IDEOLOGICAL ORIENTATION IN VACCINE UPTAKE DURING THE COVID-19 PANDEMIC

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INTRODUCTION

From the outset of the COVID-19 pandemic, many analysts have focused on such socio-demographic characteristics as age, gender, education, and income as the biggest predictors of behavior in response to mitigation measures and especially in regards to vaccination. Ethnicity, visible minority status, indigenous identification, and immigrant/nativity status have also been considered important factors influencing vaccine uptake (Burke et al. 2021; Mendolia and Walker 2023; Soares et al. 2021; Wong et al 2021). Over the course of the pandemic, a number of studies have revealed that cultural influences/identifiers have played a role in differential rates of vaccination. For example, in the case of persons identifying as Black, Indigenous and across other selected minority identifiers it is widely contended that institutional racism and colonialism have contributed to higher rates of vaccine hesitation in the United States and Canada (Greenwood and MacDonald 2021; Njoku et al 2021). But historic and contemporary socio-cultural considerations aside, political and partisan preferences, also described as ideological orientation, have significant impact as well. In the United States and Canada, where people situate on the ideological spectrum frequently explains whether or not they decide to get a Covid vaccine. And in the case of the United States the substantially lower overall rate of vaccination is at least partially explained by the disproportionately higher percentage of persons situated on the right of the spectrum where there is less vaccine uptake (Fortunato and Lombini 2023).

This paper looks at the extent to which ideological orientation of immigrants and selected minorities in the United States and Canada affects their respective rates of vaccine uptake. We acknowledge that any such cross-country comparison must take into account the important differences in the demographic characteristics of racialized groups in the two countries. Leaving aside the differences in ethno-racial diversity in the composition of American and Canadian Black

identifiers, the former is largely born in the United States while the latter is made up of a large share of the foreign born. We also note that there are differences in the two countries in what constitutes being on the right and differences in views on political issues between those situating themselves on the right.

While our data does not permit us to dive into what it means to be on the right in the United States and Canada nor the deeper diversity of the groups examined here, it nonetheless provides important insights into the important question as to whether national ideological orientation outweighs cultural identification when it comes to vaccination. Our comparative analysis also contributes to a better understanding of some of the factors that have made for greater societal polarization during the pandemic in the United States when contrasted with how such it played out in Canada.

2. BRIEF REVIEW OF RELEVANT STUDIES

Several studies in the United States and elsewhere illustrate the importance of ideological orientation or posture in the decision to vaccinate. Fortunato and Lombini (2023) observe that there has been as important ideological disparity in vaccination rates between Republicans and Democrats (Fortunato and Lombini 2023). They demonstrated that vaccination rates during the first and second cycles of the American US vaccine campaign (in the first eight months of 2021) were lower, on average, in counties where residents predominantly voted for the Republican Party in the 2020 presidential election. Other studies have made similar observations. Jiang and associates (2022) analyzed survey data from two battleground states in the 2020 election (N = 1,849) which demonstrated that conservatives were less likely to intend to get vaccinated against COVID-19. They noted however that this association was significantly mediated by perceived effectiveness and perceived side effects of vaccination, as well as perceived severity of COVID-19. Wollebæk and associates (2022) revealed an important correlation in Norway between votes for populist parties and the belief that vaccines were not important or effective. They found that "refusal to vaccinate is associated with right-wing ideological constraint, even when considering a wide array of control variables (e.g., lack of confidence, complacency), and sociodemographic characteristics. These studies suggest that vaccine refusal is associated with established political cleavages.

Next, we offer our comparative analysis of the patterns of ideological orientations and how vaccine uptake is associated these patterns between the United States and Canada.

IDEOLOGICAL ORIENTATION AND IDENTITIES IN THE UNITED STATES AND CANADA

Ideological orientation is captured in the response to our survey question – "How would you place yourself on the political spectrum?" Table 1 reveals that when asked about their ideological orientation, Americans tend to situate themselves on the right or to the right of centre (combined 29.5%) to a far greater degree than do Canadians (19.7%). That said, Canadians are far more likely not to identify themselves across the spectrum with a combined 32.1% saying they don't know or prefer not to respond compared with 20.9% of Americans.

