Abstract

What do Europeans think and how do they express themselves on immigration issue in Europe? These questions were examined from both social psychological and linguistic perspectives. Drawing on the distinction between attitudes and perceived group (perception of others’ beliefs), mismatch between the both was tested as the determinant of Europeans’ speaking out behaviours on immigration. Using word-associations in survey and sentiment analysis in social networks, the manner of how Europeans do express themselves was examined. Overall, the results from both methodologies are congruent, showing that Europeans are generally less hostile than they perceive others being. Moreover, such a mismatch determined the speaking out behaviours in line with one’s attitude, but only for Europeans who are highly identified with European values. Moreover, semantic analyses revealed the most comment sentiments that Europeans associate with immigrants such as fear. These findings highlight the importance of considering dissent and resistance as well as conformity in studies of public opinion change on sensitive social issues.

Keywords: attitudes, perceived norm, word-association, immigration, identification, outspokenness
Attitudes and Discourse on the migration crisis in Europe: A Study at the Crossroads of Language and Social Psychology.

Introduction

For a majority of Europeans, the single most important issue facing the European Union (EU) today is immigration according to the findings of the recent 11-country study conducted recently by YouGov (2018). But how do people actually feel about immigrants and refugees? Are they generally hostile, as the rise of populist right-wing parties in several countries lead us to believe? Or can blatantly negative opinions about immigration be present only amongst a minority of Europeans?

In the present research, we take an interdisciplinary approach in order to investigate these questions. We focus on social perception and social communication by studying not only Europeans’ beliefs on the immigration issue but also the language involved and the determinants of the motivation to speak out on this topic.

From a social psychological perspective, we distinguish between personal attitudes toward immigration and the perceived group norms. From a linguistic perspective, we study the words used by Europeans when they think about immigrants and refugees, and thus looked at the perception of immigration that emerges from Europeans’ discourse and in social media (i.e., Twitter).

Attitudes and perceived group norms in social psychology

Numerous studies in social psychology and related fields have been conducted in order to examine Europeans’ attitudes towards immigrants and refugees in Europe. According to Gallup’s World Poll’s dataset, Europeans seem to have globally negative attitudes towards immigration, with the majority (52%) believing immigration levels should be decreased (IOM, 2015). Data from the European Social Survey (2016) indicated that in 2014, 60% of Europeans
felt that the immigration made crime problems worse (Heath & Richards, 2016). There is evidence that such beliefs can be politically powerful. In the U.K., people who voted to leave the EU were more prejudiced against immigrants than those who voted against the Brexit (Meleday, Seger & Vermue, 2017). Similar results were reported concerning the election of Donald Trump in the United States (McElwee & McDaniel, 2017). However, while much have been learned about personal attitudes in all these studies, very little is known about the perceived social norm regarding immigration, that is the perception of what most Europeans believe about immigration. Typically, surveys ask people to express their opinions on immigration without distinguishing between personal attitudes and group norms. As a result, people may very well express their own personal views but they may also express the views that they often hear about on the issue. Given the current lack of information on this question, one of the main goals of the present study was to distinguish the both very clearly by asking participants both to indicate their own personal views towards immigration in Europe and their perception of the views held by most Europeans on the same issue, the perceived group norm.

Theoretically, in the domain of immigration, one might assume that Europeans perceive the current prevailing norm on immigration in Europe as being unfavourable to it. The political discourses in social medias may reinforce such position. Social media discourse tends to portray immigrants and refugees in rather negative ways (KhosraviNik, 2010; Rettberg & Gajjala, 2016). Moreover, along with the last Hungarian and Italian elections, one might observe that the radical right political parties who oppose immigration continue to find support in several European countries. All these factors taken together may influence the manner of perception of others’ attitudes towards immigration in Europe.

Recent research has established that the distinction between personal attitudes and the perceived group norm is conceptually and empirically valid in that even when the two are measured in very similar ways, they still represent distinct set of beliefs (Guimond, Crisp, et
Moreover, both can be strongly related although sometimes, there can be a large discrepancy between the two (Prentice & Miller, 1993). For example, within a representative sample of French population, it was found that French respondents on average expressed positive personal attitudes towards multiculturalism and cultural diversity. However, when asked about what other French people were thinking about multiculturalism (the perceived group norm), there was a large consensus that the French were against multiculturalism (Guimond, Streith & Roebroeck, 2015). Thus, while studying personal attitudes towards immigration is certainly important, the lack of attention in current research on the perceived group norm may prevent us from uncovering important social psychological dynamics.

In the present research, this question of match (vs. mismatch) between personal attitudes and perceived group norm regarding immigration in Europe will be considered as a factor that can shape social communication on the issue of immigration. Who is likely to speak out on the immigration debate in Europe? Who may be motivated to try to convince others? When individuals perceive that they think differently from the majority, they might face two behavioural strategies. On the one hand, traditional research on conformity suggests that those whose attitudes are in line with the group should be the most likely to feel confident about their point of view, and thus to express themselves on this issue (Asch, 1951, Noelle-Neumann, 1974/1993). From the perspective of spiral of silence theory, opponents of a prevailing view are more likely to stay silent whereas the supporters of majority are more likely to speak out (Noelle-Neumann, 1993). From this perspective, Europeans who have negative attitudes towards immigration and perceive that this is the general norm in Europe and thus assume that they have the support of the majority, might be more likely to express themselves on this issue.

However, another option that people may adopt, much less often investigated, will also be considered. People may also stand up for what they believe in even if they consider their
point of view to be unpopular (Hornsey, Majkut, Loise, & Terry, 2003). For instance, Louis and collaborators have shown that individuals who perceived their attitude about Asian immigrants in Australia as being different from that of others were more likely to speak out in line with their attitude (Louis, Duck, & Terry, 2010, see also Hornsey, Smith, & Begg, 2007). These different behavioural options resulting from a discrepancy between personal attitudes and the perception of the attitudes of others raise therefore a very important question: what leads people to conform to the majority norm in one situation or march to the beat of their own drum in another? This issue will be investigated by considering the moderating role of identification with Europe.

