

# Fragmentation, homogenisation or segmentation? A diary study into the diversity of news consumption in a high-choice media environment

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## Abstract

A weeklong diary study ( $N=460$ ) into the exposure to news of Belgian (Flemish) adult media users (aged 25–45) shows that their information consumption is currently relatively diverse. An explanation for the observed diversity is that news consumers in Dutch-speaking Belgium have a wide array of internally balanced news titles and channels at their disposal, which they also actively consult. In addition, the study demonstrates that news consumption patterns span across all media platforms. This study thus illustrates that there is a weak influence of ideological attitudes and psychosocial dispositions on news consumption, measured in time of consumption per media title or channel. These findings call for a revision of theories of selective exposure that disregard the influence that the diversity of information supply can have on the selection procedures of recipients.

## Keywords

Attitudes, diary study, diversity, news, selective exposure

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Diversity of information is a core subject in theories of political communication and in communication policies. Historically, the focus of information diversity research and policy has been on the supply of content. With the advent of the Internet, the tables have been turning. In this age of information abundance, attention has been shifting towards the demand side. The use of consumer data and algorithms to target information to specific audiences, as well as the targeting of audiences driven by commercial imperatives, has begun to raise the question of the actual reach and effective use of news media.

This evolution has caused the focus of political communication research to shift from the study and regulation of the diversity of sources and content towards the diversity of exposure. Napoli (2011: 248) defines exposure diversity as 'the extent to which audiences consume a diverse array of content'. Content or news diversity is then often defined as 'heterogeneity of media content in terms of one or more specified characteristics' (Van Cuilenburg, 1999: 188). Different types of content diversity may subsequently be identified, such as diversity of topics, actors, opinions and locations (for a more comprehensive discussion of the political and academic underpinnings of diversity, see Helberger, 2011).

According to Stirling (2007: 709), diversity in general may be operationalised on the basis of three properties or measures: variety, balance and disparity. Variety is the answer to the question 'how many types of things do we have?'. For the study of news, this could, for example, be the distinction between highbrow and lowbrow media, or between legacy media and Internet-based outlets. Balance is the answer to the question 'how much of each type of things do we have?'. This could be the frequency of usage of news titles or channels. Disparity, finally, refers to the manner and degree in which different news titles and channels may be distinguished. Disparity addresses the question 'how different from each other are the types of things that we have?'. Disparity may, for example, be expressed in terms of the political or ideological distance between different sorts of news titles and channels.

As Stirling (2010) observes, judgements over disparity often implicitly govern the resolve of categories used to characterise variety and balance. Studies into news consumption, for example, commonly use predefined ideological or political categories to classify news media. In US-based research, this often means that ideological differences are reduced to a bipolar division between conservative and democratic media (e.g. Stroud, 2009). This is problematic because doubt can be cast on any observed polarisation effect as being produced by the method rather than by real and possibly more subtle ideological divergences in the media, or in the population. As Stirling (2007: 709) notes, defining measures for diversity 'remains highly sensitive to tacitly subjective taxonomies and arbitrary linguistic conventions concerning the implicit bounding of categories'.

To avoid this kind of pre-judgements, and unlike what is customary in studies on exposure to news, the present study proceeds without a priori categorisations of diversity. A time diary survey is used to inductively explore whether any significant patterns of news use can be found based on time of exposure per news title or channel. It is subsequently tested to what extent these findings can be explained by different parameters, such as technical platform, ideological attitudes, psychosocial dispositions or socio-economic

position. This study thus addresses the following research question: can different categories of news titles or channels be distinguished on the basis of usage, and if so, how distinct are these categories and how are they balanced?

These findings will be used to assess three competing theses on news diversity: a fragmentation thesis and a homogenisation thesis, and a third approach, called segmentation thesis that is proposed as an alternative. These three theses are reviewed in the next section. The section after that describes the methodology used to put these criteria into effect. The next section describes the data: diary research and background survey. In the last main section, a further analysis of these findings is presented.

## Competing diversity theses

Broadly speaking, two competing theses can be identified in the literature on news diversity and news consumption. The first most recent thesis is sometimes referred to as the fragmentation (Karppinen, 2009; Tewksbury, 2005) or filter bubble thesis (Pariser, 2011). This thesis is based on the technological argument that consumption monitoring techniques and algorithms are increasingly being used by news providers and other media to target individual customers with specific news content. The economic logic behind this shift is that of content customisation: the differentiation of content supply based on customer characteristics. As a result, news is selected, repackaged or even adapted to fit individual consumer expectations. News markets thus become ideologically and politically fragmented, and users are locked up in individual, algorithm-based ideological ‘echo chambers’ that reflect their own opinions (Sunstein, 2017).

