RESEARCH NOTES

Did the COVID-19 Pandemic Reduce Attention to Environmental Issues?

A Panel Study Among Parents in Belgium, 2019-2020

*Sari Verachtert, Dieter Stiers & Marc Hooghe**

Abstract

Theories on issue competition assume that there is only a limited number of issues that a person prioritises simultaneously. In this research note, we test this mechanism by using a panel study that was conducted among Belgian parents in 2019 and 2020. Between the two observations of the study, the country suffered a severe health crisis due to the COVID-19 pandemic. We investigate whether this crisis reduced the priority of environmental issues among respondents. Our results show that there was indeed a significant decline of some indicators for environmental concern, but not for others. Furthermore, we show that a higher priority for the health-related and economic consequences of the COVID-19 pandemic was associated with a steeper decline in environmental concern.

Keywords: issue competition, COVID-19 pandemic, panel study, environmental concern, Belgium.

1 Introduction

For most citizens, social and political issues will not receive all that much time and attention (Zaller, 1992). The topics that are being singled out to receive scarce cognitive resources will be the ones that are considered as being most important by the actor (Wlezien, 2005). The literature on issue salience suggests that both citizens and political systems can only prioritise a limited number of issues simultaneously. It has been argued that sudden negative events such as externally induced crises tend to take priority, crowding out other issues from their place in the limelight (Rozin & Royzman, 2001). Thus far, most of the studies on issue competition deal with attention in the mass media, or with a place on the political agenda, but from a cognitive perspective a similar dynamic should be present on the individual level, too (Zaller, 1992). Moreover, previous research on

* Sari Verachtert is a PhD student at the Centre for Political Science at the University of Leuven. Her research focuses mainly on attitudes and behaviours towards sustainable development. Dieter Stiers is post-doctoral researcher of FWO Vlaanderen at the Centre for Political Science Research at KU Leuven. His research focuses on elections and voting behaviour. Marc Hooghe is a Full Professor of Political Science at the University of Leuven. He has written mostly about political participation and political trust.

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issue competition has focused on the obvious example of the economy and economic crises (Cho & Young, 2002; Singer, 2013). As a result, we do not know whether the mechanism of issue competition also works on the individual level, and whether it applies to other examples of negative events or crises. Therefore, the aim of this research note is to examine the effects of a suddenly imposed major health crisis and high impact event on individuals' issue priorities. More specifically, for the purpose of this study, we test whether the COVID-19 crisis that started in 2020 had a negative effect on the priority of and attention to another major issue: climate change. In the years prior to 2020, climate change gradually gained importance, both among public opinion as within the international community, and this led to a wave of protest in industrialised societies (Boulianne et al., 2020). Environmental issues (e.g. climate change, protection of the environment) are key issues of concern in many countries around the world (Milfont & Schultz, 2016). An obvious question in the context of environmental concern is whether the COVID-19 pandemic, which rapidly evolved into a major social and political crisis, has led to a downgrading of the environment as an important priority. At present, there are only some studies available on whether the literature on issue competition can help us to explain how the pandemic crowded out attention for climate change in the mass media (Rauchfleisch, Siegen & Vogler, forthcoming). This finding about the mass media, however, is not automatically also valid for public opinion as a whole, and therefore it is important to investigate whether citizens changed their attention for environmental issues due to the COVID-19 outbreak. Our main research question therefore is: to what extent did the COVID-19 pandemic reduce concern about climate change and the priority of environmental issues?

Although the COVID-19 pandemic is not structurally different compared to other previous crises and pandemics (e.g. the Financial Crisis of 2008 and subsequent years), this study wants to examine the issue competition theory in the context of the COVID-19 pandemic because of its global nature and its unprecedented impact on almost all domains of life, including employment, culture, family life and health. Globally, COVID-19 has had an extremely large impact on the lives of citizens, not just because of the health risk, but also because of the experience with isolation, social distancing, lockdowns and various national and international restrictions (Baker et al., 2020; Murray & Piot, 2021). If issue competition does occur, we would expect it in such extreme conditions. Empirically, compared to other research in the field of issue competition, this article offers a contribution to the literature on issue competition by making use of a unique two-wave panel data survey, a format that is rather essential if one wishes to investigate the effect of an external event like this. The 634 panel respondents consisted of parents of school-age children, set up as part of a study on environmental concern among pupils and their parents. The vast majority, ca. 78% (E. Vloeberghs, Statbel, personal communication, 12 October 2021) of the adult population in Belgium has children. This means that our sample of parents covers a substantial majority of adults, but self-evidently we cannot make any claims about generalisability

