

**2021 Southern African Accounting
Association
Regional Conference Proceedings**



ISBN NUMBER: 978-0-620-92690-4

NORTHERN GAUTENG REGION

Seeing the Wood for the Trees - Textual Analysis of the Integrated Reports of Forestry, Logging and Related Services Companies in South Africa

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ABSTRACT

Low readability and narrative tones can be used as impression management tools in corporate communications, especially in environmentally sensitive industries. We conducted computerised textual analysis on the integrated reports of all four companies listed in the Forestry, Logging, and Related Services (FLRS) industry of the JSE for the period 2014 to 2020. Results are compared with similar analyses of integrated reports from four well-known Retail companies. We find that FLRS integrated reports are significantly longer and more difficult to read than those from the Retail industry. For analysis of narrative tone, results showed that both industries favoured Commonality as the most favoured tone. However, the Activity and Optimism narrative tones reveal significantly different usage between the two industries. Activity scores are consistently higher for the FLRS industry while Optimism is higher for the Retail industry. We contribute to the field of impression management with results from the South African context. We confirm lower readability of integrated reports from companies operating in environmentally sensitive industries, as well as differences in narrative strategies between two industries, the FLRS and the Retail industry.

KEYWORDS: Diction; forestry and logging; impression management; narrative analysis; readability; retail

INTRODUCTION

“You can’t force people to care about the natural environment, but if you encourage them to connect with it, they just might.” — *Jennifer Nini*

Carbon and other emissions resulting from economic development have had a severe impact on the natural environment, leading to global warming and increased impact and frequencies of natural disasters (Nuskiya, Ekanayake, Beddewela, & Gerged, 2021). Hence, sustainability and sustainable development are issues of concern for society, especially in terms of pollution (Artene, Bunget, Dumitrescu, Domil, & Bogdan, 2020). Increased awareness of the human effect on the environment leads to pressure on companies to ensure they are socially and environmentally accountable (De Villiers & Maroun, 2018b). Reporting initiatives such as the Sustainability Accounting Standards Board (SASB), the International Integrated Reporting Council (IIRC), and the Global Reporting Initiative (GRI) propagate the importance of maintaining a balanced relationship between economic development and corporate profits on the one hand, and sustainability of resources for use by future generations on the other. In addition to the above, the Organization for Economic Co-operation and Development (OECD) also proposes programmes concerning Sustainable Development Goals regarding environmental, economic, and social aspects (Artene et al., 2020).

One of the main sources of information about a company is its corporate reports. Corporate reporting was traditionally a means to convey backward-looking information about a company’s financial performance and position (Camilleri, 2019). Nowadays, however, stakeholders expect companies to provide information about their non-financial performance, for example, the impact of its operations on the environment (Böhling & Murguía, 2014; Camilleri, 2018, 2019; De Villiers & Maroun, 2018a; Nuskiya et al., 2021). Through standalone sustainability reports and/or integrated reports, shareholders *and* other stakeholders can consider risks and opportunities, based on information about environmental, social, and governance issues. Thus, non-financial reporting plays an essential role in shaping a company’s image and users of corporate reports need to be aware that narrative disclosures can be used to emphasise positive news while downplaying the negative (Arena, Bozzolan, & Michelon, 2015; De Villiers & Maroun, 2018b; Diouf & Boiral, 2017).

The Forestry, Logging and Related Services (FLRS) industry in South Africa contributes significantly to economic growth (0.6% of GDP or R69bn annually) and employs many workers, making it a strategic economic sector (Viljoen, 2020) in terms of value to the economy and employment. The FLRS industry does not only have to deal with increasing demand for timber products (Viljoen, 2020), but they must also face growing scrutiny amidst increasing environmental consciousness. The FLRS industry faces various environmental pollution problems, including solid waste disposal, air emission of toxic and non-toxic particulates, veneer dryer emission, glue waste disposal, and the ever-present impact of transportation (Adhikari & Ozarska, 2018; Fuwape, 2003; Higgins, 2011). The noise pollution from the operation of machines can also be a serious health hazard to workers and nearby communities. Mechanisation has improved the process significantly but also interferes with ecosystems more than traditional methods (Higgins, 2011). However, with timber being a renewable resource, forests can play an important role in climate change mitigation through the decarbonisation that occurs during photosynthesis (Artene et al., 2020). Furthermore, the processing of plant by-products (biomass) is increasingly being used to generate electricity and as an alternative to petrol (Viljoen, 2020).