Recent research, however, finds little evidence to support the fragmentation thesis. According to this research, news sites of legacy media tend to attract a majority of the political news audience, while the remaining Internet-based news providers appeal to negligible audiences (Flaxman et al., 2016; Garrett, 2009). An experimental study by Metzger et al. (2015) found that, although people generally experience more cognitive dissonance when exposed to balanced news sources than to value-consistent news sources, they are still likely to include both types of sources in their news consumption.

The second thesis, which is also the oldest, can be traced back to the ideas of the Frankfurter Schule in the 1930s and may be called the ‘homogenisation thesis’ (Hesmondhalgh, 2013: 369–375). The economic rationale behind the homogenisation thesis is that of mass production and economic rationalisation and this in the context of historically increasing media concentration. Mass production requires mass consumption, among other things, to increase revenue from sales and advertising. This stimulates news providers to use formats and criteria for news selection offering maximum appeal to their audiences, with a reduction of potential diversity as an outcome (Burton, 2010: 228–268). To reach large audiences, content moreover needs to be articulated around the most common beliefs of audience members, thus stimulating political and ideological mainstreaming (Hardy, 2014; McChesney, 2008: 38–56).

Rationalisation, in turn, means that media enterprises try to reduce costs by, among other things, a limitation of the number of journalists in the newsroom as well as a reduction of the production time for news items. The quality and diversity of outputs consequently diminish (Hardy, 2014; McChesney, 2008: 56–66). The digitalisation of media

production has increased the possibilities for rationalisation. One way that is particularly relevant in the context of diversity are the possibilities offered by digitalisation to generate economies of scale and scope by duplicating content (Champion, 2015). It has been documented, for example, that pressures to increase productivity encourage a digitally facilitated copy-and-paste type of journalism (Hendrickx and Ranaivoson, 2019; Van Hout and Van Leuven, 2016). Although research on the topic has become less popular than that on fragmentation, it is more than likely that homogenisation tendencies are still at play today.

The focus of research that supports the homogenisation thesis is different from that of research into fragmentation. While research on fragmentation focusses on Internet-based news sources and platforms, research on homogenisation tends to focus on (the digitalisation of) traditional, mainstream media. However, as illustrated by the critique on fragmentation above, a third strand of literature can be identified that explicitly considers the relation between both types of news media. This research can broadly be situated in the tradition of research on selective exposure (Flaxman et al., 2016; Garrett, 2009; Knobloch-Westerwick and Meng, 2009; Metzger et al., 2015; Nelson and Webster, 2017; Stroud, 2009; Stroud, 2010).

Inspired by this literature, and theories on selective exposure, an alternative to the fragmentation and homogenisation theses can be proposed. This alternative can heuristically be referred to as the 'segmentation thesis'. The term segmentation is borrowed from marketing. Segments are population groups with similar consumption patterns that can be identified on the basis of common characteristics (Hine et al., 2014; Slater, 1996). In the context of news consumption, such characteristics may include political attitudes, psychological dispositions, socio-economic profiles, or any other shared properties that explain observable consumption patterns. In this article, we hypothesise that segmentation may incorporate both homogenisation and fragmentation tendencies. How the interaction between both tendencies plays out depends on the interaction between production rationales and consumer behaviours that can vary over time and that are context-bound.

## **Time as a measure of diversity**

As noted in the introduction, the present research aimed to assess news diversity at user level, in terms of time spent consuming different media titles or channels. A weeklong diary study was set up to this effect. The research was conducted using an accessible multi-platform electronic time diary system, which allowed users to take real time notes regardless of their location.

The time diary method also offers distinct advantages over the survey questionnaire methods that are traditionally used for this kind of research. Measuring news consumption with survey questionnaires is difficult because survey-based estimates of news exposure generally lead to inflated self-reports by the participants due to imperfect recall and flawed inference (Prior, 2009). Time diary methods provide comparatively more accurate results (Greenberg et al., 2005).

### *Procedure and background data*

The fieldwork for this study took place from March to May 2018. Invitation letters were sent to 10,000 respondents based on a random sample from a database provided by the

national postal service, *Bpost*. After receiving the invitation letter, respondents were asked to log into an online survey and diary tool called MOTUS<sup>1</sup> to complete a pre-survey to identify their ideological attitudes, psychosocial dispositions and socio-economic background. The pre-survey was validly completed by 1006 respondents. Upon completion of the entire data collection and data cleaning process, 460 valid diaries were retained for further analysis.

