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Collective Action and Provider Classification in the Sharing Economy

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Collective Action and Provider Classification in the Sharing Economy

Abstract

Conditions in the sharing economy are often favourably designed for consumers and platforms but entail new challenges for the labour side, such as substandard social-security and rigid forms of algorithmic management. Since comparatively little is known about how providers in the sharing economy make their voices heard collectively, we investigate their opinions and behaviours regarding collective action and perceived solidarities. Using cluster analysis on representative data from across twelve European countries, we determine five distinct types of labour-activists, ranging from those opposed to any forms of collective action to those enthusiastic to organise and correct perceived wrongs. We conclude by conjecturing that the still-ongoing influx of new providers, the difficulty of organising in purely virtual settings, combined with the narrative of voluntariness of participation and hedonic gratifications might be responsible for the inaction of large parts of the provider base in collectivist activities.

Keywords: collective action, informal employment, occupational identity, online communities, sharing economy, trade unionism.

Collective Action and Provider Classification in the Sharing Economy

Introduction

With an estimated 17% of EU consumers having used some form of sharing platform (Eurobarometer, 2016), the growth of the sharing economy¹ has been heralded by some as an empowering transformation, responsible for increasing overall market flexibility (European Commission, 2016; Horton and Zeckhauser, 2016). However, the ‘on demand’ and disintermediated nature of commercial sharing has faced heavy criticism for its low standards of labour quality (Aloisi, 2016; Hill, 2015; Slee, 2015; Van Doorn, 2017), particularly amongst those who provide their assets akin to a full-time job (Böcker and Meelen, 2016; Schor and Attwood Charles, 2017).

Moves to collectivise within this emerging labour force have already achieved some benefits, ranging from the social benefits of engagement in online communities to the legal achievements gained from more organised unionisation (Davies, 2017; Lee et al., 2015; Rosenblat and Stark, 2016). However, research has only started to empirically examine the opinions and behaviours of the providers (Huws et al., 2017; Wood et al., 2018). Particularly, there is a lack of evidence about providers’ occupational identification and desire to engage in collective action. Instead, current discussions on this topic largely regard sharing economy providers as a somewhat unified group, with an assumption of shared interests, equal involvement and shared motivations (Scholz, 2016). Without an appreciation of the heterogeneity amongst providers in the sharing economy, ongoing discussions about the potential for collective action by academics, policy makers and the media are liable to both assume and encourage the existence of a single worker solidarity, rather than appreciate the often conflicting multitude of separate worker solidarities.

This article therefore presents a detailed exploration of the variegated nature of collectivism and solidarity among sharing economy providers. Using data from 12 European countries, we

address the following research questions: *How do attitudes about collective action and provider self-classification cluster among sharing economy providers in Europe? What characterises distinct collective action groups in terms of their demographic characteristics, sharing modalities and political leanings?*

The results determine five distinct clusters, reflecting diverse worker attitudes towards collective action and self-definition: *moderate employment advocates, activist employment advocates, independent collectivists, independent individualists, and independent opponents*. Based on these results, this article makes two main contributions. First, it provides a clustering of providers, displaying a diversity of opinions and behaviours towards both self-identification and collective action. Second, by comparing the clusters in terms of demographic characteristics, sharing modalities and political leanings, we show the important role of contextual and technological factors in both enabling and constraining worker solidarities.

Prior Research

Working in the Sharing Economy

Aligning with broader labour market trends which have seen greater recourse to informal and non-standard forms of employment (Farrell and Morris, 2017; ILO, 2015; Lehdonvirta, 2018), sharing economy providers are considered, at least from certain legal perspectives, as independent contractors rather than as employees of platforms (Cherry, 2016; European Commission, 2016; Forde et al., 2017; Prassl and Risak, 2016). Classification as independent contractors is advantageous for platforms, as it restricts their liability and negates all protections afforded by employment laws (Cunningham-Parmeter, 2016; Rogers, 2015). Many academics have, however, noted that workforce surveillance and control mechanisms undercut this designation (Shapiro, 2017). Although not bound to show up for work or accept specific tasks, providers

are nevertheless required to follow strict guidelines as to how, when and where they may offer their assets (Rosenblat and Stark, 2016; Schor and Attwood-Charles, 2017; Van Doorn, 2017).

Regarding issues of worker classification, academic discourse has tended to take a top-down perspective, with legal scholars in particular attempting to identify the appropriate definition for such work (e.g., Carboni, 2016; Cherry, 2016; Kassan and Orsi, 2012; Prassl and Risak, 2016). Such contributions, while valuable additions to the ongoing discourse, nevertheless largely ignore the element of individual self-identification, namely whether providers in the sharing economy desire to be independent contractors or employees (Huws et al., 2017). Given the variegated nature of sharing economy platforms, which offer markedly different experiences of work and levels of oversight, not all providers in the sharing economy would be properly classified as employees, even if current rules broaden their scope. Nor, given the distinction between labour-oriented and asset-oriented platforms in the sharing economy, should we expect all providers to desire re-classification since asset-oriented providers may perceive themselves as less directly ‘under the control’ of platforms (Dubal, 2017).

