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### When my country is at war: Issue importance and interpersonal influence lead Iraq War attitudes to cluster within social networks

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## **When my country is at war: Issue importance and interpersonal influence lead Iraq War attitudes to cluster within social networks**

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Two studies investigated how issue importance and interpersonal influence contribute to the development of shared attitudes among social network members (i.e., attitude clustering). Study 1 used the start of the 2003 Iraq War as a natural experiment on the role of issue importance in attitude clustering within residential conversation networks. Attitudes toward the U.S. involvement in Iraq grew more clustered after—but not before—the start of the Iraq War, and this post-war growth in attitude clustering was greater for this issue relative to other political issues. Study 2, using structural equation modeling (SEM), found support for a sequential mediation model whereby personal importance of the Iraq War increases war-relevant information seeking, which increases discussion of the issue, which in turn increases attitude clustering

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within egoistic social networks. Overall, these results illustrate how intrapersonal attitude processes can catalyze interpersonal influence processes.

**Keywords:** Social networks; Iraq War; Attitude change; Attitude importance; Interpersonal & group processes.

How do people respond when their country goes to war? What impact does war have on their relevant attitudes? Classical attitude theory has focused on intrapersonal processes pertinent to these questions and led some researchers to posit that the start of a war exerts a motivated shift in people's war-relevant attitudes to grow more favorable to national interests (Hodson, Esses, & Dovidio, 2006; Lehmiller & Schmitt, 2008). Other attitude researchers suggest that events such as the start of war may increase the strength of people's war-relevant attitudes, and ultimately making them less likely to change over time (Petty & Krosnick, 1995). However, each of these theorized processes in attitude change focuses solely on intrapersonal factors, and disregards the social context in which people's attitudes form and change (Mason, Conrey, & Smith, 2007). Within the context of people's close social ties interpersonal influence often occurs, leading people's attitudes to grow increasingly shared or clustered among interconnected individuals (Cullum & Harton, 2007; Festinger, Schachter, & Back, 1950; Latané, & L'Herrou, 1996; Nowak, Szamrej, & Latané, 1990). As a dramatic and highly salient news event, the 2003 Iraq War should accelerate these processes of interpersonal influence and attitude clustering within social networks. Our paper investigates this possibility.

A growing body of research suggests that the social network a person is embedded in plays a prominent role in the stability and change of his or her attitudes (Eaton, Majka, & Visser, 2008; Huckfeldt, Mendez, & Osborn, 2004; Mutz, 2002; Visser & Mirabile, 2004). One reason for this is that network members influence one another repeatedly over time as they communicate and exchange information through the course of their social interactions. Following dynamic social impact theory (Latané, 1996), a variety of lab studies (Latané & L'Herrou, 1996), computer simulations (Nowak et al., 1990), and field studies (Cullum & Harton, 2007) have shown that this dynamic interpersonal influence process leads individuals' attitudes to increasingly converge or cluster within social networks over time. Clustering is the degree to which people's attributes are interdependent or shared among close social ties. Clustering has been found to occur for a variety of mutable attributes such as attitudes and preferences (Cullum & Harton, 2007; Latané & L'Herrou, 1996), beliefs about out-group members (DiFonzo, Bourgeois, & Suls, 2011), questions about course content (Harton, Green, Jackson, & Latané, 1998), and health behaviors

(Cullum & Harton, 2011; for reviews see Harton & Bullock, 2007; Okdie & Guadagno, 2008).

With respect to attitudes, because people disproportionately exchange information and interact primarily with proximal others (i.e., members of their immediate social network), attitudes tend to form into distinct local clusters (Latané, 1996; Latané, Liu, Nowak, Bonevento, & Zheng, 1995). Furthermore, certain features of an attitude may accelerate the rate and extent to which these clusters form. The personal importance a person attaches to an issue is one particular feature that is likely to catalyze interpersonal influence processes and lead to greater attitude clustering (Cullum & Harton, 2007). First, perceiving an issue to be important increases selective attention toward, or gathering of, issue relevant information (Holbrook, Berent, Krosnick, Visser, & Boninger, 2005), and people often prefer social sources of information, even when more objective information is readily available (Klein, 1997; Richerson & Boyd, 2005). Second, the extent to which an issue is important to a person corresponds closely with how much he or she discusses that issue with others (Krosnick, Boninger, Chuang, Berent, & Carnot, 1993; Visser, Krosnick, & Simmons, 2003). To the extent that issue importance increases information seeking, and in turn discussion of an issue with others, issue importance should facilitate interpersonal influence and ultimately lead to greater levels of attitude clustering. In the context of social networks, then, commonplace intrapersonal preferences for (a) personally important information and (b) information from social sources may in turn activate interpersonal influence processes, and ultimately lead individuals' attitudes to cluster among close social network members.