Non-financial reporting is thus especially important in the FLRS industry, as it is a high-impact industry in terms of wood processing, wood use, and waste management. Stakeholders want to know what FLRS companies do to ensure there is no loss of biodiversity, no unnecessary soil erosion, no disruptions in the hydrological cycle, and no activities that can result in desert encroachment (Fuwape, 2003). The Carbon Disclosure Project (CDP) (n.d.), one of the leading raters of environmental disclosures by the largest listed companies worldwide, publishes ratings in three categories, namely *Climate Change*, *Forests*, and *Water Security*, signifying the importance of the FLRS industry. Because of the inherent risks that FLRS poses to the environment, these companies have a responsibility to inform stakeholders as to how they are protecting and contributing to the environment as well as addressing health and safety concerns (De Villiers, Low, & Samkin, 2014; Ngwakwe & Mtsweni, 2016). This makes narrative non-financial reporting an essential part of corporate reporting for FLRS companies.

Guidelines such as the those by the GRI drives reporting on sustainability factors (De Villiers & Sharma, 2017), but it is not compulsory to follow all prescriptions from such standards (Ngwakwe & Mtsweni, 2016), which means that companies have the freedom to use narrative non-financial reporting selectively. The result is that language can be used to manipulate the impression a reader obtains from the company, which reduces the true informational value of such reports (Diouf & Boiral, 2017). Corporate reports such as the integrated report have also received criticism for a lack of quality and reliability (Cho, Michelon, & Patten, 2012; Diouf & Boiral, 2017; Emel, Makene, & Wangari, 2012), for being difficult to read (Smeuninx, De Clerck, & Aerts, 2020), and for being tools for legitimisation or impression management (Diouf & Boiral, 2017; Merkl-Davies & Brennan, 2011; Ngwakwe & Mtsweni, 2016; Stacchezzini, Melloni, & Lai, 2016). Specific narrative strategies, whether in terms of readability or tone, can be used in corporate reports of companies that are not performing well, to influence stakeholders with careful use of language that diverts attention away from the numbers (Diouf & Boiral, 2017; Hasan, 2018; Smeuninx et al., 2020). In addition to this, there continues to be a lack of proper environmental or sustainability reporting in emerging economies (Nuskiya et al., 2021).

Given the propensity of companies to manage impressions by word use in narrative sections of corporate reports, the objective of this research was to conduct an exploratory analysis of the readability and narrative strategies, or tones used in integrated reports of all four FLRS companies listed on the Johannesburg Stock Exchange (JSE). As described above, the FLRS industry is environmentally sensitive and might use a different type of narration from that of other industries that are less environmentally sensitive. The results from the four FLRS companies' analyses were then compared to reports from four retail companies to establish whether significant differences exist in the way these two industries report on their activities, with FLRS being environmentally sensitive and retail companies being less so. This study answered the call for further research regarding non-traditional disclosures and reports (Leuz & Wysocki, 2016). Furthermore, narrative tone use in JSE-listed companies' reports is an underexplored topic (Du Toit & Esterhuyse, 2021).

In the next section, a short literature review is presented. This is followed by the research method and the results of our analyses. The paper is concluded with recommendations from the results and suggestions for future studies.

LITERATURE REVIEW: IMPRESSION MANAGEMENT THROUGH READABILITY AND NARRATIVE TONE

The study is based on stakeholder theory. Although investors have an interest in the financial outcome of the activities of a company, employees, customers, suppliers, the government, and other interested parties are stakeholders of the company too (Freeman, 1984). Companies are thus accountable not only to shareholders, but to a wide range of stakeholders (Eccles, Ioannou, & Serafeim, 2014; Hassan, 2019). Narrative non-financial corporate reporting provides important information about an organisation's activities and their impact on the environment and wider society.

However, any corporate communications, including narrative reports, can be used by management for impression management purposes, and not necessarily to account truthfully. Impression management is the practice of presenting a company in a positive light, regardless of its real performance. It thus refers to the manipulation of public perceptions (Cho et al., 2012; Diouf & Boiral, 2017; Emel et al., 2012; Jones, Melis, Gaia, & Aresu, 2017; Stacchezzini et al., 2016). Examples of impression management strategies include hiding under-performance through poor readability and narrative manipulation (Diouf & Boiral, 2017; Hasan, 2018; Smeuninx et al., 2020) or the use of optimistic language to create the impression that the company is doing well (Fonseca, 2010).

Companies make use of corporate reporting to communicate what the company is doing and how it is performing at various levels. Through the presentation of corporate reports, companies can influence the perceptions of external stakeholders. In addition to financial results, companies also use corporate reports to show their efforts toward corporate social and environmental responsibility. The GRI Standards provide several principles for defining sustainability reporting quality, namely balance, comparability, accuracy, timeliness, clarity, and reliability (Global Reporting Initiative (GRI), 2016:7). However, after interviews with 33 fund managers and analysts in Canada to analyse the perceptions of stakeholders regarding sustainability report quality and the presence of bias, Diouf and Boiral (2017) report that sustainability reports were rarely thought to comply with the GRI's six principles for reporting quality. The interviewees reported that the sustainability reports suffered from impression management in that management were highlighting positive aspects but obfuscating negative outcomes (*ibid.*).

