

Sacred Devotion through Social Interaction:
Group-based Values and Psychological Pathways to Political Activism and Radicalism

Alison Clark
Bachelor of Psychology (Honours)
Murdoch University

*This thesis is presented in partial fulfilment of the requirements for the degree of
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I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary educational institution.

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Abstract

While existing research has focused on the predictors of conventional political actions and more radical forms of action, experimental demonstrations of the emergence of different collective actions are scarce. This thesis considers *how* people come to endorse different action strategies for social change. I experimentally tested the effects of social interaction (present / absent) and group-based values (sacred / instrumental) in bringing about support for both political and more radical forms of collective action ($N = 133$). I predicted that interacting with like-minded others would lead to increased support for political engagement, whereas support for radicalised solutions would shift only when the issue was perceived to involve sacred values. As hypothesised, results showed that social interaction increased endorsement of political actions, and when sacred values were salient, fostered support for more extreme solutions. Data also provided empirical evidence for specific psychological markers of both politicised and radicalised actions. This thesis highlights how the energising effects of social interaction can be consequential for social change, by increasing commitments to political activism and fostering support for more extreme, potentially illegal or violent, solutions.

Keywords: Collective action, politicisation, radicalisation, social interaction, sacred values, instrumental values

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Sacred Devotion through Social Interaction:

Group-based Values and Psychological Pathways to Political Activism and Radicalism

In 1998, members of the Earth Liberation Front burnt down a Colorado ski resort, causing US\$12 million in damages, in a protest against plans to clear national forest to accommodate a resort expansion (Scarce, 2006). In 2011, school teacher and environmentalist, Miranda Gibson, climbed 60 metres to the top of an old-growth eucalypt in Tasmania's southern forests, where she spent the next 15 months, in a bid to protect the forests from destructive logging (Martin, 2013). Earlier this year, the Sea Shepherd Conservation Society saw one of their vessels collide with a Japanese whaling vessel in the dangerous waters of the Antarctic Ocean, during one of their high profile missions in which they use direct tactics to sabotage Japanese whaling activities (Sweeney, 2014). Each of these incidences illustrates the extreme lengths people are willing to go in order to bring about, or resist, social change (particularly within the environmental movement). Given the associated high costs and potentially devastating consequences of such radical actions, this presents a problem of considerable practical significance (Thomas & Louis, 2013).

From a social psychological perspective, such behaviours can be understood as a form of *collective action*. An individual engages in collective action any time they act as a representative of a group with the sole aim of achieving the group's goals (van Zomeren & Iyer, 2009; Wright, 2009). Examples of collective action for social change range from relatively moderate forms of political engagement, such as when people sign petitions or participate in peaceful protests, to more radical strategies, such as sabotage, violence, or acts of (political) martyrdom (Wright, 2009). It seems highly unlikely that the psychological processes that lead people to partake in peaceful protests would be the same as those leading to acts of martyrdom.

Yet although the collective action and social change literatures are experiencing a period of innovation and integration (van Zomeren & Iyer, 2009), relatively few studies systematically discern between the different forms collective action can take (for exceptions see Tausch et al., 2011; Thomas, McGarty, & Louis, 2014). When do people decide to abandon mainstream political action and take more extreme, perhaps violent or illegal, forms of action in their fight for, or against, social change?

This thesis seeks to elucidate the processes through which group members come to endorse different collective action strategies. More precisely, the aim of this research is to observe *how* people become involved in a political cause (politicise) and develop more extreme strategies for action (radicalise) as dynamic *processes* of psychological transformation. Social interaction is explored as an important yet neglected mechanism that can lead to political engagement and, under certain conditions, foster the emergence of more radical solutions for social change (following Thomas et al., 2014).

Furthermore, this thesis is concerned with identifying specific mechanisms that facilitate the transition from support for political actions to more radical actions. A particular focus is the role of group-based values, where a distinction is made between sacred (i.e. intrinsic or moral) and instrumental (i.e. economic or utilitarian) values (Atran & Axelrod, 2008). Specifically, it is hypothesised that when group members perceive an issue to involve sacred values, they will be more likely to become radicalised and take more extreme forms of action. This is based on the idea that people will be driven by moral principles, and thus willing to make large personal sacrifices, to protect things of which they consider to have sacred value (Ginges, Atran, Sachdeva, & Medin, 2011).

While social interaction *per se* is predicted to promote mainstream political engagement, it is the *combination* of social interaction and sacred values that is expected to shift support towards more radical strategies. Before I can effectively rationalise why I expect social interaction to be an instrumental mechanism through which groups can politicise and radicalise, and why sacred values are anticipated to facilitate the shift towards endorsement of more extreme solutions, it is first necessary to discuss the different psychological pathways to social change actions.

Psychological Pathways to Political and Radical Collective Action

A central proposition of this thesis is that the psychological processes that lead to participation in relatively moderate forms of political action are distinct from those leading to engagement in more radical forms of action. The different types of collective action are typically conceptualised in the literature as falling along a continuum (Klandermans, 1997). For the purpose of this thesis however, a distinction is made between actions that conform to conventional, legal avenues for political participation (e.g. petitioning, peaceful demonstrations), and those that deviate in favour of unconventional, often illegal or violent, actions (e.g. sabotage, civil disobedience). While I utilise the terms political and radical collective action (or political activism and radicalism; following Moskalenko & McCauley, 2009) this distinction maps on to what other researchers have termed normative versus non-normative (Tausch et al., 2011), moderate versus militant (Louis, 2009), and constitutional versus extraconstitutional actions (Hayes & McAllister, 2005). Existing work shows that political and radical forms of collective action are predicted by different psychological factors, indicating that this is indeed a meaningful distinction to make.

What are the psychological predictors of political activism and radicalism? First, identification with more politicised groups or social movements (e.g. identifying with the “gay rights movement”) is shown to be a stronger predictor of political action compared to identification with the broader disadvantaged or aggrieved group (e.g. identifying as gay; Simon et al., 1998). Furthermore, research has shown that group-based anger and a sense of collective efficacy (the belief that the group’s actions will be effective; Bandura, 2000) are causally related to political activism (van Zomeren, Postmes, & Spears, 2008). On the other hand, a series of recent field studies have shown that feelings of contempt towards an outgroup, and a lack of collective efficacy combined with a perceived legitimacy of more extreme actions, are associated with support for radicalism (Tausch et al., 2011). Indeed, radicalised groups often emerge from larger social movements due to a perceived lack of efficacy in more conventional political strategies (e.g. Sea Shepherd Conservation Society; Stuart, Thomas, Donaghue, & Russel, 2013).

While this line of research is crucial to explaining what motivates engagement in different forms of action (the question of *why*), it is unable to explain the processes through which groups come to endorse different action strategies (the question of *how*; Wright, 2009). Indeed, there has been a well-articulated need for research to consider engagement in collective action as a *process* (Horgan, 2008). Accordingly, this thesis goes beyond identifying the predictors of collective action to consider the psychological processes that engender support for political engagement and more radical strategies, that is, politicisation and radicalisation.

Politicisation. Politicisation refers to the transformative process by which people go from sympathising with a cause to actively engaging in political activity (Simon & Klandermans, 2001). In social psychology, a widely recognised

conceptual framework for politicisation involves three consecutive steps as proposed by Simon and Klandermans (2001). The first step entails developing an *awareness of shared grievances*. Such grievances may be collective feelings of illegitimate inequality, suddenly imposed injustices, violated principles or values, or threatened privileges (Klandermans, 1997; Simon & Klandermans, 2001). The second step involves making *adversarial attributions* of blame, such that an opposing outgroup or authority is held responsible for group members' grievances, and thus becomes the primary target for influence. Here, group members demand that the adversary compensate or take some sort of corrective action. The final step, *triangulation*, involves targeting a third party for potential support—trying to convert them to join the movement or at least take a position on the issue at stake. During this step, group members typically expand their target of influence to include the general public or some representative (e.g. the media or government) to gain support. Thus, politicisation occurs to the extent that group members become consciously engaged in a power struggle embedded within a more inclusive social context (Simon & Klandermans, 2001).

Radicalisation. Radicalisation refers to the transformative process by which the beliefs, feelings, and behavioural commitments of a group become more extreme and increasingly justify actions that may be illegal, violent, or demand sacrifice in the name of the group (McCauley & Moskalenko, 2008). Radicalised groups are already politicised insofar as they experience shared grievances and attribute blame for those grievances to an opponent, but go further in that they promote more direct actions (as opposed to influencing third parties) to realise their social or political goals (Thomas et al., 2014). Indeed, radicalised groups are characterised by a perception that the “ends justify the means” (van Stekelenburg & Klandermans,

2011, p.183). Thus, radicalisation occurs to the extent that group members come to see more extreme strategies as legitimate or necessary for achieving social change goals.

Despite previous calls for research to consider engagement in collective action as a process (Horgan, 2008), empirical investigations on how different forms of action emerge are scarce (Wright, 2009). To address this gap, I explore social interaction as a powerful mechanism through which groups can become politicised but also radicalised in their fight for, or against, social change.

The Role of Social Interaction

There are several ways that social interaction may be consequential for social change actions. Communication, discussion, and debate are central to how individuals come to construct a “shared reality”, which then guides the way people act in the world (Hardin & Higgins, 1996). Social interaction can also promote the development of shared goals for social change and behavioural norms that encourage individuals to engage in collective actions (Thomas, Smith, McGarty, & Postmes, 2010; Smith, Thomas, & McGarty, 2014).

Conceptually, social interaction seems to be implicit to accounts of both politicisation and radicalisation. First, in order for groups to politicise, group members must develop a sense of shared grievances, make adversarial blame attributions, and decide on strategies for targeting third parties (Simon & Klandermans, 2001). Indeed, it is difficult to envisage how individuals would realise of the sharedness of their political grievances, and agree upon who is responsible for their grievances and why, without interacting with like-minded others. It is also likely that group members would continually devise, negotiate, and develop strategies for targeting third parties through ongoing discussion and debate. These

processes all seem to require *social validation* and *consensus*, that is, the perception that personal experiences and views are supported and shared by relevant others (Smith et al., 2014). Social interaction provides a vehicle through which people can have their views validated and achieve consensus (Postmes, Haslam, & Swaab, 2005). In fact, it has long been shown that people are highly motivated to reach consensus when engaging in social interactions (Festinger, 1954). Thus, I contend that through social interaction, people can become aware of their shared grievances, agree on who is responsible for their grievances, and decide on what particular action strategies to pursue. In other words, I argue that politicisation can occur through engagement in social interaction with like-minded others.

For radicalisation, groups must go further in that they come to endorse more extreme solutions and appeal to the ideology that the “ends justify the means” (McCauley & Moskalenko, 2008; van Stekelenburg & Klandermans, 2011). Again, it is difficult to conceive how smaller groups seeking more radical goals and actions would emerge from larger political movements without interacting with like-minded others. This transformation also seems to require social validation and consensus, but more importantly, it appears to depend on *polarisation* (van Stekelenberg, 2014). Polarisation is the process by which individuals develop more extreme attitudes and become more risk-oriented as a group (Myers & Lamm, 1976). Early experiments in social psychology have consistently demonstrated that polarisation occurs during group interaction (Myers & Lamm, 1976; Mackie & Cooper, 1984; Mackie, 1986). Thus, I argue that by discussing solutions for social change, groups may come to justify actions that are illegal, violent, or that demand sacrifice in defence of the group. However, people will be less inclined to agree with strategies that involve illegal, violent, or self-sacrificial behaviour. Hence, it is only in the presence of

contextual factors that legitimise extreme solutions, that social interaction fosters radicalisation.