TABLE 1. IDEOLOGICAL ORIENTATION: UNITED STATES V. CANADA

Ideological Orientation	United States (%)	Canada (%)
Right	16.8	9.3
Right of Center	12.7	10.4
Center	29.9	25.8
Left of Center	8.3	11.4
Left	11.4	10.9
I don't know	15.4	23.2
I prefer not to answer	5.5	9.1
Total	100.0	100.0

Source: Leger for the Association for Canadian Studies and the University of Manitoba, October 2022.

Table 2 shows ideological orientation by immigrant/nativity status in the two countries under study. As shown, those persons born outside the United States are somewhat less likely than those born in the country to identify as right or right of center on the ideological spectrum while there is relatively little difference in Canada in that regard. About one in five American immigrants and non-immigrants cumulatively say that they don't know or prefer not to answer regarding their ideological orientation. Amongst Canadians there are about one in three immigrants and non-immigrants who say that they don't know/prefer not to answer when asked to situate their ideology.

Regard ethno-racial status, Table 3 reveals noteworthy differences across the groups[1] examined here in the extent to which they respectively identify themselves as to the right or right of the centre, with the exception of persons self-identified as Asian in the United States and Chinese in Canada. In the United States, 35.2% of White identifiers situate themselves to the right or right of centre of the spectrum relative to Canadians self-identified as White with 21.1% situating to

1 In the United States, racialized groups included here are: indigenous persons (AI/AN/NH — American Indian, Alaska native, or native Hawaiian), Black or African American, and Asian. In Canada, visible minorities included here are: indigenous, Black, and Chinese.

TABLE 2. IDEOLOGICAL ORIENTATION BY IMMIGRANT/NATIVITY STATUS: UNITED STATES V. CANADA

Ideological Orientation	United States		Canada	
	Born outside the US (%)	Born in the US (%)	Born outside Canada (%)	Born in Canada (%)
Right	11.5	18.2	6.9	5.5
Right of Center	14.6	12.1	11.5	12.4
Center	33.8	29.1	27.3	25.1
Left of Center	9.7	8.0	11.5	15.3
Left	9.7	12.0	9.8	9.2
I don't know	13.7	15.9	24.5	24.3
I prefer not to answer	7.1	4.7	8.6	8.3
Total	100.0	100.0	100.0	100.0

Source: Leger for the Association for Canadian Studies and the University of Manitoba, October 2022.

TABLE 3. IDEOLOGICAL ORIENTATION BY ETHNO-RACIAL STATUS: UNITED STATES V. CANADA

Ideological Orientation	US White (%)	Canada White (%)	US AI/AN/NH (%)	Canada Indigenous (%)	US Black (%)	Canada Black (%)	US Asian (%)	Canada Chinese (%)
Right	21.4	7.5	13.7	5.7	15.3	7.2	7.6	5.8
Right of Center	13.8	13.6	9.6	9.9	11.9	7.8	14.7	13.6
Center	28.1	26.0	31.1	24.0	29.6	25.1	38.4	33.5
Left of Center	8.1	15.4	7.1	12.2	10.1	8.4	10.5	11.2
Left	12.2	8.6	9.6	10.8	11.6	9.3	9.5	9.5
I don't know	12.8	21.0	22.3	27.6	15.3	32.8	12.6	21.1
I prefer not to answer	3.6	7.8	6.7	9.9	6.1	9.6	6.6	9.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Leger for the Association for Canadian Studies and the University of Manitoba, October 2022.
Note: AI/AN/NH refers to American Indian, Alaska native, or native Hawaiian persons in the United States.

the right. A much higher percentage of White Canadians say they don't know or prefer not to answer (28.8%), compared to White Americans when situating themselves on the ideological spectrum (16.4%). It is interesting to note that amongst each of the groups surveyed in the United States a higher percentage identity cumulatively as right or right of centre than left or left of centre (although the difference is small amongst Asian Americans), whereas in Canada there is a greater tendency for the four ethno-racial groups surveyed to identify more cumulatively as left or left of centre.