As can be inferred from the drop-out of respondents during the survey, time diaries are very demanding for respondents. As it was anticipated that the final number of valid diaries would be too small to make inferences for small subgroups, it was therefore decided to homogenise the sample. Because time studies are sensitive to lifestyles and the available free time of the participants, it was decided not to include students and retired people in the sample. In addition, because digital literacy may have an influence on online news use, the age group was limited to people that may reasonably be expected to have grown up with the Internet. The study thus involved participants between the ages of 25 and 45 who were living in Flanders, Belgium.

In terms of socio-economic characteristics, the sample was well balanced. Both male and female were relatively equally represented (female: 55.9% and male: 43.9%). The age distribution of the respondents was equilibrated (25–35, 47.4%; 36–45, 52.6%). The less-educated respondents (International Standard Classification of Education (ISCED) 0–1) were slightly underrepresented with only 6.9%. The financial situation of people was estimated on the basis of a 5-point Likert-type scale, estimating the extent to which people could comfortably live with their current income. In this sample, 12.9% of respondents perceived that it was difficult to live comfortably with their income; 36.3% indicated to be coping and 50.8% found it to be easy to live with their current income.

### *Time diary set-up*

The time diary survey contained two ‘levels’ of inquiry. First, respondents were asked to register their primary activity (e.g. ‘paid work’) and/or a sub-activity (e.g. ‘having a break’). Respondents were also prompted to register the time of day that these activities took place. These questions were mainly meant to activate memory and to provide a frame of reference for the time and duration of news use. The possibility that media use was a primary or secondary activity was also included.

Second, respondents who reported news use were asked to share specific information about it. This included the titles or channels they had consulted (e.g. BBC Radio 4 or [www.bbc.com/news](http://www.bbc.com/news)) the news genre (e.g. national politics or celebrity news) and the amount of time spent consuming this news. As a last resort, people who had been consuming news directly on a web platform (e.g. Facebook or Twitter) without click-through or without being aware of the original source were registered separately. Even though some information was lost in this way, including this option lowered non-response and improved the quality of the diaries.

### *News, attitudes and dispositions*

As outlined in the first main section, the present research rests on the assumption that exposure to news can be influenced by different ideological attitudes and psychological

dispositions. The selection of parameters to assess these attitudes and dispositions was therefore meant to cover as wide a variety of parameters as could possibly be contained in a survey without damaging the quality of responses (see Supplemental Material).

With regard to ideological attitudes, the starting point was that the multi-party Flemish political landscape is divided along at least two major division lines: the left–right economic alignment of social Darwinists and egalitarians on one hand and the increasingly important new political alignment of socio-cultural conservatives and liberals on the other hand. To reflect this new political alignment, a second-order factor analysis labelled ‘ideological alignment’ was introduced in the survey that regrouped attitude scales on authoritarianism, utilitarian individualism and ethnocentrism (Elchardus and Spruyt, 2012).

Authoritarianism refers to individuals who tend to hold on to traditional values; who submit to legitimately established authority; and who are often antagonistic towards those who display behaviour outside of their norms and whom they consider to be a threat to society (Altemeyer, 1998). Utilitarian individualism stresses material success and individual self-interest (Bellah et al., 1987; Elchardus and Derks, 1998). Ethnocentrism assesses the feeling of cultural superiority of the in-group and the extent to which people feel threatened by the out-group (Elchardus and Siongers, 2007).

A number of psychosocial dispositions that are known to influence news consumption were also included in the pre-survey. These are political efficacy, political interest and political knowledge. Political efficacy can be defined as a feeling that political action can influence the political process and that it is therefore worthwhile to perform one’s civic duties. A distinction can be made between feelings of internal efficacy as an individual capability, and feeling of external efficacy as a group member. Political efficacy has been found to have an effect on news platform selection (Tewksbury et al., 2008); perception of news content (Holbert et al., 2007) and the level of online news involvement (Moeller et al., 2014). To assess news involvement, political interest and knowledge were also incorporated. Political interest has an effect on news consumption (Knobloch-Westerwick and Johnson, 2014; Strömbäck et al., 2013), while political knowledge mediates content preference (De Vreese and Boomgaarden, 2006; Prior, 2005). Thus, both are also controlled for.

## Results

As explained in the introduction, this study applies Stirling’s (2007) operationalisation of diversity as a compound of variety, balance and disparity of news consumption. As Stirling observes, a priori judgements about disparity often implicitly govern the definition of categories that will be used to characterise variety and balance. Therefore, a more formal and inductive operationalisation of diversity was opted for. This operationalisation is effectuated using *time devoted by individuals to the consumption of news* as unit of analysis. Emergent usage patterns, if any, were subsequently analysed in terms of user characteristics related to the amount of time they devoted to news.

### Disparity

Different methods were considered to explore the possible commonalities in terms of the time people spent consulting news titles or channels. A categorical principal component analysis (CatPCA) with oblique rotation was eventually opted for (Tables 1 and 2).