In support of this reasoning, Cullum and Harton (2007) found that attitudes that were on average rated as more personally important by a college campus community at the start of the school year subsequently resulted in greater geographic attitude clustering within residential buildings over the course of a semester. These emerging attitude clusters corresponded in space to where residents' social network patterns were most densely interconnected (i.e., within houses, a subset of residence hall floors). However, the use of community averaged importance levels may not systematically correspond to individual-level perceptions of importance. On the other hand, highly publicized national events, such as the start of the 2003 Iraq War, can serve as a natural experiment to more systematically test the role of issue importance in attitude clustering. The start of a war in particular is likely to increase perceptions of war-relevant issues as pertinent to people's (a) self-interests, (b) core values, and perhaps most pronouncedly, (c) shared national identity (Hodson et al., 2006; cf. Visser et al., 2003,

pp. 21 & 24); each of these factors are known antecedents to individual-level issue importance (Boninger, Krosnick, & Berent, 1995).

## GENERAL OVERVIEW

In Study 1 we investigated the impact of the start of the 2003 Iraq War on the formation of attitude clusters for a war-relevant issue by comparing the degree of attitude clustering within natural conversation networks before and after the start of the Iraq War. To determine if the start of the 2003 Iraq War increased the magnitude and growth rate in clustering for war-relevant issues, we compared the degree of change in attitude clustering for a war-relevant issue to the degree of change in attitude clustering for other non-war-relevant political issues over the same time period. Additionally, Cullum and Harton (2007) did not directly investigate the proposed processes (e.g., importance increasing selective information seeking, which in turn increases issue discussion with social network members) by which importance leads to greater interpersonal influence and ultimately greater attitude clustering. In Study 2 we took a measurement approach to personal importance and directly measured the proposed mediators during an election year several years after the Iraq War began, at a time when the issue had renewed relevance and was still important to many, but its importance was likely to vary more across people and social networks. Additionally, Study 2 explicitly tested a sequential mediation model and compared the fit of this model to alternative paths through which intrapersonal and interpersonal processes interact to affect attitude clustering within social networks.

## STUDY 1

### Overview

As part of a larger study on social influence processes and norm formation, students living on campus at a Midwestern university completed online surveys over the course of the school year (Cullum & Harton, 2007). Students lived in one of four residential buildings. Each building contained 8 houses (i.e., living areas with a single resident advisor and a separate lounge area; 32 total houses). Two of the buildings were all female, and two had four male and four female houses each. Attitudes regarding a variety of issues, including the U.S. involvement in Iraq, were assessed at the beginning and near the end of the fall semester (28 and 18 weeks prior to the start of the 2003 Iraq War). In the middle of the fall semester sociometric data were collected to assess emerging social patterns in the way residents befriended and conversed with one another. In a follow-up survey administered at the end of the spring semester—approximately 6 weeks after the start of the Iraq

War—we reassessed participants' attitudes regarding nine political issues, including the U.S. involvement in Iraq.

For Study 1 we used the start of the Iraq War as a natural experiment to test the role of issue importance in attitude clustering. The start of the Iraq War likely made U.S. citizens' shared national identity more salient (Hodson et al., 2006), subsequently making the issue of the U.S. involvement in Iraq perceived as more personally relevant and important (Boninger et al., 1995). This natural experiment on personal importance affords us the opportunity to examine how intrapersonal and interpersonal influence processes combine to shape local attitudes and geographical distributions of opinion. We hypothesized that dynamic social influence processes would result in the development of local attitude clusters regarding the U.S. involvement in Iraq. Additionally, we predicted that the start of the Iraq War would accelerate clustering for this issue compared to prior to the start of the War. Moreover, compared to attitudes regarding political issues unrelated to the Iraq War, the magnitude and growth in attitude clustering for the U.S. involvement in Iraq should be greater when assessed after the 2003 Iraq War started.