Empirically, research from social psychology and the political violence and terrorism literatures also points to an important role for social interaction in bringing about political and radical collective actions. First, Thomas and McGarty (2009) demonstrated that engaging in small group discussions about strategies to overcome social injustice increased commitment to collective actions through consensus and norm formation. Similar research highlights how groups construct ideas of “who we are” and “what we do” through discussion, that can encourage both prosocial and hostile forms of action (Smith & Postmes, 2009; Thomas et al., 2010). Moreover, analyses of escalating conflict and violence in crowds show how the dynamics of the social context can transform perceived group norms in ways that justify violent actions towards outgroups (Drury & Reicher, 2000; Stott, Hutchinson, & Drury, 2001). Finally, terrorism research also suggests that joining in small groups (Sageman, 2008) and engaging in online interactions (van Stekelenburg, Oegema, & Klandemans, 2011) can promote radicalisation as a function of changing intergroup relations. Taken together, these findings converge on the idea that people should be more willing to take political actions, and in certain contexts, more radical actions after interacting with like-minded others.

Consistent with these points, a recent study provides the first experimental evidence for the importance of social interaction in processes of both politicisation and radicalisation. Thomas and colleagues (2014) showed that discussing action strategies in small groups led to politicisation and contributed to radicalisation in the context of animal welfare, specifically in opposition to the battery farming of chickens. Politicisation was marked by the emergence of shared grievances and

triangulation, providing some support for Simon and Klandermans' (2001) model (although the data did not support adversarial blame as a mediator of political action). Radicalisation also emerged from interactions, but only where group members had been primed with the legitimacy of using more extreme actions to prevent battery farming. Moreover, radicalisation was marked by an increased willingness to break the law. These findings illustrate just how powerful social interaction is in bringing about collective actions, by showing that even short interactions in the laboratory can facilitate commitments to both political and radical forms of action.

The present research intends to replicate and expand on these findings by further exploring politicisation and radicalisation processes through group interaction. In line with Thomas et al. (2014), I expect that social interaction will provide an effective means through which group members can politicise. Furthermore, I expect social interaction to provide a catalyst for radicalisation, but only under some circumstances. Thomas et al. (2014) identified legitimising beliefs as one mechanism that, when combined with group interaction, can shift support from political activism towards radicalism. The next logical step is for research to identify additional mechanisms that underpin this transition. In accordance, I intend to explore the emergence of group-based sacred values through interaction, as a potential driver of the shift towards endorsement of more radical strategies.

The Role of Sacred Values in Radicalisation

Recent scholarship in the political violence and terrorism literatures points to the importance of understanding a group's values when attempting to understand decisions to use violence in political conflicts (Ginges et al., 2011). As participation in political violence and terrorism can be construed as forms of radical collective

action (McCauley & Moskalenko, 2008), this line of research informs the present thesis of the potential role for group-based values in radicalisation.

Conceptually, values are beliefs pertaining to desirable end states that guide the way people understand and navigate themselves in the world (Schwartz, 1994). Different types of values can be distinguished by the abstract motivational goals they represent (Schwartz, 1994). Specifically, the decision-making and negotiation literatures distinguish between sacred and instrumental values (Hanselmann & Tanner, 2008; Atran & Axelrod, 2008). *Sacred values* are those that incorporate moral principles and drive behaviour independently of, or out of proportion to, calculated risks and projected outcomes (Atran & Axelrod, 2008). Such values are closely linked with emotions and central to group identity (Atran & Axelrod, 2008). Examples include specific cultural and religious values, along with values such as family, nature, justice, and independence. In contrast, *instrumental values* are those that incorporate cost-benefit considerations and drive actions based on the most beneficial outcomes (Atran & Axelrod, 2008). The quintessential instrumental value is wealth. While instrumental values have *extrinsic* worth insofar as they provide a means to an end or a way of achieving some ultimate goal, sacred values have *intrinsic* worth, that is, they *are* the end goal (Atran & Axelrod, 2008). Scholars have argued that what specifically defines a value as sacred is its separation from the secular or material domain (Ginges & Atran, 2009a). In this way, sacred values are operationalised by their inability to be measured against an instrumental metric or to be traded-off for some instrumental or material value (Ginges & Atran, 2009a; Hanselmann & Tanner, 2008).

Empirical evidence illustrates that sacred values, as opposed to instrumental values, lead people to reason in ways that justify the use of violent actions. For

example, a series of field experiments conducted in the violent Israeli-Palestinian conflict show that when contested issues are sacred to groups, action strategies are guided by moral principles, irrespective of the potential costs associated with such actions (Ginges, Atran, Medin, & Shikaki, 2007). Specifically, Ginges and colleagues (2007) found that when issues were of sacred value to participants, adding material incentives to negotiation deals (such as offering money to compromise “holy” land) increased anger and disgust, and yielded greater support for violent opposition. In fact, the greater the incentive offered, the greater the anger, disgust, and support for violence. Conversely, when contested issues were of instrumental value to participants (such as when land was valued for economic reasons), adding material incentives to negotiations decreased anger and disgust, reduced support for violence, and increased willingness to compromise. These findings have been replicated numerous times in various real-world contexts, and together, strongly suggest that when sacred values are at stake, people will be more likely to support the use of extreme forms of action on behalf of their group (Ginges & Atran, 2009a; Dehghani et al., 2009; Dehghani et al., 2010; Ginges et al., 2011).

Some additional relevant findings from this literature support the idea that violent extremism is motivated by moral commitments to a group and its values. For instance, willingness to use violence has been negatively associated with prioritising one’s own values, but positively associated with commitment to a group’s values (Ginges & Atran, 2009b). Furthermore, research has demonstrated that the salience of an issue to a group’s identity moderates the way ingroup members reason and respond to threats to sacred values (Sachdeva & Medin, 2009).

Outside the political violence and terrorism literatures, the role of sacred values in explanations of radicalism has been overlooked. However, there have been

recent attempts in social psychology to integrate *moral convictions*, defined as “strong and absolute stances on moral issues”, into accounts of collective action (van Zomeren, Postmes, & Spears, 2012, p.52). Supporting this integration, van Zomeren and colleagues (2012) demonstrated that moral convictions predicted collective action intentions and actual collective action directly, but also indirectly through identification with a cause, group-based anger, and collective efficacy beliefs. Other recent findings also suggest that holding strong moral convictions is not only related to collective action, but is also related to a disregard for societal rules against hostile forms of action (Zaal, Van Laar, Stahl, Ellemers, & Derks, 2011). This suggests that moral convictions could act as a catalyst for radicalisation by increasing the extent to which group members perceive hostile or illegal actions to be justifiable. Despite some conceptual discrepancies between “sacred values” and “moral convictions”, these literatures are related; both agree that there is a need to further explore how ideas of morality and sacred values function in decisions to engage in political and radical collective action.

A further aim of the present thesis is to integrate the political violence literature on sacred values with the social psychological literature on collective action. In doing so, I plan to test the role of values in decisions to support different action strategies. Specifically, I predict that sacred values will be an important driver of the radicalisation process. This is because sacred values represent end goals of action (Atran & Axelrod, 2008), and thus, when political issues involve values that are sacred to groups, group members should be willing to take more extreme actions, regardless of the costs associated with that action (Ginges et al., 2011). However, I maintain that it is *through social interaction*, where values and beliefs are socially validated and agreed upon, that certain issues come to be experienced as sacred to

groups. Social interaction provides a platform through which sacred values can become experienced as part of a “shared reality”, which then guides peoples’ actions (Hardin & Higgins, 1996). In sum, I argue that sacred values should facilitate the shift from political activism to radicalism through social interaction because, by definition, sacred values appeal to the ideology that the “means justify the ends” (van Stekelenberg & Klandermans, 2011). As such, sacred values should vindicate the use of actions that may be illegal, violent, or demand sacrifice in the name of the group (McCauley & Moskalenko, 2008).

The Current Study

Following calls for research to move beyond the factors that predict collective action (Horgan, 2008), the present study aims to observe how people politicise and radicalise as processes of psychological transformation. I consider these processes in the context of environmentalism, as this is a context where both political and radical collective actions are frequently observed. More specifically, the current hypotheses will be tested in opposition to proposals for large-scale mining in the Kimberley region of Western Australia. I selected this particular context for several reasons. First, the issue of mining in the Kimberley is complex and can be understood as either an issue of moral principles (sacred values) or instrumental resources. Thus, it is an ideal context in which to manipulate the salience of sacred and instrumental values. Second, it provides a realistic, and culturally and geographically relevant issue for participants. Most importantly, it remains a relatively mundane political issue; in other words, it is not highly politicised, as the West Australian public have not yet been forced to take a position (unlike shark culling and asylum seeker issues, for example). Therefore, this provides a useful

context for observing the processes that *lead to* engagement in political and radical collective actions.

Based on the current review, social interaction appears to be implicit to theoretical accounts of politicisation and radicalisation. Empirical evidence also points to an important role for social interaction in bringing about political and radical forms of action. Moreover, recent work by Thomas et al. (2014) has provided the first experimental demonstration of the role of social interaction in politicisation and radicalisation processes. Both politicisation and radicalisation occurred from social interaction, but importantly, radicalisation only ensued when participants were primed with the legitimacy of more extreme solutions.

Stemming from this, the present research further explores the role of group interaction in bringing about support for political and radical collective actions. A novel feature of the present study, however, is that these processes are investigated through *vicarious social interaction*. Vicarious social interaction is used to refer to a situation where an individual actively observes an interaction between others as opposed to directly participating in a face-to-face interaction (Sutton, 2001).

Indeed, research suggests that vicarious interaction should be just as effective as direct interaction in influencing attitudes and behaviours. For instance, a series of studies using the group polarisation paradigm found that attitudes and perceived group norms became more extreme after listening to audiotaped group discussions on various topics (Mackie & Cooper, 1984; Mackie, 1986). Additionally, studies on social influence using computer-mediated communication have shown that mediated interactions (e.g. text, video, online chat) can result in the development of social identities and group norms that have consequences for strategic behaviours (Postmes, Spears, & Lea, 2000; Postmes, Spears, Sakhel, & de Groot, 2001). Given these

findings, I conclude that the same social influence processes that transform group members during discussion can exert their influence through vicarious interaction. Therefore, I argue that vicarious interaction will provide an effective means through which people can politicise, and will also contribute to the processes through which group members radicalise.

As radicalisation must go further than politicisation, an apparent next step for research is to identify specific mechanisms that facilitate the shift in support towards more extreme strategies. A useful direction is to explore the role of group-based values, as recent scholarship in the political violence literature suggests that group values play a key role in decisions to use violence in political conflicts (Ginges et al., 2011). A distinction is made between sacred and instrumental values, and research shows that when people perceive an issue to involve sacred values, they will be more likely to support the use of violence and self-sacrifice on behalf of the group (Ginges et al., 2011). I argue that this is because sacred values appeal to the “ends justify the means” ideology. Accordingly, I explore the role of sacred values as one important, yet overlooked, mechanism that facilitates radicalisation through vicarious interaction.