For corporate reports to be readable and to ensure readers are not unduly influenced, they should be written in plain language, be concise, and make use of a neutral tone (Smeuninx et al., 2020; Stone & Lodhia, 2019). Corporate communication should disclose pertinent information for decision-makers. It has been found that market participants appreciate reports that are short, focused, and readable (Caglio, Melloni, & Perego, 2020; Zhou, Simnett, & Green, 2017). Just as poor readability and a specific narrative tone can be used to manipulate impressions and hide poor financial results (Smeuninx et al., 2020), it can also be used to hide the truth around a company's social and environmental impact so as to enhance the positive effect of good news and reduce the negative effect of bad news (Jones et al., 2017; Stacchezzini et al., 2016).

Several studies have investigated the readability of narrative disclosure (Bonsall IV, Leone, Miller, & Rennekamp, 2017; Bonsall & Miller, 2017; Du Toit, 2017; Hasan, 2018; Loughran & McDonald, 2014, 2016; Smeuninx et al., 2020) and most found the narrative sections of corporate reports to be readable only by persons with a university education. Other studies investigated the textual tone of

narrative disclosures and conclude that words that represent tones of *optimism* and *certainty* are very dominant in corporate reports (Arena et al., 2015; Cho, Roberts, & Patten, 2010; Hassan, 2019). A corporate narrative report is thus considered to be of lower quality if it is overly long and less readable (Bonsall IV et al., 2017; Caglio et al., 2020; Loughran & McDonald, 2016), as well as when it tends to be biased toward a specific narrative tone (Huang, Teoh, & Zhang, 2014). Both readability and tone can be used by companies to manipulate impressions or to obfuscate the truth (Hasan, 2018; Smeuninx et al., 2020).

The industry has been found to play a significant role in voluntary disclosure quality. A frequently used classification framework to test industry effects is to group companies according to their impact on the environment. Fernandez-Feijoo, Romero and Ruiz (2014) deem industries as environmentally sensitive if their activities have a high impact on the environment due to extractive activities and/or high pollution and emissions. They (ibid.:58) classify environmentally sensitive industries as “agriculture, automotive, aviation, chemical, construction, construction materials, energy, energy utilities, forest and paper products, logistics, metal products, mining, railroad, waste management, and water utilities.” All other industries were classified in the control group. In a similar style, Rim, Kim and Dong (2019:1522) classify the following industries as environmentally sensitive: (i) basic materials and construction, (ii) oil and energy, and (iii) automotive, whilst the environmentally non-sensitive industries are as follows, (iv) technology and communications, (v) consumer goods or services and (vi) banking or financial services. Several studies report that companies in environmentally sensitive industries tend to provide more environmental and social information to readers of their reports versus companies in other industries due to stakeholder pressure and legitimising needs (Artene et al., 2020; Fernandez-Feijoo et al., 2014; Lock & Seele, 2015; Marwa, Salhi, & Jarboui, 2020; Nuskiya et al., 2021; Rim et al., 2019; Syed & Butt, 2017). None of these studies included African companies.

We conclude this section with our problem statement, which is that poor readability and the use of specific narrative tones can be used to influence the perceptions of readers of corporate reports. Additionally, self-serving narrative strategies by management are likely to be more prevalent in industries that have a larger negative impact on the environment. Our study also answers the call for further research regarding non-traditional disclosures and reports (Leuz & Wysocki, 2016) as well as addressing the paucity of research on narrative tone use in JSE-listed companies’ reports (Du Toit & Esterhuyse, 2021).

We phrase our research questions as follows:

- RQ1 – What are the readability and narrative strategies or tones of integrated reports of JSE-listed companies in the FLRS industry?
- RQ2 – To what extent are the readability and narrative strategies or tones of integrated reports of JSE-listed FLRS companies different from that of companies in a less environmentally sensitive industry?

RESEARCH METHOD

Computer-aided textual analysis

There is increasing interest in the textual analysis of corporate reports (Hasan, 2018). Textual analysis can be used to analyse the readability of reports (Bonsall IV et al., 2017; Du Toit, 2017; Smeuninx et al., 2020) as well as the narrative tone of a report (Arena et al., 2015; Hassan, 2019; Rim et al., 2019). Textual analysis through software applications is gaining popularity in accounting and finance research. The use of software is believed to be more reliable than manual analyses (Al-Najjar & Abed, 2014). Software applications have the benefit of inherent stability, clear coding rules for comparability, coder reliability, and the ability to process large volumes of text (Short, McKenny, & Reid, 2018).

