Immigration is hotly debated, particularly in advanced industrialized democracies receiving large numbers of immigrants from ethnically, culturally and religiously diverse backgrounds. In many cases, immigrants arrive facing economic challenges, sometimes due to lower economic status, sometimes (or also) due to barriers to economic integration within the host society. The diversity that comes with immigration also stirs up controversy—it contributes to the rise of anti-immigration parties in Europe, for instance, and more generally to public debate over societies' ability to sustain social solidarity in the face of increasing religious, linguistic, and racial differences between natives and immigrants.

There is, accordingly, a growing literature on public attitudes towards immigrants and immigration. This work tends to focus on the cultural and economic factors that underlie opposition to immigration including the possibility of employment competition and concerns over immigrants' willingness to assimilate. Past research ignores important psychological underpinnings of anti-immigrant sentiment, however. In the current article, we seek to (partly) fill this gap. Specifically, we focus on citizens' feelings about control—their own and that of immigrants.

Our argument is as follows. Citizens who believe they are personally responsible for what happens in their lives, and by extension, capable of effecting change in society, should be *less* hostile towards immigrants. These citizens are less likely to feel threatened by the changing social milieu surrounding them. We expect that feeling "in control" of one's own economic or social situation will lead to more open attitudes about immigration. At the same time, citizens will be more hostile towards immigration when they think that immigrants are responsible for their own misfortune. In other words, the more citizens see negative outcomes as related to immigrants' individual deficiencies, the more likely they

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are to be hostile towards immigrants. In short, perceptions of control – as applied to both citizens and immigrants – matter for attitudes toward immigrants.

There is a rich and diverse literature in social psychology, and to a lesser extent in political science, on locus of control. Yet there is very little research that uses what we know about how people perceive control to understand attitudes toward immigration. In this article, we rely on an online survey to examine the ways in which three types of perceived control influence anti-immigrant sentiment. The survey was fielded simultaneously to national samples in the US, Canada and the UK. It thus provides an opportunity not only to explore the impact of control on public opinion about immigration, but also to compare immigration attitudes (and the corresponding effects of control) across the three countries. Results indicate that feelings of control powerfully influence anti-immigrant sentiment, and that this effect is distinct from standard attitudinal predictors including racial prejudice and ideology. We suggest that these control orientations are fundamental to understanding attitudes toward immigration in industrialized democracies, and that they serve as precursors (that is, they are attitudinally prior) to many of the dominant explanations currently available in previous research.

In political science, the concept of efficacy is more commonly used, yet efficacy and locus of control are considered distinct constructs in the psychological literature (Bandura 1982). Personal efficacy is related to judgments of one's own ability whereas "outcome expectancies" are judgments about whether one's ability will have the desired outcome or whether results our beyond one's control (Rosenbaum & Hadari, 1985: 539). We are interested in the latter in this article, although some authors have questioned whether they are both part of a larger core construct (Judge et al. 2002).

Explaining Support for Immigration

Many native citizens of industrialized countries react with hostility toward immigrants, and particularly the social diversity that accompanies immigration (e.g. Harell et al. 2012; Fetzer 2000; Lahav 2004; Rustenbach 2010; for a review, see Ceobanu & Escandell 2010). Part of the hostility stems from basic group dynamics including ingroup favoritism and outgroup hostility (Allport 1958; Pettrigrew & Tropp 2006; Tajfel & Turner 1986), although ingroup favoritism does not always result from negative outgroup attitudes (Brewer 1999). Immigrants represent an outgroup in terms of both nationality and increasingly in terms of race and ethnicity (Pettigrew 1998; Masuoka & Junn, 2013). Citizens are thus likely to attribute more positive characteristics to themselves and their fellow compatriots, and to view immigrants more negatively. This should be particularly the case when they are more numerous (McLaren 2003; Outten et al. 2012) or their numbers are increasing (Craig & Richeson 2014; Hopkins 2010; McLaren 2003; McLaren & Johnson 2007), and/or when natives are more economically vulnerable (Quillian 1995). In short, when immigrants are viewed as more of a threat, outgroup hostility tends to increase.2

Research on immigration tends to conceptualize this threat in two ways: economic and cultural (e.g. Harell et al. 2012; Hjerm 2011; Fetzer 2000; McLaren 2003, 2007). For the former, immigrants are viewed as either threats to individual (and especially low-skilled) workers or threats to the economy more generally as a drain on the welfare state (Billiet, Meuleman & De Witte 2014; Citrin et al 1997; Hainmueller & Hiscox 2010; Esses,

² Of course, other identification processes may minimize the intergroup dynamic. Notably, when people have a shared supra-ordinate identity (Gaertner & Dovidio 2000) or identify with all of humanity (McFarland, Webb & Brown 2010), outgroups may be viewed as less threatening, or not as outgroups at all.

