue interaction, $F(2, 323) = 3.68$, $p = .026$, $\eta^2 = .022$. Participant race did not qualify this superordinate interaction ($p = .78$) suggesting a lack of racial differences. To investigate this superordinate interaction, we conducted two subordinate Language \times Activism Type analyses, separately for each issue. For affirmative action, the subordinate interaction was not significant, prompting no further consideration in this analysis, $F(2, 178) = 1.60$, $p = .205$, $\eta^2 = .018$. A marginal two-way interaction emerged for defunding the police, $F(2, 151) = 2.86$, $p = .061$, $\eta^2 = .036$. Given the significant omnibus three-way, we found it prudent to decompose this interaction because of how close it was to conventional significance.

We conducted subsequent paired-samples t -tests to compare high-cost versus low-cost behaviors for each language condition. In each of these comparisons, low-cost behaviors were preferred with social activism, social justice, and volunteer language, $t_s > 2.85$, $p_s < .007$. The effect was largest

for social activism ($d=1.31$), followed by social justice ($d=.83$), and finally volunteer language ($d=.82$). Table 1 provides relevant descriptive statistics.

Table 1. Descriptive Statistics for Defunding The Police Condition

Defund Police	Low-Cost		High-Cost	
	M	SD	M	SD
Social Justice Language	3.19	2.50	2.90	2.28
Social Activism Language	3.57	2.50	2.83	2.05
Volunteerism Language	2.82	2.14	2.44	1.60
Total	3.17	2.37	2.70	1.97

DISCUSSION

Several unexpected findings emerged in this study in addition to those that were expected. As expected, participants continued to prefer low-cost prosocial, aligning with Study 1 and previous research suggesting an interest in prosocial behavior when direct costs to the actor are minimal (e.g., Bode et al., 2015; Hobfoll, 1989; Rubaltelli & Agnoli, 2012; Simpson, 2009; Warneken & Tomasello, 2009). Second, participants were more supportive of affirmative action than defunding the police. A potential explanation for this observation may be that affirmative action might have been viewed as a more prevalent and pressing issue as the Supreme Court recently overturned decades of precedence in July 2023 (Avery, 2023; Pereira et al., 2023). This could have resulted in heightened advocacy for this issue. Moreover, the issue of “defunding the police” may have quieted down due to the minimization of “national headline events” since 2020 and participants may have become more sensitive to the nuance of this issue through the passage of time (Jackson et al., 2023; Mesic et al., 2018).

No interactive effects emerged for Black and White participants across the framing and issue conditions. The lack of difference could suggest that factors outside of race may have played a more significant role in shaping responses. Participants may have done cost-benefit analyses by weighing potential advantages and disadvantages before committing to specific social activities (Fireman & Gamson, 1977; McCarthy & Zald, 1977; Simon et al., 1998; Almanzar & Herring, 2004). This approach could be strategically employed by individuals from both ethnicities to assess perceived benefits (e.g., personal fulfillment, sense of purpose or social impact) against the perceived costs (e.g., time commitments, emotional strain) before committing to advocacy or engagement (Thomas & Dockter, 2019; Crosby 2006, Rubenfield, 1997). Moreover, the absence of differentiation by race implies that the decision-making process transcends racial boundaries and participants may be further influenced by other aspects, such as the framing of the behaviors or the language used to describe them. This insight guides our exploration beyond racial distinctions, suggesting that varying linguistic nuances or contextual cues may shape individuals’ considerations of the costs and benefits associated with these issues.

Last, the discerned language effects were more specific to concerns surrounding Defunding the Police. This effect may reflect the importance of activist language on policing issues, especially if one’s investment is low-cost helping. The magnitudinal effect for activism language could reflect interest in seeing oneself as a positive agent of change for a specific issue with minimal cost to oneself. This effect presents a degree of heterogeneity with Study 1 (where social justice framing was preferred). This finding could reflect that there may be varying interpretations of what defunding police means in language conditions compared to social justice framing lacking a specific issue for the perceiver (e.g., Vaez et al., 2019).

GENERAL DISCUSSION

Results from both studies provide continued evidence for the importance of language in shaping one's decisions to engage in ostensibly prosocial behavior tied to social issues generically (Study 1) and specifically (Study 2) as a function of that behavior's cost, albeit with greater nuance than predicted. Social justice was an influential motivator to engage in ostensibly prosocial behavior in Study 1, an effect that could have emerged based on the social desirability of the label, especially with lower costs associated with the behavior. Nonetheless, activism language was more desirable when an issue was specific for perceivers, as evidenced by Study 2. Considering specific issues as activism could be related to an interest in minimizing involvement with specific social justice initiatives that could implicate one as more disagreeable with broader society (Costello et al., 2022).

Additionally, In Study 1, Black Participants expressed greater interest in both low and high-cost activism behaviors compared to White Participants. The discrepancy in levels of interest suggests potential variations in how individuals from different racial background engage with and prioritize activism, reflecting the diverse ways in which marginalized communities may perceive and respond to social issues. Interestingly, in Study 2, Black and White perceivers did not respond to the framing conditions differently from each other. Crucially, the divergence in results between these two studies became evident only when specific social issues, namely affirmative action and defunding the police, were introduced in Study 2. This suggests that the interplay between framing techniques and the inclusion of particular social issues may significantly influence how individuals perceive and respond to these issues.

LIMITATIONS AND FUTURE DIRECTIONS

These preliminary findings offer a glimpse into the interplay between language and activism behaviors. Nonetheless, several limitations emerge that warrant future research. First, results could be tied to a social desirability bias based on intentions to participate versus real-life actions (Randall & Fernandes, 1991; Van de Mortel, 2008). Future research endeavors could benefit from employing behavioral measures that monitor actual engagement in real-world activism. Second, there was no additional demographic information (outside of race) collected in Study 2. This omission of basic demographics such as social class, gender, etc. poses limitations because these factors could have aided in interpreting the findings of Study 2.

Moreover, it should be noted that the observed effects in this research may be contingent upon political orientation specifically. Given the nature of the issues addressed, particularly within the realm of contemporarily relevant social issues, it is plausible that these effects may be more pronounced amongst individuals with left-leaning, liberal orientations (Baranauskas, 2022; Goldberg, 2022). Liberal individuals, who often endorse progressive values and social change, may demonstrate a heightened sensitivity to the language framing manipulations thus impacting the behavioral responses. Though political orientation was not explored exclusively in this study, future research may consider exploring this dynamic to ascertain the generalizability of the findings and discern potential variations in the observed effects regarding political orientation.

Last, this study focused exclusively on the effects of language framing related to more race-specific issues. Future investigations could explore these effects more broadly (e.g., environment, health). Additionally, this research was limited to concerns of Black and White participants, which may limit the generalizability of findings. Future research could address comparisons with other groups.

CONCLUSION

In conclusion, our research sheds light on the crucial role of language preferences in shaping activism interest and engagement in prosocial activities. The observed surge in interest and involvement in social activism reflects a growing awareness of social inequality and the need for positive societal change. As individuals from diverse backgrounds come together with a shared goal of addressing these issues, the language used to frame activism behaviors becomes increasingly significant in garnering support and aid.

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