To begin addressing these identified next steps, I investigate the role of vicarious interaction and sacred values in the processes of politicisation and radicalisation. To manipulate values, participants read a bogus news article that framed the issue of mining in the Kimberley in terms of either sacred or instrumental values. To test the role of vicarious interaction, some participants then watched an audio-visual recording featuring a group discussion on the issues raised in the article. Given the obvious difficulty of observing actual collective actions, particularly radical forms, I followed past studies (e.g. Tausch et al., 2011; Thomas et al., 2014)

and measured specific action intentions as a proxy for political and radical collective actions. A baseline of environmental attitudes and worldviews was established prior to manipulations. The purpose of this was to rule out pre-existing attitudes and views, which could potentially influence participants' willingness to engage in collective actions for the cause, as a possible explanation for findings.

Consistent with evidence that group discussion promotes political engagement (Thomas & McGarty, 2009; Thomas et al., 2014), I hypothesise that watching the group discussion will produce greater commitments to political action. Furthermore, I expect that social interaction will lead to political actions by allowing participants to develop an awareness of shared grievances, attribute blame for grievances to an outgroup, and perceive a need to target third parties for support. That is, I expect to find a main effect of vicarious interaction on political action intentions, and predict that this effect will be mediated by the politicisation markers outlined by Simon and Klandermans (2001).

Consistent with the radicalisation literature (Moskalenko & McCauley, 2009) and recent findings by Thomas et al. (2014), vicarious interaction is also expected to contribute to radicalisation, but only where salient aspects of the context justify the use of extreme actions. Drawing on current understandings of the function of sacred values in political violence (Ginges et al., 2011), I hypothesise that when sacred values are salient, vicarious interaction will produce greater radical action intentions. That is, I expect radicalisation to emerge from the combination of sacred values and vicarious interaction. Furthermore, because sacred values appeal to the ideology that the "means justify the ends", I expect that radicalisation will be marked by an increased willingness to break the law and risk life on behalf of the cause.

Method

Design

This study employed a 2 x 2 between-groups factorial design manipulating value frame (sacred vs. instrumental) and vicarious interaction (vicarious discussion vs. no discussion). Note that in the methods and results sections, ‘vicarious interaction’ is referred to as ‘vicarious discussion’ in order to avoid confusion between social ‘interaction’ and statistical ‘interaction’ terms. The key dependent variables measured were political action intentions and radical action intentions. Mediating variables of politicisation (shared grievances, adversarial blame, and triangulation) and radicalisation (willingness to break the law and willingness to risk life) were also measured.

Participants

Participants ($N= 133$) were university students recruited on campus ($n= 100$) and community members recruited through snowballing ($n= 33$). Psychology students received course credit and some community members were paid \$10 as reimbursement for their participation. Participants, of whom 91 were female and 42 male, were aged between 18 and 53 years ($M= 24.56$, $SD= 7.47$); two participants did not report their age. All were currently living in Western Australia and the majority (96%) were Australian citizens or permanent residents.

Procedure

The present research was conducted entirely online. Participants responded to a study ostensibly looking at attitudes towards mining in the Kimberley and were sent an information sheet detailing the study and participation requirements (Appendix A). A link on the information sheet randomly assigned participants to one of four possible surveys hosted on a secure server (Murdoch University’s SCORED).

After providing informed consent and demographic information (Appendix B), participants completed an adapted version of the New Environmental Paradigm (NEP) scale (Dunlap, Van Liere, Mertig, & Jones, 2000) as a pre-test measure of environmental worldviews (Appendix C). Participants were then presented with one of two online news articles opposing plans for mining in the Kimberley (Appendix D). These articles contained the manipulation of values. Both stated that mining would have a negative impact on the Kimberley's natural environment and raised two key issues to illustrate. In the sacred condition, mining in the Kimberley was framed as an issue of moral principles, and was said to threaten sacred heritage sites and biodiversity. In the instrumental condition, mining in the Kimberley was framed as an economic issue, and said to threaten the tourism and agricultural industries. To offer an example, participants in the sacred condition read that:

“The real value of the region lies in its sacred heritage sites and biodiversity, which depend on maintaining the natural values of the region. These are priceless.”

Conversely, participants in the instrumental condition read:

“The real value of the region lies in its tourism and agricultural industries, which depend on maintaining the natural values of the region. These are essential economic sectors.”

To ensure differences were confined to manipulations, the articles were carefully designed to be identical in as many aspects as possible. Details such as the title, names of spokespeople, length of the article, its wording and paragraph structure were kept constant.

After reading the articles, participants in the vicarious discussion conditions watched one of two 4-minute video recordings; each ostensibly featured a group of four Murdoch University students (3 female; 1 male) discussing the issues raised in the articles and their views in relation to mining in the Kimberley (for transcripts see Appendix E). The discussions were carefully scripted so as to avoid introducing any new information; though to ensure they appeared natural, volunteer drama students were recruited to help create the videos. Both discussions were purposely constructed so that the group validated the sentiments expressed in the corresponding article and reached consensus about the values involved. For example, in the sacred discussion condition, one of the members remarked:

“I agree with the sentiment that the Kimberley region is priceless.”

Conversely, in the instrumental discussion condition, it was remarked:

“I agree with the sentiment that the Kimberley region has other valuable assets to consider.”

In the ‘no discussion’ condition, participants were instead asked to summarise the key issues raised by the article. The purpose of this task was to remove time and rumination as confounds. Finally, all participants completed the main questionnaire (Appendix F), which included measures of key dependent variables. Upon completing the study requirements, participants were thoroughly debriefed (Appendix G).

Questionnaire

All items were measured on a 7-point Likert scale (1= Strongly Disagree; 7= Strongly Agree). Acceptable to excellent internal consistency was demonstrated for all variables.¹

¹ Note that there were more items in the questionnaire than those to be discussed here

Environmental attitudes pre-measure. The NEP Scale (Dunlap et al., 2000; Appendix D) was included before manipulations as a pre-test measure of environmental worldviews. Specifically, three (of five) subscales were used given their relevance to the context of the present study: ‘anthropocentrism’ items gauged human-centeredness or the extent to which human beings are considered the most significant entities on the planet; ‘balance’ items tapped into beliefs about nature’s fragility; and ‘ecocrisis’ items tapped into beliefs about the likelihood of potentially catastrophic environmental changes. Each subscale was made up of three items; together, the nine items formed a reliable scale, $\alpha = .67$.

Manipulation check. Five items adapted from Hanselmann and Tanner (2008) measured the extent to which the issue was seen to involve sacred values, $\alpha = .77$. For example, “The issue of mining in the Kimberley is about something that we should not sacrifice, no matter what the benefits (money or something else)”.

Shared grievance. Two items adapted from Thomas et al. (2014) measured the extent to which political grievances were perceived to be shared, $\alpha = .80$. For example, “This is a position I share with other people”.

Blame attributions. Four items adapted from Thomas et al. (2014) measured the extent to which mining companies and the Government were blamed for grievances relating to mining in the Kimberley, $\alpha = .84$. For example, “Mining companies are to blame for the current situation” and “The government is to blame for the current situation”.

Triangulation. Two items adapted from Thomas et al. (2014) measured the extent to which participants had become aware of society as an important target of influence, $\alpha = .83$. For example, “It is vital that we convince the West Australian community that mining in the Kimberley is unacceptable”.

Political action intentions. Six items adapted from Moskalenko and McCauley (2009) and Tausch et al. (2011) measured intentions to engage in specific political actions, $\alpha = .93$. For example, “I intend to sign a petition” and “I intend to join peaceful protests”.

Radical action intentions. Five items adapted from Moskalenko and McCauley (2009) and Tausch et al. (2011) measured intentions to engage in specific radical actions, $\alpha = .89$. For example, “I intend to join a sit-in at the headquarters of one of the mining companies involved” and “I intend to join protests that involve chaining myself to mining equipment”.

Willingness to break law. Three items adapted from Simon & Grabow (2011) measured the extent to which participants would be willing to break the law, $\alpha = .89$. For example, “If circumstances required it, I would break the law to protect the Kimberley from mining”.

Willingness to risk life. Three analogous items were crafted to measure the extent to which participants would be willing to risk their lives, $\alpha = .81$. For example, “If circumstances required it, I would put my life at risk to protect the Kimberley from mining”.

Results

Data Screening

A total of 136 participants completed the experiment, however, three were removed prior to analyses because they indicated that they were not residents of Western Australia (a pre-determined criterion based on the relevance of questionnaire items). Then having determined that missing data was not more than 3% of values for any variable, and that values were missing completely at random,

$\chi^2(524, N= 133)= 460.75, p= .978$, I used expectation maximisation to impute missing values.

Preliminary Analyses

Environmental attitudes pre-test measure. To ensure there were no differences on environmental worldviews between the four conditions prior to manipulations, I ran a one-way ANOVA on NEP scores. This revealed no significant differences between conditions, $F(3, 129)= 1.00, p= .394$, indicating that the broad sampling and randomisation successfully resulted in four conditions with similar environmental attitudes and values. The descriptive statistics, which are displayed in Table 1, show that overall mean NEP scores were just above the scale midpoint, indicating that the sample had relatively pro-environmental worldviews.

Manipulation check. A 2 x 2 between-groups ANOVA revealed a marginally significant main effect of value framing on the sacred values measure, $F(1, 29)= 3.62, p= .059$, such that sacred values were greater for those in the sacred framing condition ($M= 4.82, SD= 1.14$) compared to those in the instrumental condition ($M= 4.44, SD= 1.08$). There was no effect of vicarious discussion and no significant interaction, both F 's $< .35, p > .50$. I concluded that the intended manipulation of values was successful.

Descriptive statistics. Mean and standard deviations for key dependent variables are presented in Table 1. It can be observed that the means for shared grievances, blame attributions, and triangulation were around the midpoint of the seven-point scale. Low scores were found for political and radical action intentions, willingness to break law, and willingness to risk life, indicating that overall, participants were disinclined to take action and make personal sacrifices.