Collective Action

Trade unionism has long been presented as an iconic form of collective action, where collective action is understood as the activity of individuals working together to achieve a common goal. Recent literature, drawing on a long tradition of sociological research into trade union membership (e.g., Greer, 2008; Hodder and Edwards, 2015), including literature situated in specific European contexts (Goerke and Pannenberg, 2004; Gumbrell-McCormick and Hyman, 2013; Jansen, 2017; Scheuer, 2011), has emphasised how unionisation can help precarious, vulnerable and self-employed workers (Johnston and Land-Kazlauskas, 2018; Wynn, 2015). Since non-unionised workers often lack the resources, organisation or protections to engage in effective collective action (Pollert and Charlwood, 2009; Simms et al., 2013), a global challenge has

emerged of how to accommodate increasingly prevalent non-standard working patterns within traditional infrastructures of industrial action (Burgess et al., 2013; Kalleberg, 2009).

Recent advances in worker rights, as a result of collective legal efforts, have directed attention to how collective action could benefit sharing economy workers as a whole. In the UK, for instance, Uber drivers represented by GMB Union (GMB, 2017; Johnston and Land-Kazlauskas, 2018) won a legal case against Uber on the issue of worker classification, as well as the latter appeal (Davies, 2017). However, compared to more traditional work settings, the institutional context of the sharing economy renders traditional unionisation based on formal collective bargaining impractical.

Although the right of collective bargaining is protected under Article 28 of the EU Charter of Fundamental Rights (Veneziani, 2002), the European Commission has, since 2003, defined the self-employed as individual micro-enterprises for the purpose of regulation (European Commission, 2003), thus rendering self-employed individuals unable to conduct collective bargaining. Such decisions have also been upheld on a local basis. In the Netherlands, for instance, the Dutch Competition Authority had warned that the setting of minimum tariffs by a union of self-employed individuals was in violation of competition law (DCA, 2007). Workers in the sharing economy are thus accommodated by neither traditional trade unions nor employer associations (Jansen, 2017). Collective action, in the form of class action lawsuits, is further hindered by the contractual ecosystem of the sharing economy. Tippett and Schaaff (2017), examining the use of arbitration mechanisms in sharing economy contracts, found that by 2016 two thirds of companies had included an arbitration agreement and that nearly all sharing economy companies had included class action waivers.

The relevance of collective action for providers is nevertheless apparent in the use of online communities as a method of gaining social and informational support among peers (Beyer,

2014; Ewing, 2008). Research has explored the possibilities for providers to use social networking sites, for instance, to communicate their work experiences, gain advice, and permit conflict expression (Cohen and Richards, 2015; Richards, 2008; Sayers and Fachira, 2015; Wood, 2015). The presence of online support groups can thus benefit providers, even in cases where there is relatively passive engagement (Mo and Coulson, 2010).

Ethnographic research has found that Uber providers, for instance, used online communities to complain about the company and make sense of algorithmic features (Lee et al., 2015; Rosenblat and Stark, 2016). Online communities can also be leveraged to enable grass-roots forms of activism (Salehi et al., 2015; Stephenson and Wray, 2009). Chen's (2017) study on labour activism among Didi Taxi Drivers demonstrates that online communication, in this case through mobile social media sites, can help to transmit information about strikes. Research on online-driven activism, however, has shown that collective action must navigate the unique social dynamics of the internet (Earl and Kimport, 2016; Fitzgerald et al., 2012) and that online communities are liable to fail, particularly when the political stakes are high (Beyer, 2014). Moreover, members of activist communities which operate online only may struggle to achieve trust (Dahlberg, 2001), particularly since collective action online leverages personal risk for those involved, in terms of their reputation on the platform or their account (Beyer, 2014).

Collective Identity

Collectivism, as discussed by McBride and Martinez Lucio (2011), remains a flexible and rich concept within the study of work and workers. Collective action, whether online or offline, nevertheless requires a sense of collective identity and a subjective awareness of a worker's own collective power to pursue their interests (Hyman, 2001; Kelly, 1998). Indeed, for Kelly and Kelly (1994), the most significant correlate of unionisation is the strength of group identi-

fication. However, workers in unclear or disadvantageous positions are first compelled to engage in what Chun (2009, p. 18) terms ‘classification struggles’, with a pre-requisite for collective action being a sense of common class-consciousness (MacKenzie et al., 2006).

From a sociological point of view, mobilization theory demonstrates the importance of group interest identification (Kelly, 1998), with Hyman (2001) in his systematic account of union identity, recognising the tensions which can arise when interests diverge. As has been well established in the current literature, individuals partake in the sharing economy for a variety of reasons, ranging from monetary to social and hedonic benefits (Bucher et al., 2016). These divergent interests can be further exacerbated by political differences (Korpi and Shalev, 1979), where previous studies have found that left-wing orientations correlate positively with union membership (Jansen, 2017; Kollmeyer, 2013) and attitudes towards collective action (Turner and D’Art, 2012; Hague et al., 1998).

From an economic angle, it is also expected that collective identity is dependent on attachment to the labour force, which decreases in instances of part-time or flexible work (Jansen et al., 2017). With flexibility touted as a cornerstone of the sharing economy, many people are attracted to the sharing economy for the flexibility it offers and engaging only on an occasional basis (Eurobarometer, 2016; Huws et al., 2017). However, recourse to sharing economy platforms for income generation can also occur as a result of job scarcity and income insecurity, with many users providing on a full-time basis (Böcker and Meelen, 2016; Schor and Attwood Charles, 2017).