toward the full adult population. However, our research covers the majority of the population of Belgian parents. The panel survey is unique in the sense that the first wave was implemented well before the start of the COVID-19 pandemic while the second wave was conducted after the initial wave of the pandemic in Belgium, a country that has been seriously affected by the pandemic. This setting allows us to go beyond investigating differences in attention for the environment, as we can investigate for which respondents we observe *change* in priority for environmental issues. Doing so, the study provides a unique insight in changes in people's issue priorities during a major health crisis.

1.1 Issue Competition

Most citizens tend to have a limited ability to process information about social and current events (Zaller, 1992). Citizens are sometimes characterised as 'cognitive misers', who try to economise the intellectual effort that is needed to keep up with a rapidly evolving world (Peffley et al., 1987). This view implies that there could be a zero-sum relation between the priority of different topics competing for attention. To express it differently: if one topic increases in salience (i.e. the level of importance placed on a given issue (e.g. Burden & Sanberg, 2003)), it is assumed that other topics will necessarily decrease in priority (Zhu, 1992). Moreover, if one topic rises in visibility and importance on the agenda, other issues are given less attention in the media, the popular discourse, and to voters (Zaller, 1992).

The mechanism of issue competition among public opinion has been well documented within the field of economic voting. There is an ongoing debate within this literature about whether an economic crisis increases the priority of the economy (Singer, 2013). Some scholars argue that a weak or volatile economy increases attention for the economy (Bloom & Price, 1975; Cho & Young, 2002; Singer, 2011), while other studies claim that the economy is always an important issue to voters (Duch & Stevenson, 2010; Fiorina & Shepsle, 1989). A more recent study from Singer (2013) argues that voters are more likely to emphasise importance for the economy during periods of bad or volatile economic performance. The study confirms that voters' attention to economic issues is not stable but changes systematically. Moreover, during a period with a weak economy in which the priority of the economy increases in people's minds, voters are distracted from social policy, foreign affairs and issues related to the environment (Singer, 2013). Hence, the literature on the salience of the economy shows that, at least for some topics, issue salience seems to be a zero-sum game. Therefore, next to the first aim to examine the effects of a suddenly imposed major health crisis on individuals' priorities, our second goal here is to test whether the mechanism of a zero-sum game manifests itself in other crises and for issues other than the economy as well.

1.2 Concern for the Environment

Most previous studies on issue competition have been based on the effects of an economic crisis, as this is indeed the kind of crisis that contemporary industrialised societies will experience most frequently. We do not know, therefore, whether findings from these studies can be generalised towards the effects

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of other externally induced crisis experiences, and therefore our aim is to investigate the effects of a sudden health crisis, on a scale that Western societies had not experienced since decades. The aim of this study is to examine another important current policy issue: climate change and other environmental issues. We want to further investigate how the environmental concern of the Belgian population could also be subjected to the mechanism of issue competition, as it is generally considered a long-term problem with real-life consequences for most citizens after a considerable delay of time. We know from previous research that there is indeed a widespread concern about this issue among public opinion in industrialised societies (Bergquist & Warshaw, 2019; Egan & Mullin, 2017; Lewis et al., 2018; Scruggs & Benegal, 2012). However, most of the existing literature on public opinion on climate change, neglected to include the priority of the issue (Crawley et al., 2019). It is important to note in this regard that public concern about climate change can have real-life consequences on climate policy. Studies have shown that governments are more likely to implement a strong climate policy when they have the impression that citizens are actually concerned about this issue (Burstein, 2003; Tjernström & Tietenberg, 2008). However, this relationship cannot always be taken for granted. Issues such as gun control, immigration and climate change have regularly gotten attention in the United States for instance, with little to no policy response (Bromley-Trujillo & Poe, 2020).

