Feeling *for* and *as* a group member: understanding LGBT victimisation via groupbased empathy and intergroup emotions

Being a victim of a hate crime can be devastating (e.g., Herek, Gillis, & Cogan, 1999; McDevitt, Balboni, Garcia, & Gu, 2001). Compared with victims of other types of crime, hate crime victims are more likely to report feeling vulnerable, fearful, anxious, angry, and depressed (Corcoran, Lader, & Smith, 2015; Herek et al., 1999) and also suffer for longer (McDevitt et al., 2001). However, the impacts of hate crimes are not limited to the people directly involved in the crime. Qualitative research suggests that hate crimes have *indirect* effects that "ripple" out throughout communities (Bell & Perry, 2015; Noelle, 2002; Perry & Alvi, 2012). These "waves of harm" (Iganski, 2001, p. 628) frequently lead to feelings of vulnerability, fear, anger, and sadness amongst other group members. They can also lead to behavioural changes including avoidance and withdrawal (Bell & Perry, 2015), yet can also have a mobilising effect that inspires collective action (Noelle, 2002).

Since recorded hate crimes are on the rise both in the UK and elsewhere (O'Neill, 2017; see FBI, 2017 for US context), we provide a timely and original investigation into these indirect effects that are of considerable international concern and interest. In two experiments, we extend intergroup emotions theory (IET; Mackie, Maitner, & Smith, 2009) and uniquely apply it to the phenomenon of hate crime to show that hate crimes against Lesbian, Gay, Bisexual and Transgender (LGBT) people provoke heightened emotional and behavioural reactions in fellow LGBT individuals compared to non-hate crimes. We provide quantitative evidence that these group-level responses are a product of individuals feeling threatened *as* a group member – as IET would predict. Importantly, we are the first to show that these indirect effects also stem from the fact that people share strong empathic ties with fellow ingroup members and so also feel *for* hate crime victims to a greater extent than for non-hate crime victims.

Indirect effects of hate crime: An intergroup emotions perspective

With its emphasis on group-based appraisals, emotions and behaviours, IET provides a useful theoretical framework for understanding the community impacts of hate crime. Drawing on the social identity approach (Tajfel & Turner, 1986; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), IET posits that when group identities are salient, individuals redefine themselves as group members – rather than as individuals – and consequently think, feel and act on the *group* rather than the personal level. So what happens to the group is felt and responded to as if it has happened to them personally (Mackie et al., 2009; Mackie & Smith, 2015).

Mackie and colleagues (2008) suggest that these group-based reactions occur through two routes: group-based appraisals and self-stereotyping. The latter suggests that group membership and identity become so central to the individual that they become, and respond as, the prototypical group member. The appraisal route, meanwhile, suggests that members *appraise* events in terms of the current intergroup context (e.g., is the situation a threat to the group?). This appraisal triggers relevant *emotions* (e.g., anxiety) which, in turn, instigate specific group-based *behaviours* (e.g., avoidance). In previously studying this appraisal–emotion–behaviour link, researchers have found that specific intergroup contexts give rise to specific intergroup emotions which, in turn, elicit related behaviours. For example, intergroup contexts which elicit group-based anger can lead to confrontation and mobilisation actions (Leonard, Moons, Mackie, & Smith, 2011; Mackie, Devos, & Smith, 2000), while group-based fear can lead to avoidant and withdrawal behaviours (Dumont, Yzerbyt, Wigboldus, & Gordijn, 2003).

Group-based empathy: neglected but important

In Mackie et al.'s (2008) explanation, the authors are clear that these groupbased reactions do not occur through empathic ties: "It is not simply that group members feel empathy for other ingroup members who encounter good or ill fortune. On the contrary, intergroup emotion is emotion experienced as others..." (Mackie et al., 2008, p. 1873). They go on to explain that people are thrilled when their national team wins the world cup because they feel as if they have won it, not because they believe the team members feel good (i.e., they do not feel empathy *for* the team). However, while this example is illustrative, we believe it is incomplete. In this example, for instance, perhaps people do not feel for the team members as the authors suggest. However, their happiness may be increased by knowing that other fans (who are just as likely to be seen as group members as members of a national team) feel good and so individuals feel good about the win both because they feel as if they have won it and because they feel good for their fellow fans (i.e., have empathy for the fans). Such a surmise would be supported by the common-place observation of the enhanced exultation (or desolation) felt while watching televised reactions of fans after their team's victory (or defeat).