What does being European stands for? The European Union (EU) was founded on principles of freedom, democracy, human rights and intercultural tolerance (Likata & Klein, 2002). It is generally perceived as endorsing universalistic and multicultural values. Both the EU political rhetoric and social psychological research suggest that those who identify strongly as European are more liberal and tolerant than others. Recently, Visintin and colleagues (2018) showed that across 22 European countries, European identification was associated with reduced anti-immigrant attitudes. Thus, those who identify strongly as Europeans are likely to have personal views that differ strongly from the perceived group norm, and that very discrepancy can motivate them to be more vocal on the issue.

**Word-associations in linguistics**

People’s discourse about social phenomena is often an essential determinant of current behaviours and future policies. Numerous studies in linguistics have been conducted in order to examine the discourse about immigrants and refugees in Europe, mainly focusing on the discourse in mass media (Baker et al., 2008; Solano, 2012; King & Wood, 2001) and in social media (Rettberg & Gajjala, 2016; Lee, 2017). More rarely do we have research about how
Europeans conceptualize and talk about migrants (Assimakopoulos et al., 2017; Jowell et al., 2007; Heath et al., 2016).

In the present research, we have studied what Europeans naturally say about migration when they are in an anonymous context. In order to reach this goal, we asked participants to spell out “the first thing that comes to mind when the stimulus is presented to you” (Clark, 1970). In other words, we presented two stimulus words (“migrants” and “refugees”) to individuals who had to provide spontaneously, based on what came to their mind, a unique response word (Jung, 1969; Nelson et al., 1998; Nedjadrasul, 2017). The objective of such task is to detect spontaneous “representations” of the human brain and to study the effect of attitudes and perceptions on these representations. In this sense, it is not only a linguistic approach (e.g., “which types of words are connected to this representation?”, Lacassagne et al., 2004); it is also a psychological one (e.g. “which cognitive aspects link a word to another and to abstraction?”, Nedjadrasul, 2017) and a socio-psychological one (e.g. “to what extent does a word association illustrate social representations?”, Wagner et al., 1996).

Overview and Hypotheses

In the present study, Europeans’ reactions to the migration crisis in Europe were investigated from two different perspectives. Via an online survey, their personal attitudes, their perceptions of other European citizens’ attitudes on such a sensitive issue were examined. Of particular interest is the extent to which there is a mismatch between personal attitudes and the perceived group norm, and how this mismatch can motivate speaking out behaviours on the immigration crisis. One the one hand, one can expect that the discrepancy between attitudes and perceived majority attitude will result generally in conformist behaviours (Noelle-Neumann, 1993). Those who hold positive attitude towards immigrants but perceive other Europeans being rather opposed to it, might be reluctant to express their difference. However, counter-conformist behaviours might be expected as well. The level of identification as
European is expected to be a moderator of the effects of the mismatch between attitudes and perceived group norm on Europeans’ speaking out behaviours. Populist right-wing parties that are critical of major European values of tolerance and democracy and call for the reestablishment of strict borders are systematically associated with Euroscepticism, a low level of identification with Europe. Thus, one might expect that people who do not identify strongly as Europeans to readily follow this assumed majority attitudes. In contrast, high identifiers with Europe might react otherwise. For those who are committed to the European values, who have positive attitudes towards immigration, the more they perceive others in Europe to be against immigration, the more this may motivate them of the importance to speak out on their (positive) attitudes even if it is perceived as being unpopular and minority one.

The linguistic properties of the manner of expression of one’s opinion about the immigrants and refugees were also investigated via the word association measure. Visintin et al. (2018) while studying Europeans’ attitudes on immigration issue, did not distinguish views concerning immigrants coming from European countries and those coming from non-European countries, as the use of general word “immigrants” might lead to the confusion between these two different groups of migrants. For this reason, our word association task revolved around opinions about the immigrants as well as refugees.

In order to fill in the gaps about migration perception in the discourse, the linguistic approach will first investigate the thematic references of the word-association list. With the actual migration wave, we expect that word-associations will mainly highlight feelings of insecurity, fear and anger (Baider et al., 2017). The relationships between sociodemographic (age, sex, education) and psychosocial characteristics (attitudes, perceived norm, identification) and valence of words associated with immigrants and refugees will be also examined. We expect that older individuals are more likely to support exclusion of out-groups (Gorodzeisky, 2011; Louis et al., 2010), that men are more protectionists than women (Hempstead &
Espenshade, 1996) and that a high level of education is linked to a more open-minded discourse towards migration (Louis et al., 2010).

Finally, we investigated discourse about migration in social medias. We will see what can be concluded about sentiments expressed in tweets about migration and the efficiency of an automatic sentiment analysis of these tweets. Then, migration’s mentions will be detailed: we predict that when referring to general phenomena as migration, Europeans’ references are more global than EU-related.

**Methodology**

**Participants**

A total of 546 Europeans participated in The European “Migrants2Europe” survey, an online survey circulated on social networks and European universities web sites. Four participants who indicated being born or living outside of E. U. were excluded from present analyses. Within a final sample of 542 individuals, 228 were male and 314 were female aged between 16 to 81 years with a mean age of 37.4 years ($SD = 14.51$). The majority of participants came from France ($N = 306$) and Belgium ($N = 129$), followed by Italy ($N = 30$), the Netherlands and Luxembourg ($N = 20$ in each) and UK ($N = 19$). Other participants came from different European countries such as Austria, Bulgaria, Spain, Finland, Greece, Ireland, Latvia, Poland, Portugal, Czech Republic, Romania and Switzerland.¹ The questionnaire was used in English and French languages so that the respondents could choose the language of the survey they were more comfortable with.