For an empirical study on the occurrence of environmental concern, it is important to note that there are a number of theoretical perspectives on the nature of this concern. While some researchers consider environmental concern as a general attitude (Bamberg, 2003), others highlight the fact that this concept is in fact multidimensional. According to Dunlap and Jones (2002, p. 485), environmental concern can be defined as the following: "the degree to which people are aware of environmental problems, support efforts to solve the problems, and are willing to contribute personally to the solution." As is clear from this definition, environmental concern includes different dimensions, including attitudes and behaviours, and therefore, we will use a full set of indicators to operationalise this concept. It is also noteworthy that there has been an example where concern for climate change decreased in priority because of a crisis. In 1972, the United Nations Conference on the Human Environment stated that concerns about the global environment should dominate the political agenda in the years to come (Strong, 1973). However, the economic crisis that started in 1973 quickly pushed away the environment from the political agenda (Hooghe, 1991). The environment only made its reappearance on the global political agenda with the publication of the Brundtland report in 1987 (Brundtland, 1987). We test whether the same mechanism applies in people's minds in the COVID-19 pandemic in Belgium.

1.3 The Case of Belgium

The current study was implemented in Belgium, a country that can be seen as an average European country. From a policy perspective, the Belgian government tends to follow European rules and policies in order to mitigate climate change, and with regard to public opinion, Belgian youth has been quite active

in various protests on climate change (Maurissen, 2020). With regard to pro-environmental behaviour, concern and responsibility towards climate change, Belgian citizens score above average compared to other European countries (European Social Survey, 2016).

Belgium was one of the worst victims of the COVID-19 pandemic during the first months of the pandemic, with death rates per capita reaching the same magnitude as France and Spain (ECDC, 2020). Citizens of Belgium, therefore, had every reason to be concerned about the spread of the virus, rendering the country a well-suited case to investigate the priority of climate change and other environmental issues.[1] Following our overview of the existing literature, we hypothesise that the COVID-19 pandemic reduces the priority and concern of environmental issues. Specifically, we hypothesise that citizens who are most concerned about the impact of the pandemic on the health system and the economy will become less and less involved in the environmental issue.

2 Data and Methods

Our data were collected as part of a broader survey on environmental education in Belgium – that is, the VALIES project. For this project, a total of 2,565 children aged from 10 to 14 years old from 47 different Flemish primary and secondary schools in each of the five Flemish provinces were recruited for the survey's first wave.[2] Every child who participated in the VALIES project filled in a survey in the classroom in September 2019. In addition, each student received an additional paper questionnaire with similar questions, which was handed over to one of the parents for completion. The focus of our investigation is on this group of parents. Both parents and children had a choice between completing a paper survey or an online survey.[3] Four weeks later, a first reminder was sent to the parents via the teachers.

In order to recruit parents for the second wave survey, the researchers asked the respondents' approval and contact details to take part in the second wave in June 2020 (8 months after the first survey wave). For this project, 2,565 parents were contacted by their children to fill in the first survey. In total, 1,027 parents from the VALIES project (a response rate of 40.04 %) filled in the first survey, and 895 parents from the project agreed to participate in the second wave survey. In June 2020, we contacted the parents for the second wave. Again, a first reminder letter was sent four weeks later, and another four weeks later a second reminder was sent, with inclusion of a hard copy of the survey. The second sample consisted of 634 parents (551 parents of the project and 83 parents of the control group). This means that panel attrition stands at 39.96% for the entire group.[4] In all, our final parent sample included 634 participants who participated in both the first and the second wave. 78% of the respondents were mothers, 21% were fathers and 1% were other participants (e.g. grandparent, foster parent).[5] Parents' mean age was 43.43 years (SD = 5.60).[6] The youngest respondent in our study was 31 years old and the oldest was 71 years old. Details about the age distribution can be found in Appendix D. For this analysis, we only include full panel participants, that is parents that partici-

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pated in both waves of the panel, before and during the COVID-19 pandemic.[7] This panel design offers us a unique way of looking at *changes* in people's attitudes between the two survey waves, which in this case means before and after the outbreak of the COVID-19 pandemic. This offers us a more solid test of the issue competition mechanism than studies that were fielded during the pandemic itself, and that can only look at differences in levels of priority instead of changes.

