

EVIDENCE OF AN EXPECTATION GAP IN CORPORATE ENVIRONMENTAL REPORTING IN SOUTH AFRICA

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ABSTRACT

Research evidence has suggested that the environmental reports produced by listed South African companies, like in other countries are perceived to be deficient in decision-usefulness, thus not of a standard that can satisfy the decision-making needs of users of these reports. This article explores whether the perceived deficiency in the decision-usefulness of the reports is due to differing perceptions between users and preparers of the reports with regard to what decision-useful reports ought to be. The article thus explores whether an environmental reporting expectation gap exists within South Africa with regard to what attributes the reports ought to have to be decision-useful. Using a questionnaire survey, this study elicited the perceptions of 54 individuals from three user groups, namely, ethical investors, environmental groups and accounting academics, as well as those of 42 preparers from the Top 100 South African companies listed on the Johannesburg Securities Exchange (JSE). Upon comparing the responses, significant differences were found between the views of users and preparers in relation to the attributes that decision-useful environmental reports ought to have. The differences are consistent with the existence of an expectation gap in South Africa with regard to the decision-usefulness of the environmental reports.

Keywords: Environmental reports, expectation gap, decision-usefulness, qualitative characteristics

1. INTRODUCTION

Environmental reporting, like any other form of accounting, aims to provide users with information that is useful for making decisions (GRI, 2013). Research evidence suggests that different user groups do use environmental reports for making various types of decisions (Kamala, 2015). Environmental lobby groups for instance may use the reports to decide whether to launch a campaign against a “ungreen” company, institute a legal action or even intervene in cases of gross environmental violation (GRI, 2008). Accounting researchers may use environmental reports to evaluate the reporting practice or to decide the best reporting practice (KPMG & Sustainability, 2008). Green consumers may use environmental reports to decide whether to boycott a company's products or not (Strandberg Consulting, 2009). Socially responsible investors may use an environmental report to decide whether or not to invest in a company (De Villiers & Van Staden, 2010). Similarly, the ever growing environmentally conscious employees may need environmental information when deciding the company to which they will supply their labour (Greening & Turban,

2011). Given the evidence that users do use environmental reports for making decisions, it is imperative that the reports be decision-useful.

Recent studies conducted in South Africa and abroad show that users are increasingly critical of the decision-usefulness of environmental reports (Kamala, 2015; GRI, 2014; KPMG, 2013). In some studies, users have lamented that the reports are too generic, overloaded and incomprehensible (Laud & Schepers, 2009). In other studies, users have complained that the reports are patchy, biased and/or, self-laudatory with minimal negative information disclosure even when such information is known to exist (Delmas & Burbano, 2011; KPMG, 2013). In yet in other studies, users have opined that environmental reports are questionable due to the low levels of reasonable assurance of the reports as well as a general failure to include resentful stakeholders' voices in the reports (GRI, 2014; KPMG, 2013).

In some studies, users have also complained that environmental reports vary widely with regard to their scope, depth and content and are thus incomparable (Kamala, 2015). Yet others have bemoaned the lack of quantitative data, over-aggregation of data, as well as a lack of standardisation of environmental information which has been proliferated in a variety of media using varied formats (GRI, CFCGIA& UNEP, 2013). These together with a lack of consistency in reporting from one period to another and infrequent reporting have led to users' dissatisfaction with the quality of the reports (Kamala, 2015; Mitchell & Hill, 2010). Indeed, some South African studies have lamented that users are increasingly asking for better quality of environmental information than they were receiving (De Villiers & Van Staden, 2010; Mitchell & Quin's, 2005).

If the environmental reports produced by South African listed companies are perceived to be lacking in decision-usefulness, then the decisions made in relation to issues such as those identified above may be different to those that would have been made if the users were provided with more decision-useful information (Deegan& Rankin, 1999). The deficiency in information implies that companies with undesirable environmental practices continue to operate at a higher scale than they should, had the respective users been provided with decision-useful information. Thus failure to provide decision-useful environmental information denies the users the power to drive desirable change in corporate behaviour (Gray, 1992).

This article explores whether the perceived deficiency in the decision-usefulness of corporate environmental reports in South Africa is due to differing perceptions between users and preparers of environmental reports as to what attributes a decision-useful environmental report ought to have.

The rest of the article proceeds as follows: Section 2 reviews the relevant prior literature. Section 3 provides the theoretical perspective adopted in this article. Section 4 presents the methodology, followed by results and discussion in section 5. Section 6 provides the summary and conclusion of the article.

2. LITERATURE REVIEW

An expectation gap occurs when there is a difference in expectations between a group with expertise on a particular subject (preparers) and a group which relies upon that expertise (users) (Deegan & Rankin, 1999). Although the notion of an expectation gap is most commonly used to represent differing views between auditors understanding of what their role is and the public's expectation of the auditors, the notion has been extended to environmental reports to refer to the differences in perceptions of users and preparers with regard to various issues pertaining to the reports (Deegan & Rankin, 1999; Mitchell & Quin, 2005).

One such study conducted by Deegan and Rankin (1999) in Australia, found significant differences in perceptions of users and preparers on various environmental issues pertaining to the reports. Specifically, most users, unlike preparers expected environmental information to be disclosed in annual reports in a confined separate section (Deegan & Rankin, 1999). Similarly, unlike the preparers, users perceived the environmental reports to be significantly more important, preferred that guidelines on disclosure of environmental information be provided by accounting professional bodies and governments and that environmental reporting be regulated (Deegan & Rankin, 1999). However Deegan and Rankin's (1999) study was conducted more than 16 years ago thus its findings may not be applicable at present. In addition, the researchers did not investigate the existence of an expectation gap with regard to the decision-useful of environmental reports. Furthermore, they conducted their study in Australia, therefore the views of the respondents may not represent those of users and preparers in South Africa.