We used Readability Studio 2019 to measure readability in terms of the *Flesch Reading Ease* measure, recommended for assessing the readability of technical reports meant for adult readers. The *Flesch Reading Ease* score is calculated as $206.835 - 0.846(\text{number of syllables per 100 words}) - 1.015(\text{average sentence length in words})$. The lower the score, the more difficult it is to read the text, for example, a score between 0 and 30 is classified as very difficult to read, best understood by readers with university degrees. The study also investigated the use of text that is by nature more difficult to read, such as passive voice sentences and so-called wordy items. Wordy items refer to a phrase that is unnecessarily long and can be replaced with something shorter and simpler, for example, 'a case in point'.

The narrative strategy or tones of corporate reports were analysed with Diction 7.1.3. Diction, developed by Hart (2000) and improved by Hart and Carroll (2013), measures the textual characteristics of the text to identify if a certain linguistic strategy was applied. The broader categories it identifies are *Certainty*, *Optimism*, *Activity*, *Realism*, and *Commonality* (Hart, 2000). A full table is available as an appendix in Laskin (2018). Diction scored individual texts for each strategy, based on frequencies of occurrence of words contained in subaltern dictionaries. The individual scores are measured against a pre-determined built-in standard (Hart, 2000; Hart & Carroll, 2013). For this study, we compare our text scores against the *Corporate Financial Reports* normative base, similar to a study by Craig and Amernic (2018).

Sample and document selection

To answer RQ1, we investigated the textual attributes of the integrated reports of all JSE-listed companies operating in the FLRS industry for the period 2014 to 2020. There were four companies, resulting in 28 integrated reports being analysed. To answer RQ2, the results of the FLRS companies were compared to that of four companies in the retail sector. Concerning the classification systems of Fernandez-Feijoo et al. (2014) and Rim et al. (2019) discussed earlier, the current study opted to compare disclosures of the *FLRS* industry (an environmentally sensitive industry) to those of the *consumer retail* industry (less environmentally sensitive). Restricting comparisons to two industries to highlight disclosure differences between environmentally sensitive industries and other industries were also employed by Artene et al. (2020) as well as Lock and Seele (2015). The Artene et al. (2020) study compared disclosures of *oil* companies (four Romanian; three Greek) with *banks* (three Romanian; four Greek). Their study (ibid.) measured compliance with the European Directive

2014/95 for non-financial disclosure, by measuring the number of times that words relating to the environment appeared in the annual and sustainability reports of their sample companies. The Lock and Seele (2015) study compared disclosures of *chemical* companies (five Swiss; five German) with *bank and insurance* companies (five Swiss; five German). Their study (ibid.) measured the word count in sustainability reports across five categories, namely environmental, social, philanthropic, product, and other against expected targets based on industry risks. Both the Artene et al. (2020) and Lock and Seele (2015) studies thus measured the prevalence of ‘topics’, i.e., ‘what’ is disclosed, whilst our study measures narrative tone and readability, i.e., ‘how’ is the disclosures made.

The comparison of readability and narrative tone results between the two industries in the current study was conducted using a comparison of means statistics. Due to the small sample size and normality tests indicating that the data for most of the variables are not normally distributed, the non-parametric Mann-Whitney U test for comparison of mean ranks was employed.

The companies in alphabetic order are (JSE ticker in brackets):

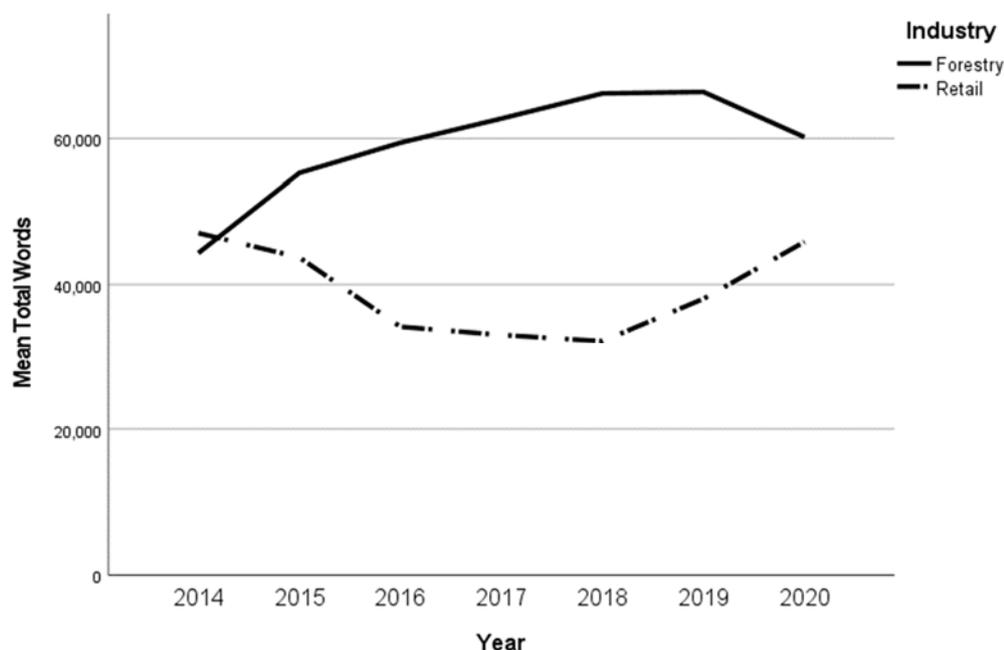
FLRS	Consumer retail
Kap Industrial Holdings Ltd (KAP)	Pick n Pay Stores Ltd (PIK)
Mondi Ltd (MND)	Shoprite Holdings Ltd (SHP)
Sappi Ltd (SAP)	The Spar Group Ltd (SPP)
York Timber Holdings Ltd (YRK)	Woolworths Holdings Ltd (WHL)