## Method

### *Participants*

A total of 917 residents ( $M_{Age} = 19.04$ ,  $SD = 1.20$ , 94% Caucasian, 94% in-state residents) responded to the first pre-war wave. Of these, 20% were male and 54% of participants reported that this was their first time living on campus. Of this original sample, 71% responded during the second pre-war wave, and of those who responded during both pre-war assessments, 72% also responded to the post-war wave. Participants lost due to attrition did not differ from those who responded during the post-war wave in demographics ( $ps > .74$ ), sociometrics ( $p > .24$ ), pre-war attitudes ( $ps > .84$ ) or in pre-war change in attitudes ( $p = .69$ ). Participants received an entry into a sweepstakes for prizes for each survey they completed.

### *Procedure*

Research assistants met with residents during their initial house meetings a week before the start of the school year to explain the study and collect demographic information. An online survey measuring political attitudes was administered in two pre-war and one post-war wave(s) approximately 28 and 18 weeks prior to, and 6 weeks after, the start of the 2003 Iraq War. Additionally, conversational sociometric measures were included during a pre-war wave. All residents received email notices at the beginning and near the end of each wave. Participants entered a personalized code on

each survey, which was matched to a data file from the Registrar containing housing information. During each wave participants had approximately seven days to respond, although most (89%) did so within 4 days.

### Measures

*Conversational sociometrics.* Participants indicated up to six people with whom they have discussions that last 10 minutes or longer, and where those people lived using the following response options: same house, different house but same residential building, on-campus but different residential building, or off campus. They also reported what medium they used to conduct their most recent conversations (i.e., face-to-face, telephone, instant messaging).

*Attitudes.* Residents responded to nine political attitude statements, regarding the following issues: abortion, immigration reform, the death penalty, refugee rights, the use of guns by campus police, legalizing marijuana, cloning/stem cell use, English as the sole “official language”, and U.S. involvement in Iraq (see Cullum & Harton, 2007). Students first indicated their level of agreement with each attitude item (e.g., “The death penalty is barbaric and should continue to be outlawed”) on a 6-point scale ( $-3 = \text{strongly disagree}$ ,  $+3 = \text{strongly agree}$ ). The primary attitude statement of interest in the present study was “The U.S. should use military force in Iraq.”

### Results and discussion

A full 87% of the conversations participants reported occurred face-to-face. Of a pool of roughly 4000 students living on-campus that residents could potentially discuss issues with, 37% of their fellow conversers consisted of housemates. This is far higher than the chance base rate would expected based on the average house size (1%),  $t(713) = 30.38$ ,  $p < .001$ . Residents also drew disproportionately more conversers from the rest of their residential building than expected by chance (18% vs 9%),  $t(713) = 9.48$ ,  $p < .001$ . Overall, conversation networks were more densely interconnected within houses than buildings (37% vs 18%,  $p < .001$ ), therefore we examined attitude clustering within houses as a proxy for social networks.<sup>1</sup> To examine the change in attitude clustering before and after the start of the Iraq War, we conducted a repeated-measures nested ANOVA, with time (28 weeks pre-war vs 6 weeks post-war) as a within-participants factor and house (1 of 32 houses) nested within residential building (1 of 4) as

<sup>1</sup> Very similar sociometric results were obtained using friendship network nominations.



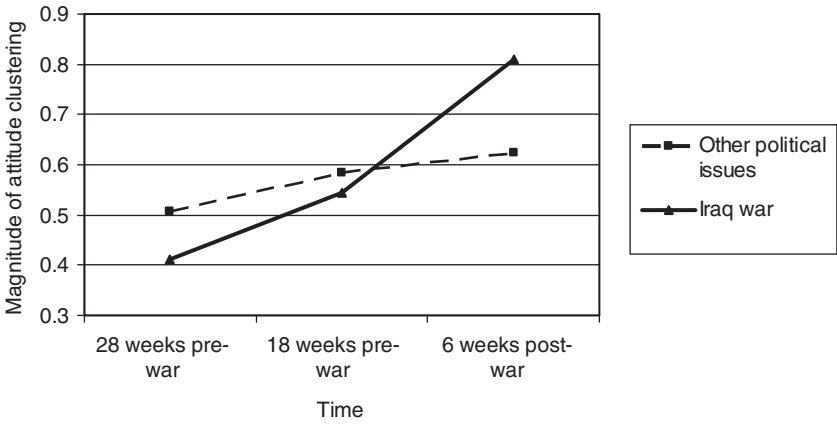
between-participants factors (Jackson & Brashers, 1994).<sup>2</sup> To control for the possible effect of network selection based on pre-existing attitudinal similarity, we used prior house acquaintanceship (knew a housemate previously vs did not) as a between-participants covariate. The dependent measure was attitudes regarding the U.S. involvement in Iraq.