The particular technological context of work in the sharing economy, characterised by a lack of co-presence, may further reduce a sense of solidarity (Lehdonvirta, 2016; Sampson, 1988). In the sharing economy, not only are providers distributed geographically, their separation is also inbuilt into platform architecture where the only forms of worker rationality are comparison

metrics (Guyer, 2016). Moreover, there is a notably high churn rate for sharing economy providers (Van Doorn, 2017). A fragmented and changing labor force thus makes it difficult for workers to forge the initial contact necessary to evoke collective identity (Finkin, 2016).

The remainder of the article shows the differentiated opinions and practices of European providers regarding collective action and identity, thus answering the first research question. It also connects these different opinions to sociological and structural factors, answering the second research question.

Methods

Sample and Data

The authors conducted an online survey across twelve European countries: Denmark, France, Germany, Ireland, Italy, Norway, the Netherlands, Poland, Portugal, Spain, Switzerland and the United Kingdom. The selection of countries was based on a combination of theoretical and practical reasons. In terms of representation and theoretical reasoning, the authors wanted to include at least one country from Northern, Southern, Eastern, Western, and Central Europe. Furthermore, the authors aimed at covering the largest European countries in terms of population (Germany, United Kingdom, France, Italy). The field work took place in June and July 2017. For the recruitment of participants, the authors collaborated with an ESOMAR-certified, international and UK-based survey provider to access a high-quality representative respondent pool.

A total of 6,111 respondents was collected, with a target number of 500 respondents per country. This sample was nationally representative of the age group 18-65 in terms of age, gender and area of residence. The respondents received a small financial compensation for participating in the survey. Key limitations of the survey are its sampling approach (quota sampling) and

its cross-sectional nature. In this sense, the data is better suited for describing the status quo of the sharing economy across different European countries than for investigating long-term trends or making strong causal claims.

The questionnaire was programmed in Qualtrics and the average response time was 760 seconds. Quality assurance on the side of the survey provider guaranteed that low quality respondents (e.g., those speeding or through-lining) were replaced. Depending on their answer to a filter question, respondents were grouped into one of four response streams: providers, consumers, aware non-users and non-aware non-users. 556 (9%) respondents in our sample were classified as providers, 1,143 (19%) as consumers, 3,818 (62%) as aware non-users and 593 (10%) as non-aware non-users. In the following, the focus is on the provider sub-sample (N = 556), as they most closely represent the workers. Among the provider sub-sample, Airbnb, Uber and BlaBlaCar emerged clearly as the most frequently used platforms. Since the remaining platforms had low or very low numbers, they were grouped into a platform category 'Other'.

Within this category 'Other', a large number of small platforms were mentioned². These platforms included services in the areas of peer-to-peer lending (e.g., Zopa, Auxmoney), home-sharing (e.g., Wimdu, HomeExchange), object-sharing (e.g., Streetbank, Peerby), ride-sharing (e.g., GoMore, Liftshare), car-sharing (e.g., Snappcar, Sharoo), and food-sharing (Refood, foodsharing.de). A substantial number of respondents (170 in total) wrote down services that do not correspond to our strict definition of the sharing economy, such as eBay, Allegro, and Le bon coin, or general purpose online and social media platforms such as Facebook and Google. These providers were excluded from further analysis, leaving us with a final sample of 386 providers. 43 percent of these providers are female, their average age is 36 years (SD = 11 years), and the mode category for education is higher secondary (32 percent), followed by Bachelor (29 percent), and Master (27 percent). Table 1 shows the country distribution of the final sample.

Table 1: Provider sample distribution by country

	Frequency	Percent	Cumulative percent
<i>Denmark</i>	28	7.3	7.3
<i>France</i>	70	18.1	25.4
<i>Germany</i>	31	8.0	33.4
<i>Ireland</i>	26	6.7	40.2
<i>Italy</i>	48	12.4	52.6
<i>Netherlands</i>	10	2.6	55.2
<i>Norway</i>	29	7.5	62.7
<i>Poland</i>	43	11.1	73.8
<i>Portugal</i>	21	5.4	79.3
<i>Spain</i>	45	11.7	90.9
<i>Switzerland</i>	18	4.7	95.6
<i>UK</i>	17	4.4	100.0
<i>Total</i>	386	100.0	

Measures

Collective action and collective identity were measured with four variables. The first three variables are based on 5-point Likert-scale questions and gauge respondents' attitudes about collective action (two questions) as well as their behaviour (one question). The behavioural question targeted participation in online communities, since the expectation was of very low prevalence of unionisation in a survey targeted at the general population. Table 2 shows the question wording and basic descriptive statistics. These four questions were entered into a cluster analysis (see below), forming the basis for distinguishing the clusters.