Table 1

Means and Standard Deviations for Dependent Variables Across Conditions

	Sacred / Discussion (<i>n</i> = 37)	Sacred / No discussion (<i>n</i> = 31)	Instrumental / Discussion (<i>n</i> = 33)	Instrumental / No discussion (<i>n</i> = 32)	Overall (<i>N</i> = 133)
	Mean (<i>SD</i>)	Mean (<i>SD</i>)	Mean (<i>SD</i>)	Mean (<i>SD</i>)	Mean (<i>SD</i>)
NEP Scale (pre-measure)	5.48 (.73)	5.56 (.65)	5.29 (.70)	5.38 (.58)	5.43 (.67)
Shared Grievances	5.12 (1.27)	4.79 (1.16)	5.04 (1.13)	4.67 (1.12)	4.92 (1.18)
Blame Attributions	4.95 (1.37)	4.78 (.85)	4.88 (.97)	4.68 (.89)	4.83 (1.05)
Triangulation	5.22 (1.43)	4.71 (1.48)	5.24 (1.00)	4.73 (1.30)	4.99 (1.33)
Political Actions	3.94 (1.48)	3.28 (1.47)	3.83 (1.47)	3.47 (1.35)	3.65 (1.45)
Radical Actions	2.68 (1.17)	1.86 (.83)	2.17 (.94)	2.25 (1.15)	2.26 (1.07)
Willingness to Break Law	3.06 (1.83)	2.51 (1.38)	2.10 (1.34)	2.60 (1.61)	2.58 (1.58)
Willingness to Risk Life	2.18 (1.36)	1.71 (.84)	1.70 (1.33)	1.97 (1.34)	1.90 (1.20)

Inter-correlations between key variables are presented in Table 2. Both political and radical action intentions showed positive correlations with shared grievances, adversarial blame, triangulation, willingness to break the law, and willingness to risk life. However, shared grievances, adversarial blame, and triangulation were more strongly correlated with political action intentions compared to radical action intentions. Conversely, willingness to break law and willingness to risk life were more strongly correlated with radical action intentions compared to political action intentions. This pattern of relationships provides preliminary support

for the central propositions of this thesis. That is, the anticipated markers of politicisation are more strongly associated with political (than radical) action intentions, while the anticipated markers of radicalisation are more strongly associated with radical (than political) action intentions.

Table 2

Correlations (r Values) Between Dependent Variables

	1	2	3	4	5	6	7
1. Shared Grievances	1	.29**	.49**	.45**	.37**	.28**	.16
2. Blame Attributions		1	.38**	.32**	.23**	.40**	.22*
3. Triangulation			1	.65**	.50**	.43**	.34**
4. Political Actions				1	.61**	.41**	.38**
5. Radical Actions					1	.59**	.62**
6. Willingness to Break Law						1	.71**
7. Willingness to Risk Life							1

Note: * $p < .05$, ** $p < .01$

Main Analyses

The role of values and vicarious discussion in politicisation

A core hypothesis of the present study was that vicarious discussion would drive politicisation and lead to political actions. If so, means for political action intentions, shared grievances, blame attributions, and triangulation should be greater for those who watched the discussion. That is, I expect a main effect of vicarious discussion on political action intentions and the mediating variables of politicisation.

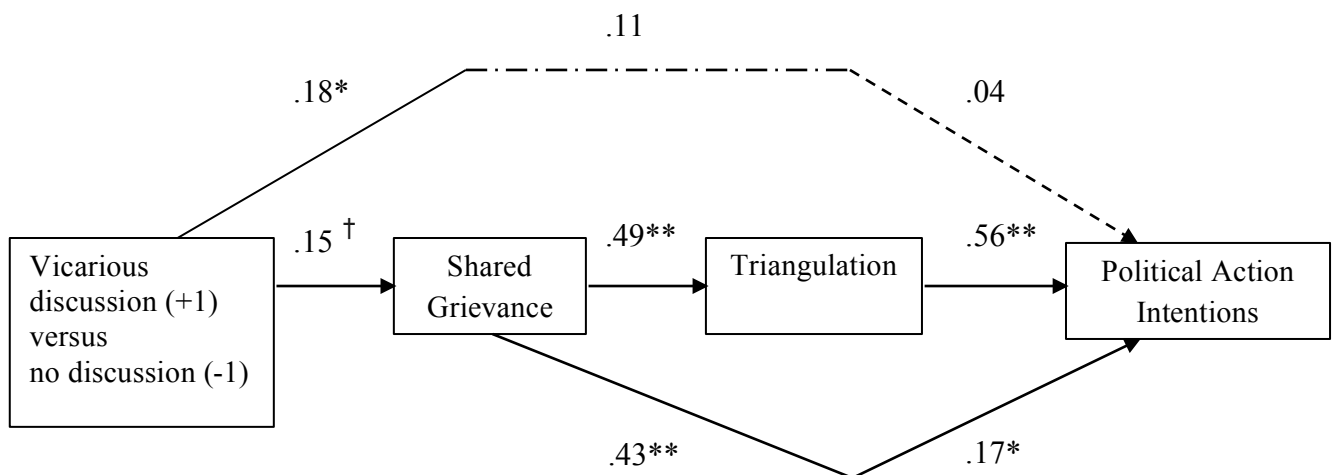
To test this, I conducted a series of 2 x 2 between-groups ANOVAs to compare the effects of the two independent variables on political action intentions and the politicisation variables (shared grievances, blame attributions, triangulation).

The ANOVAs revealed no significant main effects of value framing on any variables, all F 's $< .22$, $p' > .60$, and no significant interactions, all F 's $< .35$, $p > .55$. As expected, however, there were significant main effects of vicarious discussion on political action intentions, $F(1, 129) = 4.10$, $p = .045$, and triangulation, $F(1, 129) = 4.90$, $p = .029$, such that political action intentions and triangulation were greater for those who had watched the discussion than for those who had not. Furthermore, there was a marginal effect of vicarious discussion on shared grievances, $F(1, 129) = 2.91$, $p = .090$, such that watching the discussion produced a greater awareness of shared grievances. However, there was no effect of vicarious discussion on blame attributions, $F(1, 129) = .96$, $p = .328$.

The present study also examined whether mean-level increases in political action intentions were mediated by the politicisation variables. I was specifically interested in testing Simon and Klandermans' (2001) three-step politicisation model, in which the emergence of shared grievances, blame attributions, and then triangulation precede engagement in political action. Given that vicarious discussion had no significant effect, blame attributions was not included as a potential mediator.

I used hierarchical linear regression to test a serial mediation model as presented in Figure 1. Analyses followed the steps outlined by Baron and Kenny (1986). Vicarious discussion (coded 1 = vicarious discussion, -1 = no discussion) was entered first and significantly predicted political action intentions. I then regressed the predictor variables onto vicarious discussion, and found that vicarious discussion marginally predicted shared grievances and significantly predicted triangulation.

Shared grievances also significantly predicted triangulation. When shared grievances was entered into the model, it significantly predicted political action intentions, while the variance previously explained by vicarious discussion became negligible. In the final step, triangulation was entered and found to be a significant predictor of political action intentions. Shared grievances remained a significant predictor, however, the amount of variance it uniquely accounted for was attenuated. The final model explained 44% of variance in political action intentions, $R^2 = .44$, $F(3, 129) = 34.96$, $p < .001$. I utilised the bootstrapping method of Preacher and Hayes (2008) to test the indirect effect (*IE*) of vicarious discussion on political action through shared grievances and triangulation. Consistent with serial mediation, the indirect effect was significant, ($IE = .06$, $SE = .04$, $CI = .003, .145$). Although it may be considered marginal, the 95% confidence interval did not contain zero.



† Denotes marginal path at $p < .10$

* Denotes significant path at $p < .05$

** Denotes significant path at $p < .01$

Figure 1. Serial mediation of the effect of Vicarious Discussion on Political Action Intentions through Shared Grievance and Triangulation. Pathways display standardised regression coefficients (β weights). Solid lines represent significant (and marginal) pathways; dashed lines indicate non-significant pathways.

To summarise, I found that vicarious discussion significantly increased political action intentions, and that this effect was mediated by shared grievances and triangulation. These findings provide excellent support for the role of vicarious discussion in politicisation and offer good evidence for Simon and Klandermans' (2001) theoretical model.

The role of values and vicarious discussion in radicalisation

Another core prediction of the present study was that, when sacred values were salient, vicarious discussion would lead to radical action, as participants would be more willing to make personal sacrifices for the cause. If so, means for radical action intentions, willingness to break the law, and willingness to risk life should be greatest in the sacred discussion condition, and therefore, demonstrated by a statistical interaction between value frame and discussion manipulations. To test these effects, I ran a series of 2 x 2 between-groups ANOVAs for radical action intentions and the radicalisation variables (willingness to break law and risk life).

The ANOVA on radical action intentions revealed no main effect of value framing, $F(1, 129) = .10, p = .757$, but did reveal a significant effect of vicarious discussion, $F(1, 129) = 4.24, p = .042$. The main effect of vicarious discussion was, however, qualified by the predicted interaction, $F(1, 129) = 6.29, p = .013$, which is represented in Figure 2. Simple effects revealed that the interaction was driven by differences between value frames within the vicarious discussion conditions, such that sacred discussion produced greater radical action intentions compared to instrumental discussion, $F(1, 129) = 4.19, p = .043$. There was no significant difference between sacred and instrumental values in the no discussion conditions, $F(1, 29) = 2.30, p = .132$.

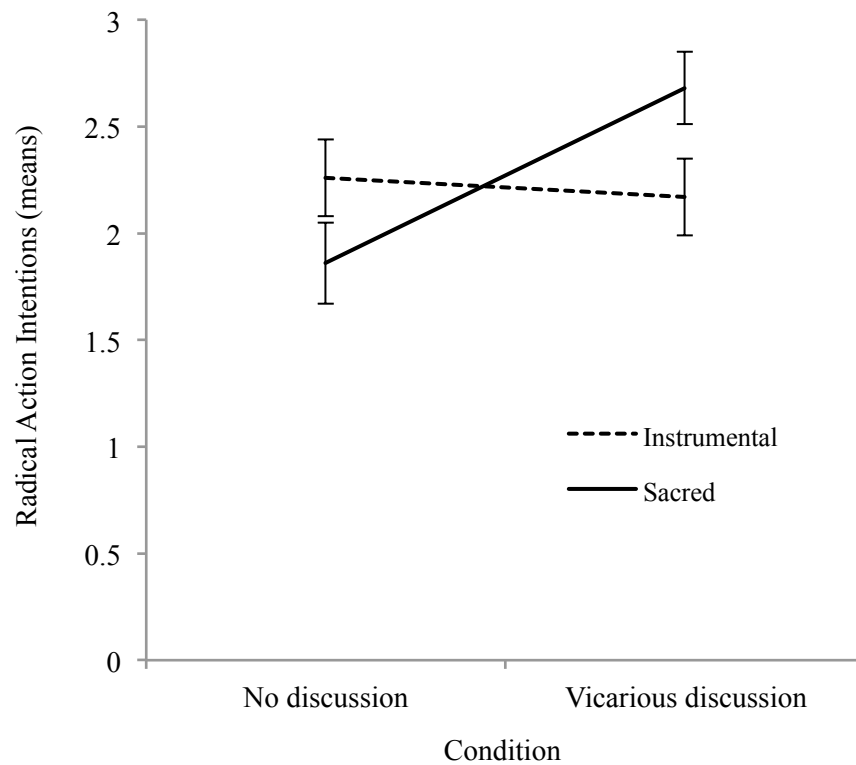
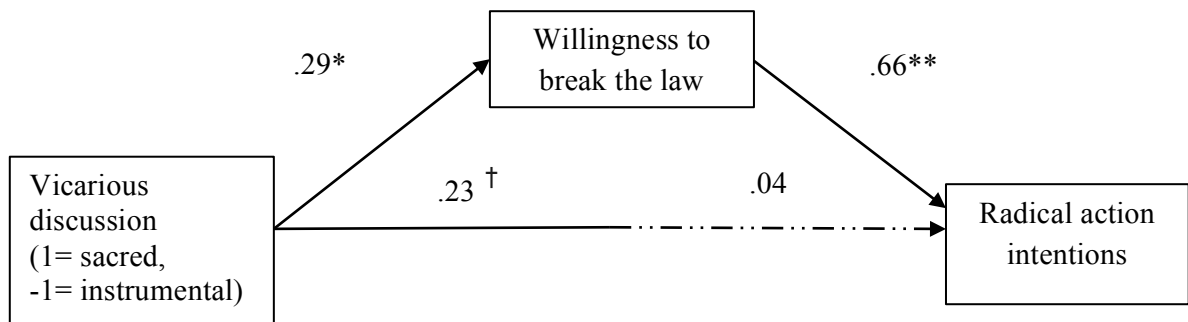


Figure 2. Interaction of Values Frame and Vicarious Discussion on Radical Action Intentions. Error bars represent +/- 1 standard error.