No residential building effects or building by time interactions emerged ( $ps > .35$ ). Most importantly, both the prior acquaintanceship by house within building interaction,  $F(30, 359) = .89$ ,  $p = .64$ , and the prior acquaintanceship by house within building by time interaction failed to reach significance,  $F(1, 359) = 1.30$ ,  $p = .14$ . Combined, these results suggest that any subsequent findings involving nested house on attitude clustering cannot be attributed to differences by building, nor to selective affiliation based on pre-existing similarities that might inflate or modify either overall estimates of attitude clustering or change in attitude clustering. Rather, any house effect can be taken as evidence of the degree to which dynamic social influence processes shape local attitudes, and any change in house effects over time can be taken as evidence of change in degree of local social influence over time.

Attitude clustering was indexed as the amount of variance in attitudes during each wave that is attributable to the local house, and this metric was converted to Cohen's  $d$ , for ease of interpretation (Cohen, Cohen, West, & Aiken, 2003). The level of Iraq attitude clustering significantly increased from 28 weeks pre-war,  $F(31, 882) = 1.16$ ,  $p = .25$ , (*Clustering*  $d = .41$ ) to 6 weeks post-war,  $F(31, 421) = 1.90$ ,  $p = .003$ , (*Clustering*  $d = .81$ ), as evidenced by a significant time by house within building effect,  $F(1, 385) = 1.62$ ,  $p = .02$ ,  $\eta_p^2 = .11$  (see Figure 1).<sup>3</sup> Subsequent analyses of pre-war waves and pre-to-post war waves revealed that the extent of house-level attitude clustering on this issue *did not* increase before the start of the war—from 28 to 18 weeks pre-war,  $F(1, 565) = 1.19$ ,  $p = .22$ ,  $\eta_p^2 = .07$ —but *did* significantly increase after the start of the war—from 18 weeks pre-war to 6 weeks post-war,  $F(1, 318) = 1.75$ ,  $p = .01$ ,  $\eta_p^2 = .16$ . While this pattern of results is consistent with the expectation that the start of the Iraq War would increase the personal importance of the issue of U.S. involvement in Iraq and

<sup>2</sup> As we sampled all available houses within these residential buildings, we modeled house as a fixed factor rather than random (Jackson & Brashers, 1994). We also treated residence building as a fixed factor, as we had too few levels to adequately model this factor as random (Snijders & Bosker, 1999).

<sup>3</sup> Furthermore, subsequent analyses found that this pattern was not qualified by gender, political orientation (time invariant covariates), or by the amount of news media consumed by participants (time varying covariate). All political attitude clustering scores were computed while controlling for gender and news consumption (which correlated with Iraq War attitudes) and prior acquaintanceship. Results comparing clustering magnitudes were very similar when gender, news consumption, and prior acquaintanceship were ignored.



**Figure 1.** Magnitude of attitude clustering as a function of time and issue type (Study 1).

subsequently facilitated local clustering of attitudes, this effect could merely be the result of a greater post-war time lag between attitude assessments than the pre-war time lag.

To explore this possibility, and further test our hypotheses, we examined the relative degree of growth in attitude clustering for the U.S. military involvement in Iraq, compared to attitudes about other political issues assessed during the same waves. If the start of the 2003 Iraq War increased attitude clustering specifically for the U.S. involvement in Iraq, then the magnitude of clustering and growth in clustering on this issue should diverge from the average degree of clustering and clustering growth found for the other eight political issues. Furthermore, an accelerated rate of clustering for Iraq attitudes should occur distinctly after, but not before, the start of the war. Thus we repeated the above set of analyses to assess attitude clustering effect sizes for all nine political issues to determine the base rate of clustering and clustering growth during this period. We then computed *z*-scores for the extent of clustering at each wave, and for the magnitude of growth in clustering between each wave.