¹The samples from these countries were very small so the number of respondents from them is not specified. This research does not have any country-specific hypothesis.
The analysis of tweets was based on a corpus of 500,000 tweets containing the #refugees, #migrants and #réfugiés hashtags, collected from 2016 to 2018 through the Woodpecker\(^2\) system developed by Cental lab, as well as comments in response to these tweets.

**Procedure and measures**

A. **Psychosocial measures**

Participants’ *personal attitudes* towards immigration in Europe were measured with six questions (i.e., “Refugees who come to Europe enrich European culture”, \(\alpha = .90\)). Amongst these six items, three of them were reverse coded.

Six other questions assessed participants’ *perceived group norm* regarding immigration in Europe. This scale of perceived norm was created by transforming the scale measuring personal attitudes (Guimond, Crisp et al., 2013). Phrases such as “The majority of Europeans think that…” were added in the beginning of each item measuring personal attitude in order to assess the perception of others’ attitudes (e.g., “The majority of Europeans think that refugees who come to Europe enrich European culture”, \(\alpha = .71\)). To measure the perceived group norm, participants were specifically instructed to indicate if the views expressed in the statements were “commonly held in Europe”. Amongst these six items, three of them were reverse coded. Higher score on the scales of personal attitudes and perceived group norm indicated favourable attitude towards the immigration. The responses to this and all other measures were reported on a five-point scale ranging from 1 = not at all to 5 = absolutely.

The perception of *societal support* for one’s personal attitude was measured with one item “In general, I think that the society agrees with my opinion on the immigration issue” (Hornsey et al., 2003). A measure of *European identification* was obtained with two items designed to assess strength of identification with the reference group (“I strongly identify as European”) as well as feelings of belongingness to the group (“Being European is very

\(^{2}\)http://cental.uclouvain.be/woodpecker/
important to me”). The two items being highly correlated ($r = .83, p < .001$) were averaged and formed one single score of group identification.

*Europeans’ willingness to speak out* on the issue was measured by one item “I am willing to discuss my opinion concerning the immigration issue with someone with different opinion” (Louis et al., 2007). Finally, the *intention to convince others of one’s personal attitude* was measured by two items “I feel a need to convince other people that my opinion on the immigration issue is correct” and “If I disagree with others, I try to convince them of point of view on the immigration issue so they may change their mind”. These two items being strongly correlated ($r = .77, p < .001$) were averaged to create a scale of intention to convince others.

Other measures were provided within the questionnaire but they are outside the scope of the present study and were not taken into account.

B. Linguistic protocol

Word-association task

For the linguistic part, *word association measure* was introduced in the beginning of online survey. More precisely, via two questions: “What is the first word that crosses your mind when you think about migrants” and “What is the first word that crosses your mind when you think about refugees”?1, the participants were asked to indicate the words that naturally come in mind. The final analyses were conducted on 542 words or expressions4 (henceforth simply words) for each question: 447 words were in French and 95 in English.

Social network data

The analysis of social network data from Twitter was entirely calculated with automated tools and specifically statistics. The word associations in the corpus of #migration’s related

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1Items in French: Quand vous pensez aux migrants, quel est le premier mot qui vous vient à l’esprit ? Quand vous pensez aux réfugiés, quel est le premier mot qui vous vient à l’esprit ?

4Some participants did not respect the form guideline and answered several words, such as *covered up sexual assaults* and *political asylum*. 
tweets were thus analysed. R packages (mainly tidytext) were used to link the tweets’ messages and lexical units to a classification dictionary of basic feelings and emotions: joy, fear, trust, anger and sadness. For English, three lexicons were processed: NRC, the emotion lexicon from Saif Mohammad and Peter Turney, the sentiment lexicon from Bing Liu and collaborators and the AFINN lexicon from Finn Arup Nielsen. We looked into simple words, compound words and hashtags. Words with non-ASCII characters were removed from the lexicons. Lastly, analysed tweets’ mentions (i.e. preceded by @) were analysed in order to grasp the main references of Twitter users who mention migration.

**Results**

**A. Psychosocial results**

**Match and mismatch between attitudes and perceived norm on the immigration issue.**

Table 1 displays the mean scores (standard deviations) and correlations between the measures. As shown in Table 1, European participants are holding on average rather neutral ($M = 3.10$, $SD = 1.19$) personal attitudes towards the immigration in Europe, with a mean score around the midpoint of three on the five-point scale. However, the perceived norm is shown to be significantly below the middle point of the scale, $M = 2.53$, $t(541) = -15.36$, $p < .001$, indicating that Europeans are generally perceived to be negative towards immigrants and refugees.

A paired-sample $t$-test showed that personal attitudes and perceived group norm were significantly different, $t(541) = 15.00$, $p < .001$. Overall, Europeans expressed more positive personal attitudes towards immigration than they perceived to be the norm in Europe ($M = 2.53$, $SD = .71$). Attitude / perceived norm mismatch score was thus calculated by subtracting perceived group norm score from mean score of personal attitude. This score was significantly correlated with the single item measuring social support ($r = -.43$, $p < .001$): the greater the mismatch between personal attitudes and the perception of the attitudes of others, the less one
considers that “society agrees with my opinion on the immigration issue”. This evidence supports the validity of the discrepancy between the measure of personal attitudes and the measure of the perceived norm as an indicator of a mismatch. It confirms that the psychological meaning of such a discrepancy is the tendency for Europeans to feel that their personal views on the immigration issue is different from that of others in Europe.

In order to test our central hypothesis about the implication of this mismatch for the tendency to speak out on the issue, two sets of analyses were conducted. First, multiple linear regression analyses testing for main and interaction effects of personal attitudes, perceived group norm and Europeans’ identification were performed on each type of speaking out behaviour. The second set of regressions was conducted in order to examine the eventual role of social support along with its interaction with attitude and group identification.