Mackie and Smith (2015) also suggest that if empathy were to impact on individuals' reactions, it does so only on an *interpersonal* rather than *intergroup* level. However, others have shown empathy can be group-based. For example, ingroup members have been shown to feel more empathy for fellow group members than they do for outgroup members (e.g., Cikara, Bruneau, Van Bavel, & Saxe, 2014; Cikara, Bruneau, & Saxe, 2011). This so-called 'ingroup empathy bias' manifests itself both psychologically (Batson & Ahmad, 2009) and physiologically (Avenanti, Sirigu, & Aglioti, 2010) and impacts on group members' thoughts, feelings, and helping tendencies (Cikara et al., 2011). Such an empathic preference for ingroup members supports our suggestion that empathy can be group-based and may play a part in understanding the indirect impacts of hate crime.

Furthering our argument for the importance of group-based empathy, empathic ties seem to be important in the formation and maintenance of groups, and also in responses to discrimination (e.g., Cortland et al., 2017). Social Identity Theory (SIT: Tajfel & Turner, 1986) suggests that social groups are formed when individuals feel similar to one another on a particular dimension. This similarity may help group members understand and feel what their fellow group members experience: that is, perceptions of similarity may help to foster strong empathic ties within groups. In addition, Cortland and colleagues (2017) found that perceptions of similarity, this time across disadvantaged groups (Black people and gay people), increases empathy – and also support for pro-action in the face of discrimination (Exp 2).

These empathic ties, then, serve to guide group-relevant and group-based emotions, attitudes and behaviours to maintain, promote and protect the group (e.g., Tajfel & Turner, 1986), and have also been identified as a response to discrimination (Cortland et al., 2017). So, in the case of hate crimes perpetrated against ingroup members, this suggests fellow group members will have greater empathy for an ingroup member than an outgroup member (e.g., Cikara et al., 2011) *because* they feel more similar to the ingroup member. Furthermore, feeling empathy for hate crime victims will elicit specific emotional responses that closely mimic those of the victim, and, as IET predicts, they will trigger certain behavioural responses (e.g., anxiety to avoidance; anger to pro-action; see Mackie & Smith, 2015 for a comprehensive review).

The extent to which hate crimes affect other ingroup members may be dependent upon the nature of the hate crime perpetrated, for example, the number of perpetrators involved in the attack. Being attacked by a group of individuals may make the intergroup aspect of the crime more salient, especially compared to attacks perpetrated by a single attacker. As IET involves the appraisal of an intergroup context, the more the context is perceived as group-based (rather than personal), the more likely it is to elicit group-based reactions (Mackie & Smith, 2015). Thus, a hostile event instigated by several outgroup members might, on *prima facie* grounds, represent greater inter*group* hostility and so be regarded as more threatening than one instigated by a single outgroup member. Considering group attacks are relatively common in hate crime, for instance, Chakraborti et al. (2014, p. 54) found that 48% of victims in their UK survey had been victimised by more than one perpetrator in a single incident (see McDevitt, Levin, & Bennett, 2002 for US context), here we explore how the number of perpetrators may moderate the indirect effects of hate crime.

The current research

In two experiments, we investigate the indirect impacts of anti-LGBT hate crimes. In the first study, we compare the reactions to newspaper articles about crimes that are motivated by hate to the same crimes not motivated by hate. Within this study, we also test whether the number of perpetrators increase the saliency of the intergroup context and hence moderate the reactions. The second study adds to this by simply comparing reactions to a hate crime against a group member with reactions to a nonhate motivated crime against a group member.

Hypotheses

1. Reactions to hate crimes will be stronger than reactions to non-hate crimes

2. Hate crimes perpetrated by several offenders will elicit stronger reactions than hate crimes perpetrated by a single attacker.