2.1 Measures

In order to answer our research question by investigating changes in respondents' concern about the environment, we focus on two reliable and one-dimensional measurement scales covering respectively attitudes and behaviour. Details about all variables are included in Appendix A. The first dependent variable is an attitudinal measure. Respondents were asked to indicate to what extent they agree with the statement 'all attention for the climate change is exaggerated', 'more attention is needed for the protection of the environment', on a 5-point scale ranging from fully agree to fully disagree. A third item measures 'government expenditure for environmental policy should be increased or decreased on a scale ranging from "much less" to "much more"'. The fourth and the fifth indicators measure the respondents' interest in climate change and protecting the environment respectively – both on 4-point scales. As these five attitudes are substantially correlated (see Appendix A), we create one measure of environmental attitude as an index score.[8] The second indicator of interest is a behavioural measure. Respondents were asked to indicate how often they engage in certain behaviours, three of which were directed towards their environmentally friendly behaviour (i.e. sorting waste, sorting organic waste and reducing waste). As these behaviours are strongly correlated (see Appendix A), we create one measure of environmentally friendly behaviour as an index score.[9] These two dependent variables were chosen because of their connection with environmental issues.

An important note that needs to be made about the dependent variables is that the measurement scales differ between the different indicators; whereas some questions had a 4-point scale, some others had a 5-point scale. Therefore, for reasons of comparability, we rescaled all dependent variables to range from a minimum value of 0 to a maximum value of 1. The main test of our research question will be to test whether the values of these variables changed significantly between the first and second survey waves.

Besides testing changing concern about the environment using the measures described earlier, we also test which respondents were more likely to change than others. To do so, we use two indicators of issue priority, which were only included in the second wave of the panel. Respondents were asked to evaluate the importance of two important issues (i.e.. health and economy) to which people were exposed to during the COVID-19 pandemic, in trade-off with the importance of the environment. These trade-off questions have been shown to provide a good measure of respondents' environmental concern (Kenny, 2021). The priority of health was measured by the item 'our own health is more important than the climate/environment'. Answers could be given on a 5-point Likert-type scale

ranging from 1 (totally disagree – i.e. not only concerned about health) to 5 (totally agree – i.e. mostly concerned about health). The average score on this item was 3.23, indicating that respondents in general do not clearly prioritise the environment or their own health. The level of importance of the economy was measured by the item 'to save our economy we should postpone green measures'. Answers could vary from 1 (totally disagree – i.e. not only concerned about the economy) to 5 (totally agree – i.e. mostly concerned about the economy). These two questions allow respondents to indicate which issues are personally important to them, making an explicit trade-off with the alternative option. The average score on this item was 2.47, which is close to the middle of this scale, suggesting that opinions on this specific question, too, tend to be rather ambiguous. In the regression analyses (see below), we add several covariates to control for their impact in changes in priority. First, we include the standard socio-demographics age and sex (1=female). Furthermore, we control by the respondent's position in society by including educational level and income. Education level variable has three categories, ranging from 0 (low), 1 (middle) to 2 (high; see Appendix A for more details). Income is included as a self-reported measure of how comfortably the family of the respondent can live on the current family income. We also control for participation of the respondent's child in the main environmental education project because this could have affected their environmental concern, even though most of the project was cancelled due to the pandemic.[10]

2.2 Method

Our main research question is to investigate whether concern for the environment decreased during the first months of the COVID-19 pandemic. As a most straightforward test, we compare respondents' scores from the first and the second survey waves using paired sample t-tests. All variables have been coded in such a way that higher levels indicate a higher concern for the environment. It should be noted that the dependent variables are left-skewed, with the result that there is more than sufficient room for a decrease, without any risk for a floor effect. In a second step, we examine to what extent a high priority of health or the economy respectively can explain people's changing concern about the environment. To do so, we first calculate different scores of people's attention for the environment between the two waves – higher scores indicating a (stronger) increase in attention, lower scores indicating a (stronger) decrease. We then include these differences as dependent variables in a series of OLS regression models. In a first model, we include our independent variable of interest (salience of health or the economy, respectively); in a second model, we include our control variables. The expectation in these models is that changes in concern for the environment will be most pronounced among respondents who prioritise health and the economy over the climate.

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3 Results

3.1 Concern for the Environment and Climate Change

First, we test whether attention for the environment and climate change decreased during the COVID-19 pandemic. We compare the average answers to the different indicators of interest between the first survey wave (September 2019; before the pandemic) and the second survey wave (June 2020; during the pandemic). First, we present the results of paired sample t-test for our two respective sum scales. The results are summarised in Table 1 – note that both scales have been rescaled to range from 0 to 1. The results show mixed support for our expectation that the pandemic decreased concern about the climate. As can be seen in Table 1, of our two measures of attention and priority for the environment and climate, the sum scale of behaviours shows a significant increase between t1 and t2. People seem to have been more environmentally friendly during the pandemic than before which is a less expected result. For the environmental attitudes, we do not find evidence of a significant change.