RESULTS

As a first analysis, the length of the integrated reports was analysed over the period 2014 to 2020. Both industries’ integrated reports were almost of the same length in 2014. However, from Figure 1 it can be seen that the length of the integrated reports of FLRS companies increased by almost 50% over time, whilst the Retail integrated reports decreased in length and then returned to initial levels. On average, the integrated reports of the FLRS industry are longer (mean = 59 222 words) than those of the Retail industry (mean = 39 171 words). The Mann-Whitney U test revealed that the difference in the total words of reports in the FLRS industry (median = 53 552) and the Retail industry (median = 38 030) is significant, $U = 144.00$, $z = -4.064$, $p = .000$, $r = -0.54^1$.

¹ U = Mann-Whitney test score; z = z-score; p = significance; r = sum of ranks

Figure 1. Average report length in terms of number of words, per industry



The rest of the readability results are presented in Table 1. The Flesch Reading Ease score of any text ranges between 1 and 100, with lower values being indicative of more difficult text. For the combined sample of 56 reports, the lowest score of 20 (FLRS) and the highest score of 39 (Retail) shows that the integrated reports for all the companies range from *Difficult* to *Very Difficult* in readability. Averages for the different industries show that, for the Flesch Reading Ease, the reports from the FLRS industry are more difficult to read (mean = 26.43) than reports from the Retail industry (mean = 32.36).