3. As predicted by IET, hate crimes will increase the saliency of LGBT identity which, in turn, will lead to greater appraisals of threat. This threat will then increase feelings of anger and anxiety about the crime and these emotions will motivate specific behaviours (e.g., anxiety to more avoidance; anger to less avoidance and more proaction: predicted associations shown in unbolded lines in Figure 1).

4. From our extension of IET it is predicted that hate crimes will increase perceptions of similarity to the victim which will enhance empathy for the victim. This empathy will then enhance emotional reactions to the crime which, in turn, are predicted to increase both avoidance and pro-action (these associations are represented by bolded lines in Figure 1).

Study 1

Method

Participants. Assuming 'moderate' effects (.30) and 80% power to detect main effects, we aimed for a minimum sample size of 90 (Faul, Erdfelder, Lang, & Buchner, 2007) but managed to recruit 181 participants from an LGBTQ+ Pride festival in Brighton, UK to a study advertised as an investigation into 'Reactions to Street Crime'. Forty-eight did not identify as LGBT and a further 13 participants failed to correctly answer a manipulation check about the stimulus news article and so were dropped from the analyses. Of the remaining 120 participants, there were 58 females, 61 males and 1 trans. Ages ranged from 16-68 years (M = 33.51, SD = 12.61). Participants selfidentified as gay (n = 57), lesbian (n = 43), bisexual (n = 12), queer (n = 4), straight (n = 2), pansexual (n = 1) and asexual (n = 1). The vast majority identified as White (n = 105), 8 as from mixed/multiple ethnic groups, 3 as Asian, 3 as Black, and one as Icelandic.

Design and Procedure. Participants were randomly assigned to one of four conditions in a 2 (Motivation: Hate vs. Non-hate) x 2 (Perpetrators: Single vs. Group) design. They read an apparently real but actually fictitious newspaper article describing how a man's leg was broken in a *homophobic* attack perpetrated by a *single* man (n = 26), a *homophobic* attack perpetrated by a *group* of six men (n = 40), a *random* attack perpetrated by a *single* man (n = 30), or a *random* attack perpetrated by a *group* of six men (n = 24). The articles were identical except for the description of the motivation of the crime (homophobic vs. random) and the number of perpetrators (one vs. six). The actual sexual orientation of the victim was not described in any of the conditions, though due to the motivation of the attack, it is likely that participants assumed the victim was Gay in the homophobic conditions. Experimenters were blind to conditions.

Measures. All measures, unless otherwise stated, were measured on a 7 point Likert type scale ($1 = Strongly \ disagree$ to $7 = Strongly \ agree$). Because of the novel nature of this research, the measures have been specially adapted by the authors from related studies (available upon request)¹.

Manipulation checks. Participants indicated which types of crime were described in the article: Robbery, Physical Assault, Murder, Verbal assault, Mugging,

¹ Participants also completed items concerning attitudes towards the criminal justice system, their feelings of shame, guilt and vulnerability that are to form the basis of a separate paper.

Homophobic hate attack, Disability hate attack, Vandalism. They also indicated how many men attacked the victim (1-7).

Strength of LGBT identity was measured by five items adapted from Phinney (1991): "I identify with other LGBT people", "I feel good about being LGBT", "I am like other LGBT people", "Being LGBT is an important reflection of who I am", and "I dislike being LGBT" (reverse scored; $\alpha = .87$).

Victim empathy was assessed using four items: "Thinking about your feelings towards the victim, to what extent do you..." "feel sadness for the victim?", "feel sympathy for the victim?", "feel respect for the victim?", and "empathise with the victim?" ($\alpha = .80$). Participants were also asked to what extent they felt *Similar* and *Different* to the victim.

Group based threat was measured by seven items adapted from Cottrell and Neuberg (2005) with the stem statement "I believe the type of crime depicted in the article..." "poses a physical threat to LGBT people", "endangers the safety of LGBT people", "poses a threat to the possessions of LGBT people", "poses a threat to the personal rights of LGBT people", "poses a threat to LGBT culture", "poses a threat to LGBT people's way of life", and "poses a threat to the beliefs and values of LGBT people" ($\alpha = .96$)².

Feelings about the reported crime were assessed using *Angry* ("Angry", "Revolted", "Outraged", and "Disgusted", $\alpha = .82$) and *Anxiety* ("Alarmed", "Anxious", and "Afraid", $\alpha = .82$).