Consistent with the pattern for radical action intentions, the ANOVAs for the radicalisation variables revealed marginal interactions for both willingness to break law, $F(1, 29) = 3.83, p = .052$, and willingness to risk life, $F(1, 29) = 3.18, p = .077$. There were no significant main effects of value frame or vicarious discussion on either willingness to break law or risk life, all F 's $< .27, p > .11$. I followed up these (marginal) interactions with simple effects analyses. For willingness to break the law, simple effects revealed that the interaction was driven by differences between groups in the vicarious discussion conditions, such that those in the sacred discussion condition were significantly more willing to break the law compared to those in the instrumental discussion condition, $F(1, 129) = 6.65, p = .011$. Conversely, there were no significant differences in the no discussion conditions, $F(1, 29) = .06, p = .802$. This parallels the pattern of findings for radical action intentions. For willingness to

risk life, however, simple effects revealed no significant differences between the conditions, both F 's < 2.80 , $p > .10$. So while the overall interaction for willingness to risk life was marginal, none of the mean differences attained significance.

A hierarchical linear regression was then conducted to assess whether mean-level differences in radical action intentions between the two discussion conditions (coded 1= sacred discussion, -1= instrumental discussion) were mediated by an increased willingness to break the law and risk life. Again, analyses followed the steps outlined by Baron and Kenny (1986). The discussion variable was entered first and was a marginally significant predictor of radical action intentions ($p = .051$). However, when the predictor variables were regressed onto the discussion variable, discussion was shown to significantly predict willingness to break the law, but not willingness to risk life ($\beta = .19$, $p = .119$). This indicates that willingness to risk life did not mediate the effects of discussion on radical action intentions. Hence, the final model, as presented in Figure 3, only included willingness to break the law as a mediator. As can be seen, when willingness to break the law was entered, it significantly predicted radical action intentions, however, the relationship between discussion and radical action intentions became negligible. The final model explained 45% of variance in radical actions, $R^2 = .45$, $F(2, 67) = 27.96$, $p < .001$. Consistent with mediation, bootstrapping revealed that the indirect effect (IE) was significant ($IE = .21$, $SE = .10$, $CI = .033, .419$); the 95% confidence interval did not include zero.



† Denotes marginal path at $p < .06$

* Denotes significant path at $p < .05$

** Denotes significant path at $p < .01$

Figure 3. Mediation of Radical Action Intentions through Willingness to Break the Law. Pathways display standardised regression coefficients (β weights). Solid lines represent significant (and marginal) pathways; dashed lines indicate non-significant pathways.

In sum, I found that radicalisation emerged from an interaction between value frame and vicarious discussion. Specifically, the data show that when sacred values were salient, vicarious discussion produced greater radical action intentions. Furthermore, the effect of sacred discussion on radical action intentions was mediated by an increased willingness to break the law. Willingness to risk life, however, was not found to be a mediator. Overall, the data provides empirical support for the role of vicarious group discussion and sacred values in radicalisation.

Discussion

The current research aimed to observe how people come to engage in both political and more radical forms of collective action for social change. I examined the role of social interaction (specifically, vicarious interaction) as a central, yet underexplored, mechanism that could contribute to both politicisation and radicalisation processes. Furthermore, I investigated whether sacred values (as opposed to instrumental values) could facilitate the shift towards radicalism. I also

sought to provide empirical evidence for the theoretical markers of both politicisation and radicalisation.

I found good support for the role of social interaction in promoting politicisation. As hypothesised, there was a main effect of vicarious social interaction on political actions, such that actively observing a group discussion significantly increased participants' intentions to engage in political forms of collective action. Furthermore, I found that increased political action intentions were mediated by a perception of shared political grievances and a need to gain the support of society at large (triangulation), but not by adversarial blame attributions. This is consistent with Thomas et al. (2014), and suggests that shared grievances and triangulation are an important part of the politicisation process, whereas adversarial blame is not. Overall, these findings suggest that social interaction can promote engagement in political activism, by allowing people to become aware that their political grievances are shared and decide that actions will need to target society at large in order to gain support for their cause.

Moreover, the present study found good support for the combined effects of sacred values and social interaction in promoting radicalism. As predicted, where sacred values were made salient, watching the group discussion significantly increased the extent to which participants intended to take radical forms of collective action. Importantly, the effect of sacred values on radical action intentions was dependent on subsequent vicarious social interaction. This suggests that while sacred values create the conditions for radicalisation, they are not sufficient in and of themselves to produce radicalisation. Thus, it is *through* social interaction, that sacred values can promote engagement in more radical action strategies. I also tested whether increases in radical action intentions were marked by an increased

willingness to make personal sacrifices on behalf of the cause. I found that the effect of sacred values and social interaction on radicalisation was indeed marked by an increased willingness to break the law, but not willingness to risk one's own life. Overall, this pattern of results suggests that when an issue is perceived to involve sacred values, social interaction can promote radicalism by increasing the extent to which people will justify the use of illegal actions for the cause.

Theoretical Implications

The present research is amongst the first to experimentally demonstrate collective action as an emergent process of psychological transformation. Results are consistent with previous research that suggests social interaction is an important driving mechanism for the processes that lead to collective action (Thomas & McGarty, 2009; Smith & Postmes, 2009; Thomas et al., 2014). Moreover, the current study distinguished between political and radical forms of action, and demonstrated that social interaction contributed to both politicisation and radicalisation processes, albeit through different mechanisms.

The overall pattern of findings is consistent with recent research by Thomas and colleagues (2014) who found that engaging in small group discussions increased endorsement of political actions and (when primed with legitimising beliefs) facilitated the shift towards support for more radical strategies. The present study adds to this work by demonstrating that even vicarious interaction, namely watching a group discussion, can contribute to each of these processes. I contend that this is because even indirect forms of social interaction provide a vehicle for the processes of social validation, consensus, and polarisation (Myers & Lamm, 1976; Mackie, 1986; Postmes et al., 2000, 2001, 2005)—all of which feed into the processes that lead to political and radical collective action. That is, even watching an interaction

between others, can allow people to realise that their experiences and views are supported (social validation) and shared (consensus), and also, to develop perceptions of more extreme attitudes and behavioural norms (polarisation) under certain conditions (Mackie, 1986). A caveat to the current findings is that absolute mean levels for both political and radical action intentions were below the scale midpoint. Thus, while I have observed a relative shift in support toward political and radical actions, I have not created highly committed activists or full-blown “radicals”.

The current results provide good support for Simon and Klandermans’ (2001) three-step model of politicisation, showing that politicisation was marked by shared grievances and triangulation, although not adversarial blame attributions. This suggests that watching the interaction promoted political actions because it allowed participants to develop an awareness of shared political grievances and a need to target third parties to achieve social change. Interestingly, these findings are in line with Thomas et al. (2014), who also found no role for adversarial blame attributions. Thomas and colleagues (2014) suggested a potential reason they did not find a role for adversarial blame was because, in the battery-farming context, people may focus more on helping the victimised animals than on farmers or consumers as the problem. It seems less likely that this would provide an explanation in the context of mining in natural environments, where aggrieved groups often hold mining companies or the government responsible (e.g. Georgatos, 2014). Perhaps this indicates that the responsibility of mining companies and / or the government is “normalised” in this context and, therefore, is difficult to shift. Regardless, I conclude that adversarial blame attributions are not necessary for politicisation in all contexts (e.g. animal liberation and environmental movements). Future research

could investigate whether blame attributions are a marker of politicisation in particular contexts (e.g. political conflict between ethnic groups; Simon & Grabow, 2011).

Moreover, this research was the first to link group-based sacred values with social psychological understandings of radicalisation, and the first to study social interaction and sacred values in combination. The finding that sacred values were important in the shift towards support for more extreme actions is consistent with field research in the political violence literature (Ginges et al., 2011). However, radicalisation only emerged from the presence of sacred values where social interaction had taken place. From a conceptual standpoint, I argue that is because sacred values become experienced as part of a “shared reality” and anchored in a mutual understanding of social issues when people interact (Higgins & Hardin, 1996). It is only once shared in this way, that sacred values can influence judgement and group behaviour. The present research contributes to understandings of the path towards violence in political conflicts, by suggesting that it is through social interaction that sacred values create such extreme commitment to a group and its cause. In addition, these findings contribute to social psychological theory on radicalisation by identifying a specific mechanism that underpins the shift from political towards more radical forms of action.

Ginges and colleagues (2011) suggest that sacred values lead to extremism because they are linked with moral principles and drive actions irrespective of, or out of proportion to, calculated risks and expected outcomes. That is, because they *are* the end goal, sacred values should vindicate the use of actions that are illegal, violent, or demand self-sacrifice (Ginges et al., 2011). Consistent with this, and with previous findings by Thomas et al. (2014), I identified willingness to break the law

as a marker of radicalisation. This suggests that through social interaction, sacred values foster radicalism by increasing the extent to which people will be prepared to take actions that are illegal. However, willingness to risk life did not mediate radicalisation. This may be because life itself is often considered to be a sacred value. Thus, I contend that a preparedness to risk one's own life is not an essential marker of radicalisation. Nevertheless, while it may be rare, people risking their lives for a political cause is observed in many real-world contexts, including the environmental movement (Scarce, 2006). An important future endeavour is to understand when and how people come to see actions that involve putting their life at risk as legitimate or necessary for social change.

Practical Implications

On the one hand, civic engagement and political participation are fundamental to democracy and important for achieving (or resisting) social change where it may be necessary (Louis, 2009). On the other hand, direct protest actions can be extremely costly, for both protesters themselves and for society at large (Thomas & Louis, 2013). Governments spend substantial resources (including taxpayers' money) policing even peaceful demonstrations, though much more is spent trying to control more radical actions, including property destruction, industrial sabotage and so on (Thomas & Louis, 2013). Indeed, the consequences of radical actions go beyond economic expenses, particularly when they involve violence. Given the essential role of political participation for democracy and the high costs associated with radical actions, understanding what leads to different action strategies can have important practical implications. How do we promote mainstream political engagement? But also, how do we prevent groups escalating to violence in their pursuit for social change?