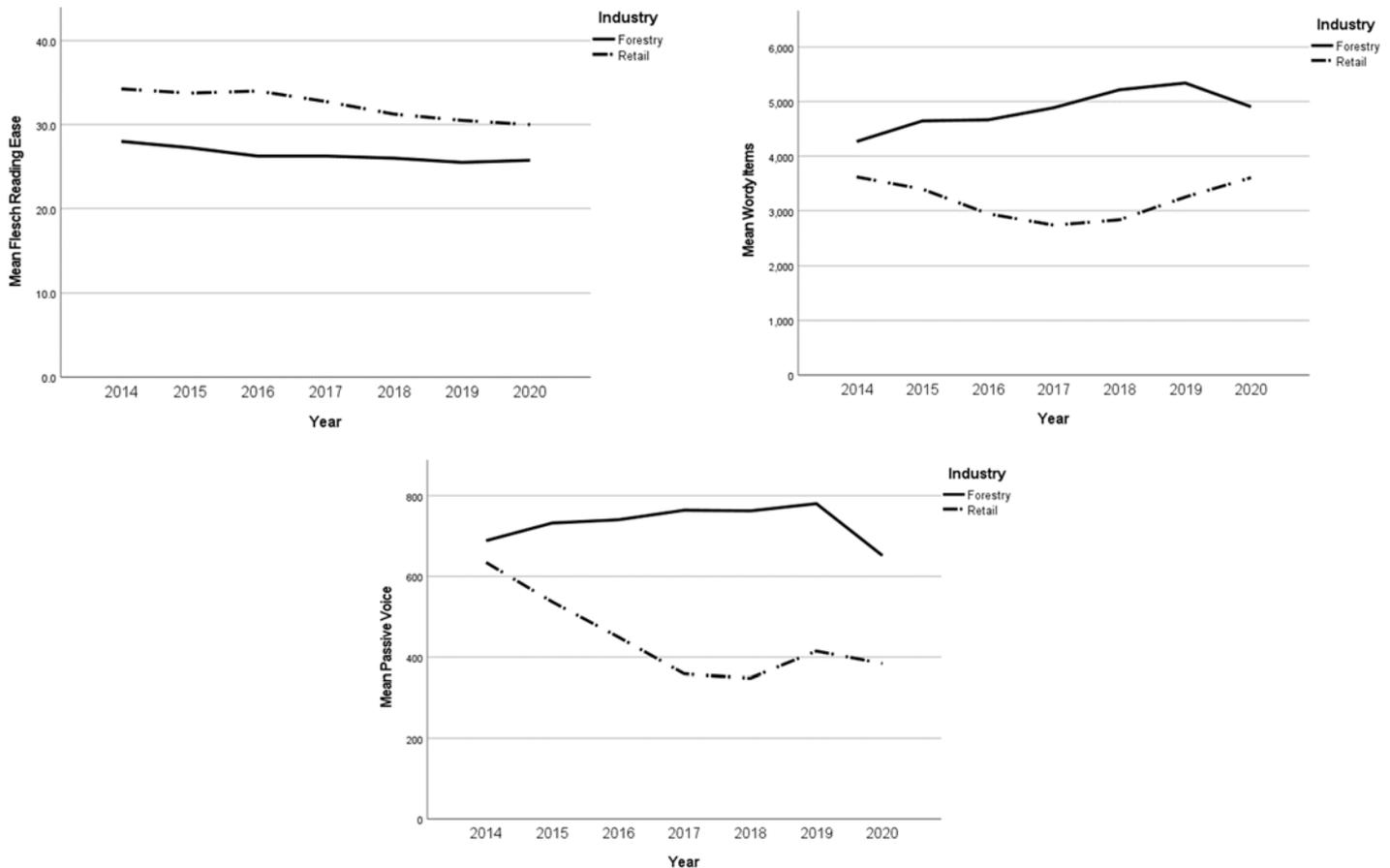
Table 1: Readability results

	Mean	Median	Standard Deviation	Min	Max
<i>Panel A: FLRS (n = 28)</i>					
Length (word count)	59 222	53 552	21 031	20 014	104 690
Flesch Reading Ease	26.43	27.00	3.32	20.00	33.00
Wordy Items	4 848	4 574	1 452	3 041	8 304
Passive Voice	732	742	217	370	1 045
<i>Panel B: Retail (n = 28)</i>					
Length (word count)	39 171	38 030	12 857	15 811	66 707
Flesch Reading Ease	32.36	32.00	3.61	25.00	39.00
Wordy Items	3 199	3 145	847	2 043	5 258
Passive Voice	447	395	197	236	983

Figure 2 reveals that the Flesch Reading Ease scores (for which lower scores indicate less readability) decreased over time, indicating that the reports in both industries became less readable over time. The use of wordy items increased over time, especially for the FLRS industry, contributing

to lower readability. Only the use of passive voice sentences decreased over time, especially in the Retail industry.

Figure 2: Graphical depiction of readability trends over time



The Mann-Whitney U test revealed that the difference in the Flesch Reading Ease scores of the FLRS industry (median = 27.00) and the Retail industry (median = 32.00) is significant, $U = 701.00$, $z = 5.082$, $p = .000$, $r = 0.68$. For wordy items, the Mann-Whitney U Test results indicate another significant difference between the FLRS industry (median = 4 574) and the Retail industry (median = 3 145), $U = 116.00$, $z = -4.523$, $p = .000$, $r = -0.60$. For passive voice sentences items the Mann-Whitney U Test results also indicate a significant difference between the FLRS industry (median = 742.00) and the Retail industry (median = 395), $U = 129.00$, $z = -4.310$, $p = .000$, $r = -0.58$.

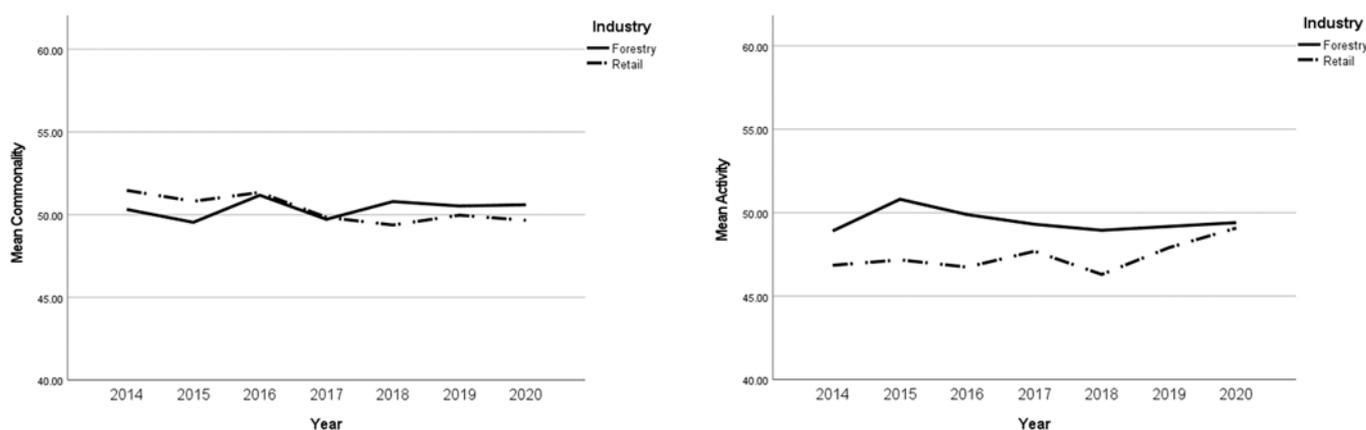
The results of the narrative analysis of the integrated reports are shown in Table 2.

