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Does involvement in corporate social irresponsibility affect the linguistic features of corporate social responsibility reports?

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# **Does Involvement in Corporate Social Irresponsibility Affect the Linguistic Features of CSR Reports?**

## **Matteo Corciolani**

Responsible Management Research Center  
Department of Economics & Management  
University of Pisa  
Via Ridolfi 10, 56124, Pisa, Italy  
E-mail: [matteo.corciolani@unipi.it](mailto:matteo.corciolani@unipi.it)

## **Federica Nieri**

Responsible Management Research Center  
Department of Economics & Management  
University of Pisa  
Via Ridolfi 10, 56124, Pisa, Italy  
E-mail: [federica.nieri@for.unipi.it](mailto:federica.nieri@for.unipi.it)

## **Annamaria Tuan**

Department of Management  
University of Bologna  
Via Capo di Lucca 34, 40126, Bologna, Italy  
E-mail: [annamaria.tuan@unibo.it](mailto:annamaria.tuan@unibo.it)

## **Does Involvement in Corporate Social Irresponsibility Affect the Linguistic Features of CSR Reports?**

### **Abstract**

Companies publish corporate social responsibility (CSR) reports to inform their stakeholders of their CSR efforts. However, the literature has shown that these reports can be used as a way to offset companies' involvement in corporate social irresponsibility (CSIR). By relying on a cognitive-linguistic perspective, we investigate whether firms respond to their own irresponsible business conduct by changing their CSR reports' linguistic features and, if so, how. We use a sample of 135 large corporations headquartered in developed countries between 1995 and 2014. An analysis of their CSR reports reveals that the more a firm is involved in irresponsible business conduct, the more likely it is to use narrative (instead of analytical) and deceptive (instead of authentic) language. Moreover, we show that these two trends are particularly evident for highly internationalised firms.

**Keywords:** Corporate social responsibility (CSR); Corporate social irresponsibility (CSIR); CSR report; Social responsibility communication; Internationalisation; Linguistic style

## 1. INTRODUCTION

In recent years, anecdotal case-study evidence from all over the world has shown how companies communicate their corporate social responsibility (CSR) policies while simultaneously being involved in corporate social irresponsibility (CSIR). H&M, Abercrombie & Fitch and Apple, all of which are engaged in widely publicised labour rights violations, are just three of myriad companies involved in CSIR despite their reported CSR communication activities. Prior research on the relationship between the adoption of CSR policies and involvement in CSIR also suggests that companies may engage in and communicate about their CSR activities in order to offset past irresponsible conduct (e.g. Heal, 2005; Kotchen & Moon, 2012) or may adopt CSR policies in order to stake a strong claim to legitimacy that would mitigate any potentially negative reactions in the case of future CSIR (e.g. Flammer, 2013; Godfrey et al., 2009).<sup>1</sup> However, research on this topic has been scant (Riera & Iborra, 2017), and very little attention has been given to analysing how firms' involvement in CSIR may affect their CSR communication, especially with regard to CSR reports.

CSR reports are key tools that companies have at their disposal to communicate about their social and environmental activities to their stakeholders (Alniacik et al., 2011; Hooghiemstra, 2000; Seele & Lock, 2015; Tschopp & Huefner, 2015). These reports are sometimes criticised for allowing firms to show only the good side of their activities (Morsing, 2017) in a bid to gain and maintain external legitimacy (Bansal & Kistruck, 2006; Dhaliwal et al., 2011; Nikolaeva & Bicho, 2011). According to some research, CSR reports may be deliberately employed in response to a company's involvement in CSIR in order 'to apologise, explain, justify, or blame others for its actions, thereby helping to maintain legitimacy' (Bansal & Kistruck, 2006, p. 167).

In this paper, we investigate whether and how firms react to their irresponsible business conduct by systematically changing the linguistic features of their CSR reports. We take a cognitive-linguistic perspective that examines subtle choices in grammar use. By taking this approach, our work provides key insights into how individuals really construct the world around them (Langacker & Langacker, 2008). We made this decision for two important reasons. First, the literature has observed how focusing on the grammar

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<sup>1</sup> For the purpose of our analysis, we do not consider CSIR and CSR as 'opposite ends of a continuum' (Jones et al., 2009, p. 305). Rather, we believe that the failure to respect a negative duty (i.e. doing no harm) cannot be compensated by a positive duty or action in favour of the affected (or other) constituencies (i.e. doing good). Thus, following prior research (e.g. Fiaschi et al., 2015, 2017; Strike et al., 2006; Surroca et al., 2013; Wu, 2014), we treat CSIR and CSR as two conceptually and empirically distinct constructs.

and the linguistic style of a text (e.g. a CSR report) can be more revealing than analysing its content (Ben-Amar & Belgacem, 2018; Crilly et al., 2016; Ludwig et al., 2013; Tenbrink & Freksa, 2009; Wang et al., 2018). Previous contributions investigate the topics discussed in CSR reports (Holder-Webb et al., 2009; Kouloukoui et al., 2018; Vuontisja, 2006), but it has become increasingly apparent how, especially after the introduction of international standards to report CSR initiatives (Behnam & MacLean, 2011), the content of CSR reports tends to be quite similar across companies (Crilly et al., 2016). Hence, focusing on the grammar and the linguistic style of CSR statements is essential to more fully assess corporate communication and to reveal the ways in which actors really categorise their phenomena of interest. Second, scholars who have examined the linguistics of texts suggest that, while the content of the communication may be deliberately controlled by actors, differences in how they structure and express their thoughts from a linguistic point of view may also reveal their distinct cognitive processes, albeit to a subtle extent (Crilly et al., 2016; Ireland & Pennebaker, 2010).