With the advent of new media technologies, people have greater opportunities in which they can discuss social issues and subsequently come to agree upon solutions for social change. Interacting with others via online chat forums or social media, for instance, may be consequential for promoting mainstream political engagement, but may also create opportunities for the emergence of radicalised groups. Indeed, existing research has shown how groups can form and radicalise online through ongoing discussion and debate (van Stekelenberg et al., 2011). In the current research, merely *observing* a group discussion was sufficient for politicisation and contributed to radicalisation. Thus, popular social media such as YouTube, where individuals have the opportunity to share videos and engage in further discussion and debate on the interactive forum, may provide a platform where groups can develop political grievances and, under some circumstances, become radicalised (van Stekelenburg et al., 2011). Indeed, the strategic use of social media by Islamic State militants to promote violence and recruit support for their cause appears to have been effective in radicalising disenfranchised individuals around the world (Wockner, 2014). Thus, social media may provide a useful tool for social movement organisers and activists in gaining support and mobilising mainstream political action. However, it may also allow certain individuals to become radicalised, potentially to a point where they endorse or engage in extreme violence.

While for obvious reasons it is incredibly difficult to stop people from engaging in social interaction, it may be possible to avoid escalations to violence if the contextual factors that facilitate radicalisation are better understood. Thomas and colleagues' (2014) research implies that radicalisation will be more likely when specific contextual factors make legitimising beliefs salient. Similarly, the current findings imply that radicalisation will be more likely where aspects of the context

make moral or sacred values salient. Considering the present research, sacred values can be made salient as a result of value framing in the media. Indeed, research shows that the way the media frames social issues can powerfully shape how people come to understand those issues and how they express their personal views on such issues (Brewer, 2002). Thus, media framing seems to provide one mechanism that can make salient certain beliefs and values, which for some, may serve to vindicate the use of more extreme forms of action and violence. However, it is important to keep in mind that violent actions are usually only carried out by a small number of the people who align themselves with a cause. This is because radicalisation is a dynamic process of change, influenced by the input of multiple interacting factors (McCauley & Moskaleiko, 2008). Nevertheless, knowing when and how people may come to see violence as more legitimate is an important first step towards developing well-informed strategies for preventing violence in political movements.

Limitations and Future Directions

I acknowledge several limitations of the current study that may be considered in future research. First, I utilised vicarious interaction, in which participants watched a pre-recorded group discussion, to explore the role of social interaction in politicisation and radicalisation. While the discussion was carefully scripted and acted out by drama students to ensure it appeared realistic, it was nevertheless artificial, and may not have precisely reflected the richness of actual social interaction. Despite this limitation, utilising vicarious interaction introduced a methodological strength to the present research, namely, by allowing greater control over the content of the discussion. When social interaction research is conducted in the lab, discussions may deviate from the topic to unrelated matters, or group members may become hostile towards one another. Indeed, despite the importance of

social interaction in social psychology, it is rarely studied experimentally as it creates methodological uncertainty, introduces error, and is statistically “noisy” (Haslam & McGarty, 2001). By using pre-recorded focus groups, the contents of the discussion and the style of the interaction between group members is controllable and manipulable. Given the trade-off between authenticity and control in social interaction research, I suggest that future investigations make use of all different methods for studying social interaction, as together they can be complimentary.

Another limitation was that I measured action intentions instead of actual political and radical collective actions. Existing research supports the use of behavioural intentions as a proximal predictor of actual behaviours (Ajzen, 1991; Webb & Sheeran, 2006), and in particular, demonstrates that political action intentions are a good predictor of actual political engagement (e.g. Moskalenko & McCauley, 2009). But while measuring action intentions provides a convenient and empirically supported method for measuring collective action, it should be acknowledged that intentions do not inevitably lead to behaviour (Webb & Sheeran, 2006).

One suggestion for future research is to create opportunities to observe activism in the lab. For instance, Thomas et al. (2014) gave participants an opportunity to personally sign a letter to the local minister expressing their opposition to battery farming practices. Future research could create similar behavioural opportunities for participants, such as signing a petition or sharing awareness information via social media. Due to ethical (and legal) reasons, however, it seems more problematic to create opportunities for observing the emergence of radical behaviour. Thus, action intentions may be the most useful tool for studying radicalisation in laboratory experiments.

A further limitation of the current study is that it did not include a ‘no values framing’ control group. While I concluded that sacred values produced greater radical action intentions, it is equally possible that instrumental values decreased radical action intentions, or that perhaps it was a combination of each. In light of existing research on the function of sacred values in the decision-making and political violence literatures (Hanselmann & Tanner, 2008; Ginges et al., 2011), it seems more plausible that support for radical actions was facilitated by sacred values. Nevertheless, to rule out alternative explanations, future research should include a control condition in which issues are discussed in a ‘value neutral’ framework.

Finally, it is worth mentioning that the pre-test measure revealed that overall the sample had relatively pro-environmental attitudes and worldviews. I acknowledge that if I had involved a sample that was more negative towards the environment, the manipulations may not have had the same effects. For instance, if the sample held more negative environmental attitudes, they may have been less likely to care about the issues raised, or to even oppose the sentiments expressed in the articles. In addition, they would have been less likely to identify with the group in the recording (Mackie, 1986), and thus, less likely to become politicised or radicalised (van Stekelenberg, 2014). Additional research is required to determine whether the observed effects of value framing and vicarious interaction on politicisation and radicalisation extend to those with more dissenting views.

There are a number of directions for future inquiry. Research could look at the combined effects of social interaction and value framing using alternative methods of interaction, such as small group discussions (following Thomas and colleagues) or online chat (following van Stekelenburg et al., 2011). Also, to provide

a more nuanced understanding of the processes through which groups come to engage in different collective actions, future research could make more specific distinctions between the different types of action (e.g. action that is illegal but not violent).

Concluding Comments

I began this thesis by describing particular examples of direct protest actions that illustrated the extreme lengths people are willing to go in order to bring about, or resist, social change. This thesis has highlighted the important role of social interaction and group-based values in mobilising such actions. Specifically, it has shown that interacting with like-minded others has the power to promote political activism, but also contributes to the process by which people come to endorse more extreme solutions. In particular, when people believe that issues are about moral or sacred values, they are more likely to become radicalised through their interactions with others. This thesis has, therefore, brought us one step closer to understanding seemingly incomprehensible acts such as burning down a ski resort to prevent deforestation, living atop a tree for over a year to prevent logging, or risking one's life out at sea to prevent whaling. In conclusion, it would seem that when people display such extreme devotion to a cause, they are motivated by the very things which make us human—social relations and group values.

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Appendix A

[Information letter]

Attitudes towards mining in the Kimberley

You are invited to participate in an online research study concerned with attitudes and decision-making in the context of mining. We are specifically interested in your attitudes, feelings and beliefs about mining in the Kimberley region of Western Australia.

What does your participation involve?

If you choose to participate in this study, you will be asked to complete the following tasks:

1. Provide some demographic information and complete a brief questionnaire on your general views on the relationship between humans and the environment.
2. Read an article discussing issues involved with mining in the Kimberley region.
3. Spend a few minutes engaging in a task (e.g. watching a short clip or brainstorming).
4. Complete a questionnaire, which asks you about your attitudes, feelings and beliefs about mining in the Kimberley, and about any actions you may intend to take.
5. Read a couple of short scenarios and indicate which option best represents *your* view of what is the most acceptable in each of the situations.

Your responses will be kept confidential and no information that can identify you personally will be connected to your responses. In all, your participation is expected to take between 30- 45 minutes.

Voluntary Participation and Withdrawal from the Study

Your involvement in this study is entirely voluntary. You can decide to discontinue participation at any time. However, as the questionnaire is anonymous it will not be possible to withdraw your responses once they have been submitted.

Feedback will be made available through the School of Psychology and Exercise Science webpage:

http://www.psychology.murdoch.edu.au/researchresults/research_results.html.

Results will be available from November 2014.

My supervisor and I are happy to discuss any concerns you may have about this study. If you would like to discuss any aspect of this study, please feel free to contact either myself or my supervisor on the details provided below.

Happy to go ahead?

Please click on this link to take you through to the survey: [Continue](#)

Thank you in advance for your assistance with this research project!

Regards,

Alison Clark,

Student Research

Email: Alisonjayneclark@gmail.com

Ph: 0430 997 121

Dr Emma Thomas,

Supervisor

Email: Emma.Thomas@murdoch.edu.au

Ph: 08 9360 7209

This study has been approved by the Murdoch University Human Research Ethics Committee (Approval 2014/124). If you have any reservation or complaint about the ethical conduct of this research, and wish to talk with an independent person, you may contact Murdoch University's Research Ethics Office (Tel. 08 9360 6677 (for overseas studies, +61 8 9360 6677) or e-mail ethics@murdoch.edu.au). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.

Appendix B

[Participant consent and demographics]

I have read the Information letter about my participation in this study. Any questions I have about the research process have been answered to my satisfaction. I agree that by submitting the questionnaire, I give my consent for the results to be used in the research. I am aware that this survey is anonymous and no personal details are being collected or used. I know that I may change my mind, withdraw my consent, and stop participating at any time; and I acknowledge that once my survey has been submitted it will not be possible to withdraw my data.

I understand that all information provided is treated as confidential by the researchers and will not be released to a third party unless required to do so by law.

I understand that the findings of this study may be published and that no information which can specifically identify me will be published.

I agree

Demographic Information

Age: _____

Sex:

Male

Female

Are you an Australian citizen or permanent resident of Australia?

Yes

No

Are you currently residing in Western Australia?

Yes

No

Are you a student at Murdoch University?

Yes

No

Appendix C

[New Environmental Paradigm Scale]



The following questions are interested in your general worldviews about the relationship between humans and nature. Please indicate the extent to which you agree with the following statements:

	Strongly disagree		Neither agree nor disagree			Strongly agree	
	1	2	3	4	5	6	7
• Humans have the right to modify the natural environment to suit their needs	1	2	3	4	5	6	7
• When humans interfere with nature it often produces disastrous consequences	1	2	3	4	5	6	7
• Humans are severely abusing the environment	1	2	3	4	5	6	7
• Plants and animals have as much right as humans to exist	1	2	3	4	5	6	7
• The balance of nature is strong enough to cope with the impacts of modern industrial nations	1	2	3	4	5	6	7
• The so-called "ecological crisis" facing humankind has been greatly exaggerated	1	2	3	4	5	6	7
• Humans were meant to rule over the rest of nature	1	2	3	4	5	6	7
• The balance of nature is very delicate and easily upset	1	2	3	4	5	6	7
• If things continue on their present course, we will soon experience a major ecological catastrophe	1	2	3	4	5	6	7

Appendix D

[News articles]

[Sacred frame]

National - World - Finance - Sport - Entertainment - Lifestyle - Travel - Technology - Video -



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Kimberley mining plans fuel debate over environmental impact





The Kimberley region in Western Australia is said to have world-class reserves of coal, oil and natural gas. Now, with extensive mining plans and exploration under way, there are growing concerns about the potential impacts of proposed mining activities in the region.

TEXT SIZE
+ -


Escalating protests and recent campaigns suggest that the issue is far from being resolved. Recognition of what is valuable about the region, and how mining will impact these values, is central to the issue. The main concerns have been with respect to the conservation of Western Australia's sacred heritage sites and biodiversity.



Exploration drilling for coal seam gas in the west Kimberley Source: news.com.au

"Mining is an important part of the West Australian economy. However, the real value of the region lies in its sacred heritage sites and biodiversity that depend on maintaining the natural values of the region. These are priceless," said Dr. Anthony Cohen, from the Kimberley Research Station.