IDEOLOGICAL ORIENTATION AND VACCINATION IN THE UNITED STATES AND CANADA

In this section we look at the ideological orientation of persons self-identified with the four ethno-racial groups examined here and the extent to which they report getting Covid-19 vaccines. Table 4 reveals that the overall vaccination rate in the United States is lower than that in Canada. Vaccination is associated with ideological orientation. Particularly in the United States, those persons saying they were least likely to have been vaccinated preferred not to answer or said they didn't know where they stood when asked where they situated themselves along the ideological spectrum. In Canada, those who preferred not to answer as to their ideological orientation were more inclined to have overall rates of vaccination similar to Canadians identifying on the right of the spectrum. It's on that end of the spectrum where the gap in vaccination rates amongst Americans (76.5%) and Canadians (80.7%) is lowest. Similarly, the gap is also relatively low amongst Americans and Canadians respectively identifying with the left on the ideological spectrum. On the other hand, the gaps in vaccination rates are especially wide for Americans and Canadians identifying as right of centre or centre across the ideological

TABLE 4. IDEOLOGICAL ORIENTATION AND VACCINATION: UNITED STATES V. CANADA

Ideological Orientation	Vaccination — "I have had the vaccine for COVID-19"	
	United States (%)	Canada (%)
Right	**76.5**	**80.7**
Right of Center	73.4	92.1
Center	74.5	91.8
Left of Center	83.8	96.5
Left	90.2	95.4
I don't know	60.7	89.4
I prefer not to answer	57.9	82.9
Total	74.2	90.9

Source: Leger for the Association for Canadian Studies and the University of Manitoba, October 2022.

spectrum as well as amongst those who said they preferred not to reveal their ideological preference.

VACCINATION, IDEOLOGICAL ORIENTATION, AND IDENTITIES

Americans who were born outside of the United States (82.9%) were far more likely to get vaccinated than those born in the country (72.4%). But the gaps in vaccination rates between immigrants and non-immigrants in the United States were not consistent across the ideological spectrum, and hence US-born persons identifying to the right were more likely than the foreign-born to get vaccinated. On the left, the foreign-born were just as likely as the US-born to get vaccinated. Elsewhere across the spectrum those born outside the United were more likely than those born in the country to report they were vaccinated and that is especially the case for those identifying at the center as well as those saying they didn't know or preferred not to answer.

When considering the pattern in Canada, Canadian-born and foreign-born persons did not exhibit much difference in their respective rates of vaccination. As observed in Table 5, the gap in the rates between the Canadian-born and US-born was 17.7 percentage points (72.4% v. 90.1%), which was greater than that (10.4) of the foreign-born in Canada (82.9% v. 93.3%).

Turning to the four selected racialized or visible minority groups in the United States and Canada we track below the respective changes in vaccination rates by ideological orientation over the period October 2021 to October 2022. As shown in Table 6, the gaps across the four groups in the United States were substantially greater. For example, gaps in vaccination rates were wider: American Indian, Alaska native, or native Hawaiian persons were nearly 10 percentage points lower than Black/African Americans, and latter group five points lower than White Americans who were in turn 13 points lower than Asian Americans. In Canada, the gaps in vaccination rates across the four groups were narrower: Indigenous identifiers were five points lower than those self-identified as Black and White, which in turn were five points lower than the rate for Chinese Canadians. In both countries, Blacks showed the largest increase in vaccination rates from 2021 to 2022.

The largest gaps in vaccine uptake in the United States and Canada in 2022 were between native American and indigenous persons (24.3%) and persons self-identified as Black (21.3%), relative to Canadian counterpart groups with the gaps remaining fairly constant across the one-year period. By contrast, looking at vaccination rates between Asian Americans and Chinese Canadians, the difference was far less significant

TABLE 5. VACCINATION, IDEOLOGICAL ORIENTATION, AND IMMIGRANT/NATIVITY STATUS: UNITED STATES V. CANADA

Ideological Orientation	Vaccination – "I have had the vaccine for COVID-19"			
	United States (%)		Canada (%)	
	Born outside USA	Born in USA	Born outside Canada	Born in Canada
Right	72.9	77.1	83.6	79.3
Right of Center	80.1	71.8	94.6	91.3
Center	87.3	70.9	93.1	91.4
Left of Center	88.9	83.1	98.9	95.9
Left	90.0	90.3	97.4	94.6
I don't know	80.5	56.8	93.4	88.1
I prefer not to answer	71.2	55.3	87.0	82.2
Total	**82.9**	**72.4**	**93.3**	**90.1**

Source: Leger for the Association for Canadian Studies and the University of Manitoba, October 2022.