Paying attention to CSR reports' cognitive-linguistic aspects becomes even more important when companies are involved in irresponsible behaviour. When a company is involved in CSIR, its stakeholders may start to lose trust and increase their scepticism (Flammer, 2013; Zavyalova et al., 2012), which leads to a deterioration of the company's legitimacy (Nieto, 2008). Therefore, we seek to verify whether firms change their CSR communication after being involved in a threatening situation, such as an irresponsible event, and how the degree of internationalisation may reinforce such changes. In other words, does a company's involvement in CSIR affect the linguistic features of its CSR reports? And does the company's internationalisation strategy moderate this relationship?

We examined this possibility by focusing on two distinct sets of constructs that are commonly considered in linguistic analyses: the level of analytical (vs. narrative) language and the level of authentic (vs. deceptive) language. According to Pennebaker et al. (2014), a language style can be considered analytical when it is particularly formal, logical and hierarchical; it becomes more narrative when it is more dynamic and informal. In turn, an authentic style is conceptualised as a more personal, sincere and humble type of language; when the style tends to be more impersonal and distanced, it can become deceptive (Barrett et al., 2002; Newman et al., 2003).

Selected from among the Forbes Global 2000, our sample included 135 large, publicly listed firms headquartered in developed countries. We investigated the CSR reports they published between 1995 and 2014. Using this analysis, we found that CSIR has a negative effect on the use of both an analytical language and an authentic language. In fact, a less analytical (and, thus, more narrative) language may be seen as more effective in cases of CSIR, as long as it gives the impression that it offers simple solutions to difficult situations by relying on more personal and informal language (Boyd & Pennebaker, 2015; Jordan & Pennebaker, 2017). Moreover, a less authentic (and, thus, more deceptive) language can be used to justify corporate actions and behaviour (Wang et al., 2016). Although companies are not necessarily aware of these underlying psychological processes, we argue that the language style they use may reveal their real intentions (see also Crilly et al., 2016). Importantly, we found that the two effects we briefly described above are more pronounced in highly internationalised firms. In the case of CSIR, internationalised firms face more substantial threats to their legitimacy, which may render the abovementioned mechanisms even more noticeable.

This paper's contribution is twofold: First, we contribute to the literature analysing the relationship between CSIR and CSR communication (e.g. Kang et al., 2016; Kotchen & Moon, 2012; Muller & Kraussl, 2011) by adopting a cognitive-linguistic perspective (e.g. Crilly & Ioannou, 2017). Specifically, while earlier research has mainly focused on the potential outcomes of language choices (e.g. how adopting different language styles may cause a company to perform in different ways), we identify CSIR as an important antecedent that has a considerable effect on the writing style of CSR reports. In particular, we found that CSIR negatively affects the use of both an analytical and an authentic language in CSR reports. Second, we contribute to the literature about companies' internationalisation and their social impact (e.g. Marano et al., 2017) by showing that, among the most irresponsible companies, those that are highly internationalised tend to use a more narrative and deceptive language than those that are less internationalised. This effect may be attributed to their attempt to respond to intense pressure from the stakeholders.

## **2. THEORETICAL BACKGROUND AND HYPOTHESES**

Experts in linguistic analysis have demonstrated how every text is composed of some type of content filtered through a unique writing style. According to Tausczik and Pennebaker (2010), for instance, 'content words

are generally nouns, regular verbs, and many adjectives and adverbs. They convey the content of a communication... [I]ntertwined through these content words are style words, often referred to as function words. Style or function words are made up of pronouns, prepositions, articles, conjunctions, auxiliary verbs, and a few other esoteric categories' (p. 29). The choice of specific styles and function words is a subconscious dimension that cannot be easily manipulated by actors (Crilly & Ioannou, 2017). Therefore, the writing style often becomes an object of interest for researchers, who seek to uncover what the writers really intended to convey through their words (Ludwig et al., 2013). A cognitive-linguistic perspective is particularly insightful in this regard, as it helps to identify the relationship between the writers' language style and their mental representations (Hart, 2014).

As anticipated above, two constructs that are often investigated in linguistic analyses are the level of analytical (vs. narrative) style and the level of authentic (vs. deceptive) style in a text. The first concept is especially important because it provides information as to whether writers are trying to convey specific details about their subject of interest or are just trying to tell a story in a more narrative and informal way (Crilly & Ioannou, 2017; Pennebaker et al., 2015a). The second concept is considered informative because it clarifies whether an actor is speaking in a personal and authentic vs. distanced and deceptive way (Crilly et al., 2016). Accordingly, analysing these two constructs in CSR reports may be relevant to understanding how companies actually disclose their CSR efforts and what they intend to convey in this way. Below, we introduce our hypotheses on how CSIR may affect the adoption of both an analytical and an authentic language in CSR reports and how these effects are moderated by the companies' level of internationalisation.

### **2.1. The Effect of CSIR on the Use of an Analytical Language in CSR Reports**

The seminal work of Pennebaker et al. (2014) suggests that any type of text may be situated on a continuum from a high level of analytical style on the one end to a high level of narrative style on the other. In the case of the former, the language tends to be more formal, logical and hierarchical and implies a higher level of cognitive complexity, which is evident in the frequent use of articles and prepositions. The following extract from a company's report provides an example of this writing style (articles and prepositions in italics):

*In* 2008, 34 lost-time accidents and 27 accidents *without* lost time were reported involving Essilor employees *in* France, together *with* 5 lost-time accidents and 3 accidents *without* lost

time involving temporary staff. [...] We also supply optical equipment *to* employees, according *to* specific rules, and pay *the* cost *of* long-service awards and optical industry long-service awards, adding *a* further bonus determined according *to a* set scale. Lastly, *the* Company pays days off granted *to* mothers or fathers *to* take care *of a* sick child, according *to* specific rules. (Essilor, Annual Report 2008, pp. 227–228)