3.2 Explaining Changes in Concern for the Environment

Next to the change in individuals' issue priorities, we also test whether there really is a zero-sum relation between the level of attention for competing issues. The expectation is that the level of importance attached to the 'new' issue is positively associated with the steepness of the decline. In order to test the occurrence of this mechanism, we estimate a series of regression analyses, where the difference in the environmental measurements between t1 and t2 serves as the dependent variable. As explained earlier, we test the effect of the increasing priority for two issues that have been particularly prominent during the COVID-19 pandemic: health and the economy. We expect that the priority for health and the economy will be negatively related to the evolution in respondents' concern about sustainability. The results are summarised in Table 2 for health and Table 3 for the economy.

Table 1 ***Paired sample t-tests change in sum scales***

	Survey wave 1	**Survey wave 2**	**Difference between waves**
Environmental attitudes	0.737	0.731	−0.006
Environmental behaviour	0.864	0.878	0.012*

Note. Average scores on the different indicators in the two survey waves respectively.
Paired sample t-test: significance levels: +: p < 0.01; * $p < 0.05$; **: $p < 0.01$; ***: $p < 0.001$.

Table 2 *Explaining changes in concern about the environment with attention for health*

	(1)	(2)	(3)	(4)
	Attitudes B (s.e.)	**Attitudes B (s.e.)**	**Behaviours B (s.e.)**	**Behaviours B (s.e.)**
Health more important than climate	−0.008^{+} (0.004)	−0.008^{+} (0.005)	0.008 (0.005)	0.008 (0.006)
Sex (ref.=male)		−0.008		−0.013
		(0.012)		(0.014)
Age		−0.001		−0.001
		(0.001)		(0.001)
Education: low				
Middle		0.015		0.017
		(0.021)		(0.026)
High		0.009		0.005
		(0.021)		(0.025)
Income		0.001		0.005
		(0.007)		(0.008)
School child in project		0.007 (0.013)		0.023 (0.016)
Constant	0.019	0.043	−0.013	−0.010
	(0.015)	(0.054)	(0.018)	(0.066)
N	574	574	553	553
R^2	0.005	0.009	0.004	0.014

Note. Entries are unstandardised OLS coefficients, standard errors in parentheses. Significance levels: +: p < 0.01; *: $p < 0.05$; **: $p < 0.01$; ***: $p < 0.001$.

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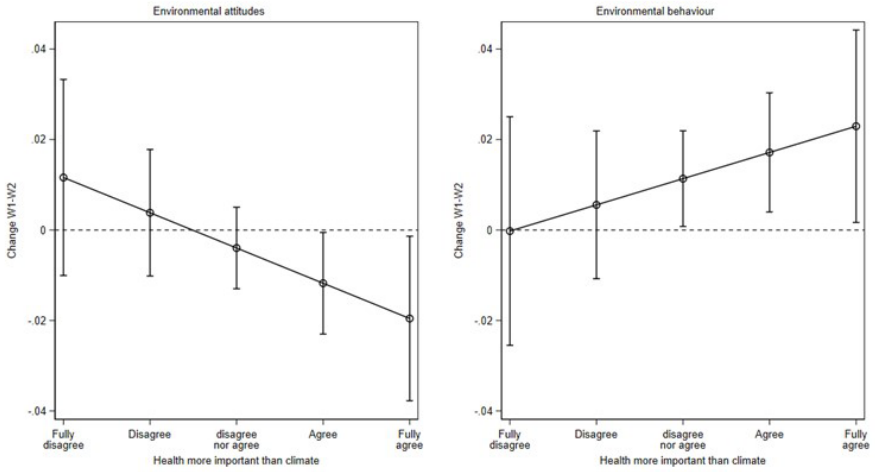
Table 3 *Explaining changes in concern about the environment with salience of the economy*