TABLE 6. CHANGES IN RATES OF VACCINATION BY ETHNO-RACIAL STATUS IN 2021 AND 2022: UNITED STATES V. CANADA

	United States (%)			Canada (%)			Gaps
	2022	2021	Change	2022	2021	Change	2022
Total	74.2	69.0	5.2	91.7	87.1	4.6	17.5
White	76.4	70.4	6.0	91.7	88.6	3.1	15.3
AI/AN/NH / Indigenous	61.5	57.6	3.9	85.8	83.9	1.9	**24.3**
Black	70.6	59.0	11.6	91.9	83.0	8.9	**21.3**
Asian / Chinese	89.3	83.1	6.2	96.7	96.2	0.5	7.4

Source: Leger for the Association for Canadian Studies and the University of Manitoba, October 2021 and October 2022.
Note: AI/AN/NH refers to American Indian, Alaska native, or native Hawaiian persons in the United States.

TABLE 7. VACCINATION, IDEOLOGICAL ORIENTATION, ETHNO-RACIAL STATUS: UNITED STATES V. CANADA

	Vaccination – "I have had the vaccine for COVID-19"							
Ideological Orientation	US White (%)	Canada White (%)	US AI/AN/NH (%)	Canada Indigenous (%)	US Black (%)	Canada Black (%)	US Asian (%)	Canada Chinese (%)
Right	62.8	73.3	69.2	66.7	60.0	83.3	87.5	100.0
Right of Center	69.9	90.4	63.6	80.0	77.8	83.3	85.7	94.7
Center	70.8	89.1	64.9	87.5	58.4	82.6	81.4	93.6
Left of Center	78.8	97.1	63.4	95.5	70.0	92.9	87.1	100.0
Left	91.3	94.6	88.6	94.7	78.1	84.6	96.4	90.0
I don't know	58.2	86.1	48.1	78.0	38.3	79.3	70.4	97.9
I prefer not to answer	59.7	80.2	50.0	85.0	50.0	70.0	70.0	85.7
Total	70.4	88.5	64.2	83.5	59.1	82.2	83.1	95.6

Source: Leger for the Association for Canadian Studies and the University of Manitoba, October 2021 and October 2022.
Note: AI/AN/NH refers to American Indian, Alaska native, or native Hawaiian persons in the United States.

and actually narrowed between October 2021 (13.1%) and October 2022 (7.4%). Regarding persons self-identified as White in the United States and Canada, the gap was reduced, to 15.3 and 18.2 points respectively, over the one-year period.

When considering the impact of ideological orientation on vaccine uptake across our four groups there is no consistent pattern that emerges in the two countries. Table 7 shows that, amongst indigenous persons in Canada and American Indian, Alaska native, and native Hawaiian persons in the United States, the gaps in vaccination appear considerable at the center of the spectrum (including the right and left of the center) as well as for those saying they don't know or prefer not to answer. For those identifying with the right or left, the gap between Americans and Canadians is much narrower in large part because the indigenous in Canada on the right of the spectrum have especially low rates of vaccination relative to others while American natives identifying with the left have far higher rates of vaccination than does the rest of the spectrum.

In the case of persons self-identified as Black or African American and Black Canadian, only on the right of center and the left is the gap in vaccine uptake relatively narrow. Elsewhere across the spectrum the gap is between 20 and 25 points and above 40 points amongst those saying they don't know where they are situated on the spectrum.

Amongst persons self-identified as White in Canada and the United States there are significant differences in vaccine uptake across the spectrum with the exception of those identifying with the left (3.3%). For those identifying with the right, the gap is about 10 points while elsewhere on the spectrum it tends to be in the 20-point range.