The use of these types of words is generally interpreted as a writer's attempt to classify objects, people and events in hierarchical ways – as is typical of more analytical thinkers (Boyd & Pennebaker, 2015). By contrast, when the language is mainly associated with reporting stories (i.e. more narrative), it tends to include a more widespread use of auxiliary verbs, adverbs, conjunctions, impersonal pronouns, negations and personal pronouns (Biber, 1991; Faasse et al., 2016). The following extract is a good example of this type of language (narrative words in italics):

*We are continuously* improving the ways *we* monitor training effectiveness. *We* recognize *that* the working conditions in the factories *we have* audited *have* improved. The number of participating suppliers *and* factory management *has* increased. *However, we need* to ensure *that* the improved working conditions are a direct result of an increase in the participation of managers *who can* influence positive change. (Wal-Mart, CSR report 2005, p. 9)

This means that people who use a narrative style tend to live more in the present, like to tell stories and are more focused on social matters than analytical thinkers (Boyd & Pennebaker, 2015). A more analytical style has been associated with fewer expressions of positive emotion, while a more narrative style has been considered more emotionally involved (Boyd & Pennebaker, 2015; Pennebaker et al., 2014). Similarly, rational decision makers, who tend to be highly analytical, have been shown to be more socially cold, while experiential decision makers, who rely more on their emotions and on narratives to make decisions, have shown themselves to be more socially warm than rational decision makers (Fetterman & Robinson, 2013). Other studies have also illustrated that, especially when they are going through complex and uncertain situations, individuals do not like to hear complicated arguments and prefer simpler solutions

instead, which a narrative style seems to communicate more appropriately (Crilly, 2017; Jordan & Pennebaker, 2017).

Hence, we believe that, when faced with a threatening situation, such as an involvement in CSIR, a company might adopt more narrative language, which, as the literature (e.g. Boyd & Pennebaker, 2015; Jordan & Pennebaker, 2017) shows, could be more effective than analytical language as long as it appears to offer simple solutions to a difficult situation. Moreover, after a negative event (e.g. an irresponsible act), we expect that a company could develop a more narrative language style, which the literature associates with more positive emotions (Boyd & Pennebaker, 2015; Fetterman & Robinson, 2013). These arguments lead us to think that, when the number of CSIR events increases, the company's CSR reporting may become less analytical and more narrative. In more formal terms, we hypothesise that:

*H1. The more a company is involved in CSIR, the less (more) the CSR report will use analytical (narrative) language.*

## **2.2 The Effect of CSIR on the Use of Authentic Language in CSR Reports**

The level of authenticity is generally measured as a continuum stretching from a high level of authentic style to a high level of deceptive style (Newman et al., 2003). An authentic style relies on higher cognitive complexity (more exclusive words, such as *but*, *while*, *whereas*), more self-and-other references and emotion words that are less negative (Newman et al., 2003) than deceptive language. This seems to happen in the following example (exclusive words and self-and-other references in italics):

For L'Oréal, the strategic challenge is *not* to arbitrate between the three spheres of sustainable development—economics, environment and society—*but* to create a model capable of sustainably ensuring *its* economic and social balance, which is *not* only equitable *but* also creates value added for all stakeholders. (L'Oréal, Annual Report 2009, p. 20)

A deceptive style, by contrast, requires the creation of a story about an experience or attitude that is different from reality. Therefore, while an authentic style tends to be more personal and humble, a deceptive style implies more psychological distance (Barrett et al., 2002; Newman et al., 2003). As the following

example shows, this may mean employing a more abstract language, which results in lower cognitive complexity (e.g. fewer exclusive words) and fewer self-and-other references:

A key objective in serving the community is protection of water resources, and during the year a major project was launched after many months of detailed discussion and preparation. [...] Under the partnership, an extensive range of activities is being implemented to promote awareness of and support for conservation projects. (Coca-Cola, Annual Report 2005, p. 45)

The literature shows that when individuals face threatening information, they tend to discuss it in a more defensive way, which implies using a less authentic tone (Barrett et al., 2002). Akpinar et al. (2018), for example, confirm that individuals tend to share more “self-relevant product harm information” in a less authentic way. That is, they tend to distance themselves from the stories they create in an effort to avoid taking direct responsibility for their behaviour, as in the case presented above, in which the lack of self-reference and exclusive words produces a more detached description.

Other studies have considered corporate communications more directly and shown that, when faced with severe devaluations, firms tend to craft responses that could justify their actions and behaviour (Wang et al., 2016). In line with the work of Newman et al. (2003), these responses seem to be less personal than those implemented by firms actually practising what they communicate (Crilly et al., 2016; DePaulo et al., 2003). Therefore, we hypothesise that, because firms involved in CSIR face major threats to their reputation (Flammer, 2013; Zavyalova et al., 2012), they may respond by communicating more defensively. Since previous studies have shown that being in a defensive position causes a decrease in the language’s authenticity (Akpinar & Berger, 2017; Barrett et al., 2002; Newman et al., 2003), we expect that, the more a company is involved in CSIR, the more it is likely to adopt a deceptive (and less authentic) language in its CSR reporting. Accordingly:

*H2. The more a company is involved in CSIR, the less (more) the CSR report will use authentic (deceptive) language.*

## **2.3 Internationalisation and the Effect of CSIR on CSR Reports’ Language Style**

So far, we have discussed how, as the number of CSIR activities increases, there may be a shift towards less analytical and less authentic language. However, we recognise that CSIR cases can have different impacts on separate companies. One variable that should be considered in this regard is the degree of firm internationalisation, which is likely to moderate the relationship between CSIR and the style of language used in the CSR report.