**Table 1.** CatPCA with oblique rotation: model summary.

Dimension	Cronbach's alpha	Total (eigenvalue)	% of variance	Rotation
1	.441	1.700	11.336	3.164
2	.329	1.443	9.619	2.481
3	.247	1.300	8.669	2.346
4	.205	1.236	8.240	2.739
5	.175	1.195	7.967	1.995
6	.106	1.110	7.402	2.479

**Table 2.** CatPCA with oblique rotation: structure matrix.

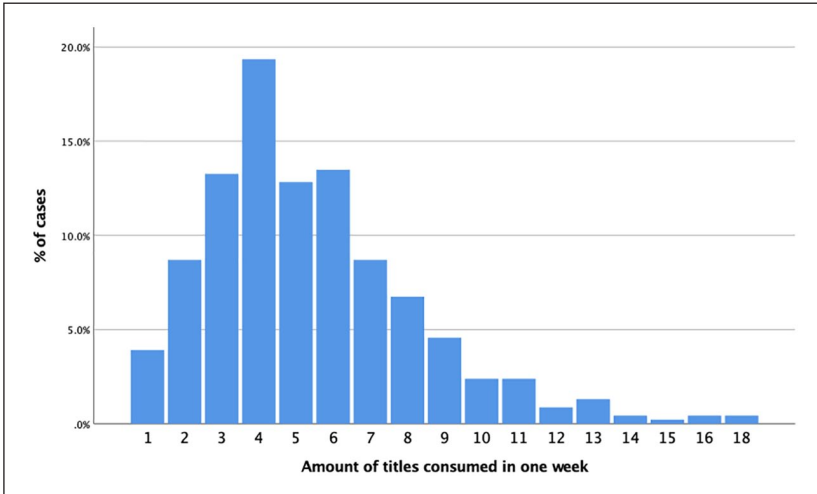
Dimension	1	2	3	4	5	6
Facebook	-.07	-.17	.06	-.18	.93	-.18
Studio Brussel	.57	-.24	.47	-.11	.02	-.62
Eén	.18	-.97	.01	.06	.05	-.18
hln.be	-.18	-.01	.91	.31	.08	-.09
Radio 1	.35	-.26	.03	.18	-.18	.88
VTM	-.89	.02	-.12	.36	-.30	-.26
Qmusic	-.94	-.06	.11	-.03	.26	.00
MNM	.02	-.08	-.10	.98	.07	-.15
nieuwsblad.be	.04	-.01	.98	-.19	-.10	.01
vrt.be	.82	-.38	-.28	.25	-.04	.31
Radio 2	-.52	-.61	-.42	.15	-.39	-.30
standaard.be	.11	.37	-.01	-.46	.13	.84
Het Laatste Nieuws	-.09	.02	.12	.98	-.03	.08
Other social media	.01	.21	-.14	.42	.86	.12
Canvas	.07	-.82	.14	-.06	.02	.51

A principal component analysis (PCA) would not yield any valid results because of the skewedness of the time variable. To improve the distribution of the time variable and allow for a categorical analysis, the time variables were divided into four categories. Time spent on each different title was ranked from one to three. The non-users were added as a fourth category. The input consisted of titles consulted by at least 10% of the sample, as the remaining titles were only used by a very limited number of respondents.

The eigenvalues of the CatPCA suggested a six-dimensional solution. The explained variance of these dimensions was low (only 11.9% for the first variable). The Cronbach's alpha's ranged from abysmal to bad ( $\alpha=.106$  to  $\alpha=.441$ ). No significant categories could thus be inferred from the dataset. In addition, no media platform effects could be identified, even with all news titles included in the analysis. In other words, based on time of exposure per title, no statistically significant patterns could be discerned.

One main finding may be inferred from this result with regard to the theses presented in the first section of this article. Internet-based news enclaves may be in gestation or exist in the margins, but they do not constitute a major phenomenon. Had such usage





**Figure 1.** Graph to illustrate the number of titles consumed per user ( $n=460$ ).

patterns been prominent, they should have shown up in the CatPCA. It should be noted, however, that due to the research design, news enclaves constituted by minor social platforms or very small news outlets that reach less than 10% of users cannot be detected with this method. To find ideological news enclaves within these very small groups, another research design is required. There may thus be users that are encapsulated into ideological news enclaves, but their numbers, calculated on the basis of exposure to titles that reach at least 10% of users, are not large enough to be statistically significant.