	(1)	(2)	(3)	(4)
	Attitudes B (s.e.)	**Attitudes B (s.e.)**	**Behaviours B (s.e.)**	**Behaviours B (s.e.)**
Postpone green deal to save economy	−0.016***	−0.017***	0.008	0.009
	(0.004)	(0.005)	(0.005)	(0.006)
Sex (ref.=male)		−0.007		−0.010
		(0.011)		(0.014)
Age		−0.001		−0.001
		(0.001)		(0.001)
Education: low				
Middle		0.012		0.023
		(0.021)		(0.026)
High		0.000		0.009
		(0.021)		(0.026)
Income		−0.001		0.009
		(0.007)		(0.008)
School child in project		0.006		0.023
		(0.013)		(0.016)
Constant	0.033**	0.064	−0.007	−0.020
	(0.012)	(0.053)	(0.014)	(0.066)
N	571	571	550	550
R^2	0.023	0.028	0.004	0.015

Note. Entries are unstandardised OLS coefficients, standard errors in parentheses. Significance levels: +: p < 0.01; *: $p < 0.05$; **: $p < 0.01$; ***: $p < 0.001$.

Figure 1 Importance of health and change in concern about the environment



The results show mixed support for our hypothesis. No significant associations were observed between the changes in environmental attitudes and priority of health. There is more support for a moderating impact of salience of the economy. It seems like attention for the economy strongly decreases people's environmental attitudes. More specifically, the coefficient indicates that the more people agree that health is more important than the environment, the larger the decrease in environmental attitudes. For the other indicator of environmental concern, we do not find a significant association with priority for health care. For a detailed view on the effects and for ease of interpretation, we show the average decline of each indicator at the different levels of priority of health in Figure 1.

The results in Figure 1 show a more nuanced picture of the change in concern about the environment. The results in Table 1 indicated a decreased support for more spending on environmental policy overall. While the results in Table 2 did not show a significant association between this decrease and priority of health, Figure 1 shows that there is a decrease for individuals who strongly believe that health is more important than the environment, while there is no such association for respondents who strongly disagree with the higher importance of health. Hence, while the difference between the two groups is not significant, it provides some evidence that issue priorities can be a zero-sum game. While those who do not consider health as being very important do not change significantly in the importance they attach to the environment, those who say that health is more important show a significant decrease in importance to the environment.

As a second test of our hypothesis, we estimate the same models, including as main independent variable a measure of the respondents' opinions on postponing environmentally friendly measures in order to save the economy. The results are summarised in Table 3.

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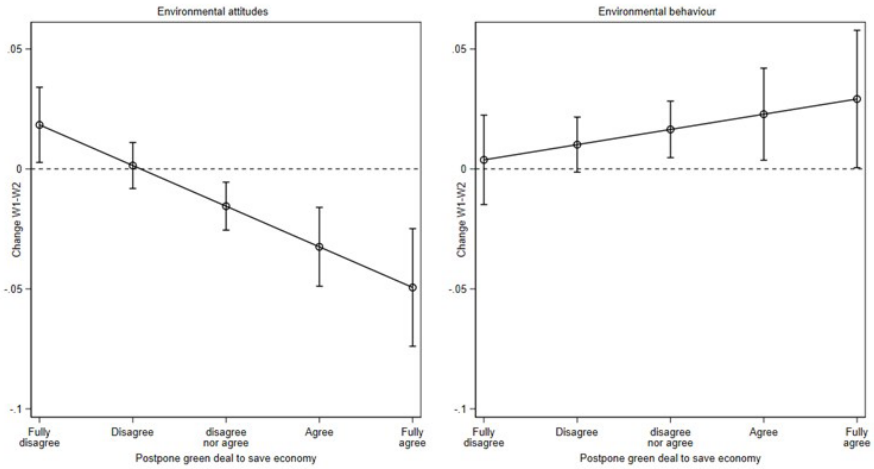
Figure 2 *Importance of the economy and change in concern about the environment*



There is more support for a moderating impact of salience of the economy. It seems like attention for the economy strongly decreases people's environmental attitudes. Again, we provide a more detailed look into the effects by displaying average levels of change at different levels of salience for the economy (Figure 2).

The results in Figure 2 are somewhat similar to those in Figure 1. We also find differences in the levels of attitudes between the two survey waves of our panel in the extent to which people change their attitudes following their issue priorities. With this issue, we even find opposite changes in the importance of the environment between respondents who think that the economy is more important than green policies and those who do not. In short, respondents who value the economy more than the environment decrease in environmental attitudes. On the contrary, respondents who attach less importance to the economy, increase their level of importance to environmental attitudes.