The degree of firm internationalisation reflects the relative importance – and, therefore, the amount – of business activities conducted abroad through foreign direct investments. Therefore, highly internationalised companies face more significant threats in the case of CSIR than their less internationalised counterparts. Indeed, higher levels of internationalisation may increase a firm’s exposure to host country stakeholders and, therefore, ‘the potential for those stakeholders to engage in adverse institutional attribution in assessing these firms’ (Marano et al., 2017, p. 401). In turn, this could translate into a higher risk of losing stakeholder trust (Flammer, 2013; Yannopoulou et al., 2011) because of irresponsible business conduct. Internationalisation also increases a firm’s exposure to legitimating actors (Kostova et al., 2008), such as international and non-governmental organisations (e.g. the United Nations), as well as local and global media, which scrutinise their impact on social and environmental issues – especially when they globalise (Marano & Kostova, 2016).

Consequently, among the most irresponsible firms, those that are highly internationalised could face greater pressure to use a level of language that is less analytical and more narrative, and a level of language that is less authentic and more deceptive, if they are involved in irresponsible behaviour. Thus, we hypothesise that:

*H3. The higher a firm’s level of internationalisation is, the stronger the negative (positive) effect of their involvement in CSIR will be on the adoption of an analytical (narrative) language in the CSR report.*

*H4. The higher a firm’s level of internationalisation is, the stronger the negative (positive) effect of their involvement in CSIR will be on the adoption of an authentic (deceptive) language in the CSR report.*

Our conceptual model is presented in Figure 1.

[Figure 1 about here]

### 3. DATA AND METHOD

#### 3.1 Sample

To test our hypotheses, we focused on a sample of 135 large, publicly listed firms selected from the Forbes Global 2000 rankings across 27 sectors. We adopted a stratified random sampling approach with equal allocation by randomly selecting five firms in each of the selected sectors from the Forbes list. This sample included firms from the United States and Canada (52%), Europe (40%) and Asia (Japan and South Korea) (8%). We selected large corporations because they are more powerful and visible than smaller firms. Their operations are also monitored more frequently by stakeholders, and they have more resources to invest in CSR and to manage irresponsible business conduct.

#### 3.2 Variables

**3.2.1 Dependent variables.** For each of our sample firms, we downloaded their CSR reports or the specific CSR section included in the annual reports from their corporate websites. In total, we collected 1,259 reports published between 1995 and 2014 and subjected them to an automated text analysis, following recent advances in text analytics to systematically analyse large quantities of data (Pennebaker et al., 2014). With this method, texts' language style elements can be analysed, and it allows for a more thorough investigation of the strategies used to communicate the topics discussed in a text. In our case, we determined our dependent variables in order to explore the writing style of the CSR reports we collected.

To this end, we used the Linguistic Inquiry and Word Count (LIWC) 2015 software, which relies on underlying linguistic scales that have frequently been used in psychology, marketing and language research, among others (Akpınar et al., 2018; Aleti et al. 2019; Humphreys & Wang, 2018; Ludwig et al., 2013; Tausczik & Pennebaker, 2010). Approximately 90 variables or combinations of variables are included in LIWC, and they can be employed to measure several important aspects of texts. For instance, if researchers are interested in measuring the frequency at which various texts use 'articles', they can select the 'articles' variable from LIWC. After the text has been uploaded, the software counts the number of articles used and

divides this number (e.g. 17) by the total number of words in the text (e.g. 90). Thereafter, it will multiply the result by 100 to provide the researcher with the percentage of words that refer to the specific theme that is being researched:  $[17/90] * 100 = 18.89\%$ .

Consistent with our theoretical framework, we used two variables available on LIWC to measure the level of *Analytical language* and the level of *Authentic language* in CSR reports.<sup>2</sup> Following the results obtained in several studies (Pennebaker et al., 2014, 2015b), both these variables were automatically calculated by LIWC through specific, proprietary algorithms, which include function or closed class words that establish grammatical relations among various types of content (e.g. articles, pronouns, prepositions, adverbs). These types of words are the smallest yet most common words in the English language and are considered to more reliable markers of psychological states than content words such as nouns (Pennebaker et al., 2014). The *Analytical language* variable is a summary variable that combines eight function words: articles and prepositions with a positive loading, personal and impersonal pronouns, auxiliary verbs, adverbs, conjunctions and negation words with a negative loading. As demonstrated by Pennebaker et al. (2014), this formula can capture with precision the degree to which people use words suggesting analytical (i.e. formal, logical and hierarchical) thinking patterns, as opposed to words that suggest a more narrative style.

Similarly, the algorithm for authentic language was derived from a series of studies in which the language adopted by groups of people who were induced to be more authentic or deceptive was then analysed (e.g. Newman et al., 2003). The resulting variable (*Authentic language*) is a summary variable that combines the positive loading of first- and third-person singular pronouns, third-person plural pronouns and exclusive words (e.g. *but*, *except*, *without*) with the negative loading of negative emotions and motion verbs (e.g. *arrive*, *drive*, *go*). In this way, high scores of this variable are associated with people who reveal themselves to be authentic or honest and are more personal, humble and vulnerable. Conversely, low scores on this variable relate to more distance from the self and a more deceptive language (Barrett et al., 2002; Newman et al., 2003).

For both *Analytical language* and *Authentic language*, LIWC gives standardised scores that are converted to percentiles (based on the area under a normal curve) ranging from 0 to 100. Figure 2 shows the

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<sup>2</sup> The variable ‘analytical thinking’ from LIWC was used to measure *Analytical language*, and the variable ‘authentic’ was used to measure *Authentic language*.

average value of the two linguistic variables by year. Both dimensions increase over time. Thus, we included year fixed effects in the estimations.