### Variety

The negative findings described in the previous section have consequences for the analysis of variety and balance. Normally, variety consists of the number of categories counted. Balance can be calculated on the basis of the distribution of the elements across categories. Because of lack of categories, however, it is not possible to perform the analysis in this way. The only alternative approach is to treat each individual title as a category. Variety was thus calculated by counting the number of titles consumed per user in 1 week. The findings for this measure are detailed below. A regression analysis is subsequently used to investigate the attitudes and dispositions that explain the observed variety.

On the basis of these findings and for lack of comparative material using the same measures, the average use of news consumers may be labelled as relatively diverse in terms of variety of titles consulted. As shown in Figure 1, close to 60% of users consulted three to six titles/channels per day. Another 15% consulted seven to eight titles per week. High usage of nine to 18 titles per week was reported by slightly less than 13% of users. Low usage of one to two titles was limited to less than 13% of users. It is possible, however, that the latter figure is an underestimation. An interesting additional finding is that,



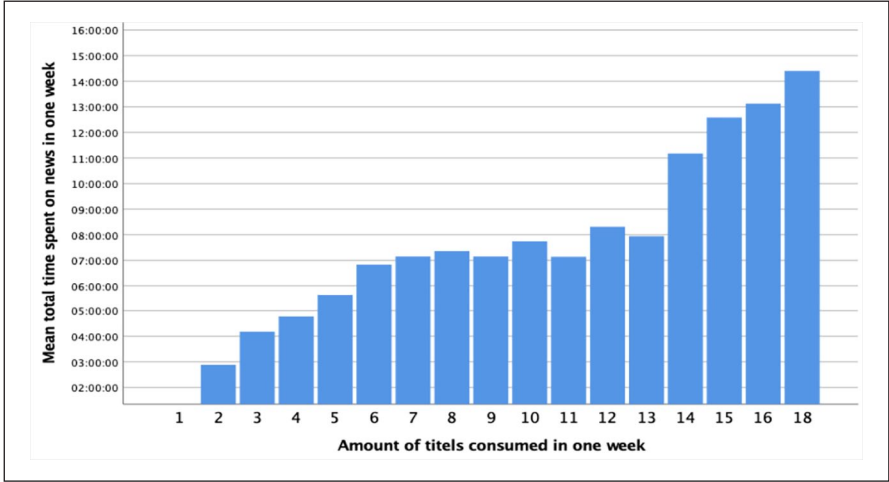


Figure 2. Graph to illustrate the duration of consumption per number of titles (n=460).

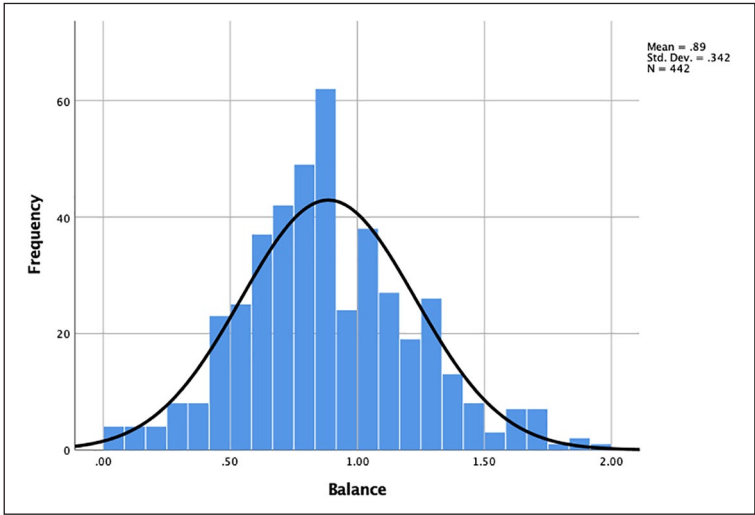


Figure 3. Graph illustrating a histogram of balance (n=442).

as shown in Figure 2, the more time people spend consuming news, the greater the number of titles or channels they consult. It is thus not only the volume of news consumed that increases with time, but also the diversity (Figure 3).

To fully understand the analysis of variety, however, the role of the mainstream media needs to be accounted for; in particular, it is important to consider that of the public service broadcaster VRT. Taken together, all VRT channels and titles (radio, TV and Web) account for more than 40% of news time consumption. If the TV mainstream

commercial broadcaster VTM is added to that of the public service, more than 50% of news consumption time is accounted for. Only 6.98% of respondents were not reached by one of these two news providers.

The variety in news consumption can be explained by different user characteristics. In terms of socio-economic characteristics, there are some weak significant correlations with higher education ( $r=.127$ ), comfortable living ( $r=.157$ ) and the male gender ( $r=.200$ ). They are included in the regression model only as control variables. The more significant characteristics are political knowledge ( $r=.306$ ), political interest ( $r=.266$ ) and perceived internal ( $r=-.330$ ) and external ( $r=-.179$ ) political efficacy.