4 Conclusion

In this research note, we contribute to the theoretical development of the concept of issue competition by investigating the priority of environmental issues in the context of a crisis, the COVID-19 pandemic. Given the scale of the COVID-19 pandemic, it can be assumed that this issue dominated the political agenda, the media and public opinion during most of the year 2020. Despite this rather unique, and strong external, negative event, it has to be noted that the mechanism of issue competition theory is not fully supported by the results of this panel study.

We found the strongest evidence for a zero-sum game in concern for the climate for the attitudinal dimension. However, our results suggest that this mechanism does not seem to apply at all to environmental behaviour, as

there is no apparent reason that worries about the pandemic implied that one did not have time anymore to sort household waste. In fact, the opposite occurred, as respondents actually seemed to have more time to engage in this form of environment friendly behaviour. Future research on issue competition should hence distinguish various dimensions of environmental behaviour under investigation. Next, to be able to generalise the results of this study which are based on a sample of Belgian parents, it is important that future studies investigating the change in attention for the environment and climate change include a more representative sample of people.

The relevance for policy is that different dimensions need to be distinguished. Among environmental policymakers there is a concern that attention for the environment and climate change will be neglected, as a result of other important issues and worries that rise within a society (Weber, 2015). With regard to the COVID-19 health crisis, which was tested in this research, this is obviously true for environmental attitudes. But for other dimensions as environmental behaviours, this is less obvious. This is in line with the study from Singer (2011) who states that the economy is certainly not the only issue citizens care about. Environmental and climate change concern is still present among the population, and is expressed in manners that, apparently, are perfectly compatible with the pandemic.

Notes

1 It is important to note that in June, July and August 2020 which was the time period of our data collection of the second wave of the survey, the number of cases, deaths and hospital admissions of COVID-19 were lower compared to the first months of the pandemic. Between the 1st of June and the 31st of August 2020, Belgium counted 534 deaths, 2,038 hospitalisations and 27,066 confirmed COVID-19 cases in a population of about 11 million people (Sciensano, 2021).

2 Belgium is a federal country, where education falls under the purview of the language communities. The current study was conducted only in the Dutch language education system, which accounts for ca. 60% of the Belgian population, with the other 40% comprising education in the French or German language system.

3 For the main analysis, we controlled whether the paper/online format made a difference to our results (Appendix C). In total, 47% of our panel sample filled in the paper survey while 53% opted for the online survey. The results show that the format used to fill in the questionnaire, online or offline, did not have any substantive effect on the results in the analyses.

4 It is important to note that attrition was only slightly influenced by socio-economic status. 59.75% of the full panel respondents had higher education credentials, compared to 49.06% of the respondents who participated in the first wave only.

5 As expected, there was an overrepresentation of women in our sample, as is common in surveys starting within a school context.

6 In our survey sample 93% of the respondents indicated that Dutch was their main spoken language at home while the remaining 7% mainly spoke another language at home. Looking at the education level, 5% of our respond-

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ents have a low level of education (no education, primary or lower secondary), 35% has completed middle education (upper secondary education or post-secondary education) as their highest education level. High-income groups were overrepresented: 60% have completed higher education (bachelor or above). Parental income was assessed as the subjective household income. Respondents were asked to describe their family income and had to indicate how easy or difficult it was to live within their income. 50% indicated that it was easy to live within their family income while 42% stated it was not easy or difficult to make ends meet. 7% indicated it was difficult to cope and less than 1% mentioned it was very difficult to live on the household income. In general, therefore, it has to be acknowledged that the panel respondents have a higher socio-economic status than the general population of Belgium.

7 This statement has been phrased in a negative way to limit social desirability in the answers, and is reversed so that higher answers denote more attention for the environment.

8 In Appendix B, we show the results for the different attitudes separately, and these are in line with the results shown here.

9 In Appendix B, we show the results for the different behaviours separately, and these are in line with results shown here.

10 We also wanted to test our models with an extra independent variable measuring the exposure of the COVID-19 pandemic. By doing so, we could actually look at individual respondents whose lives had been considerably uprooted because of the events. We tested our model with two extra independent variables 'change in occupational status' and 'change in household income'. The results are reported in Appendix E and show a small significant effect of change in occupation for environmental attitudes. However, due to the limited sample of respondents that have experienced these changes, the two independent variables were not included in the main analyses.

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Appendices

The Appendices A-E are only available online and can be found here: https://www.elevenjournals.com/tijdschrift/PLC/2022/1/PLC-21-00024A.