Table 2: Measurement of collective action and provider classification

Question Number	Question Wording	Means (Standard Deviation) and Percentages
1	<i>Providers in the sharing economy should have a trade union.</i>	2.91 (1.09)
2	<i>It is easy for providers to organize collectively.</i>	3.11 (1.01)
3	<i>I use online communities to connect with other providers.</i>	2.89 (1.19)
Response options for questions 1-3: 1-strongly disagree, 2-somewhat disagree, 3-neither agree nor disagree, 4-somewhat agree, 5-strongly agree		
4	<i>In your opinion, how should providers be classed?</i> a) As employees who work directly for the sharing platform. b) As independent contractors who use the sharing platform to connect to potential customers.	% a) 31.6 % b) 68.4

In addition, the survey aimed at measuring respondents' demographic and socio-economic characteristics, their political attitudes and their sharing modalities in order to differentiate the clusters in a second step. Age in years, gender and education based on the ISCED categories, as well as yearly gross household income were collected. Political attitudes were measured with the following question: "*In political matters, people talk of 'the left' and 'the right'. Please indicate where you would place your own views, generally speaking? 1 means 'very left' and 10 means 'very right'.*" (Peffley and Rohrschneider, 2003). Sharing modalities covered motivations for sharing, frequency of providing, whether providers used their income as the main source of income or as supplementary income and the most frequently used platform. Four items oriented on motive typologies from previous studies (Bucher et al., 2016; Hamari et al. 2016) were used to assess users' motivations for using sharing platforms. These four items were

queried on 1-5-Likert scales, with higher values indicating more agreement. Financial motivations were most pronounced (arithmetic mean 3.45, SD = 1.16), followed by social responsibility (3.06, SD = 1.17), social aspects (2.88, SD = 1.17) and hedonic aspects (2.87, SD = 1.13). The median sharing frequency was *once a month*. Main vs. supplementary income was assessed with the following item, where respondents had to select one of the options: “*The income I get from providing on the sharing platform... is my main source of income (1); is a good way of supplementing my main income (2); is just something I earn on the side, but I don't really need it (3)*”. 8.5% of respondents (33 providers) selected option 1, 30.8% (119 providers) option 2 and 60.6% (234 providers) option 3. For the most frequently used platform, workers were queried in an open text field about which platform they used most often as a provider. Subsequently, all entries were coded into Airbnb (121 providers), BlaBlaCar (151), Uber (49), and Other (65).

Connected to this, we also coded a variable whether the sharing is labour-oriented or asset-oriented. Only Uber drivers, respondents who had indicated they use both BlaBlaCar and Uber and one respondent who had indicated they work for Foodora and Uber Eats were classified as labour-oriented (52 respondents in total). The remaining 334 respondents were classified as asset-oriented due to the nature of the platforms. BlaBlaCar providers were classified, in this categorisation, as asset-oriented sharing as they conducted only trips they would undertake regardless of the platform, thus transforming the ‘ride’ offered into a pre-existing asset. This asymmetrical division between labour-oriented and asset-oriented providers reflects the nature of the sharing economy sample, being inclusive of more ‘sharing-type’ platforms, as opposed to more ‘gig-economy’ type platforms. We expect that an altered framing of the survey, requesting ‘gig-economy’ platforms, may have resulted in a greater proportion of labour-oriented providers.

We coded the type of sharing platform based on seven categories: home-sharing (e.g., Airbnb, Wimdu; 130 providers), ride-sharing (e.g., BlaBlaCar, GoMore; 157), ride-hailing (e.g., Uber;

49), car-sharing (e.g, Snappcar, Sharoo; 7), object-sharing (e.g., Peerby; 19), food-sharing (e.g., foodsharing.de, Feastly; 4), and peer-to-peer-lending (e.g, Auxmoney, LendingClub; 20).

Methodological Approach

The variables shown in Table 2 were included into a cluster analysis in IBM SPSS Statistics (v.25), opting for a hierarchical cluster analysis approach with Euclidean distance as the distance measure and Ward's method as the cluster method (Sarstedt and Mooi, 2014). All variables were z-standardized to make them comparable. The authors compared all solutions with between three and six clusters and, based on considerations of parsimony and interpretability, decided to report a five-cluster solution. After the cluster analysis, a discriminant analysis in IBM SPSS Statistics (v.25) was performed, using the cluster membership as the grouping variable (i.e., the variable to be grouped or explained) and the demographic, socio-economic, political and sharing modalities variables as independent variables. Descriptive statistics were included in this analysis (means of the independent variables for each group and univariate ANOVAs) as well as function coefficients (Fisher's). The purpose of the discriminant analysis was to describe the clusters more holistically and to identify key variables that might differentiate them.

Results

The analysis proceeds in three steps. First, the responses are described descriptively, identifying overall patterns in the data. Second, the cluster analysis is reported with regards to the key variables used to group the respondents, answering research question 1. Third, the results of the discriminant analysis are displayed. This serves to differentiate cluster membership based on demographic and sharing-related variables, thus answering research question 2.

Descriptive Findings

On aggregate, providers express mixed opinions about the need of a trade union, the difficulty of collective organisation and the use of online communities (Table 3). The large number of respondents who selected scale category 3 (neither agree nor disagree) and the variance of the items suggest ambivalence, and possibly uncertainty, towards collective action among providers. Thus, providers are divided on this issue and far from thinking collective organisation is necessary and easy.