The Kimberley region is a biodiversity hotspot with natural ecosystems that remain largely intact.

Representatives from environmental conservation groups have expressed concern over the recent mining proposals.

"There are a number of known species of plants, animals, and marine life that are only found in this part of the world, some of which are threatened species that have disappeared from other parts of Western Australia," says Kate Sullivan, from the Conservation Council of WA.

<http://www.news.com.au/national/western-australia/kimberley-mining-plans-fuel-debate-over-environmental-impact/story-fnii5thn-1336883764424>

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"The environmental impact of mining and the industrialisation of the region would significantly affect its biodiversity and would be detrimental to the ecosystems," she said.

The Kimberley is also remarkable for its cultural and historical significance—including many iconic Australian landmarks and sacred Indigenous heritage sites.

It has national heritage listing for its biodiversity, stunning coastlines, spectacular gorges and waterfalls, ancient Aboriginal burials, ancient rock art, prehistoric corals, and fossilised dinosaur footprints.

However, the listing does not ensure the land is protected from mining, and the rapid growth of the coal seam gas industry has acted as a catalyst for locals' concerns.

"This is our country," said Dave Shaw, Indigenous community leader and ranger at the world-heritage listed Purnululu National Park.

"The proposed large-scale coal mining would have devastating effects on our country and would spoil our sacred places; you simply can't measure the value of the Kimberley in dollars."

The latest campaigns are putting pressure on the West Australian government, with hope that the Kimberley proposals will be knocked back, as with the recently knocked back proposal for a coal mine in the Margaret River region.

SOURCE: <http://www.news.com.au/national/western-australia/kimberley-mining-plans-fuel-debate-over-environmental-impact/story-fnii5thn-1336883764424>

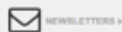


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SHARE **Kimberley mining plans fuel debate over environmental impact**



 TEXT SIZE





The Kimberley region in Western Australia is said to have world-class reserves of coal, oil and natural gas. Now, with extensive mining plans and exploration under way, there are growing concerns about the potential impacts of proposed mining activities in the region.

Escalating protests and recent campaigns suggest that the issue is far from being resolved. Recognition of what is valuable about the region, and how mining will impact these values, is central to the issue. The main concerns have been with respect to Western Australia's tourism and agricultural industries.



Exploration drilling for coal seam gas in the west Kimberley Source: news.com.au

"Mining is an important part of the West Australian economy. However, the real value of the region lies in tourism and other industries based on maintaining the natural values of the region, like farming. These are essential economic sectors," said Dr. Anthony Cohen, from the Kimberley Research Station.

Tourism is one of the Kimberley's major industries with the number of domestic and international visitors increasing each year.

Representatives from the tourism industry have expressed concern over the recent mining proposals.

"Kimberley tourism relies on the branding of natural environmental assets, such as the untouched coastlines, exotic outback landscapes, and vast wilderness areas that are unique to Western Australia," says Kate Sullivan, from the Conservation Council of WA.

<http://www.news.com.au/national/western-australia/kimberley-mining-plans-fuel-debate-over-environmental-impact/story-fnii5thn-1336883764424>

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“The environmental impact of mining and the industrialisation of the region would be detrimental to these brands and would significantly devalue the thriving tourism industry,” she said.

The Kimberley is also remarkable for its agricultural industry—including irrigated farming, horticulture, and hundred of pastoral stations.

It has attracted a wave of international investments for its abundance of fresh water, sun, and fertile soils.

However, ownership does not ensure the land is protected from mining, and the rapid growth of the coal seam gas industry has acted as a catalyst for local farmers’ concerns.

“This is prime agricultural land,” said local farmer, Dave Shaw.

“The proposed large-scale coal mining would have devastating effects on the quality of this land for all kinds of farming activities. Irrigated farming will be negatively impacted by water contamination, fertile soils spoiled by compaction and salinity; you simply can’t reduce the value of the Kimberley to mining dollars.”

The latest campaigns are putting pressure on the West Australian government, with hope that the Kimberley proposals will be knocked back, as with the recently knocked back proposal for a coal mine in the Margaret River region.




SOURCE: <http://www.news.com.au/national/western-australia/kimberley-mining-plans-fuel-debate-over-environmental-impact/story-fnii5thn-1336883764424>



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Appendix E

[Dialogue transcripts]

[Sacred frame]

- A: Okay, so, now we're just supposed to discuss our views on mining in the Kimberley? Is that right?
- B: Yeah, and our take on the article.
- C: So, what did you guys think of it, the article?
Like did you agree?
Do you know more about the issues it raised or anything?
- A: Well, to be honest, I wish I knew more about all these issues.
But I definitely think I agree with what it said about, umm... like how, despite the economic importance of mining and everything, **there are some things in the Kimberley region that you simply just cannot put a price on**... and that the impact that the mining would have on these things needs to be considered as well.
- D: I'm no expert either, but I mean, you don't really need to be an expert to see that introducing large-scale coal mining into the Kimberley will *not* be a good thing for the environment.
- B: Mm, true, but I don't think anyone would actually argue that mining is going to be a *good* thing for the environment.
I think what the issue really is about, is *how big* is the impact going to be? And for who? or what?
And then, is it worth it?
- C: Yeah I agree, its like, what's the trade-off?
I actually think that's what the article is trying to, sort of, get a bit of a gauge on, by talking to people who understand what the impacts will be, and who will be affected by it.
- D: Yeah, and personally, like A, **I agree with the sentiment that the Kimberley region is priceless**, and I'm not anti-mining, but to be frank, I do not support the plans for mining in the Kimberley.
- B: and I feel the same. **I think the Kimberley region is precious; it's invaluable.**
- C: Soooo, I think we're all in agreement then!
- A: [Picks up article and skims over it]
Hmmm, so, what are some of the things that make the region so valuable? [Kind of talking to self, but to the group]
- B: [Looking at the article] It says here that **the Kimberley has national heritage listing, and that some of the national parks and landmarks, even have world heritage listing.**
[Re-engaged] **Seems like a pretty good reflection of the cultural and historical value of the region.**

- C: Yeh and **how could we justify the loss of our culture and history to make a buck?**
- D: We couldn't really justify it, I don't think, because **its not about money or profits; it's a different kind of value**, like, **it has intrinsic value**—if that's the right term.
- A: Yeah, **it's valuable in and of itself.**
- B: and the biodiversity. Like the person interviewed (in the article) talks about how **the Kimberley is home to endangered species**, which are also dependent on the environment.
- C: Actually, I know one of the major concerns is to do with the impact of coal mining on the fresh water in the Kimberley, as there are many endangered species that live and survive only in freshwater springs and mangroves. So if mining spoils the fresh water, some of the endangered species could potentially be wiped out.
- A: And that's just one example. Seems it would be bad for many aspects of environment and affect the whole ecosystem.
- C: Yeah. Also, **the land, the animals, and the plants are sacred to the Indigenous Australians.**
So if mining activities desecrate the sacred land and wildlife, it just loses its value, for good.
- D: Oh yeah, that's a good point!
I have to admit, I find it hard to believe that the environment isn't better protected from the mining industry.
It's not like I'm anti-mining per se, I just mean, I think there should be better protections in place, to make sure the mining industry is responsible, you know?
- B: Some aspects [of the environment] are so under-valued, while other aspects are so over-valued.
- A: Actually, I found that thinking about this in terms of the proposed mine in Margaret River really brought the issue home.
Could you imagine supporting coal mining in our Margaret River region?!
It's such a precious and sacred place; I think it'd be so tragic to see it spoiled by mining and industrialisation.
I'm just assuming we've all been down there, right?
- [Everyone affirms]
- B: Yeah, I cannot even fathom it.
- C: Yeah, I know. **That place just seems far too valuable to compromise for material benefits.**
- D: Mm, and that's what we're saying about the Kimberley.

[Instrumental frame]

- A: Okay, so, now we're just supposed to discuss our views on mining in the Kimberley? Is that right?
- B: Yeah, and our take on the article.
- C: So, what did you guys think of it, the article?
Like did you agree?
Do you know more about the issues it raised or anything?
- A: Well, to be honest, I wish I knew more about all these issues.
But I definitely think I agree with what it said about, umm... like how, despite the economic importance of mining and everything, **there are other things in the Kimberley region that have value**... and that the impact that the mining would have on these things needs to be considered as well.
- D: I'm no expert either, but I mean, you don't really need to be an expert to see that introducing large-scale coal mining into the Kimberley will *not* be a good thing for the environment.
- B: Mm, true, but I don't think anyone would actually argue that mining is going to be a *good* thing for the environment.
I think what the issue really is about, is *how big* is the impact going to be? And for who? or what?
And then, is it worth it?
- C: Yeah I agree, its like, what's the trade-off?
I actually think that's what the article is trying to, sort of, get a bit of a gauge on, by talking to people who understand what the impacts will be, and who will be affected by it.
- D: Yeah, and personally, like A, **I agree with the sentiment that the Kimberley region has other valuable assets to consider**, and I'm not anti-mining, but to be frank, I do not support the plans for mining in the Kimberley.
- B: and I feel the same. **I think the other economic values of the Kimberley are incredibly important. I don't know if we could afford to lose them.**
- C: Soooo, I think we're all in agreement then!
- A: [Picks up article and skims over it]
Hmmm, so, what are some of the things that make the region so valuable? [Kind of talking to self, but to the group]
- B: [Looking at the article] It says here **that the number of tourists, including domestic and international tourists, visiting the Kimberley is going up every year.**
[Re-engaged] **Seems like a pretty good reflection of the value of the environment for the Kimberley's brand.**
- C: Yeh and **how could we justify the loss of these assets and the loss of the tourism industry, to make another buck from mining?**

- D: We couldn't really justify it, I don't think, because **it'd be pretty much impossible to accurately calculate the future loss of value to the region**, you know, if like, the number of tourists is actually increasing every year.
- A: Yeah, **it's growing in value**. And it seems like, as everywhere else becomes more and more industrialised, I think the attraction of genuine wilderness, you know, the appeal of untouched natural environments, like in the Kimberley, will probably increase too.
- B: and the agricultural industry. Like the person interviewed (in the article) talks about **how the Kimberley has prime agricultural land**, which is also dependent on the environment.
- C: Actually, I know one of the major concerns is to do with the impact of coal mining on the fresh water in the Kimberley, as many of the farms in the region obviously need access to fresh water and the mining may spoil it.
- A: And that's just one example. Seems it would be bad for many aspects of environment and like it would affect the whole farming system.
- C: Yeah. So basically, **the tourism industry and the agricultural industry depend on maintaining the integrity, or the land as it is**.
So if mining activities spoil the environment or land, it just loses its value, for good.
- D: Oh yeah, that's a good point!
I have to admit, I find it hard to believe that the environment isn't better protected from the mining industry.
It's not like I'm anti-mining per se, I just mean, I think there should be better protections in place, to make sure the mining industry is responsible, you know?
- B: Some aspects [of the environment] are so under-valued, while other aspects are so over-valued.
- A: Actually, I found that thinking about this in terms of the proposed mine in Margaret River really brought the issue home.
Could you imagine supporting coal mining in our Margaret River region?!
The industrialisation would destroy its whole tourism brand, and the environmental impact would probably upset the wineries.
I'm just assuming we've all been down there, right?
- [Everyone affirms]
- B: Yeah, I cannot even fathom it.
- C: Yeah, I know. **That place just seems far too economically valuable to compromise.**
- D: Mm, and that's what we're saying about the Kimberley.