Using the stem statement "Having read about the crime, I would...", *Avoidance* was measured using three items: "Go out less often", "See friends less often", and

² While we had planned on separating realistic from symbolic threats as Cottrell and Neurberg (2005) suggest, a factor analysis on these items revealed just one factor with all items loading > .85, and so we aggregated these items into one overall threat scale.

"Avoid certain places and people" ($\alpha = .76$). *Pro-Action* used four items: "Join and/or increase my participation in anti-crime groups (e.g., Neighbourhood Watch)", "Join and/or increase my participation in groups and charities that help victims of these types of crimes", "Join and/or increase my participation in general local community groups", and "Use social media (e.g., Twitter) to raise others' awareness of the crime" ($\alpha = .90$).

Experiences with hate crimes. To check that there were no confounds between conditions in terms of prior direct or indirect victimisation, participants indicated how many times in the past 3 years they had been a victim of a homophobic or transphobic hate crime or incident (*Direct experiences*) and how many people they knew who had been a victim of such crimes (*Indirect experiences*). Response options were 0, 1-3 times/people, 4-6 times/people, 7-9 times/people, 10-12 times/people, 13-15 times/people, 16 times/people or more.

Results

Manipulation checks. The mean recalled 'number of perpetrators' was 1.19 (*SD* = .96) for the single-attacker condition and M = 5.62 (SD = 1.19) for the group-attack condition (t(112) = -21.72, p < .001). There were no differences between conditions in participants' ages (F(3,115) = .43, p = .73, gender ($\chi^2(3) = .63$, p = .89), sexual orientation ($\chi^2(3) = 1.12$, p = .74) or previous experiences with hate crimes (Direct: F(3, 98) = .13, p = .94; Indirect: F(3, 98) = .43, p = .73). Thus, the random allocation to conditions was successful.

*ANOVAs*³. Table 1 presents the means and standard deviations of the four conditions and the significant results of the 2 (Motivation: Hate vs. Non-Hate) x 2

³ As the victim and offender(s) were male, we added gender as a third factor in the ANOVA. There were no main effects or interactions involving gender and so this factor is not discussed further.

(Perpetrators: Single vs. Group) ANOVAs on all measures. Providing partial support for Hypothesis 1, hate crimes elicited more anger and were perceived as more threatening than comparable non-hate crimes. Hate crime victims were also empathised with more and were perceived to be more similar than victims of non-hate crimes. Such findings generally support the claim that hate crimes have more powerful effects on group members' perceptions of similarity, feelings of empathy, threat and anger than comparable non-hate crimes.

There were no main effects of number of perpetrators on any of the variables and so our second hypothesis received no support.

Path model.

Using *Mplus* (Muthén & Muthén, 2011) we tested the hypothetical path model presented in Figure 1. Variables on the same level (e.g., anger, anxiety) were allowed to covary and to ensure a most stringent examination of the variables, all paths between variables adjacent to one another in the model (e.g., similarity and strength of identity both predicting threat and empathy) were tested. The model fit the data well: $\chi^2(24) = 23.32$, p = .50, CFI = 1.00, RMSEA = .00 (90%CI: .00-.07), SRMR = .06 (Hu & Bentler, 1999).

As shown in Figure 2 and consistent with H4, the hate condition was associated with increased feelings of similarity to the victim which, in turn, was associated with increased empathy and also perception of threat. Strength of identity, however, was not significantly impacted by the hate crime condition as would be expected in the traditional IET framework, though it was associated with increased feelings of empathy and threat (H3).

In the next stage of the model, perceptions of threat were related to higher levels of anger and anxiety, showing support for the traditional IET hypothesis (H3). Adding to the IET formulation, though, empathy was also related to increased anger and anxiety (H4; though the latter was marginal p = .06), above and beyond the impact of threat. Also somewhat consistent with IET hypotheses (H3), anxiety was associated with more avoidance and pro-action while anger was related to more pro-action but not to less avoidance as expected.