Table 3: Distribution of collective action variables

	Question 1 <i>Providers should have a trade union.</i>	Question 2 <i>It is easy for providers to organize collectively.</i>	Question 3 <i>I use online communities to connect with other providers.</i>
<i>Strongly disagree (1)</i>	12.2 (47)	6.7 (26)	16.6 (64)
<i>Somewhat disagree (2)</i>	20.7 (80)	17.4 (67)	18.4 (71)
<i>Neither agree nor disagree (3)</i>	37.6 (145)	42.2 (163)	32.98 (127)
<i>Somewhat agree (4)</i>	22.8 (88)	25.1 (97)	23.8 (82)
<i>Strongly agree (5)</i>	6.7 (26)	8.5 (33)	8.3 (32)
Arithmetic mean (SD)	2.91 (1.09)	3.11 (1.01)	2.89 (1.19)

Percentages are displayed (absolute numbers in brackets); N=386; Question 1 was adapted from the European Social Survey

(Turner and D'Art, 2012), Questions 2 and 3 were newly developed

Around one third of all providers report using online communities to connect with other workers. Substantial and significant country differences in the use of online communities also exist among providers ($F=3.72$, $p=0.000$). These differences may be attributable to different language contexts and regionally specific dominant platforms. In general, workers in Poland and Portugal

report relying on online communities the most, while those in the Netherlands, France and Germany do so the least. Providers on different platforms also reveal different response patterns to the collective action questions. For questions 1 ($F = 2.12$, $p = 0.018$) and 3 ($F = 3.90$, $p = 0.000$), the differences are significant, while for question 2 ($F = 1.76$, $p = 0.060$) they are not. Among the three major platforms in the data, Uber drivers are most favourable towards trade unions and rely by far the most on online communities, while BlaBlaCar drivers do so least. Political attitudes correlate positively, but weakly, with the third collective action question ($r = 0.12$ and $p = 0.0153$) but there is no significant correlation with the other two items ($r = 0.06$ and $p = 0.232$ for item 1 and $r = 0.07$ and $p = 0.202$ for item 2), showing the absence of a strong political dimension.³

Regarding the classification of providers, the picture is clearer (Table 4). A substantial majority of almost 70% thinks that providers should be classed as independent contractors, while about three out of ten respondents think they should be classed as employees.

Table 4: Distribution of classification variable

Question 4	Response
<i>In your opinion, how should providers be classed?</i>	
As employees who work directly for the sharing platform.	31.6 (122)
As independent contractors who use the sharing platform to connect to potential customers.	68.4 (264)

Percentages are displayed (absolute numbers in brackets); $N=386$; The question was adapted from Smith (2016)

Cluster Analysis

The descriptive analyses in the previous section have pointed to heterogeneous attitudes about collective action in the sharing economy, showing possible differentiating criteria such as country of residence and most frequently used platform. To further study this heterogeneity and

identify different groups, we performed a cluster analysis. Table 5 shows a description of the five clusters.

Table 5: Overview of clusters

Cluster Nr.	Name	Collective Action (Questions 1-3)	Provider Classification (Question 4)	Frequency and Percentage of Total Sample
1	Moderate Employment Advocates	Medium	Employees	96 24.9%
2	Activist Employment Advocates	Very high	Employees	26 6.7%
3	Independent Collectivists	High-Very high	Independent contractors	64 16.6%
4	Independent Individualists	Medium-low	Independent contractors	122 31.6%
5	Independent Opponents	Very Low	Independent contractors	78 20.2%

N=386

As seen in Figure 1, two of the clusters (2 and 3 – *activist employment advocates* and *independent collectivists*) score substantially above the overall arithmetic mean for the three collective action items. Two clusters (4 and 5 – *independent individualists* and *independent opponents*) are considerably below the mean. One cluster (1 – *moderate employment advocates*) has average values for the three collective action items. Regarding the clustering along worker classification and thus self-identification (Table 4), the cluster analysis completely discriminated along this variable. Thus, all 96 *moderate employment advocates* and all 26 *activist employment advocates* think they should be classified as employees, whereas all 64 *independent collectivists*,

all 122 *independent individualists* and all 78 *independent opponents* think they should be classified as independent contractors. In the following, we describe each cluster in more detail.

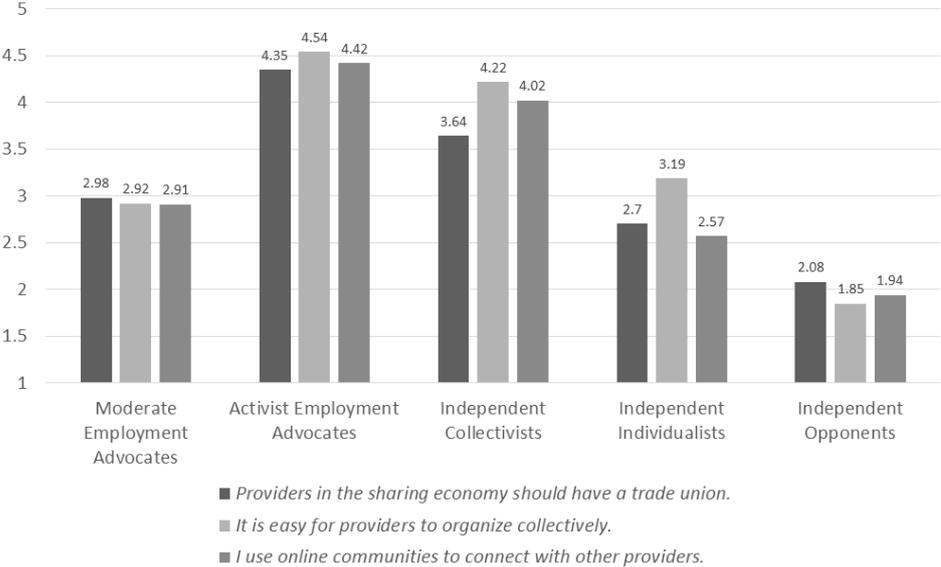


Figure 1: Arithmetic means per item for each cluster

Moderate employment advocates (cluster 1), the second largest cluster with 96 respondents in total, show a middle stance regarding collective action. *Moderate employment advocates* think that sharing economy providers should be classified as employees.