Brochu & Dickson 2012). For the latter, ethnic, racial and religious differences are seen as a challenge to the cultural majority and a symbolic threat to the cohesiveness of the nation (Ayers et al. 2009; Brader et al. 2008; Ford 2011; McLaren & Johnson 2007; Valentino et al, n.d.). There is a growing evidence confirming that both economic and cultural threats drive anti-immigration attitudes, and that the effects are similar across immigrant-receiving countries (e.g., Citrin & Sides 2008; Iyengar et al. 2013).

Less is known about how other individual psychological predispositions influence anti-immigrant sentiment. That said, there is a body of work that highlights ways in which certain ideological and value orientations may be associated with prejudicial thinking and punitive reactions to outgroups. For instance, work in psychology points to Social Dominance Orientation (SDO) and Right Wing Authoritarianism (RWA) as two traits that can affect reactions to outgroups such as immigrants (Cohrs & Stelzl 2010; Costello & Hodson 2011; Kupper, Wolf & Zick 2010; Thomsen et al 2008). Note that these attributes do not replace hypotheses based on intergroup threat but enrich them. For example, Costello & Hodson (2011) show that people with higher levels of SDO are more prone to be more punitive toward immigrants when confronted with both economic and cultural threats. In other words, people who have more rigid beliefs about social stratification are particularly hostile to immigrants, especially when they are portrayed as posing a threat to mainstream society.

³ Although note that Sniderman and colleagues (2000) find no differences in the cultural distance of immigrants. For them, simply being an outgroup members is more important than how different that outgroup is.

⁴ SDO refers to specifically to a person's belief ingroup hierarchy (Sidanius & Pratto 1999), whereas RWA refers to a person's belief in authority figures and valuing conformity (Altemeyer 1981).

Our argument follows a similar path, though we want to suggest the importance of a (related but) different psychological orientation that thus far has been greatly under-valued in analyses of anti-immigrant sentiment, namely, perceptions about locus of control. *Locus of control* refers to a set of beliefs about the causal attributions of an event to either internal or external sources (Lefcourt 1982; Rothbaum et al. 1982; Rotter 1966). In its classic form, as developed by Rotter (1966), it was conceived as a predisposition to view one's personal situation as either under one's own control (internal) or beyond one's control (external).

Collins (1974, 382) suggests that causal attributions tend to vary in terms of two dimensions: (1) predictability versus chance, and (2) situational versus dispositional attributes. The former captures whether what happens to a person can be explained by a specific cause or is simply a result of randomness or fate. The latter distinguishes whether it is the actor or the environment that is responsible for any given outcome.

For intergroup evaluations, perceptions of control should matter to assessments of how threatened one's (or one's group) position is, as well as how a person evaluates and responds to the outgroup's situation. Given the importance of both economic and cultural threat as dominant explanations of immigration attitudes, it seems logical to assume that threat is in part a function of a) how much control one has over the outgroup's presence, and b) whether that outgroup's negative attributes are attributed to their own failings, or to larger processes outside of their control. Past studies tends to support both these propositions. People who tend to view themselves in control (internal locus) tend to be less threatened and more open to those who are different, compared to those who view external forces as the source of their personal situation (Costarelli 2007; Duckitt 1984).

⁵ See Nicol (2007) and Onraet et al. (2013) for a discussion of the relationship between SDO and RWA and locus of control

People also tend to be biased in their causal attributions of outcomes. A person is far more likely to explain their own group's positive outcomes based on dispositional characteristics and individual fortitude, whereas outgroup members are more likely to have their *negative* outcomes explained via personal weaknesses (Agroskin & Jonas 2010; Fiske & Dépret 1996; Fristches et al. 2008; Hewstone & Ward 1985; Hewstone 1990; Pettigrew 1979; Stephan 1977). When outgroups encounter economic misfortune, then, it is typically attributed to the personal failings of outgroup members, whereas successful outcomes are attributed to chance. In contrast, the ingroup is viewed as having earned their successes through hard work, while their failures are attributed to factors beyond their control.

Those aware of the work on welfare attitudes in the United States will be familiar with this form of prejudicial logic in attributions of the causes of poverty among Blacks. One of the dominant explanations for harsh attitudes toward the poor generally, and welfare recipients in particular, is that those who are poor do not deserve assistance because they are personally responsible for their plight. Deservingness is determined by whether citizens think the causes of poverty for an outgroup are due to internal failings (such as laziness, substance abuse, lack of effort, etc.) rather than external sources (such as chance, injustice or discrimination, etc.) (e.g. Cozzarelli et al. 2001; Hunt 1996, 2007; Smith & Stone, 1989; Zucker & Weiner, 1993).