Study 1 Discussion

In this experiment we have shown experimentally that an indirect experience of a hate crime targeted at one's group (from reading a news article) can activate perceptions of threat (against one's group) and feelings of anger. This is entirely consistent with IET. In addition, that same experience also instigated a perception of increased similarity to the victim and enhanced empathy for him. These latter two findings suggest a useful extension of IET. When analysing the relationships in a single path model, the support for IET and our proposed addition to it became even clearer. As we had predicted, an indirect experience of hate crime can plausibly be seen as triggering a series of psychological perceptions and emotional reactions, which then are associated with particular behavioural intentions. It is especially noteworthy that not only was threat associated with group-based emotions (as predicted by IET), but so was empathy (as we had hypothesised).

Unexpectedly, varying the number of perpetrators had little effect on participants' responses to the news article. Apparently, the crime was seen as sufficiently serious that whether it was instigated by a lone individual or a group became immaterial. Also, it is acknowledged that several of the dependent measures did not reveal any effect due to the manipulations. It is not clear why this might be. One possible weakness of the Motivation manipulation was that there was a potential confound between the nature of the crime (hate motivated or random) and the sexual orientation of the victim (assumption of being gay). Thus, strictly speaking, the observed effects due to this variable are ambiguously attributable – are participants reacting to an (assumed) ingroup member being targeted or to the fact that it is an identity motivated crime?

With these considerations in mind, we conducted a second partial replication study, which addressed the possible confound and also used larger cell sizes. In view of the absence of any discernible effects due to the number of perpetrators variable, we dropped that factor from the design.

Study 2

A second experiment was designed in which the sexual orientation of the victim was held constant between the two Motivation conditions. The alleged crime was always committed by a single perpetrator. In other respects, the procedure and measures were similar to Study 1.

Participants

Nine-hundred and twelve participants were recruited to the online experiment which was advertised as a "Reactions towards street crime" study. Participants were recruited by Qualtrics and received a pre-determined reward (e.g., vouchers, loyalty points) for completing the study. We made the *a priori* decision to include only participants who identified as LGBT (n = 206) and only those who correctly completed both manipulation checks (final N = 102). The distribution of these manipulation check exclusions between

conditions is given in the Results section. These 102 participants were aged between 16-80 years (M = 36.21 years, SD = 14.78). Most identified as female (62) or male (34) with other individuals identifying as intersex, trans, trans male, trans male and female, agender, and no gender. Participants' sexual orientations were bisexual (46), gay (34), lesbian (13), pansexual (4), queer (2), asexual (1), asexual and bisexual (1), and straight (1).

Design and Procedure

Participants were randomly assigned to one of two conditions in which they read a newspaper article describing how a man's leg was broken in an attack that was described as either a case of mistaken identity (Non-hate) or a homophobic hate attack (Hate). The articles were identical except in four parts which referred to whether the attack was motivated by hate or a mistaken identity. Since both articles included a statement from the victim's husband as to why he had been attacked, the victim was clearly identifiable as Gay in both conditions.

Measures

Manipulation checks. So as not to prime participants' LGBT identification or to reveal the main interest of the experiment, the two manipulation checks were placed at the end of the study. The first read, "Thinking back to the article you read at the start of the study, how would you describe the victim?" *Straight, Gay, Lesbian, Trans, Don't remember*. The second item asked "How did the article describe the assault?" *A case of mistaken identity, Homophobic hate crime, Islamophobic hate crime, Domestic abuse.*

The other measures were the same as those used in Study 1 and the scales showed good reliability: strength of LGBT identity ($\alpha = .83$), similarity (r = .51, p <

.001), victim empathy ($\alpha = .84$), threat ($\alpha = .96$), anger ($\alpha = .91$), anxiety ($\alpha = .82$), avoidance ($\alpha = .83$), and pro-action ($\alpha = .96$).⁴

Results

Manipulation checks. Of the 206 self-indentified LGBT participants, 25 incorrectly answered both manipulation checks (Non-hate = 21, Hate = 4), 51 failed to identify the victim as Gay (Non-hate = 43, Hate = 8) and a further 28 were unable to specify the correct motivation of the crime (Non-hate = 27, Hate = 1). The resulting cell sizes of the two conditions were: Hate, n = 62; Non-hate, n = 40.