**[Figure 2 about here]**

**3.2.2. Independent variables.** In line with prior research (Fiaschi et al., 2015, 2017; Nieri & Giuliani, 2018; Ruggie, 2008; Wettstein et al., 2019), we conceptualised CSIR as business-related human rights violations in which the sample firms were involved. The 1948 Universal Declaration of Human Rights, as well as subsequent treaties, defines human rights as inalienable fundamental rights to which a person is inherently entitled because he or she is a human being (Ruggie, 2008): labour rights, local indigenous communities' rights to land and to life and customers' right to health, among others. The conceptualisation of CSIR as a firm's involvement in human rights violations is particularly relevant in the context of international companies, given the global scope of their operations, and calls for a universal framework that overcomes concerns about international differences in legal and cultural systems in order to define what is (not) 'irresponsible' (see also Donaldson, 1996; Welford, 2002).

We retrieved this information directly from the Business and Human Rights Resource Centre (BHRRC),<sup>3</sup> the world's leading independent hub for information on the positive and negative impacts of corporations on human rights (Avery, 2009). Our search found more than 4,000 documents, including news and reports, providing evidence for examples of negative impacts on human rights up to 2014. For each year, we coded the number of abuse-related events in which a firm was reportedly involved. Our *CSIR* variable was then calculated as the cumulative number of irresponsible events that firm *I* has been involved in up to time  $t-1$ .

In order to test Hypotheses 3 and 4, we also included the interaction term between *CSIR* and firm internationalisation in the model. To determine the number of countries in which the firm had invested until  $t-1$  (*Internationalisation*), we relied on FDIMarkets for data on greenfield and brownfield investments and on (Bureau van Dijk) and SDC Platinum (Thomson Reuters) for data on mergers and acquisitions.

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<sup>3</sup> For more details, see BHRRC at [www.business-humanrights.org](http://www.business-humanrights.org) which we last accessed on 26 November 2018.

**3.2.3. Control variables.** In our models, we controlled for firm size (*Size*) based on the logarithm of the number of workers each year, and for firm age (*Age*), which is the logarithm of the number of years since the firm was established. We also included firm performance, measured as a firm's *Return on asset*, and firm *Slack resources*, measured as the ratio of total debt to equity. Then, we controlled for *Standalone CSR report*, which is a dummy variable and took the value of 1 if the firm has published a CSR report on its website and 0 otherwise. We also controlled for *Experience CSR report*, which indicates the number of years since the firm first published a CSR report. Finally, we included the *Year Fixed Effects* in the analysis in order to consider the time trend characterising the adoption of CSR policies and, specifically, the publication of CSR reports on the firms' websites.

### 3.3 Models

To test the hypotheses, we used an unbalanced panel of observations with fixed effects (FE)<sup>4</sup> to control for the effects of unobservable time-invariant firm and industry characteristics, as well as macroeconomic trends (Wooldridge, 2010). We used a one-year lag for all independent, moderating and control variables to improve the inference of causality (Meyer et al., 2017).<sup>5</sup> We checked for potential multicollinearity by calculating the variance inflation factors (VIFs) for the independent variables, moderators and control variables specified in each of the models. As a general rule of thumb, all VIFs were smaller than 10, indicating no high correlation. In all the estimations, given the presence of serial and cross-sectional correlation, which we tested by following Wooldridge (2010, p. 320), as well as heteroscedasticity (see Wooldridge, 2010, p. 172), *p*-values were calculated on the basis of robust standard errors.

## 4. RESULTS

Table 1 presents descriptive statistics for our variables and the correlation matrix.

[Table 1 about here]

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<sup>4</sup> The use of FE instead of random effects (RE) was supported empirically since the Hausman Test was rejected for all our models, which suggests that FE is more appropriate for our analysis than RE (Wooldridge, 2010).

<sup>5</sup> Exceptions are *Standalone CSR report* and *Experience CSR report*, which are considered at time *t*.

Table 2 provides the results of the econometric estimations. Model 1 tests the results for the baseline relationship between *CSIR* and *Analytical language* and suggests a negative and statistically significant effect ( $\beta = -0.258, p < 0.001$ ), which supports Hypothesis 1. When a firm is involved in a new irresponsible event that leads to a human rights violation, the language style used in the CSR report will become more narrative and less analytical. That is, rather than report a more technical and detailed analysis, it will probably tell a story about its actions in a more narrative way.

Model 2 shows a negative and statistically significant effect of *CSIR* on *Authentic language* ( $\beta = -0.047, p < 0.001$ ), which supports Hypothesis 2. This result suggests that involvement in a new irresponsible event leads to a more deceptive language style in the CSR report; thus, companies react to CSIR by using a less authentic tone.

Model 3 tests our Hypothesis 3 by predicting a negative moderating role for *Internationalisation* on the relationship between *CSIR* and *Analytical language*. Since the interaction term's coefficient is negative and statistically significant ( $\beta = -0.128, p < 0.05$ ), the (negative) effect of *CSIR* on *Analytical language* is especially significant among the most internationalised firms, which supports Hypothesis 3. Figure 3 depicts this result, which is also confirmed by the marginal effect analysis, which shows that, unlike firms with a low ( $ME = 0.096, p > 0.05$ ) or medium ( $ME = -0.077, p > 0.05$ ) level of internationalisation, the language used by highly internationalised firms ( $ME = -0.246, p < 0.001$ ) becomes less analytical the more they are involved in CSIR (see Table 3).<sup>6</sup>

**[Figure 3 about here]**

Similarly, Model 4 illustrates the results of the moderating effect of *Internationalisation* on the relationship between *CSIR* and *Authentic language*. Hypothesis 4 is supported since the interaction term's coefficient is negative and statistically significant ( $\beta = -0.025, p < 0.05$ ). Figure 4 reveals that *CSIR* has a negative impact on the authentic language used in the CSR reports of highly internationalised firms

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<sup>6</sup> We used the mean value of *Internationalisation* and one standard deviation above and below the mean value to denote high and low levels, respectively.