In the regression analyses, gender, education and income effects are absorbed by political knowledge ( $\beta=.137$ ) and, more importantly, political interest ( $\beta=.212$ ). In turn political interest and political knowledge seem to be largely motivated by an underlying social attitude; namely, perceived internal political efficacy ( $\beta=.322$ ). When adjusted for all other variables, the effect of internal political efficacy is the only factor that remains significant ( $\beta=.251$ ). Finally, and significantly, variety of exposure is not affected by the ideological attitudes of users.

The interpretation of these findings should take into account the particular position of the public service broadcaster VRT. Of the top 15 titles and channels, for example, seven are public service channels (see the selection of titles and channels used in the CatPCA in the previous main section). All channels and titles included, the public service broadcaster accounts for over 40% of time spent on news.

Provisionally, it can be inferred that perceived internal political efficacy is the most important attitude in terms of the consumption of news titles or channel variety. It is relatively strongly connected with political interest and political knowledge. It could be that a sense of political efficacy awakens people's political interest and thus motivates them to acquire political knowledge through news consumption, among other avenues. Education is a supporting factor, but not a decisive one.

## Balance

As noted in the previous section, the variety of use of titles or channels increases with usage time. For a more complete understanding of this phenomenon, however, the question needs to be addressed of whether this usage time is balanced. The concept of balance in the context of time spent consulting each title or channel can be defined as equal time spent on each. Imbalance thus means that one or a few titles received more attention in terms of time at the expense of others. For instance, individuals may view five titles a week, but spend 90% of their time on one single source. News users may spend time viewing a great variety of titles or channels; however, if their consumption is very imbalanced, the notion of variety becomes almost meaningless.

Balance may thus reduce the strength of variety as a measure of diversity; a varied consumption of news titles or channels can be very imbalanced when actual time of usage is taken into account. The relative standard deviation of the elements was used to make the output comparable between respondents and to operationalise balance. It is defined as the ratio of the standard deviation (of time spent on each title) to the mean (of time spent on each title):  $balance = \sigma/\pi$ . Using this equation, a balance score can be computed for each

**Table 3.** Multiple regression analysis of variety ( $n = 346$ ).

Model	1	2	3	4
Education (ref.=low)				
Medium	.048 <sup>a</sup>	.046	.054	.061
High	.136	.074	.073	.075
Gender (ref.=female)	.117 <sup>*b</sup>	.009	-.015	-.004
Comfortable living	.123 <sup>*</sup>	.109 <sup>*</sup>	.103	.096
Political internal efficacy		-.283 <sup>***</sup>	-.204 <sup>**</sup>	-.209 <sup>**</sup>
Political external efficacy		-.086	-.072	-.054
Political knowledge			.054	.046
Political interest			.111	.114
Ideological alignment				-.051
R <sup>2</sup> adjusted	.036	.119	.126	.126

<sup>a</sup>Standardised regression coefficients.

<sup>b</sup>\* $p \leq .05$ ; \*\* $p \leq .01$ ; \*\*\* $p \leq .001$ .

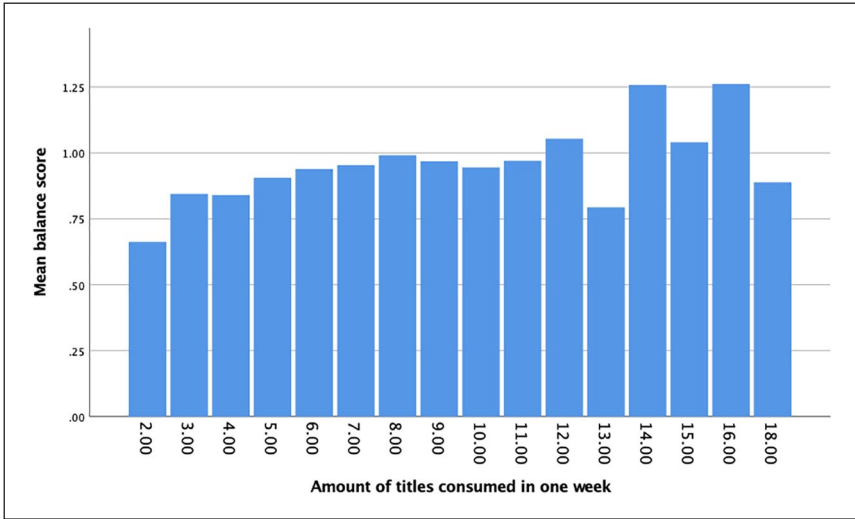
respondent. For example, respondent A consumed five different titles and spent 10 minutes on each of these different titles and will have a balance score of zero. In this context, zero is a perfect balance. Respondent B consumed five titles as well, but spent 10 minutes on four titles and 400 minutes on the fifth title. This respondent will have a balance score of almost two. In other words, the higher the score, the higher the imbalance.