Finally, In the case of Asian Americans and Chinese Canadians the data reveal that in both countries these groups respectively have the highest vaccination rates when compared to the others examined here. There are nonetheless gaps in vaccine uptake with Chinese Canadians more likely than Asian Americans to get vaccinated and the differences

across ranging from between 10 and 15 points with the exception of those saying they don't know where the difference is more than 20 points.

CONCLUSION: CULTURE, CONTEXT, AND POLARIZATION

The above findings offer important insight into the extent to which immigrant status and ethno-racial status influence vaccine uptake, showing that these cultural identification or identities appear to be strong predictors in decisions about vaccination. However, results from our comparative analysis of selected ethno-racial minorities in the United States and Canada call for more nuance when generalizing about the effects cultural influences and/or cultural barriers on whether or not to get vaccinated. In particular, comparing groups that identify similarly in the two countries suggests that socio-political considerations may outweigh cultural factors when, for example, it comes to vaccine hesitation. In other words, ideological of orientation in each country seems to matter than the ethno-racial group with which people identify themselves. Our surveys nonetheless suggest some deviation in the case of the Asian Americans and Chinese Canadians where gaps in rates of vaccination are not as large. It seems that cultural influences may be a more significant predictor for Asians, but it would be premature to conclude about such Asian exceptionalism, as culture is not innate to a group but rather emerges from, or are reshaped by, context and other structural circumstances unique to context. Thus, further examination of the intersection between cultural and sociopolitical factors is needed to validate the above findings. Our results also raise important questions about community cohesion in the two countries and point to the need for more research about in-group polarization along ideological spectrum. Our survey data show that vaccination rates vary across the ideological spectrum by immigrant/nativity status and amongst different ethno-racial groups. Such group dynamics can serve as a microcosm of what we observe for the entire populations in United States and Canada.

REFERENCES

Burke, PF, Masters D, Massey G. (2021) "Enablers and barriers to COVID-19 vaccine uptake: an international study of perceptions and intentions. *Vaccine* 39:5116–28.

Fortunato, Piergiuseppe and Alessio Lombini. 2022. "COVID-19 Vaccination, Political Partisanship, and Moral Values." Available at SSRN: https://ssrn.com/abstract=4259779 or http://dx.doi.org/10.2139/ssrn.4259779

Greenwood, Margo and Noni MacDonald. 2021. "Vaccine Mistrust: A legacy of Colonialism." https://rsc-src.ca/en/voices/vaccine-mistrust-legacy-colonialism

Jiang, Xiaoya, Juwon Hwang, Min-Hsin Su, Michael W. Wagner, and Dhavan Shah (2022) "Ideology and COVID-19 Vaccination Intention: Perceptual Mediators and Communication Moderators." *Journal of Health Communication, International Perspectives* 27(6): 416–426. https://doi.org/10.1080/10810730.2022.2117438

Mendolia, Silvia and Ian Walker. 2023. "COVID-19 vaccination intentions and subsequent uptake: An analysis of the role of marginalisation in society using British longitudinal data." *Social Science & Medicine* 321, doi: 10.1016/j.socscimed.2023.115779

Njoku, A., Joseph, M., Felix, R. 2021. "Changing the Narrative: Structural Barriers and Racial and Ethnic Inequities in COVID-19 Vaccination." *Internal Journal of Environmental Research and Public Health* https://doi.org/10.3390/ijerph18189904

Soares, P, Rocha JV, Moniz M, et al. (2021) "Factors associated with COVID-19 vaccine Hesitancy." *Vaccines* 9:300

Wollenbæk, Dag, Audun Fladmoe, Kari Steen-Johnsen, Øyvind Ihlen. 2022. Right-wing ideological constraint and vaccine refusal: The case of the COVID-19 vaccine in Norway." Scandinavian Political Studies 45(2): 253-278.

Wong Cho Lee, Alice W.Y. Leung, Oscar Man Hong Chung, and Wai Tong Chien. 2022. "Factors influencing COVID-19 vaccination uptake among community members in Hong Kong: a cross-sectional online survey." *BMJ Open* 12: e058416. doi:10.1136/bmjopen-2021-058416