[Insert Table 1]

Table 1

*Means, standard deviations and correlations between the variables.*

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<td>-.50***</td>
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<td>2.Perceived</td>
<td>2.53 (.71)</td>
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<td>- .30***</td>
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<td>3.Group</td>
<td>3.42 (1.37)</td>
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<td>Identification</td>
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<td>4.Social support</td>
<td>2.74 (1.08)</td>
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<td>.02</td>
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<td>5.Outspokenness</td>
<td>3.90 (1.17)</td>
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<td>.37***</td>
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<td>6.Intention to</td>
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*Note: N = 542. *** p < .001. ** p < .01. * p < .05*
Interplay between attitudes and perceived group norm as predictor of Europeans’ public outspokenness and intention to convince others

Multiple linear regressions were conducted in order to examine the main and interactive effects of attitudes, perceived group norm and group identification on willingness to speak out on the immigration issue and intention to convince others of one’s own attitude on this issue. To prevent the stability of the regressions analyses from being influenced by multicollinearity between the predictors and interaction terms, all the interaction terms were based on centered scores (Aiken & West, 1991). Firstly, group identification being controlled, main and interactive effects between attitudes and perceived group norm on the outspokenness and intention to convince others were examined in order to test our central mismatch hypothesis. Secondly, the group identification was considered in the model and examined as the moderator of the effect of this mismatch on the intentions to speak out and to convince others in case when one disagrees with the majority. The results of these regressions are displayed in Table 2 (cf. Annex).

Willingness to speak out on the immigration issue

As shown in Table 2, attitudes and perceived group norms did not predict Europeans’ outspokenness on the immigration issue ($p = .532$ and $p = .247$ respectively). Participants’ identification as Europeans, however, had a marginal effect ($B = .08, t(534) = 1.84, p = .067$), such that the higher level of identification led to greater willingness to speak out on the immigration issue. Two-way interactions Attitudes X Perceived norm, Attitudes X Identification and Identification X Perceived norm were not significant ($p = .781, p = .562$ and $p = .374$ respectively). However, a three-way interaction between attitudes, perceived norm and group identification was significant on public outspokenness ($B = -.14, t(534) = -3.50, p = .001$). Thus, simple slopes were tested by examining the interaction effects between attitudes and group norm for high identifiers (+ 1SD) and low identifiers (- 1SD). The interaction between
attitudes and perceived group norm was significant for high identifiers, $B = -.45$, $t(534) = -2.90$, $p = .004$. Once this interaction was decomposed, it was revealed that amongst high identifiers who perceived others as being unfavourable towards immigration, the more they were personally favourable to it, the more they reported the willingness to speak out on the immigration issue compared with those who were personally opposed to it, $B = .36$, $t(534) = 2.21$, $p = .028$. However, there was no effect of attitude for those who perceived others as being favourable for the immigration in Europe, $p = .189$ (see Figure 1). This result supports the hypothesis of the counter-conformism resulting from the mismatch between attitudes and perceived group norm for high identifiers. For low identifiers, the interactive effect between attitudes and perceived norm was also significant ($B = .48$, $t(534) = 3.56$, $p < .001$) but in a different sense than for high ones. It was revealed that amongst low identifiers who perceived others as being unfavourable to the immigration, the more they were personally favourable to it, the less they intended to speak out on this issue, relative to those who were personally unfavourable to it ($B = -.46$, $t(534) = -2.87$, $p = .004$). There was no effect of attitude for those who perceived the norm as being favourable for the immigration ($p = .268$, see Figure 2).

The interactive effects between attitudes, perceived norm and identification supported our hypothesis on the moderating role of the level of identification as European of the mismatch between attitudes and perceived norm at least on Europeans’ willingness to speak out on their attitude.

**Intention to convince others of one’s own attitude towards immigration issue**

The same multiple linear regression analysis was conducted on the intention to convince others of its attitude. As for willingness to speak out, the attitudes and perceived group norms did not predict the intention to convince ($p = .965$ and $p = .705$ respectively), whereas the level
of the identification did ($B = .14$, $t(534) = 3.28$, $p = .001$), such that a higher level of identification led to the greater intention to convince others of its attitude. Two-way interactions Attitudes X Identification and Perceived norm X Identification were not significant ($p = .492$ and $p = .638$ respectively). However, the interaction between attitudes and perceived norm was significant, $B = .47$, $t(534) = 8.34$, $p < .001$. Once this interaction was decomposed, it appeared for those who perceived others as being negative towards the immigration, their personal positive attitude was associated with reduced intention to convince others ($B = -.33$, $t(534) = -5.32$, $p < .001$). However, for those who perceived others as being favourable to immigration, their positive attitude led to the greater intention to convince others of their attitude ($B = .34$, $t(534) = 4.39$, $p < .001$). Finally, three-way interaction Attitudes X Perceived norm X Identification was also significant, $B = -.09$, $t(534) = -2.36$, $p = .019$. Simple slopes were tested by examining the interactive effects between attitudes and perceived norm for high (+ 1SD) and low (-1SD) identifiers. The interactive effect between attitudes and perceived group norm was not significant for those who highly identified as Europeans ($p = .270$).

However, interactive effect between attitudes and perceived norm was significant for low identifiers ($B = .77$, $t(534) = 5.90$, $p < .001$). It was revealed that amongst low identifiers who perceived others as being opposed to the immigration, their personal positive attitude was associated with the reduced intention to convince others, $B = -.45$, $t(534) = -2.39$, $p = .004$. However, for low identifiers who perceived others as being favourable to the immigration, their positive attitude was associated with the greater intention to convince others ($B = .65$, $t(534) = 3.32$, $p = .001$, see Figure 3). This result partially supported our expectation that the identification with Europe is playing the moderating role in the effects of the mismatch between attitudes and norm on communication behaviour.

[Insert Figure 3]
Effect of social support for one’s personal attitude on intentions to speaking out behaviours

Another way to test the behavioural effects of match/mismatch between one’s attitudes and the perception of that of others is to consider the relation between attitudes and societal support of it (see also Hornsey et al., 2003). As for the precedent analyses, multiple linear regressions were conducted in order to examine the main effects of attitudes, social support along with the interactive effects between these two predictors. The level of identification was also considered in model as the potential moderator of the interaction between attitudes and social support on speaking out behaviours.  