The mean clustering effect for political issues post-war was  $d = .62$  ( $SD = .082$ ) and the mean post-war growth in clustering effect was  $d^{change} = .041$  ( $SD = .061$ ). After the start of the Iraq War, attitudes regarding the use of military force in Iraq were significantly more clustered than the base rate for other political attitudes,  $Z = 2.31$ ,  $p = .02$ , even though at both pre-war waves attitudes on U.S. involvement in Iraq were no more clustered than other political issues ( $Z$ s range from  $-.83$  to  $-.53$ , *ns*). Additionally, after the 2003 Iraq War started the growth in clustering for

Iraq War attitudes was significantly greater than the base rate of growth for other political attitudes, ( $Z = 3.51$ ,  $p = .0004$ ), but before the war started its growth in clustering was no different than the base rate for other political attitudes ( $Z = 1.12$ ,  $p = .26$ ). Thus the start of the 2003 Iraq War seemed to increase the extent to which local attitude clusters formed regarding the issue of U.S. involvement in Iraq, but it did not increase for other, less systematically relevant issues.

Overall, this pattern of results supports the hypothesis that the start of the Iraq War would increase the formation of attitude clusters for this war-relevant issue, but not for other, less war-relevant, political issues. This pattern of results is consistent with the notion that when issues become systematically important to people, they attend more selectively to information regarding the issue (Holbrook et al., 2005), and subsequently seek to discuss the issue more within their social networks (Visser et al., 2003), leaving them more receptive to dynamic social influence processes (Cullum & Harton, 2007). While Study 1 capitalized on a natural experiment on an issue's personal importance (i.e., increased relevance of a war-related issue after war began), it did not directly measure change in importance or the proposed intrapersonal and interpersonal mechanism by which issue importance is thought to facilitate the formation of attitude clustering within social networks. Thus Study 2 took a measurement approach to personal importance and mediation to directly test a model of the hypothesized processes that contribute to attitude clustering among social networks, using structural equation modeling (SEM).

## STUDY 2

### Method

#### *Participants and procedure*

In late April of the 2008 election year we recruited 107 students ( $M_{\text{age}} = 21.8$ ,  $SD = 3.19$ , 55 male, 52 female) from a Rocky Mountain university campus. Participants were entered into a \$50 draw and/or received extra credit from an upper division course for completing a survey on social and political attitudes, including the Iraq War. A total of 85% of the sample was Caucasian (5%, Hispanic, 3% Native American, 7% Other); 30% of the sample indicated their political orientation as Liberal, 36% as Moderate, and 34% as Conservative.

#### *Measures*

*Attitudinal variables.* Participants indicated how favorable they were to the U.S. involvement in Iraq, using a 7-point Likert scale (1 = *Strongly Oppose*, 7 = *Strongly Favor*). Attitude importance was measured using the

following item: *How important is the issue of the U.S. involvement in Iraq to you personally?* Participants responded to this item using a 5-point Likert scale ranging from 1 (*Highly Unimportant*) to 5 (*Highly Important*).

*Information seeking.* Next participants indicated the degree to which they attended to information about the Iraq War by responding to three items fashioned after those developed by Visser et al. (2003; e.g., *How closely do you pay attention to information about U.S. involvement in Iraq?*). Participants responded to these items using a 7-point Likert scale (1 = *Very Little Attention*, 7 = *Very Close Attention*; Cronbach  $\alpha = .94$ ; factor loadings from .88 to .96).

*Discussion.* Participants then responded to three items designed to measure the extent to which people discussed the U.S. involvement in Iraq, using 7-point Likert scales (Visser et al., 2003). For example, participants were asked, “*How often do you discuss U.S. involvement in Iraq with others?*” (1 = *Not Very Often*, 7 = *Very Often*; Cronbach  $\alpha = .93$ ; factor loadings from .84 to .95).