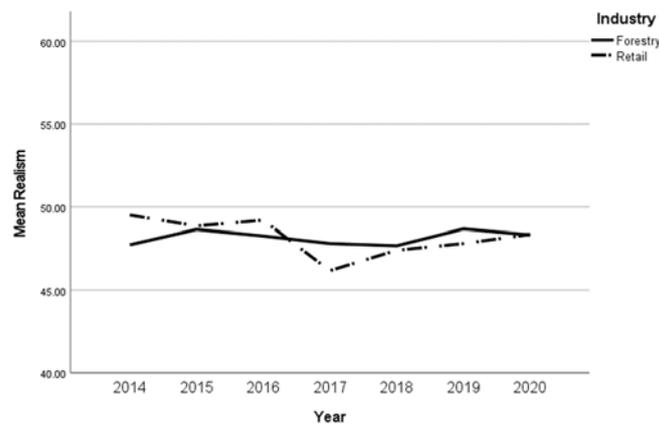
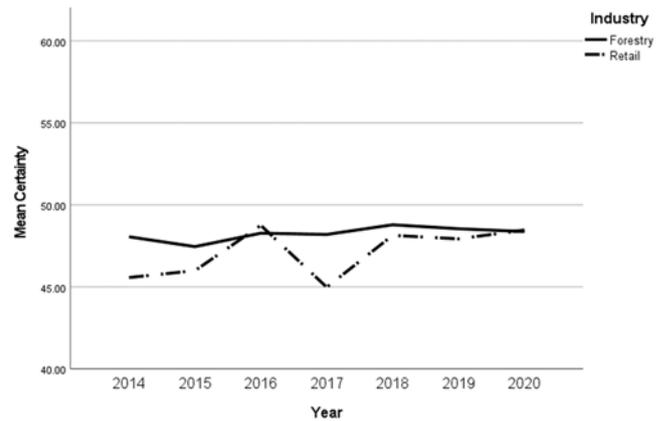
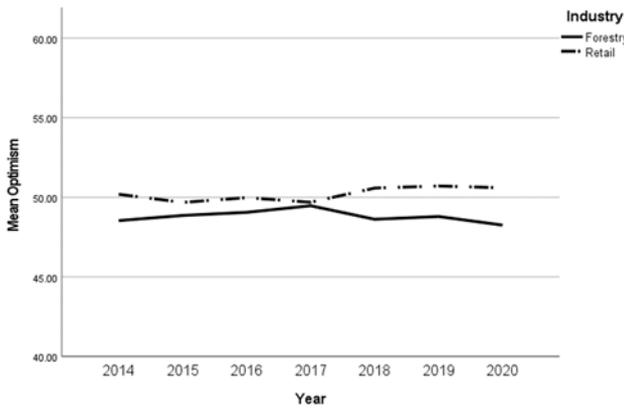
Table 2: Narrative analyses

	Rank	Mean	Median	Standard Deviation	Min	Max
<i>Panel A: FLRS (n = 28)</i>						
Commonality	1	50.38	50.45	1.26	47.40	52.84
Activity	2	49.49	49.16	2.19	46.20	55.56
Optimism	3	48.80	49.26	1.85	45.46	51.98
Certainty	4	48.24	48.24	1.82	45.68	52.35
Realism	5	48.16	48.12	1.68	44.56	51.47
<i>Panel B: Retail (n = 28)</i>						
Commonality	1	50.35	50.71	1.46	46.78	52.71
Optimism	2	50.20	49.94	0.87	48.80	52.09
Realism	3	48.19	47.72	2.87	43.59	52.28
Activity	4	47.39	47.41	1.66	44.26	50.61
Certainty	5	47.12	47.18	2.52	41.76	50.99

From the rankings in Table 2, it appears that companies in the two industries have different preferences for the five narrative tones defined by Diction. Furthermore, the FLRS industry has a lower dispersion between the five tones (high of 50.38 and low of 48.16) and tighter standard deviations with only *Activity* exceeding two points. The Retail industry has a wider dispersion between the five tones (high 50.35 and low of 47.12) and both *Certainty* and *Realism* have standard deviations greater than two. *Commonality* was the only tone that both industries preferred equally as it is ranked first by both industries. The narrative tone category of *Commonality* refers to language highlighting the values of a group. The difference in the use of the *Commonality* narrative tone was insignificant between the FLRS industry (median = 50.45) and the Retail industry (median = 50.71), $U = 400.50$, $z = .139$, $p = .889$, $r = 0.02$.