Willingness to speak out on the issue

Attitudes, social support and identification did not predict Europeans’ willingness to speak out on the immigration issue ($p = .610$, $p = .442$ and $p = .353$ respectively). Two-way interactions Support X Attitudes and Support X Group identification were not significant neither ($p = .685$ and $p = .528$ respectively). However, the interactive effect between attitudes and group identification was significant, $B = .07$, $t(534) = 1.98$, $p = .048$. Moreover, the three-way interaction Attitudes X Group identification X Support was also significant, $B = .06$, $t(534) = 2.21$, $p = .028$. This interaction was decomposed by examining the interactive effect between attitudes and social support for low (- 1SD) and high (+ 1SD) identifiers. This effect was significant for low identifiers ($B = -.21$, $t(534) = -2.32$, $p = .021$) but not for high ones ($p = .081$). It was shown that amongst low identifiers who have negative attitude towards the immigration, the more they perceive a support for their attitude the more they are willing to speak out in line with their attitude ($B = .29$, $t(534) = 2.23$, $p = .027$). There was no effect of social support on the public outspokenness for low identifiers having positive attitudes ($p = .378$).

5See Appendices for table with full details of multiple linear regression analyses predicting the intention to speak out and to convince others from attitudes, social support and group identification.
**Intention to convince others**

Main effects of attitudes and social support were significant on the intention to convince others of its’ own opinion ($B = -.13, t(534) = -2.73, p = .006$ and $B = -.15, t(534) = -2.75, p = .006$ respectively), in that negative attitudes towards the immigration and reduced social support led to the increased willingness to speak out on the topic. The main effect of group identification, however, was marginal ($B = .08, t(534) = 1.92, p = .055$). Two-way interactions Support X Attitude and Support X Identification were significant ($B = -.13, t(534) = -2.73, p = .006$ and $B = -.15, t(534) = -2.75, p = .006$ respectively). Once these interactions were decomposed separately, it was revealed that firstly, those who perceived increased support for their opinion, the more their attitude was opposed to the immigration, the more they were willing to convince others ($B = -.37, t(534) = -5.98, p < .001$). There was no effect of attitudes for those who perceived little support for their opinion ($p = .106$). Secondly, it was revealed that the less high identifiers perceived the support for their opinion, the more they were willing to convince others ($B = -.49, t(534) = -3.34, p = .001$). However, two-way interaction between attitudes and identification was not significant ($p = .742$), nor the three-way interaction between attitudes, social support and identification on the intention to convince ($p = .381$).

**B. Linguistic results**

**Word-associations in online survey**

In the precedent part, the speaking out behaviours on immigration issue were analysed from a social psychological perspective. In this part, European’s reactions about the immigrants and refugees was analysed from a linguistic perspective. Thus, spontaneous lexical associations were analysed via word-association task. The answers given French ($N = 447$) and English ($N = 95$) speaking participants are presented in Table 3.

A polarity was assigned manually to rating regarding participants’ reaction to migration: -1 for negative reaction, 0 for neutral reaction and 1 for positive reaction. Several considerations
have to be detailed about this ranking. A series of words were very ambiguous and context-dependent. In order not to exclude them from the analysis, these words were coded 0 (= neutral rating: difficulty, shame, danger, etc.). Other neutral ratings concerned facts that could not refer to a positive or negative opinion (war, itinerancy, journey). Positive ranking (1) was given to words that clearly referred to the benefits of migration (multiculturalism, diversity, potential friends), personal emotions or descriptions about the migrants suffering (compassion, sadness, welcome), all these words were not ambiguous. Negative ranking (-1) was given to words that referred to the negative impact of migration (unemployment, terrorism), migrants’ negative attitude (rape, violence, parasite) or general conspiracies form the population or politicians (lie, great replacement). The negative ranking was also assigned to words that reduced migration to a stereotype (black skin, Islam, Africans), as stereotyping is considered as a negative social stigma (Li et al., 2006). The words are given as examples in Table 3.

[Insert Table 3]

As shown in Table 3, words are more likely to refer to a positive attitude towards immigration. Only rare associations refer to negative impact of migration: invasion, envahisseurs and criminality. It is also interesting to observe that “war” is the most frequent association in both languages (16.5% and 17.9%). References to help that should be provided to migrants and migrants’ poverty also appear very frequently in both languages, as well as their state of poverty (misère, pauvreté, poor, needs…).

Comparing distribution of frequencies of percentages of participants in function of the polarity of the word expressed for immigrants and refugees in word-association task, it may be observed that the percentage of people who said positive words about immigrants (45.2%) and refugees (44.3%) was bigger than that of people who said negative words (21.4% and 14% respectively for two categories of words). Total means for each association are 0.24 (for migrants) and 0.30 (for refugees). This result shows that there is an average positive attitude
towards general migration amongst the participants and that they are in general more positive towards refugees than towards migrants.

Ten most frequent words for each question are displayed in Table 4. The most common term regarding migrants is a negative one (invasion) and also includes another one (envahisseurs), in opposition to the top ten refugees list that does not include any negative word. We also observe that refugees are mainly related to situations of conflict (guerre, war, fuite) and to their social conditions (misère, détresse). In refugees’ top 20 associations, we notice that the most common term is far more frequent than the others; it seems that it is more representative of the category.

[Insert Table 4]

**Links between word associations and social psychological characteristics**

Chi-square and Kruskal-Wallis tests were conducted in order to explore the links between three-degree polarity (ordinal variable) and sociodemographic (gender, age, education level) and psychosocial measures (attitudes, perceived norm, identification) separately.