*Attitude clustering.* Finally, participants responded to some items regarding the attitudes of their close social network members. Participants were asked to think of five close friends, family members, and/or co-workers with whom they interact on a regular basis (Visser & Mirabile 2004). For each network member, participants included the member’s initials and then on a 5-point Likert scale indicated the extent to which he/she agreed with this person’s views regarding the U.S. involvement in Iraq (1 = *Strongly Disagree*, 5 = *Strongly Agree*; Cronbach  $\alpha = .63$ ; factor loadings .41–.59). Four participants indicated only three or four social network members, instead of the requested five. Missing responses were coded to the mean of the participant’s remaining network members, although complete deletion of these four participants produced identical results. Combined, these social network items indicate the degree of attitude clustering within direct social networks. Clark Levitan and Visser (2009) demonstrated that egoistic social network measures of political attitudes are highly accurate (over 90%) indicators of the actual attitudes of social network members, independent of sources of response bias such as projection and false consensus effects.

## Results and discussion

### *Analytic strategy*

We used AMOS 7.0 software (Arbuckle, 2006) with Maximum Likelihood estimations to examine structural models of the data. To test for mediation we conducted modified causal step mediation tests to investigate two

sequential mediators (Baron & Kenny, 1986; Taylor, MacKinnon, & Tein, 2008). Briefly, we hypothesized a sequential mediation process by which personal importance of the Iraq War increases war-relevant information seeking (cf. Holbrook et al., 2005), which increases discussion of the issue, which in turn leads to greater attitude clustering within networks (cf. Cullum & Harton, 2007; Latané, 1996). We also assessed the magnitude and significance of the sequential mediation effect in two ways. First, following the recommendations of MacKinnon and colleagues (Fritz & MacKinnon, 2007; Taylor et al., 2008), we conducted bias corrected two-tailed tests of significance for direct and indirect path effects and calculated 90% confidence intervals for each path coefficient, using a bootstrapped sample of 5000. Second, we tested for joint significance mediation at the model level, by comparing a model with only sequential mediation paths available to one in which all direct paths are freely estimated (Kenny, personal communication).

Personal importance was entered with  $\alpha$  fixed to .90 (although results were the same when  $\alpha$  ranged from 1.0–.60). For all other latent variables, the first observed variable mentioned above for each was set to 1.0 for model identification purposes (MacCallum, 1995). We use  $\chi^2$  scores to determine the quality of the overall fit of a model, and  $\Delta\chi^2$  to compare a sequential mediation model to a model in which all direct and indirect paths to attitude clustering are freely estimated. Lower  $\chi^2$  and  $\Delta\chi^2$  scores indicate a better fit (Hu & Bentler, 1999; Kline, 2005). We also report several other common model fit indices with normative standards for scores that indicate a well fitting model. Among these, Root Mean Square Error of Approximation (RMSEA; Browne & Cudeck, 1993) with scores  $\leq .08$  and the Normed Fit Index (NFI) and Comparative Fit Index (CFI) with scores  $\geq .90$  indicate good fit (Kline, 2005). Means and standard deviations of each latent variable as well as the correlations between latent variables are noted in Table 1.

### *Data analysis*

*Freely estimated model.* Gender, political orientation, and direction of participants' attitudes toward the Iraq War did not alter the overall pattern of results or model fit; thus we excluded these variables from further analyses. The model represented a good fit for the data,  $\chi^2(50) = 45.7$ ,  $p = .65$ , RMSEA = .00, NFI = .95, CFI = 1.0. Figure 2 depicts this structural model with standardized path coefficients.

*Causal steps test.* Examining the path coefficients revealed that importance had a significant positive relation to information seeking, unstandardized  $\beta = 1.26$ ,  $SE = .12$ , bias-corrected 90% confidence interval

TABLE 1  
Latent variable canonical correlations with means and standard deviations (Study 2)

Latent variables				
	Personal Importance	Information Seeking	Discussion	Attitude Clustering
Personal Importance	<i>M</i> = 3.59 <i>SD</i> = 1.12			
Information Seeking	.80***	<i>M</i> = 4.81 <i>SD</i> = 1.64		
Discussion	.69***	.85***	<i>M</i> = 3.84 <i>SD</i> = 1.58	
Attitude Clustering	.48**	.41*	.52**	<i>M</i> = 3.50 <i>SD</i> = .72

Note: *N* = 107, \**p* < .02, \*\**p* < .01, \*\*\**p* < .001.