Figure 3: Trends of narrative tone over time





For the second-most popular narrative strategy, the Retail industry tended more towards the use of *Optimism* language (language that endorses a person, group, concept, or event or that highlights their positive attributes) while the FLRS industry uses more *Activity* words (language emphasising movement, change, the implementation of ideas, and the avoidance of passivity). *Optimism* was the third most prevalent tone for the FRLS industry. A Mann-Whitney U Test of the difference in the use of the *Optimism* narrative tone was significant between the FLRS industry (median = 49.26) and the Retail industry (median = 49.94), $U = 581.00$, $z = 3.097$, $p = .002$, $r = 0.41$ with the *Optimism* score being significantly higher for the Retail industry. A Mann-Whitney U test revealed a significant difference in the *Activity* narrative tone of the FLRS industry (median = 49.16) and the Retail industry (median = 47.41), $U = 178.50$, $z = -3.499$, $p = .000$, $r = -.46$ with the *Activity* score being significantly higher for the FLRS industry.

The least-used tone for the FLRS industry was *Realism*, whilst that for the Retail industry was *Certainty*. *Realism* uses words that describe tangible matters that affect everyday lives, whilst *Certainty* refers to inflexibility and completeness. The Mann-Whitney U Test difference in the use of the *Realism* narrative tone was insignificant between the FLRS industry (median = 48.12) and the Retail industry (median = 47.72), $U = 388.00$, $z = -.066$, $p = .948$, $r = -0.01$. For the use of the *Certainty* narrative tone the difference was also not significantly different between the FLRS industry (median = 48.24) and the Retail industry (median = 47.18), $U = 294.50$, $z = -1.598$, $p = .110$, $r = -.21$.

The trends over time for the use of specific narrative tones are depicted in Figure 3. For *Activity* and *Optimism*, the lines never cross and the use of these two tones are significantly different between the two industries.

DISCUSSION AND CONCLUSIONS

The purpose of our study was to find whether JSE-listed companies in the FLRS industry, given the environmentally sensitive nature of their operations, use specific narrative strategies in their integrated reports. The results from an analysis of the FLRS industry were compared to results from a similar analysis of the integrated reports of companies in the Retail industry, which have a lower impact on the environment and are thus expected to disclose information differently.

The findings show firstly that the integrated reports of companies in both industries tend to lack readability. However, the lack of readability is more pronounced in the FLRS industry. This finding is based on specific readability formulae, as well as other measures that affect readability, such as word count, the use of passive voice sentences, and 'wordy' items. Readability has declined over time and this decline is even more prominent in the FLRS industry than in the Retail industry. Low readability in other studies is a means to hide negative information, and this might be true for our sample of FLRS that engages in activities that harm the environment in terms of emissions and effluents generated during the processing of wood products.

The analysis of the narrative styles used in integrated reports shows that the reports in both industries tend to make use of words relating to *Commonality* most often. In the FLRS industry specifically, the use of *Commonality* and *Activity* words are most prominent. This may be a means to give the reader a certain impression of the company, namely that the company stands for certain principles (*Commonality*) and that the company is actively involved in change and the implementation of ideas (*Activity*). Non-parametric tests reveal that *Activity* and *Optimism* as narrative strategies differ significantly between the two industries, whilst *Commonality*, *Realism* and *Certainty* displayed no statistically significant differences. It seems that the intensity of use (or lack thereof) in these three tones could be generic to integrated reports. However, *Activity* and *Optimism* could be influenced by business models and operating and market conditions of specific industries. These two narrative strategies could also be used for impression management to create favourable opinions with the shareholders and other stakeholders. Management seems to be active and in charge (FLRS industry), or optimistic about their plans and the future (Retail industry).

The study contributes to the paucity of literature on narrative use in corporate reports and its potential use for impression management in the Sub-Saharan Africa context. We find South African companies in industries that have a larger environmental footprint, in this case, FLRS, have longer and less readable reports than companies in the Retail industry. We also find notable differences in how narrative tones are used. We argue that the combined findings can indicate the presence of impression management tactics in the FLRS industry.

The purpose of corporate reports is to communicate effectively in a way that readers can understand. If companies make use of specific narrative strategies or reduced readability to manage the impressions of stakeholders, it brings to question the reliability of the information for decision-making. The study has implications for various stakeholder groups as it suggests that reporting or disclosure

is not used for the purpose it was intended for, namely, to inform, but rather to manage impressions through specific narrative choices. For policymakers, regulators, and authorities, the results from this study show that integrated reports are not necessarily accessible in terms of readability. The research is also a call upon companies to ensure the language used in their non-financial narrative reporting is written plainly and without bias so as not to unduly influence or manipulate stakeholders.

The most significant shortcoming of this study is the small sample size. However, even though the sample size is small, as an exploratory study it paves the way for more intensive future investigations into the narrative strategies used by companies, especially in their integrated reports. To expand on this study, one can include other industries and investigate the reports over a longer period. The specific narrative strategies of the companies can also be related to other company characteristics.

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