These attributions for poverty are intimately tied to racial prejudice. Stereotypes about Blacks in the US are tied to stereotypes about deservingness (Appelbaum 2001, Gilens 1996; Winter 2008); the reverse is also true. And existing work shows that external attributions can facilitate more positive attitudes toward outgroups: for example, Gill and colleagues (2007, 2013) demonstrate that when people accept external explanations, they

are more likely to recognize the suffering of the outgroup and to feel compassion for them. In other words, a belief in external rather than internal explanations is associated with reduced outgroup hostility, and increased support for policies designed to alleviate poverty. Similarly, prior outgroup prejudice makes people more likely to express internal explanations.

There are thus several hints in the existing studies that perceptions of control should matter to attitudes toward immigrants. Work that focuses explicitly on the link between control and immigration is nevertheless nearly non-existent. One of the only studies we are aware of is by Agroskin and Jonas (2010) who use a small student sample to demonstrate that lack of political or economic control is related to prejudice toward immigrants. Here, control was measured using a modification of Paulhas' domain-specific locus of control focused on politics and the economy more generally and the dependent variable is ethnocentrism, using prejudice towards immigrants as a mediator; the study does not include the classic measure of personal locus of control, nor attributions of locus of control to the outgroup under consideration (by which we mean here immigrants).⁶

There is good reason, then, for further work exploring perceptions of control as drivers of anti-immigrant sentiment. Lack of control should make immigrants appear more threatening. Doing so also requires, we believe, a consideration of the relationship between attributions of control and other predispositions, like racial prejudice and political ideology. Prejudice is related to perceptions of internal control to outgroups, as the welfare literature clearly shows (Gill et al. 2007, 2013), as well as attitudes towards immigration (Pettigrew

⁶ Relatedly, a recent study by Testé et al. (2012) showed that people tend to be more positive toward immigrants when they are given information that immigrant's themselves feel like they are responsible for their situation.

1998). It is thus important to show that perceptions of control are not simply proxies for prejudicial thinking.

Political ideology is a similarly powerful predictor of immigration attitudes (Chandler & Yung-Mei 2001; Citrin et al. 1997; although see Janus 2010). Ideology and ideas about control are also intimately related, with left-leaning individuals more likely to make external attributions for poverty, whereas right-leaning individuals tend toward internal explanations (Weiner, Osborne & Rudolph 2011). We believe that feelings of control, especially personal assessments of locus of control, are prior to political attitudes. (We acknowledge that they can be mutually reinforcing – one might adopt a political party's explanation for why certain groups are on welfare, for instance.) But we need not establish a precise causal ordering at this stage, so much as acknowledge that any consideration of the political relevance of perceptions of control requires evidence that they offer a contribution distinct from both racial prejudice and ideology to our understanding of anti-immigrant sentiment.

In sum, our study poses a series of interconnected hypotheses that are tested in a multivariate context within large, national samples in three countries: (1) people who feel more in control (either personally or as a society) will have lower levels of anti-immigrant sentiment; (2) those who view immigrants' misfortune to their own failings (internal) rather than situational factors beyond their control (external) will have more anti-immigrant sentiment; and (3) locus of control will predict anti-immigrant sentiment independently of racial prejudice and political orientation.

These propositions entail three different conceptualizations of control. First, we measure *personal locus of control* by measuring whether respondents view their own

circumstances as being internally or externally driven. Second, we measure how much control respondents feel their society exercises over immigration, to capture what Paulhus (1983) refers to as a *sphere-specific measure of control*.⁷ Finally, we are interested in respondents' perceptions of *immigrants' locus of control*.⁸

We test these hypotheses in the context of three Anglo-Saxon democracies that are characterized as liberal welfare state regimes: Canada, the US and the UK. Canada and the US tend to have quite distinct immigration regimes (Bloemraad 2006). In Canada, a large portion of immigrants are accepted on the basis of a points system that rewards immigrants viewed as likely to contribute economically to Canada, whereas in the US, it is family reunification rather than economic skills that dominates eligibility. The UK immigration system differs as well, given the UK's colonial history, as well as its integration into the European Union, making former colonial ties and immigration from within Europe as important sources of immigration. That said, like Canada, the UK has begun to adopt a points system that prioritizes educated and skilled immigrants. We expect that the three countries will exhibit similar patterns in the relationship between perceptions of control and anti-immigration attitudes. At the same time, Canadians should have lower overall levels

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⁷ More precisely, our measure is intended to capture what Rothbaum and colleagues (1982) refer to as secondary control, and more specifically the subcategory of "vicarious" control, which refers to how "persons sometimes associate with others simply for the sake of sharing psychologically in the others' control. Vicarious control, then, is similar to the phenomena of identification and deindividuation, in which individuals submerge a sense of self in order to enhance a sense of close association with a more powerful entity" (11).