Participants in the two conditions did not significantly differ in age or their direct or indirect experiences of hate crimes (all ts(100) = 1.65, all ps > .11). There were also no differences in their gender identities ($\chi(2) = 1.25$, p = .54) or sexual orientations ($\chi(3) = 6.32$, p = .10)⁵.

Independent t-tests were used to examine differences between the two conditions. Table 2 provides clear support for H1 and shows that reactions towards the hate crime were more pronounced than reactions to non-hate crimes. Participants felt more similar to homophobic hate crime victims than non-hate crime victims and hate crime victims received significantly more empathy. Hate crimes also provoked more anger, anxiety, feelings of threat, and were more likely to lead to avoidance and pro-action and strengthened LGBT identification than a non-hate attack against a gay man.

Path model

⁴ As in Study 1, participants also completed items concerning attitudes towards the criminal justice system, feelings of vulnerability, guilt and shame which are to form the basis of a separate paper.

⁵ Because of low numbers of certain gender and sexual identities, we compared the number of people identifying as male, female and neither, and compared the number of people identifying as bisexual, gay, lesbian and none of the above.

As in Study 1, we tested the hypothesised model (Figure 1) using Mplus (Muthén & Muthén, 2011). The model fit the data well: $\chi^2(18) = 29.34$, p = .04; CFI = .96; RMSEA < .08 (90%CI: .01-.13); SRMR = .07 (Hu & Bentler, 1999) and Figure 3 presents the significant paths. Extending IET (H4), hate crimes were again associated with an increased feeling of similarity between the participant and the victim. This similarity, in turn, was related to more empathy and an increased perception of threat. The study also provided support for the IET hypotheses in that the hate crime was related to stronger LGBT identification than the non-hate crime. This primed identity was then again shown to be related to increases in empathy and perceptions of threat. Supporting H4, empathy for the victim predicted both anger and anxiety while threat only predicted anxiety. Consistent with H3, anxiety again predicted positively both avoidance and pro-action, whilst anger only positively predicted pro-action.

Study 2 Discussion

This experiment broadly replicated the results of Study 1, but with an improved and more powerful design. This time, the majority of dependent measures showed clearcut effects of the manipulation, in the predicted directions. Consistent with both IET and our proposed extension, people exposed to a hate crime against a fellow ingroup member showed increased identification and enhanced perceptions similarity; increased perceptions of threat and stronger empathy; stronger feelings of anger and anxiety, and more inclination to engage in avoidance and pro-action, compared to those who learned only of a random attack against an ingroup member. When analysed together in a path model, the links between the experimental manipulation and the dependent variables were mostly as predicted. Here, then, is another experimental demonstration of the causal effects of indirect hate crime victimisation, a rarity in a field dominated by correlational designs. It is also noteworthy that these results were obtained from an experimental design in which the nature of the crime was unconfounded from the sexual identity of the victim.

General discussion

These findings provide convincing experimental evidence that hate crimes have more pronounced indirect effects than non-hate crimes. Given the scarcity of empirical research to document this claim, this, in itself, is a notable achievement. Moreover, these novel findings illuminate the probable social psychological processes which underlie those effects. By applying IET to a new area, we show that hate crimes are evidently viewed as threats to the ingroup that trigger the emotions of anger and anxiety which, in turn, are linked to specific action tendencies (pro-action and avoidance respectively). Providing a new theoretical contribution, we also show that an additional reason for the heightened response by people to hate crimes against fellow ingroup members is that they give rise to increased perceptions of similarity to the victim, and thence to heightened empathy for him or her. Independently of threat, such empathy is reliably associated with group-based emotions.

The demonstrable role of empathy in these studies adds to the literature as it calls into question Mackie at al.'s (2008) suggestion that empathy is not implicated in group-based emotions. Our data show that it is not only the case that other group members respond with anger and anxiety because they feel as though their group – and by extension themselves – have been attacked. These findings indicate that these emotional reactions are also predicated upon the meaningful ties that bind group members together. That is, group members do not just respond *as* group members to feelings of threat, they also feel empathic concern *for* their fellow group members.