A correlation analysis with the variables used in Table 3 was conducted to further interpret the balance score, but no significant strong correlations were found. However, a small correlation ( $r = .205$ ) was found between balance and variety. This meant that a drop or increase in variety resulted in a small change in balance. As shown in Figure 4, the use balance may interpretatively be considered to be fair on average, but it is relatively better balanced for people with a limited usage in terms of variety than for people with high variety of news consumption. This phenomenon could mean that the news consumption of people with a high variety was more topical; for instance, consumption consisted of punctual Internet searches.

The scores on balance, however, need to be interpreted in the light of the market position of the public service broadcaster VRT. Because the VRT represents 40% of news time consumed, an analysis of balance in which all VRT titles and channels would be combined as one title might show an imbalance in favour of the public service. The impact of this regrouping on the imbalance on the ideological content of news consumption would, however, be limited. The VRT targets the widest possible span of audiences from highbrow to lowbrow but, as is elaborated upon in the next section, the ideological balance of its news is close to identical on all of its channels.

### Three theses revisited

Three main assumptions about stratification of news use were introduced in this study: fragmentation, homogenisation and segmentation. Fragmentation posits that news users



**Figure 4.** Graph illustrating the mean balance score by variety score.

are increasingly encapsulated in individual, algorithm-based, ideological news enclaves. According to the second thesis, homogenisation, users consume a diversity of news sources; however, all of these sources are characterised by mostly mainstream content. The third and final thesis, segmentation, suggests that a more or less diversified news supply is consumed by groups of people who have relatively similar news consumption patterns, which are based on common ideological or psychosocial characteristics.

On the basis of time spent consuming news, the fragmentation thesis could relatively easily be discarded. All news titles and channels compared, no major usage patterns could be distinguished that were triggered either by platform usage (newspaper, Internet, radio and TV) or ideological preferences (social Darwinism, authoritarianism, ethnocentrism, populism and utilitarian individualism). A similar picture emerges from the research of Flaxman et al. (2016) in the US context. Their research shows that the use of social networks and search engines somewhat increases the mean ideological distance between individuals; however, they show an equal tendency for the majority of online news consumption to consist of individuals visiting the home pages of mainstream news titles or channels, tempering effects that can be attributed to Internet-based news titles. Research that incorporates all news media platforms, such as the one presented in this report, *a fortiori* reinforces these findings.

In addition to these findings, we suggest that research should take into account the internal diversity of the dominant mainstream news media in Dutch-speaking Belgium. With 40% of news viewing time, the public service organisation VRT plays a preponderant role in this respect. The public service broadcaster is legally bound to be internally diverse. The programmes and Internet pages of the public service broadcaster have to provide a balanced reflection of the diverse ideological preferences of the population. Diversity as to representations of race, gender and physical abilities (i.e. actor diversity)

is also closely monitored by a dedicated internal service of the public service organisation. In-depth academic content analysis of the news provision confirms the diversity of its news (d'Haenens et al., 2018).

The news provision of the public service broadcaster sets a *de facto* standard when it comes to diversity. To what extent this inspires other media organisations is a matter of further investigation. Using actor diversity as a proxy, Beckers and Van Aelst (2018) show that the ideological diversity of news of the main commercial TV broadcaster VTM is comparable with that of the public broadcaster. The main difference is that the commercial broadcaster provides more 'soft' news than the public service. If the time spent by news consumers of the VTM is added to the 40% of the public service, a sum total of more than 50% of news consumption time is attained. Jointly, VTM and VRT reach virtually all individual news consumers.

The abovementioned findings could be interpreted as a confirmation of the homogenisation thesis. The model of diversity of the public service broadcaster is one of 'reflective diversity', which means that its news should be 'impartial', meaning that it should reflect the ideological balance of society, often interpreted in practice as respecting electoral proportions (Raats et al., 2016). From a critical perspective, the VRT may thus be said to represent the status quo. Such an interpretation, however, disregards two other aspects. First, the public broadcast is internally diverse indeed, and minority voices can be heard (particularly on the highbrow channels). Second, people have access to and, as this study demonstrated, do use other sources.