⁸ These items are detailed in the following section and full wording is available in the Appendix A.

⁹ For a discussion of how the European Union structures immigration flows both within and outside of Europe, see Van Houtum & Pijpers (2007)

¹⁰ For a review of the level and trends of anti-immigrant attitudes in these three countries, see Segovia and Renatta (2010) for the US, Ford (2011) and Blinder (2012) for the UK and Wilkes and Corrigall-Brown (2011) for Canada.

of anti-immigrant sentiment, and (may) also feel more in control of immigration. This is because Canada lacks a shared border with the primary source of immigration, making illegal immigration less of an issue. Furthermore, the well-know points system for economic class immigrations tends to focus on skilled immigrants.

Data

The data come from the Race, Gender and Support for the Welfare State (RGWS) survey, fielded online in July 2012 in the US, Canada, and the UK. The original survey had 1200 respondents per country; though an additional subsample of 600 respondents was collected in the US in May 2013, bringing the total US sample to 1800. Lach survey was fielded by YouGov-PMX, which uses a matching methodology for delivering online samples that mirror target populations on key demographics. For details on the sampling procedures and composition of the YouGov online panels, see Vavreck & Iyengar (2011). The samples reflect general population characteristics, with only minor differences between country samples. Lack and the US of the US

Our measure for anti-immigrant sentiment is drawn from a standard battery that includes four items that touch on general attitudes toward immigrants, such as "Immigrants

¹¹ The additional US sample was collected with a survey identical to the original, with the exception of the inclusion of Hispanics as an outgroup in the prejudice question battery and in a question battery unrelated to this article.

¹² The mean sample age was 48, and was 51% female. The sample was slightly more educated, ranging from 24% with a university degree in the UK to 34% in Canada. The percentage foreign-born in each sample is 7.5% (US), 5% (UK) and 13% (Canada). Note that the Canadian survey was fielded in both official languages (English and French). The English survey instrument was independently translated by three native Francophone research assistants for conceptual, semantic and normative equivalence. Any inconsistencies between the independent translations were then discussed for consensus with the research coordinator

take jobs away from other [Canadians]" and "[Canada]'s cultural life is enriched by immigrants to this country". The battery includes equal numbers of economic and cultural items, and the scale is balanced with equal numbers of positive and negative statements on each dimension. (Full question wording – for this index, and for all other measures – is included in the Appendix A.) The final scale ranges from 0 to 1 with higher values reflecting more anti-immigration attitudes (Cronbach's Alpha=.80). In addition to the complete scale, for some analyses we separate the economic and cultural items into separate scales. These items clearly capture hostility towards immigrants, and are often used as direct measures of both economic and cultural threat. We simply refer to them here as anti-immigrant sentiment, our outgroup hostility.

In line with the discussion above, we operationalize control in three ways.¹³ Individual Locus of Control is measured with a scale based on agreement with two statements that are pulled from standard control measures in social psychology. The two items are:

- (1) Many times I feel that I have little influence over the things that happen to me.
- (2) When I make plans, I am almost certain that I can make them work.

Societal Locus of Control is based on a single question which asks, "Thinking about the immigrants that come to [COUNTRY], how much control do you think that [COUNTRY] has over the immigrants who are able to enter the country?" Respondents are given three choices: almost complete control, a moderate degree of control and no control.

¹³ Appendix B shows correlations between the three measures of control. There are some significant correlations (ranging from .025 to .176), but associations amongst the measures are weak. We take this as evidence that our measures capture rather different quantities.

Both Individual and Societal LOC are rescaled to 0-1, where higher scores indicate more control.