( $ME = -0.045, p < 0.001$ ), while there are no statistically significant effects for moderately ( $ME = -0.012, p > 0.05$ ) or little ( $ME = 0.021, p > 0.05$ ) internationalised firms (see Table 3).

**[Figure 4 about here]**

Regarding the control variables, we also found that, in the models with *Authentic language* as the dependent variable, *Return on asset* is positive and statistically significant ( $\beta = 6.906, p < 0.05$  in Model 2;  $\beta = 6.744, p < 0.05$  in Model 4). Moreover, *Standalone CSR report* and *Experience CSR report* are positive and statistically significant across all models.

**[Table 2 about here]**

**[Table 3 about here]**

## **5. DISCUSSION AND CONCLUSION**

In this study, we adopted a cognitive-linguistic perspective to analyse CSR reports and to understand how the related language changes may depend on a company's involvement in CSIR. In line with previous literature (e.g. Crilly et al., 2016), we found that, although the content of CSR reports can be similar across companies and conditions, the linguistic features and grammar styles are not necessarily homogenous. In fact, differences in how individuals make grammatical choices in order to connect heterogeneous types of content tends to be a subconscious activity, which may effectively signal how they actually relate to their social and environmental policies (Hart, 2014; Langacker & Langacker, 2008). Therefore, the differences in *how* actors write instead of *what* they write are particularly illuminating with regard to the ways in which they conceive of important phenomena and represent them. These differences, in particular, may reveal information about the actors' way of thinking that would otherwise be difficult to elicit via conventional content analysis (Crilly & Ioannou, 2017).

In this regard, our work provides new insights regarding how managers address the challenge of CSIR. Specifically, the more a company is involved in CSIR, the more its CSR report will adopt both a

narrative and a deceptive language style in reaction to the crisis situation. Moreover, we demonstrate that these trends are particularly evident for highly internationalised firms, which have greater exposure to influential stakeholders and, therefore, face greater pressure. In this way, we extend the results obtained by Crilly and Ioannou (2017), who show how the adoption of a particular language style (e.g. a conjunctive and analytical language) may predict relevant outcomes for the company, such as social performance. By adopting a cognitive-linguistic perspective, we show how negative outcomes (such as those related to CSIR) may become *inputs* that predict a significant change in the language used in CSR reports. That is, a company may employ a particular language style because it has engaged in irresponsible conduct in the past. As far as we know, this paper marks the first attempt to consider CSIR as an antecedent that may significantly affect the writing style adopted in CSR reports.

Similarly, this article is among the first ones to consider the importance of two key variables of writing style (i.e. the level of analytical language (Pennebaker et al., 2014) and the level of authentic language (Newman et al., 2003)) to analyse what a CSR report is *really* communicating beyond merely illustrating particular content. Similar research has focused on the readability of CSR disclosures in order to investigate whether managers who do engage in CSR adopt language that is plain or complex (e.g. Ben-Amar & Belgacem, 2018; Wang et al., 2018). From our viewpoint, the level of analytical language and the level of authentic language could also be taken into consideration in these types of analyses, as long as they seem to relate to companies' involvement in previous CSIR events. In a very subtle way, these two constructs can detect not only whether a company is engaged in CSR activities but also whether it is speaking in a particular way in order to *conceal* irresponsible acts.

In terms of managerial implications, we recommend that stakeholders pay keen attention not only to *what* CSR reports say but also to *how* they say it. In other words, large firms can use CSR reports to “take advantage of the information asymmetry between internal processes and externally projected images” (Wickert et al. 2016, 1180). Indeed, stakeholders of large and highly visible firms, such as those we considered in our study, often have relatively low proximity to firms, which makes it more difficult to assess companies' true social performances. Consequently, we recommend that investors, media and non-governmental organisations focused on CSR issues be more cautious when reading a CSR report that appears to use a very narrative language by systematically eschewing any in-depth analysis. Similarly, CSR reports

that adopt a distanced style, which looks highly impersonal, should also be examined with a critical eye. In both these cases – especially if the evaluated company is highly internationalised – stakeholders should carefully evaluate the company’s related activities because they may potentially be associated with CSIR. To this end, an analysis of the linguistic features of CSR reports through text-mining tools can effectively be employed to assess the company’s CSR disclosure in order to understand whether it is really *walking* or just *talking* CSR. Stakeholders could interpret CSR reports’ linguistic features as a signal of potentially irresponsible business conduct and suggest a misalignment of the CSR communication with actual CSR practices.

However, our study is not without limitations. We only analysed companies in developed countries whose CSR reports are written entirely in English. Future research could analyse CSR reports from developing countries and look at the different styles that are used in other languages and cultures. Other types of CSR communication tools could also be investigated: CSR strategy papers, websites and social media are a few examples of instrumental and deliberative tools (Seele & Lock, 2015) that may be analysed from a cognitive-linguistic perspective. Additionally, while we focused on human rights violations as a form of CSIR, further research could analyse how different types of irresponsible business conduct (e.g. financial fraud, corruption, environmental crime) may also affect the linguistic features of companies’ CSR communication strategies. Future studies may also investigate the opposite relationship. That is, CSR reports’ linguistic features may be used to determine potential CSIR practices or to anticipate the likelihood of a company engaging in irresponsible behaviour. Finally, future studies could replicate our analysis in other contexts and use other empirical methodologies (e.g. in-depth interviews, field experiments) to triangulate our results.