Activist employment advocates (cluster 2), the smallest cluster with only 26 respondents, are the most positive and engaged cluster, showing very high agreement with all three collective action questions. Not only are *activist employment advocates* strongly in favour of unionisation, they also engage very actively in online communities and think it is easy for providers to organise collectively. Members of this cluster embrace the idea of sharing economy providers as employees.

Independent collectivists (cluster 3), the second smallest group with 64 respondents, are in favour of collective action, think it is easy for providers to organise collectively and are active in

online communities. While they resemble *activist employment advocates* in their stance towards collective action, they view providers as independent contractors rather than employees.

Independent individualists (cluster 4), the largest cluster representing 122 cases, are not particularly interested in collective action. They are against unionisation and do not engage frequently in online communities. However, they think it is relatively easy to organise collectively, even more so than the generally more enthusiastic *moderate employment advocates*. *Independent individualists* also think that workers should be classified as independent contractors and not employees.

Independent opponents (cluster 5), the third largest and third smallest cluster with 78 cases, are the most extreme in their opposition to collective action. They score very low on all three collective action items and desire to be classified as independent contractors.

Discriminant Analysis

Building on the above clustering, we were interested in identifying cluster membership based on external variables, giving greater insight of the clusters in terms of key demographic and sharing-related characteristics. This allows us to embed the clusters more holistically into sharing economy attributes, as found across Europe. Table 6 shows a summary of the discriminant analysis.

Table 6: Summary of differentiation analyses

Cluster Number	Name	Demographic Composition and Other Characteristics
1	Moderate Employment Advocates	Male, young, full-time, Uber, regular use, Norway, Poland and UK, motivated by social and social responsibility benefits.
2	Activist Employment Advocates	Average gender, young, full time, Uber, very frequent use, Ireland, Poland and Spain, motivated by all benefits.
3	Independent Collectivists	Male, average age, supplement, Airbnb, frequent use, Italy and Spain, motivated by all benefits.
4	Independent Individualists	Female, old, side job/marginal income, BlaBlaCar, infrequent use, France, motivated by financial benefits.
5	Independent Opponents	Average gender, old, side job/marginal income, Airbnb and Other (small) platforms, infrequent use, Germany and Switzerland, low motivation overall (if anything by financial benefits).

The interpretations are in comparison to the overall means. “Female”, for example, means above average proportion of women in the cluster but not a female majority (as seen in the “Sample and Data” sub-section, men are over-represented among providers).

To assess general positioning within society, we used age, gender, income and education as key sociological variables. Related to education and income, as indicators of social positioning, we also included country of residence and whether providers used their income from sharing as their main or supplementary income. Together with frequency of use, this would indicate respondents’ involvement in the sharing economy. As shown in the descriptive findings section, the sharing economy platform which providers use most frequently might also provide an important context for cluster membership. Some platforms are more community-driven, while others are more individualized, competitive and dispersed. Connected to this, we included the

labour-based vs. asset-based sharing variable and type of sharing platform. Finally, we considered sharing motives and political attitudes.

Table 7 displays the results of a test of equality of groups means, obtained as part of the discriminant analysis. The table can be read as a MANOVA, where the significance column indicates whether significant differences in cluster membership between different values of the independent variables exist. Insignificant values indicate that the clusters do not differ significantly in terms of the respective variable.

Table 7: Tests of equality of group means from discriminant analysis

	Wilks' Lambda	F	Sig.
<i>Gender</i>	.984	1.533	.192
<i>Age</i>	.946	5.459	.000
<i>Country</i>	.975	2.447	.046
<i>Income</i>	.994	.557	.694
<i>Education</i>	.999	.081	.988
<i>Motive: financial benefit</i>	.969	3.012	.018
<i>Motive: social benefit</i>	.871	14.106	.000
<i>Motive: hedonic benefit</i>	.881	12.880	.000
<i>Motive: social responsibility</i>	.896	10.995	.000
<i>Frequency of providing</i>	.828	19.682	.000
<i>Main vs. supplementary income</i>	.867	14.583	.000
<i>Most frequently used platform</i>	.983	1.633	.165
<i>Political attitudes</i>	.982	1.746	.139
<i>Asset- vs. labour-oriented sharing</i>	.951	4.869	.001
<i>Sharing platform type</i>	.983	1.687	.152