Our third item measures how people perceive an outgroup's level of control over their economic standing. This measure of locus of control is specific to immigrants. It asks respondents to select the most important reason that immigrants face economic hardship. The four choices include (1) they are unlucky, (2) laziness or lack of willpower, (3) injustice in society, or (4) an inevitable part of modern progress. Unlike the first measure of locus of control, this item captures Collins (1974) two dimensions of causal attribution. We can distinguish the internal item (laziness) from two types of external causes: two external items due to chance (unlucky/inevitable) and one situational explanation (injustice). 14

In addition to the three measures of control, our analyses also include measures of racial prejudice and partisanship. Racial prejudice is measured based on a composite score of racial stereotype items for salient ethnic minority groups in each country. Respondents were asked to rate each group on a scale from 1 to 7 from hardworking to lazy, and from dependent to self reliant. (See Appendix A for details.) Political orientation was measured using partisan identification, recoded to three categories (0) Other/None; (1) Democrat or Labour; (2) Republican or Conservative. This measure was only available in the US and UK, so partisan identification is included in analyses for these countries only.

¹⁴ Immigrant locus of control is, of course, likely to be related to more general beliefs about how the world should work. Those who believe that society rewards hard work may be more likely to think that poverty is caused by personal failings.

¹⁵ Blacks, Asians and Southeast Asians were included in all three countries in the original survey. In Canada and the UK, the three items load onto a single dimension (alpha=.732 and .679 respectively.) In the US, the measure works less well with Blacks (and Hispanics in the oversample) falling on a separate dimension from the Asians and South Asians, so we limit our measure of racial prejudice in the US to these two groups (Blacks only in the full sample, and Blacks and Hispanics in the oversample).

It is known that preferences on immigration differ by individuals' ethnicity and country of origin, with native citizens from the dominant racial group expressing more harsh views toward immigrants than members of minority groups or naturalized citizens (Masuoka & Junn, 2013). We therefore limit our analysis in each country to white, nonforeign born respondents. We also include a set of basic controls for sex (female=1), education (university degree or more=1), employment status (working=1) and age (30 or less, 30-55, and 55 and older). Given that age, education, gender and employment status are related to immigration attitudes (see citations above), and have also been shown to relate to locus of control (Ross & Mirowsky 2002; Specht, Egloff, & Schmukle 2013), their inclusion is important for isolating the relationship we are most interested in, namely, the link between versions of LOC and anti-immigrant sentiment. We begin below by exploring this basic relationship; we then revisit the models, taking both political ideology and prejudice into account.

Analysis

Perceptions of Control and Anti-Immigrant Sentiment

Table 1 provides basic diagnostics – it shows levels of anti-immigrant sentiment in the three countries, first for the full four-item scale, and then dividing the scale into its economic and cultural components. Separating out economic and cultural aspects makes little difference – in every country, the mean for economic and cultural items is nearly, or exactly, equal. We take this to suggest that we lose nothing by using the four-item scale, and do so in the analyses that follow.

[Table 1 about here]

There are real differences in levels of anti-immigrant sentiment across countries – or, at least, across the Atlantic. While Canadian¹⁶ and American levels of anti-immigrant sentiment are statistically indistinguishable, Americans and Canadians are significantly more accepting of immigration (p<.01) than the British. This finding is in line with other comparative work (see citations above).

[Table 2 about here]

Table 2 shows basic diagnostic data for our measures of control. We have no reason to expect higher or lower means for Individual LOC across countries, and we find little variation, especially between Canada and the US, although even this small difference is statistically significant (p<.05). Attributions of Immigrant LOC also vary little across countries, and only Canada's mean is marginally different from the others (p<.10). Where Immigrant LOC is concerned, what really stands out is the relatively low level of internal control attributed to immigrants – respondents infrequently attribute immigrants' poor economic situation to laziness or a lack of willpower. (This may in part be due to social desirability bias, although this should be less likely in an online survey.)

Cross-country differences in Immigrant LOC nevertheless line up as we suspected, with Canadians leaning slightly more towards external rather than internal accounts in comparison with Americans and Britons. This cross-national difference is clearer in the measure of Societal LOC, where the Canadian mean is markedly and significantly higher than both the US and UK. This makes sense: as noted above, a combination of geography

¹⁶ Note that past work has found higher levels of anti-immigrant sentiment in Quebec than in the rest of Canada. We do not distinguish between the two regions here, but note that in overall measure of anti-immigrant sentiment, they are very similar. This is driven by somewhat more anti-immigrant sentiment in Quebec on the two cultural items, but less on the economic dimension.

and history allows Canada to have more control over immigration than either the US (with a porous southern border) or the UK (given its proximity to the rest of Europe and Africa, as well as its membership in the European Union). Respondents' perceptions of Societal LOC thus varies across countries plausibly, given the contexts in which these nations find themselves.

What is most important for our purposes is not the country-level means so much as the fact that these variables all exhibit substantial within-country variation. (See the standard deviations in Table 2.) Does this individual-level variation matter for anti-immigrant sentiment? Table 3 examines this possibility. The table shows results from multivariate OLS regression models, first with all three countries combined, and then for each country separately.