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## TABLES

**Table 1. Descriptive statistics and correlation matrix**

Variables	Mean	Sd	1	2	3	4	5	6	7	8	9
<b>1</b> Analytical language	53.24	47.69									
<b>2</b> Authentic language	8.60	8.78	0.90								
<b>3</b> CSIR	8.81	20.73	0.27	0.24							
<b>4</b> Internationalisation	13.48	13.27	0.52	0.49	0.38						
<b>5</b> Age	80.70	51.57	0.23	0.25	0.34	0.39					
<b>6</b> Size	1.97e+22	8.83e+23	0.05	0.03	0.14	0.07	-0.01				
<b>7</b> Return on assets	0.57	0.06	-0.05	-0.04	-0.02	-0.03	0.01	-0.01			
<b>8</b> Slack resources	6.42e+0	7.52e+10	0.12	0.14	0.06	0.16	0.11	0.05	-0.04		
<b>9</b> Standalone CSR report	0.39	0.49	0.74	0.58	0.31	0.52	0.25	0.03	-0.03	0.10	
<b>10</b> Experience CSR report	3.19	4.46	0.69	0.61	0.40	0.66	0.24	0.01	-0.04	0.16	0.59

Note: To calculate the Mean and Sd, we used the original data without any transformation.

**Table 2. Results**

VARIABLES	(1) Analytical language	(2) Authentic language	(3) Analytical language	(4) Authentic language
CSIR	-0.258*** (0.053)	-0.047*** (0.011)	0.096 (0.130)	0.021 (0.027)
Internationalisation	-1.181 (1.694)	0.111 (0.334)	1.196 (1.916)	0.570 (0.365)
CSIR*Internationalisation			-0.128* (0.055)	-0.025* (0.011)
Size	2.906 (2.073)	0.655 (0.356)	2.887 (2.048)	0.652 (0.356)
Return on assets	16.089 (18.940)	6.906* (3.325)	15.247 (18.671)	6.744* (3.334)
Slack resources	-0.006 (0.008)	0.001 (0.001)	-0.006 (0.008)	0.001 (0.001)
Age	-3.104 (5.854)	-1.778 (1.229)	-4.416 (5.873)	-2.031 (1.242)
Standalone CSR report	57.062*** (3.662)	7.228*** (0.759)	56.687*** (3.684)	7.156*** (0.756)
Experience CSR report	1.749** (0.572)	0.265* (0.115)	1.635** (0.568)	0.243* (0.115)
Firm Fixed Effects	Included	Included	Included	Included
Industry Fixed Effects	Included	Included	Included	Included
Year Fixed Effects	Included	Included	Included	Included
Observations	2,298	2,298	2,298	2,298
R-squared	0.630	0.420	0.633	0.423

Robust standard errors in parentheses.

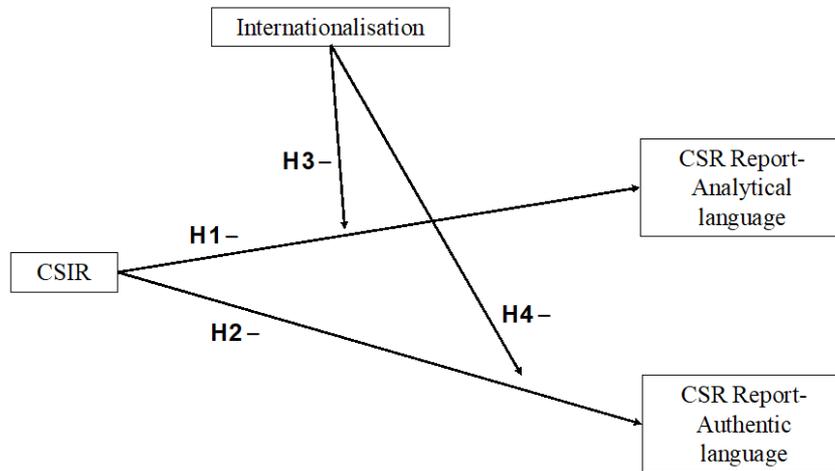
\* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

**Table 3. Marginal effects of the moderating role of Internationalisation on the baseline relationships**

	<i>Analytical language</i>		<i>Authentic language</i>	
	Marginal effect (ME)	p-value	Marginal effect (ME)	p-value
Low Internationalisation (mean – 1sd)	0.096	0.464	0.021	0.445
Average Internationalisation (mean)	-0.077	0.252	-0.012	0.408
High Internationalisation (mean + 1sd)	-0.246	0.000	-0.045	0.000