As far as the sociodemographic profile is concerned, Chi-square tests show that firstly, female participants expressed themselves more positively about migrants ($\chi^2 (2) = 45.32, p < .001$) and refugees ($\chi^2 (2) = 30.10, p < .001$) than male participants. Then, age has a marginally significant effect ($F(3, 538) = 2.57, p = .053$) on word-association polarity with migrants. However, when it comes to refugees, the effect of age is significant ($F(3, 538) = 3.43, p = .017$): older participants (45+) have a more positive discourse about refugees than younger ones. Finally, we examined polarity practices in relation to education level: there doesn’t seem to be any relation between the level of education of our participants and opinion-oriented discourse about immigrants ($\chi^2 (8) = 13.03, p = .111$) nor about refugees ($\chi^2 (8) = 9.88, p = .274$).

In order to examine the links between psychosocial measures (personal attitude, perceived group norm, identification, continuous variables) and word-association scores,
Kruskal-Wallis tests were computed. First of all, it was revealed that word-association polarity seems to vary across the participants’ personal attitudes ($H(2) = 206.39, p < .001$): participants with a negative attitude are more likely to show a negative polarity result at the word-association exercise about migrants, as participants with a high attitude score are more likely to show a positive polarity result at the same exercise. We find the same results with the exercise about refugees ($H(2) = 136.41, p < .001$), with the effect size being slightly stronger for words on migrants ($V = .550, p < .001$) compared to that on refugees ($V = .469, p < .001$).

A link between perceived norms and refugees / immigrants polarity is also significant. It appears that participants who perceive others as being opposed to the immigration are observed to express words of a negative polarity concerning the immigrants ($H(2) = 115.22, p < .001$) and refugees ($H(2) = 75.82, p < .001$). Effects size is slightly higher for link between word polarity associated with words on migrants ($V = .438, p < .001$) compared to that for refugees ($V = .345, p < .001$), which means that the effect size is stronger for general immigration.

Regarding the link between participants’ European identification and word-association, no significant variation was found between the groups concerning the immigrants ($p = .132$) nor refugees ($p = .409$).

Finally, we calculated the possible correlation between attitudes - norms mismatch and word-association polarity. The results of Kruskal-Wallis test showed that the more a participant perceive a difference between his or her attitude towards migration and that of the majority, the more he or she will express positive words with regards to immigrants ($H(2) = 157.32, p < .001$) as well as refugees ($H(2) = 104.40, p < .001$).

**Sentiment analysis of word-association in the social network data**

Finally, a sentiment analysis was implemented on the Twitter corpus. The idea here was to refine results obtained in the survey’s word association task, by proposing deeper analyses.
Based on tidytext R package that uses sentiment lexicons, the most common words linked to #migration and to a sentiment analysis grid were analysed. It searched for simple words, compound words and hashtags in tweets that also appear in words classification lexicons. Each lexicon assigns a sentiment score which enables us to obtain a general sentiment score for each tweet⁶.

The analyses reveal various interesting trends. At first, the fear score is quite alarming as this sentiment is the most representative in our corpus (n = 62,534)⁷. Moreover, words linked to migration (immigrant, asylum) were classified as fear-related words by the lexicon programmers. Other associations were also astonishing as economy or show in the trust group and money in the joy one. There are also words that don’t fit in a particular class group as they are decontextualized. For example, we doubt the use of child in a migrants context is joyful, neither policy and food are trustful or poverty is fearful (i.e., “#PRAYER DAY God, we pray for an end to all wars, poverty and torture that cause people to flee & become #refugees or displaced”). Thus, it might be concluded that an automatic sentiment analysis of tweet messages must be much subtler and that we should probably be in favour of semi-automatic approaches of the messages where a qualitative analysis would enable a contextualization and specialization of the lexicons. Accordingly, the more precise aspects of the messages were analysed: the mentions that appear in the tweets in order to grasp the main references of Twitter users who mention migration. Mentions are commonly known as named entity preceded by the mention feature @ (e.g. @UCL). Our psychosocial interest focused on norms related to the migration theme; here, we aim at defining the main references and personalities’ network that form this

⁶See Appendices for the table summarizing the results and showing 10 most frequent sentiment words assigned by the lexicons.
⁷We have to take into consideration the fact that if this category includes words related to migration, it could be the reason why it is the most frequent category on a #migration related corpus.
norm. A wide variety of mentions, including politicians, newspapers, organizations and even general concepts can be found:

1) Politicians and religious leaders: @pontifex, @junckereu, @antonioguterres;
2) Newspapers and other medias: @reuters, @v_of_europe, @aj_english;
3) Police agencies and other organizations: @eu_commission, @amnesty, @unicef;
4) Other powerful people and particular events: @kon__k (Kon Karapanagiotidis), @behrouzboochani, @aiww (Amsterdam International Water Week);
5) Tools and private companies: @c0nvey, @youtube, @starbucks.

Even when concentrating on Europeans’ tweets, their main references are opened to the world: politicians (@realdonaldtrump, @turnbullmalcolm, @justintrudeau), medias (@guardian, @nytimes, @cnn), organizations (@UN, @asrc1, @wef). References to the rest of the world are four times more common than to European instances and people. These references show that the migrants’ concern is not limited to a specific area, but is a global problem for Europeans. Furthermore, the typology of mentions above illustrates the wide variety of instances involved in this phenomenon: Europeans take part in the media discourse by answering to media posts (ex. 2) on Twitter (i.e., “@V_of_Europe Simple solution. All women must wear burqa so not to attract attention and display anything immoral. OR you start rounding up this garbage and start mass deportations. #Diversity #multicultural #migrants”). They also call for the help of different people and organizations (i.e., “@EU_Commission Will you continue looking the other way? #Refugiados #refugees), but convict them too, when they are outraged by current events (i.e., “There’s nothing great about denying aid to millions of civilians who need it to make a political point. @realDonaldTrump cutting @UNRWA funding would be immoral, cruel and disastrous for #Palestine #refugees”).