Appendix F

[Questionnaire]

[The following questionnaire was presented online via the Murdoch University SCORED website. Questionnaires were identical in all four conditions, except for where items are marked with an asterisk(*) indicating that items were only included in the experimental conditions, which involved watching a video of a group discussion.]

Attitudes towards mining in the Kimberley

** Thinking about the group discussion you just watched, please indicate the extent to which you agree with the following statements:*

	Strongly disagree		Neither agree nor disagree			Strongly agree	
	1	2	3	4	5	6	7
• * The people in the recording reached an agreement on the issues discussed	1	2	3	4	5	6	7
• * There was a lot of disagreement between group members on this issue	1	2	3	4	5	6	7

The following questions are interesting in your stance on the issues and values involved in the issue of mining in the Kimberley. Please indicate the extent to which you agree with the following statements:

The issue of mining in the Kimberley is about...	Strongly disagree		Neither agree nor disagree			Strongly agree	
	1	2	3	4	5	6	7
• something that we should not sacrifice, no matter what the benefits (money or something else)	1	2	3	4	5	6	7
• something which one cannot quantify with money	1	2	3	4	5	6	7
• something for which I think it is right to make the cost-benefit analyses	1	2	3	4	5	6	7
• something that involves issues or values which are inviolable (non-negotiable)	1	2	3	4	5	6	7
• something for which I can be flexible if the situation demands it	1	2	3	4	5	6	7

The following questions ask you about the information you have received and your views on mining in the Kimberley region. Please indicate the extent to which you agree with the following statements:

	Strongly disagree		Neither agree nor disagree			Strongly agree	
	1	2	3	4	5	6	7
• I am opposed to the plans for further mining in the Kimberley	1	2	3	4	5	6	7
• I support plans for further mining in the Kimberley	1	2	3	4	5	6	7
• This is a position I share with other people	1	2	3	4	5	6	7
• Lots of other people share these views with me	1	2	3	4	5	6	7
• Mining companies are to blame for the current situation	1	2	3	4	5	6	7
• Mining companies are responsible for the current situation	1	2	3	4	5	6	7
• The government is to blame for the current situation	1	2	3	4	5	6	7
• The government is responsible for the current situation	1	2	3	4	5	6	7
• It is vital that we convince the West Australian community that mining in the Kimberley is unacceptable	1	2	3	4	5	6	7
• People who oppose mining in the Kimberley should work to convince the West Australian public that mining in the Kimberley is inexcusable	1	2	3	4	5	6	7
• The West Australian public are failing to act to protect the Kimberley from mining	1	2	3	4	5	6	7
• The West Australian community are useless at preventing mining in the Kimberley	1	2	3	4	5	6	7
• Action to prevent mining in the Kimberley are justified, even if they break the law	1	2	3	4	5	6	7
• On the issue of mining in the Kimberley, it's more important to try to change unjust laws than to obey the law	1	2	3	4	5	6	7
• Laws must be obeyed, even when they are immoral laws	1	2	3	4	5	6	7

- The proposed mining in the Kimberley is unjust 1 2 3 4 5 6 7
- The West Australian government is not doing enough to protect the Kimberley 1 2 3 4 5 6 7
- Existing efforts to defend the environment in the Kimberley are satisfactory 1 2 3 4 5 6 7
- Together anti-mining supporters will be able to improve the situation in the Kimberley 1 2 3 4 5 6 7
- Anti-mining efforts are a waste of time, effort, and money 1 2 3 4 5 6 7

Thinking about other people who share the same position as you do on these issues, please indicate the extent to which you agree with the following statements about yourself:

- | | Strongly disagree | | | | | Neither agree nor disagree | | | | Strongly agree |
|--|--------------------------|---|---|---|---|-----------------------------------|---|--|--|-----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
| • I feel a bond with other people who oppose mining in the Kimberley | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
| • I am glad to be someone who opposes mining in the Kimberley | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
| • I often think about the fact that I oppose mining in the Kimberley | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
| • I have a lot in common with the average person who opposes mining in the Kimberley | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
| • People who oppose mining in the Kimberley have a lot in common with each other | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |

The following questions are interested in the extent to which you intend to take the following actions to protect the Kimberley from mining. Please indicate the extent to which you agree with the following statements about the actions you would take:

- | | Strongly disagree | | | | | Neither agree nor disagree | | | | Strongly agree |
|---|--------------------------|---|---|---|---|-----------------------------------|---|--|--|-----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
| • I intend to encourage family and friends to not support mining in the Kimberley | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
| • I intend to raise awareness of this issue via social media | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
| • I intend to sign a petition | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
| • I intend to write to the WA Minister for Environment and Heritage | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |

- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| • I intend to join peaceful protests | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| • I intend to donate to an organization that fights to protect the Kimberley region (e.g. Save the Kimberley) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| • I intend to donate to an organization that fights to protect the Kimberley region, but which sometimes break the law to do so | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| • I intend to join a sit-in at the headquarters of one of the mining companies involved | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| • I intend to travel to the Kimberley region to protect current or future mining proposals | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| • I intend to join a blockage to an exploration sit in the Kimberley | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| • I intend to join protests that involve chaining myself to mining equipment | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

The following questions are interesting in the risks you would take to protect the Kimberley region from mining. Please indicate the extent to which you agree with the following statements:

- | | <i>Strongly disagree</i> | | | | | <i>Neither agree nor disagree</i> | | | | <i>Strongly agree</i> |
|--|---------------------------------|---|---|---|---|--|---|--|--|------------------------------|
| • I would be willing to break the law to protect the Kimberley from mining | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
| • I would never break the law to protect the Kimberley from mining | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
| • If circumstances required it, I would break the law to protect the Kimberley from mining | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
| • I would be willing to put my life at risk to protect the Kimberley from mining | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
| • I would never put my life at risk to protect the Kimberley from mining | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
| • If circumstances required it, I would put my life at risk to protect the Kimberley from mining | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |

Please indicate which of the three statements comes closest to how you think about the issues presented in the following three scenarios:

Scenario 1: Some Western Australians believe that opening up protected heritage sites for mining may be acceptable, if doing so would bring great benefits to the Western Australian people. Which of these statements comes closest to how you think about this?

- **I do not object to this.** If it means great benefits for all Western Australian people, opening up protected heritage sites for mining is acceptable.
- **I would consider this.** If the benefits are great enough, Western Australian people should at least consider opening up protected heritage sites for mining.
- **I would not consider this.** No matter how great the benefits, opening up protected heritage sites for mining is not acceptable.

Scenario 2: Some Western Australians believe a compromise between Indigenous landowners and mining companies may be acceptable, if Indigenous landowners receive a share of the revenue from mining activities. Which of these statements comes closest to how you think about this?

- **I do not object to this.** If Indigenous landowners receive a share of the revenue, a compromise is acceptable.
- **I would consider this.** If Indigenous landowners receive an adequate share of the revenue, a compromise should at least be considered.
- **I would not consider this.** No matter how much revenue Indigenous landowners receive, a compromise is not acceptable.

Scenario 3: Some Western Australians believe that mining in untouched wilderness areas of the Kimberley may be acceptable, if doing so would bring great benefits to the Western Australian people. Which of these statements comes closest to how you think about this?

- **I do not object to this.** If it means great benefits for all Western Australian people, mining in untouched wilderness areas is acceptable.
- **I would consider this.** If the benefits are great enough, Western Australian people should at least consider mining in untouched wilderness areas.
- **I would not consider this.** No matter how great the benefits, mining in untouched wilderness areas is acceptable.

Please indicate the extent to which you agree with the following statements about how you feel with regards to the current situations:

I feel...	Strongly disagree		Neither agree nor disagree			Strongly agree	
• angry at the mining companies involved	1	2	3	4	5	6	7
• outraged at the mining companies involved	1	2	3	4	5	6	7
• contempt for the mining companies involved	1	2	3	4	5	6	7
• disdain for the mining companies involved	1	2	3	4	5	6	7
• angry at the government	1	2	3	4	5	6	7
• outraged at the government	1	2	3	4	5	6	7
• contempt for the government	1	2	3	4	5	6	7
• disdain for the government	1	2	3	4	5	6	7

* Thinking about the group discussion you watched earlier, please indicate the extent to which you agree with the following statements:

	Strongly disagree		Neither agree nor disagree			Strongly agree	
• * I identify with the people in the recording	1	2	3	4	5	6	7
• * I have a lot in common with the people in the recording	1	2	3	4	5	6	7
• * I hold similar views to the people in the recording	1	2	3	4	5	6	7
• * I felt I belong with the group in the recording	1	2	3	4	5	6	7
• * I felt my views were validated by watching the group discuss these issues	1	2	3	4	5	6	7
• * I enjoyed watching the group discussion	1	2	3	4	5	6	7
• * I thought the discussion was boring	1	2	3	4	5	6	7

You have reached the end of the survey!

Thank you for your participation!

Appendix G

[Participant debrief letter]

Attitudes towards mining in the Kimberley

This research has been concerned with attitudes towards mining in the Kimberley, but more specifically on how people form different values around contested issues and subsequently decide to pursue different protest strategies. People often hold different values with regard to political issues. Some people may believe it to be a moral issue involving sacred values that cannot be compromised or subject to negotiations; whereas some believe it to be an economic or utility issue involving instrumental values that can be compromised and should be negotiated in a way that is fair and maximises benefits and/or profits. Then there are a variety of ways that groups can choose to protest social injustice or inequality. Some of these can be thought of as purely political (e.g. petitions, peaceful protest; appealing to political systems in a legal way), where as some can be more radical (e.g. direct actions, civil disobedience; appeals which may fall outside of legal conduct). In the current research we sought to document how people come to form different values around an issue, and subsequently decide to pursue different strategies, through framing and vicarious social interaction.

Some participants read an article that framed the issue solely in terms of sacred, moral values, while some read an article that framed the issue solely in terms of instrumental, economic values. Both versions of the article were fabricated, although were based on factual information. Some participants then went on to watch a recorded small-group interaction featuring three students discussing the issues in relation to the article, while some participated in an individual brainstorming task. The recorded interactions were scripted and acted out specifically for the purposes of the study.

Your responses will be kept confidential and no information that can identify you personally will be connected to your responses. The information obtained will be stored and secured at the School of Psychology at Murdoch University. All responses will be reported in aggregate form; no particular questionnaire or other material will be singled out in any way in reporting the results of this study. We are interested in general trends rather than singling out individual responses.

Please do not talk to other people (who may be potential participants) about the actual research agenda of this study.

If you would like to discuss any aspect of this study please feel free to contact Dr Emma Thomas on either 9360 7209 or email Emma.Thomas@murdoch.edu.au.

Feedback will be made available through the School of Psychology webpage in November 2014: http://www.psychology.murdoch.edu.au/researchresults/research_results.html.