[Table 3 about here]

Individual and Societal LOC are included as single, interval-level indicators. We separate out Immigrant LOC into categorical variables, where the internal response (laziness or lack of willpower) is contrasted with the two external explanations: injustice in society and inevitability or chance (residual category). We begin by focusing on the combined results in the first column. These results show a clear connection between control and attitudes toward immigrants. Individual and Societal LOC are negatively related to anti-immigrant sentiment: those who feel that they have more control over what happens in their life, and those who feel like their country has control over immigration, are less likely to be hostile toward immigrants. Perceptions of Immigrant LOC also matter: when citizens perceive the outgroup as individually responsible for negative outcomes, hostility

¹⁷ While we combine "unlucky" and "inevitable part of modern society" for the "injustice in society" category here, note that "unlucky" was selected by just 4% of respondents.

increases.¹⁸ These findings fit with our expectation that internal locus of control applied to the *ingroup* should promote more tolerant attitudes; whereas internal locus of control applied to the *outgroup* should produce the opposite effect. These results do not change as we move to country-by-country results in columns 2 through 4. Every LOC variable has a similar impact across all three countries.

Of the three measures of control examined here, Individual Locus of Control should be the most stable predisposition, and most independent of intergroup assessments. We likely have ideas about control over our own situation before we have opinions about immigrants. Societal and Immigrant LOC are somewhat different, however – each likely reflects some combination of (exogenous) ideas about control and (endogenous) ideas about immigration and politics. (They are also related to each other, although by no means do they appear to be measuring the same thing: the strongest inter-indicator correlation is -.18, between views of societal control over immigration and perceptions of immigrants' control. See Appendix B.)

That these measures of control are related to political attitudes may be a source of some concern, at least insofar as our objective is to capture the impact of control that is prior to – or at least distinct from – other factors. Note however that all models in Table 3 control for one or both of these political attitudes.

The existing literature makes clear that attitudes toward immigrants are racialized, and so it should be no surprise here that the racial prejudice measure has a strong and significant impact across all Table 3 models. We note that bivariate correlations between

¹⁸ It is interesting to note that there are also significant differences across external explanations where those who link immigrant poverty to systemic discrimination have less anti-immigrant sentiment compared to external explanations that are more general (unlucky/inevitable).

racial prejudice and both Societal LOC (-.201) and Immigrant LOC (.276) are significant (p<.001). In line with previous work, then, we find that prejudice is related to perceptions about LOC. At the same time, measures of control exhibit a good degree of independence; and results in Table 3 make clear that LOC measures matter to anti-immigrant sentiment above and beyond the impact of prejudice.

[Table 4 about here]

Partisanship, too, it related to LOC attitudes. Table 4 shows mean levels of the three measures of control, across partisan identification in the US and UK. (Recall that we do not have partisanship for the Canadian sample.)¹⁹ There are clearly partisan differences across measures of control in each country. In the US, Republicans are somewhat more likely to express levels of internal Individual LOC than Democrats (p<.05) but their perceptions of Societal LOC are significantly lower (p<.01). They are also more likely to hold immigrants responsible for their economic hardship compared to Democrats (.36 versus .13, p<.01), with over a third of Republicans choosing the internal response, versus just one in eight Democrats. All of this is in line with what we should expect from those with a more conservative ideology, of course; and we see the identical (and statistically significant) pattern across Conservative and Labour identifiers in the UK.

That said, partisanship accounts for only a small part of the variance in our measures of control; it follows that perceptions of control are not simply a proxy for ideology. We have, indeed, already seen this in Table 3. Models for both the US and UK there include partisanship; LOC measures matter nonetheless. We take this as strong

¹⁹ We do have other measures of political ideology, including a scale of economic conservatism (based on questions about redistribution) and a scale of social conservatism (based on questions about gender roles). These questions show roughly similar results to what we see for party ID, however, and so we focus just on the latter here.

evidence that the relevance of measures of control for anti-immigrant sentiment are not the product of their correlation with partisanship.²⁰

The other control variables in Table 3 perform largely as expected, with younger and more educated respondents reporting lower levels of anti-immigrant sentiment (p<.001). We also find evidence that women show slightly higher levels of anti-immigrant sentiment.²¹

Conclusions

This study is one of the first to examine how perceptions of control – namely the extent to which citizens view themselves, their society and others as responsible for their own circumstances – influence anti-immigrant sentiment. We have relied on a range of indicators that draw on the diverse conceptualizations of locus of control. Our results clearly show that perceptions of control are related to anti-immigrant sentiment.