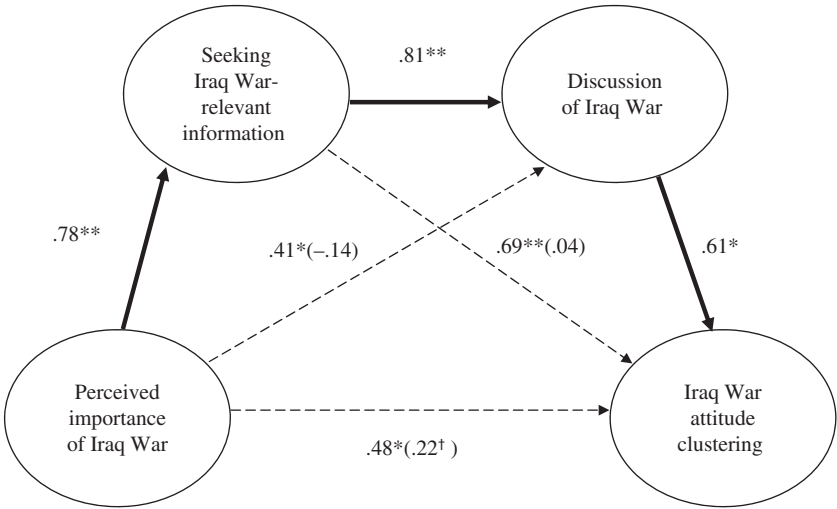


Figure 2. Structural equation model predicting Iraq War attitude clustering within social networks (Study 2).

Note: †*p* < .10, \**p* < .03, \*\**p* < .001, Model Fit  $\chi^2(50) = 45.7$ , *p* = .65, RMSEA = .00, GFI = .93, NFI = .95, CFI = 1.0, RFI = .93, AIC = 103, BIC = 180. Dotted lines represent non-significant paths in the model. For these lines the canonical correlations between latent variables are listed first, followed by the path betas from the model test (in parenthesis).

(BCCI) of 1.08–1.42,  $p < .001$ . Moreover, information seeking had a significant positive relation to discussion (unstandardized  $\beta = .81$ ,  $SE = .11$ , BCCI from .64 to 1.01,  $p < .001$ ), and discussion had a significant positive relation to attitude clustering, unstandardized  $\beta = .18$ ,  $SE = .08$ , BCCI from .05 to .35,  $p = .014$ . Thus the freely estimated model was a good overall fit for the data, and all of the paths in the hypothesized causal chain were jointly supported (MacKinnon, Fairchild, & Fritz, 2007; Taylor et al., 2008). Additionally, the positive association between importance and discussion ( $r = .69$ ,  $p < .001$ ) and between information seeking and attitude clustering ( $r = .41$ ,  $p = .01$ ) before mediation tests (see Table 1), were reduced to non-significance once the mediation paths were included, unstandardized  $\beta s = -.12$  and  $.06$ , respectively,  $ps > .17$  (see Figure 1). This suggests that information seeking fully mediated the effect of importance on discussion, and that discussion fully mediated the effect of information seeking on attitude clustering (Baron & Kenny, 1986; Taylor et al., 2008). Furthermore, the association between importance and attitude clustering ( $r = .48$ ,  $p < .01$ ; see Table 1) was reduced to marginal significance by the mediators (unstandardized  $\beta = .18$ ,  $SE = .11$ , BCCI from .01 to .41,  $p = .078$ , see Figure 1.). This suggests that information seeking and discussion combined partially—if not fully—mediated the effect of importance on attitude clustering among social networks (Taylor et al., 2008).

*Indirect effects.* Additional tests of the significance of these mediated effects revealed that importance had an indirect effect on discussion,  $b = .66$ , BCCI from .57 to .74,  $p < .001$  and information seeking had an indirect effect on attitude clustering,  $b = .43$ , BCCI from .26 to .57,  $p = .001$ . Lastly, importance also had the expected indirect effect on attitude clustering,  $b = .33$ , BCCI from .19 to .46,  $p = .001$ , via the sequential mediators of information seeking and then discussion.