Our findings, then, provide a new contribution to knowledge on the effects that group identity *and* empathy have on the indirect impacts of hate and prejudice. Future research testing the viability of our research methods and hypotheses to other groups (e.g. disability, race and ethnicity) will help to strengthen this new knowledge base further. Some progress has been made in research reported elsewhere (Authors, under review).

In addition to the theoretical contributions made by this research, these findings have potential implications for social and legal policy-making. Although hate crimes are an increasing concern for many nations (e.g., OSCE, 2017), some commentators have argued against the introduction of specialised hate crime legislation since such crimes, in their opinion, are no more unique than their non-hate motivated counterparts (Jacobs & Potter, 1997). However, by clearly demonstrating that hate crimes have significantly greater effects on the wider community than non-hate motivated crimes, we believe the findings provide support for a legal distinction between offences motivated (or not) by hostility and prejudice.

Figure 1

Hypothetical model.

Unbolded lines represent traditional IET hypotheses, bolded lines represent hypotheses extending IET. All paths are predicted to be positive except between anger and avoidance.

Note. All paths between variables on adjacent levels were calculated in the analyses and variables on the same level were covaried.



	Hate –	Hate –	Non-hate –	Non-hate –	Main effect of
	Single	Group attack	Single	Group attack	Motivation
	attacker	(n = 40)	attacker (n =	(n = 24)	$[\eta_p^2]$
	(n = 26)		30)		
Similarity	4.52 (1.40)	4.56(1.29)	3.95(1.45)	4.00(1.26)	5.10*[.04]
Strength of	5.91 (1.20)	5.73 (1.43)	5.94 (1.38)	5.72 (1.44);	-
LGBT identity				n = 23	
Empathy	6.26 (0.70)	6.41 (0.75)	5.86 (1.39)	5.61 (1.31)	F(1,115) =
		n = 39			9.12**[.07]
Group based	5.25	5.47 (1.27);	4.70 (1.93)	4.28 (1.61)	F(1,113) =
threat	(1.37);	n = 39			8.86**[.07]
	n = 24				
Anger	5.80 (1.29)	6.03 (1.08)	5.53 (1.33)	5.24 (1.49)	F(1,116) =
					4.88*[.04]
Anxiety	4.01 (2.04)	4.17 (1.58);	3.88 (1.66)	3.31 (1.17)	-
		n = 39			
Avoidance	2.07	2.43 (1.56);	1.97 (1.00)	2.28 (1.20)	-
	(1.15);	n= 39			
	n = 25				
Pro-action	3.55	3.82 (1.72);	3.17 (1.59)	3.36 (1.47)	-
	(1.49);	n = 39			
	n = 25				

Study 1 Means and standard deviations for conditions and significant ANOVAs

Note. There were no significant main effects of number of perpetrators or significant interactions.

p* < .05, *p* < .01

Table 1.

Figure 2.

Study 1. Significant standardised paths in tested model

Model fit indices: $\chi 2(24) = 23.32$, p = .50, CFI = 1.00, RMSEA = .00 (90%CI: .00-.07), SRMR = .06. ***p < .001; **p < .01; *p < .05; †p = .06.



Table 2.

	Mistaken identity	Homophobic hate	t (df = 100)
	(n = 40)	crime $(n = 62)$	
Similarity	3.69 (1.52)	4.82 (1.40)	3.80***
Strength of LGBT	5.06 (1.27)	5.63 (1.21)	4.97***
identity			
Empathy	5.75 (1.20)	6.31 (.92)	2.70**
Group based threat	4.04 (1.90)	5.66 (1.22)	-4.78***
Anger	5.24 (1.55)	6.05 (1.21)	-2.95**
Anxiety	4.04 (1.37)	5.03 (1.37)	-3.55***
Avoidance	2.63 (1.41)	3.30 (1.60)	-2.15*
Pro-action	3.38 (1.23)	3.97 (1.51)	-2.09*

Study 2 Means, standard deviations, and t-tests

p < .05, p < .01, p < .01

Figure 3

Study 2. Significant standardised paths in tested model.

 $\chi^2(18) = 29.34, p = .04, CFI = .96, RMSEA = .08 (90\%CI: .01-.13), SRMR = .07.$ ***p < .001; **p < .01; *p < .05.



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