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8 The 100 most frequent mentions found in the 500,000 tweets containing hashtags related to migration are shown in Appendices.
Finally, these words associations with the hashtags linked to migrants were compared with word-associations from the word-association task of online survey. This comparison offers additional information on participant’s spontaneous discourse in a word-association setting. We find in word-associations more references to emotions than in hashtags: malheureux, courage, tristesse, détresse, souffrance, solidarité, envahisseurs, but only in French, as in English the ratio emotion versus description seems the same than in the hashtags list. Spontaneous associations (i.e. word-associations) also include less references to proper nouns (countries, politicians…) and European references. If French associations relate more to emotions, English ones clearly refer more to moral concepts (life, culture, help, criminality, alternative…) and every day-life reality (money, work, fear…).

**Discussion**

Immigration has become a major concern in recent years. To deepen and answer part of this interest, we combined a psychosocial and a linguistic perspective to study how and when Europeans express their opinion about the so-called migration crisis.

The main objective of the psychological part of the study was to examine the effects of personal attitudes and perception of others’ attitudes towards the immigrants along with the interplay between the both factors on Europeans’ speaking out behaviours. The mismatch between attitudes and group norms was considered as a motivating factor for speaking out behaviours. Moreover, identification as European was argued to be one of the critical moderators of the behavioural effect of such a mismatch. The present findings provide general support for our expectations. First, a significant difference between personal attitudes and perceived group norm regarding the immigration was found. Accordingly, Europeans have personally less hostile attitudes towards the immigrants than they perceive others to hold. Moreover, such a mismatch determined Europeans’ public outspokenness resulting in conformist behaviour. Indeed, Europeans who are personally favourable towards the
immigration but perceive others as being rather opposed to it (i.e., mismatch), did not speak out their attitude. As predicted, the identification as European modified the implications of such mismatch on communicative behaviours. Accordingly, high identifiers who had positive attitudes towards immigrants but perceived others being opposed to it were more likely to speak out on the issue in line with their attitude. Contrariwise, for low identifiers, being in the same type of mismatch was associated with remaining silent.

As for the linguistic part, the word-association task aimed to deepen our analysis of what Europeans spontaneously say when they are asked to think about the immigrants and refugees. Results of word-associations show that the main reference to migration for Europeans is the war context, although there is an average positive attitude towards general migration. We observe that French associations relate more to emotions, English ones refer more to moral concepts. When looking into social media discourse, the sentiment analysis approach shows that the more common emotion evoked in Tweets about migration is fear.

Overall, results issued form the linguistic approach are consistent with and complementary to the psychosocial analysis of personal attitudes and perceived group norm and thus provide important contributions to the research on immigration issue in general.

Recent elections in some European countries, as Italy and Sweden, where populist and right-wing parties are given a high percentage of votes, may lead to assume that Europeans are personally intolerant towards the immigrants. However, as shown by our psychological and linguistic analyses, Europeans are personally quite tolerant towards immigrants and hold a positive discourse on the immigration issue. Moreover, the linguistic analyse of Europeans’ discourse patterns went one step further by showing that Europeans are more positive towards refugees than towards immigrants. Such a significant distinction between both categories has a very important implication. A body of research on discursive approach has shown that the refugees are represented in mass media as the category of people deserving of support. Other
categories including “migrants” or “economic migrants” are presented as undeserving of support because they are represented as people who get unfairly what they can from Europe without making any contribution (Goodman, Sirriyeh, & McMachon, 2017). Our linguistic approach showed that the word “refugee” is linked to the idea of war as the word “migrant” is linked to the idea of “invasion”. This result offers a clear demonstration of how the name given to the category of people might impact the corresponding treatment of them: some of them must be excluded as they represent the threat (immigrants) and others should be helped (refugees).

Moreover, the significant mismatch between personal attitudes and perceived group norm also points out that in reality, Europeans are personally favourable towards the immigration it but they are not aware of that. In fact, they perceive others to be more opposed than them in Europe on the immigration issue. The study of the interplay between the personal opinion and the perception of the public opinion as well as that of polarity of words spontaneously said on immigration issue allow thus to discern eventually the reality of European situation of such a very sensitive issue. Thus, one may suppose that as very often the two categories, refugees and migrants are confused, an inappropriate terminology for the last one may contribute to the maintenance of intolerant attitudes towards people flowing war zones in general.

Another chief theoretical contribution of the present study from the social psychological perspective is the role of the interplay between personal attitudes and perceived group norm in explanation of speaking out behaviours. Recent research showed that very often, individuals’ attitudes fail to match with the perception of that of others (Guimond, Crisp et al., 2013; Guimond et al., 2015). However, to the best of our knowledge, the behavioural consequences of the interplay between personal attitudes and perceived group norms has rarely been investigated (Khamzina et al., 2018; Louis et al., 2010; Hornsey et al., 2003; 2007). Khamzina et al. (2018), have found that in times of social change, individuals are more likely to react in
line with their attitude despite the fact that it is incongruent with the norm. Within the present data, the mismatch between Europeans’ attitudes and their perceptions of others’ attitudes also affected one of the communicative behaviours, namely intention to convince others of one’s attitude. Those who perceived others as being negative towards the immigrants coming to Europe, but being personally rather positive to that (i.e., mismatch), were less willing to convince others of their attitude. Those who would intend to convince others of their opinion were those whose attitudes matched the norm. Clearly, this result confirms a spiral of silence theory of Noelle-Neumann (1974/1993). When individuals perceive their views as losing ground, they become more uncertain of themselves and would be less inclined to express their opinion. Contrariwise, agreeing with the “winning” view would boost one’s self-confidence and thus would make one more inclined to express one’s opinion without the fear of being socially rejected. Thus, one opinion would appear to dominate and the other to be heard less and less. As a result, the tendency of some to speak up and others to remain silent starts off a spiralling process which increasingly determines one opinion as the prevailing one (Noelle-Neumann, 1974). However, the present study offers a very interesting contribution to the psychological research revealing that, as expected, the mismatch between attitudes and perceived group norm does not always result in conformist behaviours. The level of identification as European was found as being a moderator of this link, such that high identification resulted in counter-conformist behaviours. In other words, identical patterns of attitudes and perceived norms are associated with very different behaviors depending on one’s level of identification as European.