*Model comparison.* To determine if the freely estimated model could be simplified to include only the hypothesized sequential mediation paths, we also tested a model that constrained all other paths to zero. This model also represented a good fit of the data,  $\chi^2(53) = 49.6$ ,  $p = .61$ , RMSEA = .00, NFI = .94, CFI = 1.0, and did not significantly differ from the freely estimated model,  $\Delta\chi^2(df = 3, N = 107) = 3.9$ ,  $p = .273$ . In addition to significance testing for differences in model fit (using  $\Delta\chi^2$  tests), the use of Information Criteria—such as the Akaike Information Criterion (AIC), and the Bayesian Information Criterion (BIC)—are also commonly used to compare model fit, with lower scores representing better-fitting models. The simplified sequential mediation model represented a better fit than the overall model ( $\Delta AIC = -2$ ,  $\Delta BIC = -1$ ). We also compared several other alternate models in which we systematically constrained each path in the



hypothesized sequential model to zero, and in which all alternate mediational arrangements were individually tested (i.e., information seeking and discussion as independent mediators and as a single mediator each). In all cases, these alternative models provided poorer fits of the data than the sequential mediation model.<sup>4</sup> This pattern of results suggests that the sequential mediation model represents the most parsimonious account of the data, illustrating how the personal importance of an issue can activate dynamic social influence processes, and ultimately the development of local attitude clusters.

## GENERAL DISCUSSION

How do people respond when their country goes to war? These studies demonstrate that in answering this question it is important to take into account the social context in which people's attitudes form and change. Taking people's social networks into account, we found that in response to war, people seek more information and form local factions of like-minded opinion (i.e., attitude clusters). Study 1 showed that the start of the 2003 Iraq War led to increased attitude clustering within informal social networks and that this effect was specific to a war-relevant issue (i.e., the U.S. use of military force in Iraq) and did not generalize to other political attitudes that were non-war-relevant (e.g., abortion, the death penalty, gun control). Furthermore, this pattern of findings was attributable to dynamic social influences (Latané, 1996; Nowak et al., 1990) and not to selective affiliation based on prior similarity or familiarity. Study 2 examined the hypothesized mechanisms by which the act of war increased attitude clustering, finding that the personal importance of the Iraq War led to increased seeking of war-relevant information, which increased efforts to discuss war-relevant information, which ultimately resulted in greater clustering of attitudes within local social networks.

Combined, these studies demonstrate how the act of war can impact the distribution of public opinion and lead to the formation of local attitude clusters or norms. However, the present work did not entirely rule out the possibility that factors other than importance accelerated attitude clustering (Study 1) or that the mediation process found in Study 2 directly corresponded to the processes that accelerated clustering in Study 1. Future work should employ social network and discussion experimental designs to directly test the role of issue importance and the hypothesized

<sup>4</sup> An anonymous reviewer of an earlier version of our manuscript suggested another model by which discussion leads directly to clustering and information attending,  $\chi^2(53) = 48.6$ ,  $p = .58$ , AIC = 104, BIC = 180. However, this potentially equivocal alternative model was a poorer fit of the data than the sequential mediation only model, as indicated by its higher information criterion scores ( $\Delta\text{AIC} = 3$ ,  $\Delta\text{BIC} = 10$ ).



mechanism for attitude clustering. Nevertheless, these results combined suggest that promoting the shared personal relevance of an issue may ironically promote greater factoring of public opinions into local and regional norms, rather than greater national solidarity (Hodson et al., 2006) or greater personal resistance to attitude change. More broadly, the present work also suggests a dynamic mechanism for the development of attitude clusters within a population, and for how cultures may form and acquire their particular behavioral and belief content (Cullum & Harton, 2007; Harton & Bullock, 2007; Heine, 2008, ch. 2; Richerson & Boyd, 2005; Sperber, 1996). Future work could also explore these multi-level attitude processes at a regional or national level.

## Conclusion

Individual-level theory on attitude change and formation has been criticized for failing to integrate the influence of the broader social structure and contexts in which individuals preside (Eaton et al., 2008; Mason et al., 2007; Visser & Mirabile, 2004) and the present work provides one model for bridging this divide to accurately reflect micro- and macro-level social phenomena. That is, issues that are commonly perceived as personally important initiate intrapersonal processes of seeking issue relevant information (Holbrook et al., 2005), which in turn catalyze interpersonal processes such as greater discussion and receptiveness to dynamic social influence, to ultimately result in greater social and geographical clustering of attitudes within a population.

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