On the basis of the overall findings of our study, a 'segmentation thesis' that integrates both fragmentation and homogenisation tendencies might be put forward instead. The findings indeed suggest that the majority of people who spend time consulting news sources tend to combine more ideologically coloured news sources with the less coloured or 'balanced' sources offered by the mainstream broadcasters. On the basis of the overall findings of our study, a 'segmentation thesis' was explored as an alternative to fragmentation and homogenisation. Segmentation assumes the existence of relatively homogeneous subgroups of news users based on, for example, socio-demographic characteristics, socio-economic position, attitudes or perceived needs. The findings are not unequivocal. News users with high feelings of political efficacy are the most likely to consume a greater diversity of news sources than others. Users with pronounced feelings of political efficacy are likely also users with a high political interest and knowledge. Only weak correlations, however, were found with the ideological alignment of users. How ideological alignment relates to political efficacy, interest and knowledge remains a subject for further investigation.

The finding that the segmentation of audiences is relatively weak, or at least complicated, however, is relevant in itself. This finding calls for a reappraisal of studies – in particular those based in the United States – whose focus is mostly on the effects of partisan media on selective exposure; that is, the extent to which people's choice of media channels or titles corresponds with their ideological preferences (e.g. Knobloch-Westerwick, 2009; Stroud, 2010). The issue of the relation between selective exposure and internally diverse or 'balanced' news provision is insufficiently addressed in this literature. This may be due to that fact that the United States is more polarised in terms of news provision and the political situation, which warrants this focus. Nevertheless, theoretically, an important aspect of selective exposure might be overlooked as a result.

Metzger et al. (2015) develop a similar argument. They tackle the issue in an experimental study of the relation between cognitive dissonance and the balance of news (the authors use the concept of balance and credibility interchangeably). One of the conclusions of their research is that although people generally experience more cognitive dissonance when exposed to balanced news sources than to value-consistent news sources, they are equally likely to include both types of sources into their news consumption.

There are two possible explanations for this phenomenon. Metzger et al. (2015) find that participants in their experiment experienced 'balanced' messages as more 'credible' after consuming them, and assume that this motivated their choice. However, it may be questioned on cognitive grounds whether people actually make an *a priori* credibility assessment when consuming news on a day-to-day basis. First, a lot of news consumption might be tight to habitual media consumption. Second, it may be questioned whether the majority of people are intellectually equipped to distinguish balanced from unbalanced news sources in an instant.

An alternative explanation can be drawn from cognitive psychology. Cognitive science demonstrates that people automatically tend to filter out or reinterpret value inconsistent information. This happens because people's perception of information is filtered by mental schemes that guide information processing in an expectancy consistent manner (Hunzaker, 2016; Neisser, 1978; Sherman et al., 2000; Strauss and Quinn, 1997; Vaisley, 2009). This cognitive mechanism would explain why balanced information or internally diverse sources are not necessarily experienced by news consumers as value inconsistent to the extent that they trigger news avoidance.

These findings feed the assumption that news users who are confronted with a multitude of (internally) diverse messages, interpret messages selectively, depending on cognitive interpretation frames that have been shaped by their personal, family and social life trajectories and are influenced by their current living conditions and social contexts. Future research should therefore extend its scope on selective exposure into the realm of the selective perception of media messages.

## Conclusion

This study was conducted in a news media market of a small Western European country with a strong public broadcasting tradition, which led to the rejection of both a fragmentation and a homogenisation thesis on news media consumption. Findings demonstrated that research on selective exposure was a promising avenue for researching the segmentation of news markets but these theories may be improved in two ways. First, the research on selective exposure needs to pay attention to the different ways in which the supply of news influences the participants' exposure to news. Second, theories on selective exposure should offer an account of how people react to internally diverse media content.

Both aspects should be incorporated into the research design. To put it bluntly, if news use is *a priori* categorised in bipolar terms – as left/right or liberal/conservative – and news supply is also conceived in bipolar terms, the outcome cannot be expected to be much other than bipolar as well. This study tackled this critique using diverse scales to assess people's ideological attitudes and psychosocial dispositions and set up a detailed diary survey to estimate people's actual news consumption in terms of time spent on it.

It was consequently found that the consumption of news titles and channels in Flemish-speaking Belgium is relatively diverse in terms of variety, balance and disparity. Balance and disparity of content consumption may be attributed to the prevalence of internally diverse news media. This is a relevant conclusion, both in political and policy terms. It means that internally diversified news sources do reach people which, in turn, legitimates public service policies that offer guarantees for such diversity. A strongly diverse partisan media landscape may be said to be less diverse in terms of use than one including strong internally diverse news providers operating at arm's length of the government and commercial interest groups.

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### Supplemental material

Supplemental material for this article is available online.

### Note

1. [www.vub.be/TOR/project/motus-infrastructure-for-continuous-modular-online-time-use-survey/](http://www.vub.be/TOR/project/motus-infrastructure-for-continuous-modular-online-time-use-survey/)

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