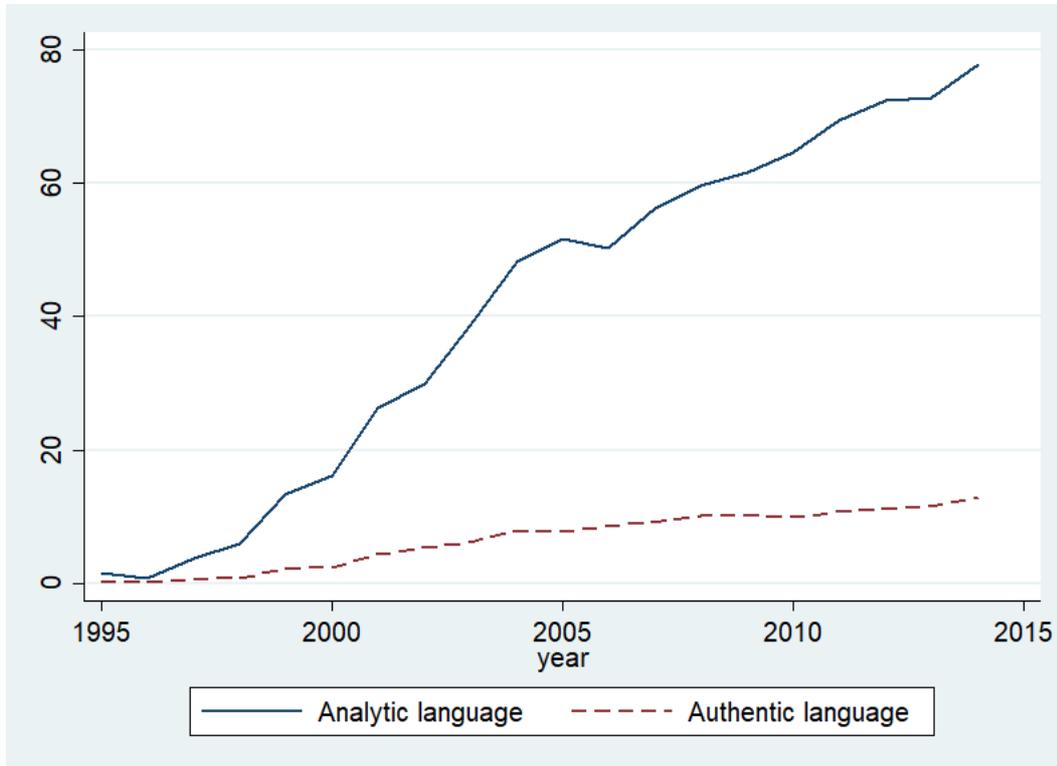
## FIGURES

Figure 1. Conceptual model



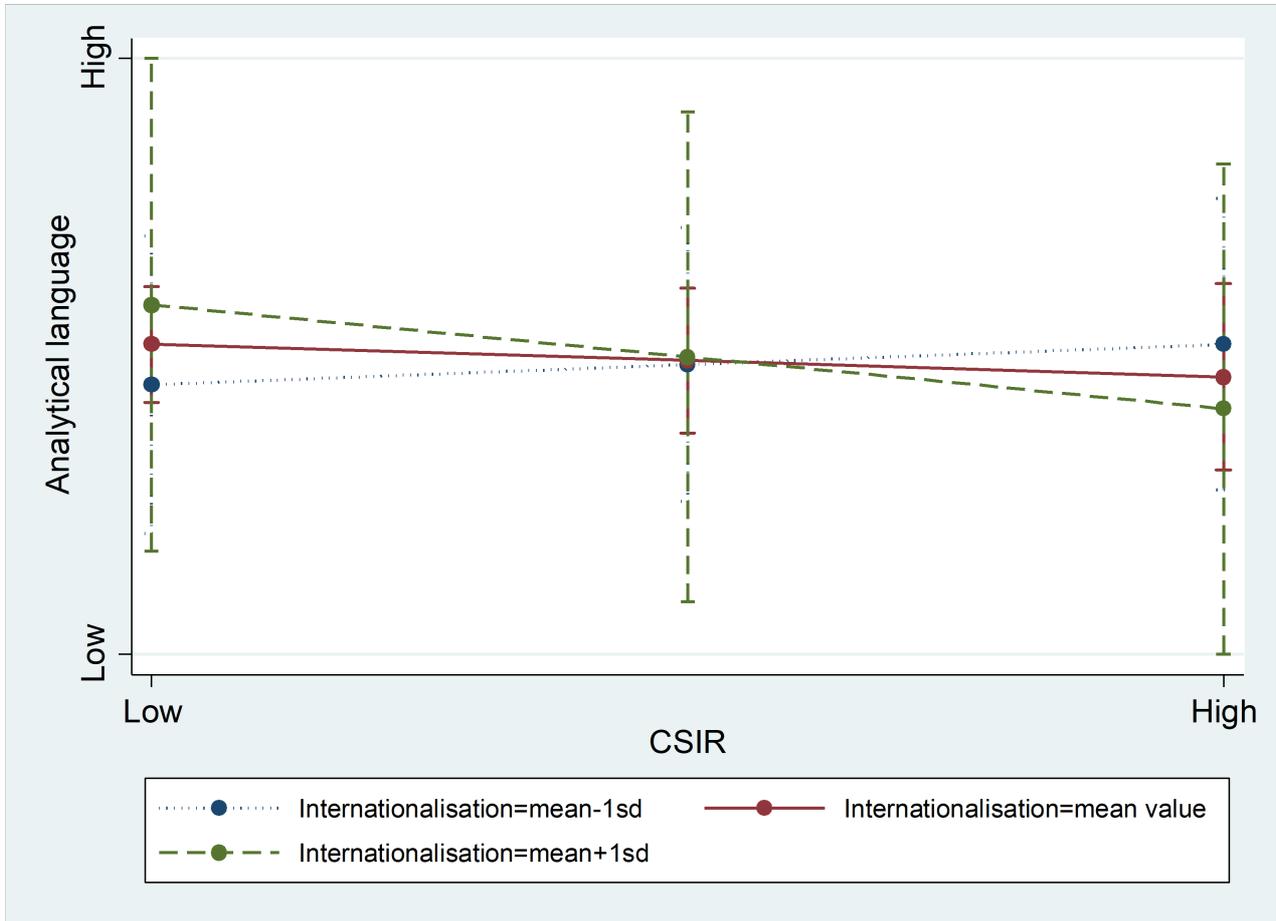
**Figure 2. Time trend of *Analytical language* and *Authentic language* in CSR reports**

Source: Authors' own elaboration.



**Figure 3. The moderating role of *Internationalisation* on the relationship between *CSIR* and *Analytical language***

Source: Authors' own elaboration based on Model 3 from Table 3 (with 95% confidence intervals).



**Figure 4. The moderating role of *Internationalisation* on the relationship between *CSIR* and *Authentic language***

Source: Authors' own elaboration based on Model 4 from Table 3 (with 95% confidence intervals).