This pattern of results brings new dimensions to the research on social identity and self-categorisation (Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987; Terry & Hogg, 1996). On the basis of these two theories, it might be speculated that intentions would be influenced by perceived group norms but only for highly identified group members,
for whom a group membership is an important and silent component (Terry & Hogg, 1996). Within our data, the high identifiers were more influenced by their attitudes than group norm as they spoke out in line with their attitude, in contrast to low identifiers who gave up on their attitude in order to toe the line. Thus, the explanatory role of identification as European in appearance of counter-conformist behaviours has some different implications.

Firstly, it suggests that when identification as European becomes an important part of the self, there is implication in terms of feelings of consistency between identity and action (Fielding, McDonald, & Louis, 2008; Callero, 1985). Indeed, as European identity is positively associated with personal attitudes towards the immigrants (see also Visintin et al., 2018), expressing one’s positive personal attitude (regardless if it is a minority one) on that issue would reduce the identity related internal discomfort.

Secondly, the present results may also suggest that high identification as European may be associated with the perception of oneself as moral minority (Louis et al., 2010). Perceiving the moral basis for one’s attitude has been associated with willingness to resist to the norm (Hornsey et al., 2003; 2007). The studies of Hornsey et al. (2003; 2007) have shown that people who perceive a moral ground for their attitude engaged in behaviours consistent with their attitudes when they perceived weak social support.

Above all, the present data speaks to the importance of considering dissent and resistance as well as conformity in studies of public opinion change. In fact, low identifiers who have negative attitudes towards the immigrants expressed their attitudes only when they felt their position being socially supported. Such a pattern of results is consistent with the traditional conformity findings and spiral of silence theory as it is defined by Noelle-Neumann (1973). For example, Louis et al. (2010) found that supporters of Australian new conservative movement that is on rise and triggers the reduction of Asian immigration, were more willing to express their negative views only when they perceived the social support for their position. Thus, an
erroneous perception of the hostility towards the immigrants due to the rise of right-wing parties in Europe leads low identifiers to perceive an exaggerated perception of the support of their positions. In turns, such a “false consensus” might make them more willing to express more easily their negative attitudes and thus having a considerable degree of success in disseminating the view that the majority norm in Europe is anti-immigrants’ one (see also Guimond et al., 2015). Given that people assess others’ attitudes by observing others’ actions, the non-expression of opposition is likely to lead other individuals to mistakenly perceive other members of their group as being favourable to that. In this sense, people’s reluctance to express their opinion while they believe that their opinion is not shared by others allows to social change to occur (Portelinha & Elcheroth, 2016). However, high identifiers’ expression of their attitude, despite the fact that it fails to match with the norm, breaks the spiral of silence spiral and can have considerable impact, as shown by research on minority influence (Moscovici, 1985). Indeed, such resistance may be fruitful in producing policy change or guarding the group of the erroneous normative direction (Louis et al., 2010).

Limitations and future research.

The present research benefited from a large and diverse sample that allowed us to test an innovative social psychological model in a real social context that was deepened by linguistic perspective. However, we acknowledge some methodological and theoretical limitations of our study.

On the one hand, from the social psychological perspective, the primary weakness associated with the present data is that it is correlational and thus the direction of causality is opened to question. Moreover, due to the strongly significant correlation found between attitudes and perceived norm, one might suppose that people base their perceptions of others’ attitudes on their own personal attitudes, as proposed by the theory of social projection (Krueger, 2007). However, Guimond and associates (2013; 2015) have clearly shown that
attitudes and perceived norm are two constructs empirically and theoretically distinct and are underpinned by different determinants. For example, it was shown that attitudes are more strongly related to socio-demographic characteristics whereas perceived norms do not vary as function of age, gender or even political orientation (Guimond et al., 2015). However, in the present study, the strong correlation between attitudes and perceived norm still does not exclude the possibility that people generalise their attitudes on that of other members of the group. Thus, further research should use experimental design to further explore the causality of observed associations. One of the way to reassert the assumption that a mismatch found in the present sample is not a mere projection of one’s own attitude on the group might be to counter balance the order of the questions⁹ (see also Guimond et al., 2013). Finally, the tweets analysis could be improved as well: we could enhance our emotion classification in order to fit better with sentiments expressed in social networks and we could specialize it on the theme of migration. At last, although the word associations highly varied across Europeans’ social and psychological characteristics, linguistic analyses are needed to be deepend in order to confirm psychosocial hypotheses. Thus, further studies are needed to study new word associations, as references to “Europe”, social groups as “friends”, “family”, etc. the links between the manner in that Europeans express themselves on the immigration issue and other sociodemographic and cultural information (sexual or political orientation, cultural habits as reading, special activities membership, etc.) should be examined in order to cross conscious practices with psychological conclusions.

The present study had the goal to shed light on the understanding of social and psychological mechanisms underlying Europeans’ speaking out behaviours on the immigration issue by combining the psychosocial and linguistic perspectives. The results provide important

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⁹Due to a technical problem during the launch of the online survey, the counter-balance of experimental conditions (“Highly salient norm” vs. “Lowly salient norm” conditions) did not operate in the present study and all participants expressed their personal attitudes before answering questions about the attitudes of others.
insights into what people actually think on such a sensitive issue, allowing one to go beyond what some political movements want us to believe. From a theoretical perspective, this study is of relevance to studies of determinants of social behaviours and social communication. We found that the terminology used to refer to refugees and immigrants contributes to explain the underpinning treatments of these two populations. Taken together, the present findings confirm that conformity is a powerful social force but offer new insights into the reality of dissent and counter normative behaviours related to the immigration issue.

[References and annexes in the official document only]