Feeling in control, we argue, makes it psychologically easier for people to deal with the changing social landscape in their environment because they feel capable of responding to these changes. It follows that promoting internal locus of control – in both its Individual and Societal forms – is a potential counter to anti-immigrant sentiment. The cross-national variation in measures of control examined here suggests that they are not immune to context. That said, we cannot easily account for the cross-national variation here – we have only three countries, and thus limited leverage over cross-national questions. Future

²⁰ Note that comparing models both with and without partisanship suggests the following: in the UK, adding partisanship has almost no impact on the size of LOC coefficients; in the US, adding partisanship strengthens the estimated impact of Individual LOC, while slightly decreasing the magnitude of other coefficients.

Note, however, that the effect of gender is absent in the UK model.

research should nevertheless seek to explore how context – in particular, policy context – might lead to more internally-focused perceptions of control.

Our results suggest that attributions of control matter when applied to outgroups as well. Viewing immigrants' economic hardship as a personal failing exacerbates anti-immigrant sentiment. This perception is clearly related to partisanship and prejudice, as we have shown; but it is also partly independent, and quite possibly causally prior. This finding is also related to a much larger body of work on support for social welfare programs. Viewing immigration through the lens of control is novel, and this perspective might serve to bridge the welfare literature to larger debates about immigration.

Future research should also explore the causal relationship between feelings of control, anti-immigrant sentiment and other potential predictors of anti-immigrant sentiment. While we have argued that locus of control is likely prior to anti-immigrant sentiment, it is possible that attributions of control develop in response to anti-immigrant attitudes as a way to justify not someone's dislike for immigrants (or other disliked groups). Disentangling reason from rationalization is very difficult, yet a worthy goal of future research. In this article, our contribution has primarily focused on bring to light the relationship between locus of control attributions and anti-immigrant sentiment and to show its distinctness from more common explanations of anti-immigrant attitudes.

The consequences of our findings for politics are relatively clear. Immigration is a policy domain that evokes passionate responses, in large part because ethnically, racially and religiously diverse immigrants threaten (or are at least are perceived to threaten) the socioeconomic and cultural stability of the host nation. Hostility toward immigration decreases when citizen (a) feel that they, and/or their country, are more in control, and (b)

believe that potentially negative outcomes for immigrants are the product of external rather than internal forces. Policy contexts that serve to increase internally-oriented views of Individual and Societal LOC, and public debate (i.e., media coverage) that emphasize externally-oriented views of Immigrant LOC, will tend to bolster more positive attitudes toward immigrants. We know from past research that anti-immigrant sentiment – often conceived as the economic and cultural threat posed by immigrants – is a strong predictor of immigration policy attitudes (e.g. McLaren 2003; McLaren & Johnson 2007), so understanding the sources of these attitudes should have important consequences for public support for immigration more generally. These are the implications of the preceding work, at least. Our hope is that future research will be able to examine these possibilities more directly.

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Appendix A: Variable Wording

*Note that * indicate items that are reversed in scales.*

Individual Locus Control:

Many times I feel that I have little influence over the things that happen to me.* When I make plans, I am almost certain that I can make them work.

Societal Locus of Control

Thinking about the immigrants that come to [Canada], how much control do you think that [Canada] has over the immigrants who are able to enter the country? (almost complete control, a moderate degree of control, no control)

Immigrant Locus of Control

Immigrants in this country sometimes face economic hardship. Here are four possible reasons why. Please tell us which reason you think is the most important:

- a. because they are unlucky
- b. because of laziness and lack of willpower
- c. because of injustice in our society
- d. because it's an inevitable part of modem progress.

Anti-Immigration Scale (4 point agree/disagree scale)

- 1. Immigration is good for Canada's economy.*
- 2. Too many recent immigrants just don't want to fit into Canadian society.
- 3. Immigrants take jobs away from other Canadians.
- 4. Canada's cultural life is enriched by immigrants to this country.*

Racial Prejudice

Where would you rate each of the following groups in [COUNTRY] on a scale of 1 to 7, where 1 means HARDWORKING and 7 means LAZY?

Where would you rate each of the following groups in [COUNTRY] on a scale of 1 to 7, where 1 means DEPENDENT and 7 means SELF RELIANT?*

Canada: Asians (e.g. Chinese) / Blacks / Southeast Asians (e.g. East Indians, Pakistanis) UK: Asians (e.g. Chinese) / Blacks / Southeast Asians (e.g. East Indians, Pakistanis) US: Blacks / Hispanics †

†Hispanics only asked about in Oversample in US.