N=385; df₁=4; df₂=380

Through the discriminant analysis, we are able to classify 40.5% of providers correctly based on the independent variables. While 69% of *activist employment advocates* are correctly classified, only 33% of *modern employment advocates* are (45% of *independent collectivists*, 39% of *independent individualists* and 38% of *independent opponents*). Many *modern employment advocates* (42% in total) are wrongly assigned to the *independent collectivists* and *independent*

individualists clusters through the discriminant analysis. This shows that *activist employment advocates* have a clearer demographic and sharing-related profile than the other clusters and that *modern employment advocates* are most difficult to predict based on the independent variables included. The Wilk's lambdas for the four discriminant functions are 0.59, 0.85, 0.93 and 0.98 respectively. Thus, with function 1 we are able to account for most variance in the cluster membership. The canonical correlations of the four discriminant functions are 0.56, 0.29, 0.21 and 0.16. Functions 1 and 2 were significant at least at the 5% level (p-values of 0.000, 0.032), while functions 3 and 4 were not (p-values of 0.413 and 0.653), indicating that they have limited discriminatory predicting power. The frequency of providing, main vs. supplementary income, hedonic, social and social responsibility motives identify function 1 most strongly. Financial motives as well as age and asset- vs. labour-oriented sharing identify function 2 most strongly. Social motives, main vs. supplementary income, political attitudes and most frequently used platform identify function 3 most strongly. Finally, gender and country of residence identify function 4 most strongly. Function 1 differentiates the *activist employment advocates* most strongly. Function 2 differentiates the *moderate employment advocates* most strongly. Function 3 differentiates the *activist employment advocates* and *independent collectivists* most strongly. Finally, function 4 has limited differentiating power but differentiates the *independent opponents* most strongly.

Overall, the clusters do not differ significantly in terms of income, education, gender, political attitudes, most frequently used sharing platform and sharing platform type but they do so in terms of all other variables considered. The Wilk's lambda indicates that the clusters are differentiated most strongly by the frequency of providing and whether providers use the income from providing as their main or supplementary income. Age is by far the strongest demographic differentiator, followed by country of residence. Asset- vs. labour-oriented sharing and different

modalities differentiate the clusters significantly as well. We proceed to describe each cluster based on the results from the discriminant analysis.

Moderate employment advocates (cluster 1): This cluster of regular users is comparatively young (average age 33), male, and motivated beyond financial benefits, caring about social and social responsibility aspects. It has a relatively large share of Uber drivers and can be found disproportionately in Norway, Poland, and the United Kingdom.

Activist employment advocates (cluster 2): These providers are young, frequent users of sharing platforms and rely heavily on their income from sharing, especially through driving for Uber. In line with their strong involvement in the sharing economy, *activist employment advocates* are strongly motivated by all sharing benefits assessed.

Independent collectivists (cluster 3): This cluster is predominantly male and disproportionately often based in Italy and Spain. Airbnb is a primary platform used among the members of this cluster and, like the activist employment advocates, they are motivated by all factors assessed.

Independent individualists (cluster 4): Members of this cluster are disproportionately female, old and living in France, not depending heavily on their income from providing but still providing mostly for financial motives. BlaBlaCar is a frequently used platform among this cluster, although overall use frequency is low.

Independent opponents (cluster 5): Members of this cluster are often residing in German speaking countries (Germany, Switzerland), provide on Airbnb or small platforms, do not rely on their income from providing and are characterized by infrequent use of sharing platforms as well as lower than average motivation.

Discussion and Conclusion

At a high level, this paper demonstrates that a substantial proportion of European sharing economy providers welcome trade unionisation, think it is feasible to organise collectively and already take part in online communities. However, the majority of providers think they should be classified as independent contractors rather than employees, limiting more organised forms of collective action. Rather than approaching providers as a pre-existing collective which merely needs an organisational catalyst, our findings indicate that a multi-focal and differentiating approach is required, which takes into account the inherent fragmentation and heterogeneity in the experiences and attitudes of providers.

Indeed, in our analysis, we stress the diversity among different provider sub-groups. The two extreme groups of *activist employment advocates* and *independent opponents* are clearly identifiable and relatively distinct in terms of sharing modalities and country of residence; while they show solidarities among themselves, they are of a completely divergent nature compared to each other. For collective organisational forces, such as emergent trade unions, it would be thus profitable to focus on recruiting *activist employment advocates*, while limiting energy expenditure on those *independent opponents* who might not only resist collectivism, but also actively hinder it.

The three “middle clusters” remain somewhat more mysterious, yet represent the bulk of provider sample in this paper. While *moderate employment advocates* want to be classified as employees, they show only limited collective action. That these providers want to be classified as employees, yet engage in only moderate collective action, suggests that they are more interested in a ‘quick fix’ than in active engagement for their cause. Emerging trade unions might have particular difficulty in reaching out to this group, particularly compared to *activist employment advocates* and *independent collectivists* who show high engagement in soft forms of collective

action and welcome trade unionisation. However, *moderate employment advocates* are motivated by social and social responsibility factors, which might trigger them to get involved in local organisations in the future. That only 33% of the *moderate employment advocates* could be accurately identified also shows that this might be a somewhat fleeting group that may be swayed in either direction.

One interesting contribution of this paper to the literature on collective action is that our results differ in some regards from existing opinions about demographic predispositions towards trade unionism in Europe. For example, whereas education was an important predictor in Turner and D'Art's (2012) study, with more educated respondents being less trade union-friendly, education was non-significant in this study. Our findings regarding political orientation similarly differ from existing literature, where left-leaning citizens tended to be more union-friendly (Turner and D'Art, 2012; Hague et al., 1998). In our findings, there was only a very weak connection between political attitudes and collective action. Among consumers and aware non-users, however, the directionality from previous research is maintained². Compared with other cross-country studies which present opinions towards trade unions (Keune, 2015; Tailby and Pollert, 2011; Vandaele, 2012), we also do not find more negative attitudes among young workers. Rather, the clusters with the most negative attitudes, *independent individualists* and *independent opponents*, are comparatively old.

In general, our findings suggest that it is structural factors, more than demographic factors, which drive collective organisation and class-identification. Looking more closely at the results of the discriminant analysis, we found that variables related to sharing modalities were the strongest differentiators for cluster membership, particularly whether workers used their income from providing in the sharing economy as their main source of income, their frequency of providing, their motives and whether they participated in asset- or labour-oriented sharing.

As Keune (2015) suggests, disengagement in trade unions is not so much due to negative attitudes but rather due to “*structural factors, a lack of interaction between unions and young workers and a mismatch between union policies and young people’s expectations*” (p. 3). If the most discerning variables for the discriminant analysis can be understood as structural factors, this narrative accords with the narrative that collective action engagement is tied to structural factors, more so than demographic factors or personal opinions.

Indeed, the dispersed, on-demand and technologically mediated nature of the sharing economy offers a valuable context for viewing the propensity of collectivity among a new class of workers or providers, whose activities are reflective of broader labour market trends. As outlined, platforms do not facilitate communication between providers and use legal tactics to prevent re-classification as employees. In this distributed environment, providers may face difficulties in reaching out to each other. This is in addition to the broader difficulties which arise from finding a single collective identity among a group with diverse motivations and experiences.

The differentiating effect of the role of the platform also carries with it suggestions of difference based on labour type. As an aspect of working in the sharing economy, this should not be overlooked. Differences in attitude towards classification can be broadly aligned with the increasingly visible distinction between asset-oriented and labour-oriented providing in the sharing economy. Indeed, that income and education were not significant in our study indicates that horizontal rather than vertical inequalities might be at play more strongly here, corresponding to the differences in working experience.

Although ‘sharing economy platforms’ were grouped together initially, due in part to media narratives and value signalling among platforms, the maturation of the sharing economy over the last decade has highlighted a fundamental rift between asset-oriented and labour-oriented platforms. Ride-hailing platforms, for instance, align ever more closely to traditional conceptualisations of work and labour as the work can be viewed as merely a new form of taxi-driving.

The lack of formalised rights for these providers is thus a pressing issue which can be profitably addressed through accurate classification. On the other hand, for many asset-oriented providers who interact with minimal ‘labour’ other than making their assets available to others, identification as employees could be perceived as an inappropriate over-correction of their current status. What this distinction demonstrates, perhaps most strongly, is the fragility of the term ‘sharing economy’, particularly when applied to both asset-oriented and labour-oriented platforms. The authors thus encourage future separation between asset-oriented and labour-oriented providers when discussing issues of collectivity and classification.

Overall, this article has shown that there can be multiple and conflicting solidarities among provider groups in the sharing economy and that attitudes towards collectivism need to be embedded them into a larger web of individual and contextual factors, including the role of the technology. Regulators and sharing platforms alike should be aware of the different voices among workers, with only a minority in favour of collective action (clusters 2 and 3 together make up 3/8 of the total sub-sample). However, this minority is an important group of providers who should not be overlooked due to their smaller size, since they disproportionately rely on the sharing economy as their main source of income. Without these providers, on whom the labour-oriented sharing economy is strongly reliant as a workforce, the benefits of sharing platforms for consumers and workers alike may disintegrate. Regulators and platforms would therefore be well advised to enter into dialogue with these different groups based on their specific values, desires, and habits.

In terms of limitations, it must be stressed that the survey did not measure providers’ actual knowledge about trade unions, collectivism or employment rights, indicating that their attitudes towards collective action may reflect perceptions rather than fact-based understanding. Moreover, despite the international coverage across 12 European countries, the survey sample size of 386 providers was somewhat limited and unevenly spread between the countries (Table 1).

Future research should aim for larger samples and include providers across more platforms. This would allow for in-depth cross-country comparisons.

Endnotes

¹ In this article we adopt a relatively narrow understanding of the sharing economy, where providers (e.g., Airbnb hosts, Uber drivers) grant temporary access to their personal goods to consumers in return for monetary compensation, mediated through an online platform (Newlands et al., 2017). We thus adopt a more economic lens which views the sharing economy as a multi-sided market (Gawer, 2014). We nevertheless use the term sharing economy with reservation since, by this point, there is widespread agreement that the concept of sharing is merely performative framing (Frenken and Schor, 2017; Slee, 2015) which underplays the control leveraged by platforms over providers.

² After the respondents had been grouped into the four response streams (providers, consumers, aware non-users, non-aware non-users), the provider and consumers sub-sample were asked to write down the most frequently used platform in an open text box. Subsequent questions were then queried for this particular platform.

³ The correlation for question 1 and political attitudes is negative and strongest for consumers ($r = -0.17$, $p = 0.000$) and aware non-users ($r = -0.16$, $p = 0.000$), who were also asked question 1 but not questions 2 and 3. This points to different patterns between providers on the one hand and consumers and aware non-users on the other hand.

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