Appendix B: Control and Racial Prejudice

	Individual LOC	Societal LOC	Immigrant LOC †
Societal LOC	.074***		
Immigrant LOC †	.025	176***	
Racial Prejudice	024	201***	.276***

Note: Cells contain Pearson's correlation. * p < .05; ** p < .01; *** p < .001. Restricted to white, non-foreign-born respondents.

† Immigrant Locus of Control was recoded where the internal response (laziness/lack of willpower) was coded 1 and the other three external responses were coded 0

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Tables and Figures

Table 1: Level of Anti-Immigrant Sentiment by Country

	Canada			US			UK		
	Cariada			00			OIX		
	Mean	SE	StDev	Mean	SE	StDev	Mean	SE	StDev
Full Scale	.49	.01	.24	.50	.27	.50	.64	.01	.25
Economic Only	.46	.01	.27	.53	.31	.53	.64	.01	.27
Cultural Only	.52	.01	.25	.48	.28	.48	.64	.01	.26

Note: Restricted to white, non-foreign-born respondents.

Table 2: Perceptions of Control by Country

	Canada			US			UK		
	Mean	SE	StDev	Mean	SE	StDev	Mean	SE	StDev
Individual LOC	.61	.01	.19	.64	.01	.21	.53	.01	.18
Societal LOC	.52	.01	.34	.37	.01	.32	.27	.01	.30
Immigrant LOC †	.19	.01	.40	.24	.01	.43	.25	.01	.43

Note: Restricted to white, non-foreign-born respondents.

[†] Immigrant LOC is recoded so that the internal response (laziness/lack of willpower) is equal to 1 and the other three external responses are equal to 0.

Table 3: Control and Anti-Immigrant Sentiment

	All	Canada	US	UK
Individual LOC	002***	006**	0 406***	0 402**
Individual LOC	093 ***	096 **	-0.106***	-0.102**
Societal LOC	(.02)	(.03)	(.03) -0.102***	(.03) -0.218***
Societal LOC	159 ***	164***		
Immigrant LOC: Lazingga/Unwilling	(.01) .118***	(.02) .141***	(.02) 0.124***	(.02) 0.085***
Immigrant LOC: Laziness/Unwilling				
Immigrant I OC: Injustice in Society	(.01) 106 ***	(.02) 064** *	(.01) -0.120***	(.02) -0.098***
Immigrant LOC: Injustice in Society				
Pacial Projudice	(.01) .378***	(.02) .366***	(.01) 0.315***	(.02) 0.473***
Racial Prejudice				
UK PID: Con	(.02)	(.04)	(.03)	(.04) 0.028
OK FID. COII				
UK PID: Lab				(.02) -0.034*
OKTID. Lab				(.02)
US PID: Dem			-0.039**	(.02)
OS FID. Delli			(.01)	
US PID: Rep			0.036**	
обти. Кер			(.01)	
Female	.029***	.033*	0.049***	0.005
	(.01)	(.01)	(.01)	(.01)
Working	-0.014	-0.014	0.001	-0.013
	(.01)	(.01)	(.01)	(.01)
University	114***	080***	-0.151***	-0.092***
	(.01)	(.01)	(.01)	(.02)
Under 30	048***	0.003	-0.083***	-0.061**
	(.01)	(.02)	(.02)	(.02)
Over 55	0.005	0.003	-0.013	0.021
	(.01)	(.02)	(.01)	(.02)
UK	.063***			
	(.01)			
US	079***			
	(.01)			
Constant	.557***	.531***	0.505***	0.624***
=	(.02)	(.03)	(.03)	(.03)
N	3283	895	1296	963
Rsq	0.437	0.342	0.462	0.424

Note: Cells contain OLS regression coefficients with standard errors in parentheses. * p < .05; ** p < .01; *** p < .001. Restricted to white, non-foreign-born respondents.

Table 4: Control and Partisanship: Basic Descriptives

	Individual LOC	Societal LOC	Immigrant LOC †
US			
Democrat	0.60 (.01)	0.46 (.01)	.13 (.02)
Republican	0.69 (.01)	0.33 (.02)	.36 (.02)
Other/None	0.63 (.01)	0.32 (.01)	.22 (.02)
UK			
Conservative	0.57 (.01)	0.22 (.02)	.33 (.03)
Labour	0.50 (.01)	0.28 (.02)	22 (.02)
Other/None	0.53 (.01)	0.28 (.02)	.21 (.02)

Note: Cells contain mean values for measures of control with standard error in parentheses. Restricted to white, non-foreign-born respondents.

[†] Immigrant Locus of Control was recoded where the internal response (laziness/lack of willpower) was coded 1 and the other three external responses were coded 0.