In a more recent Australian study, Haque, Deegan and Inglis (2013) found low levels of disclosure of climate change information, as compared to what users expected. The authors attributed their finding partly to perceived higher costs of producing the information relative to mostly unquantifiable benefits derived. Haque *et al.*'s (2013) study was however conducted in Australia, therefore the views of the respondents may not represent those of users and preparers in South Africa. In addition, they only focused on climate change related disclosures, a small component of environmental information disclosed by South African companies.

In the South African context, Mitchell and Quin (2005) compared the expectations of preparers and users of environmental reports, and found that users expected higher levels of disclosure than the preparers thought they did (Mitchell & Quin's, 2005). Similarly, users rated many disclosures to be of more importance than preparers thought they did, thus there was evidence of the existence of an expectation gap between preparers and users (Mitchell & Quin's, 2005). However, Mitchell and Quin's (2005) study only surveyed the views of one category of users (environmental pressure groups), who are known to provide prejudiced answers to further their own ulterior objectives (Deegan & Rankin, 1997). In addition, the study is outdated as it was conducted more than 10 years ago. Besides, the study did not investigate whether there was an expectation gap with regard to the decision-usefulness of environmental reports.

The above-mentioned gaps in the prior literature suggest a need for a more recent study in the South African context, to determine if indeed an expectation gap exists between users and preparers of environmental reports with regard to the perceived attributes of decision-usefulness that these reports ought to have. This study aims to determine whether an expectation gap exists between users and preparers of corporate environmental reports produced by listed South African companies with regard to the qualitative characteristics that a decision-useful environmental report should have.

3. METHODOLOGY

3.1 Questionnaire design

The users' and preparers' perceptions on the qualitative characteristics that a decision-useful environmental report should have were elicited using a questionnaire survey. As was the case in Deegan and Rankin's (1999) study, two sets of identical closed-ended questionnaires were designed, one for the users and the other for the preparers, to maximise comparability of responses of the two groups of respondents. The two questionnaires comprised eight questions requiring responses on a five-point Likert scale, yes/no answers, multiple-choice and numerical answers. The questionnaires were thus designed to be easy to answer, a strategy deployed to maximise the response rate by minimising the time required to complete the questionnaire, which ideally should have been 15 minutes.

The questionnaires were divided into a three sections. The first section requested demographic information such as gender, age, highest educational qualification, and occupation to ensure that the selected respondents were knowledgeable users and preparers of environmental reports, and thus appropriate for this study. The second section elicited respondents' perceptions on what

environmental reports should do or how they should be. The third section elicited respondents' perceptions on how environmental reports are read and the media from which the reports are read.

Prior to disseminating the questionnaire, a pilot test was conducted whereby the questionnaires were completed and critically evaluated by ten academics with vast experience in questionnaire design. The questionnaires were then adjusted according to the recommendations of the academics and when re-submitted to them were found to be clear, concise and understandable.

3.2 Population and sample selection

The population comprised both users and preparers of environmental reports produced by JSE listed companies. The population of users as defined in the accounting conceptual frameworks could foreseeably comprise the entire South African population (IASB, 2010; FASB, 2010; Mitchell & Quinn, 2005). This study focused on the user groups actively involved in 1) ethical investment (ethical investment funds), 2) environmental protection (environmental NGOs), and 3) environmental reporting research (environmental reporting researchers who have published journal articles on environmental reporting in South Africa).

Given that there appears to be no comprehensive public listing of all ethical investment funds, environmental NGOs and environmental reporting researchers in South Africa, a compilation of a population frame list was done with aid of the Internet. A thorough Internet search of the three categories of users was conducted, which yielded 100 users that comprised representatives of 30 ethical investment funds, 30 representatives of environmental NGOs and 40 accounting researchers. Consistent with the prior studies, a census of the identified users was conducted given that the population was relatively small (Tilt, 1994; Danatas & Gadenne, 2004).

The population of preparers of environmental reports included representatives of the top 100 operating companies by market capitalisation listed on the JSE. The representatives included financial directors, accountants, executives, managers and environmental officers involved in the preparation of the reports. Again, a census of the preparers was conducted, given that the population was relatively small.

3.3 Questionnaire distribution

Each identified respondent was contacted telephonically to obtain his or her co-operation prior to sending an Email with a link to a web-based questionnaire. Attached to the Email sent was a detailed cover letter that explained the purpose of the study and invited the respondents to participate in the survey by clicking on the Uniform Resource Locator (URL) link provided, which re-directed them to a web-based questionnaire. Therefore only respondents who had an E-mail

address were included in this survey. The E-mail which was sent out on 1 July 2013 included a deadline for completing the questionnaire of 31 August 2013.

4. RESPONSE RATE AND TEST FOR NON-RESPONSE BIAS

Out of the 100 E-mails sent to users, 54 usable questionnaires were returned resulting in a response rate of 54%, a rate higher than that achieved by Tilt (1994) (46.8%), and O'Dweyer, Unerman and Hession (2004) (52.8%), that also conforms to Fowler's (1988) recommendation that a response rate should be at least 20% to provide credible statistics about a population. Out of 100 questionnaires sent to preparers, 42 usable questionnaires were returned resulting in a response rate of 42%, which also conforms to Fowler's (1988) recommendation cited above.

Of the users, 55.56% were male, 44.44% were female. All users were above 26 years old and had a minimum of a post-matric certificate/diploma. In addition, the users were mostly accounting researchers (39.62%), followed by other professionals (32.08%), and representatives of environmental groups (22.64%). The above information suggests that the users were generally well educated and thus could reasonably be expected to understand the content of environmental reports. Besides, the sampled users represented a variety of stakeholders in a manner consistent with the broad definition of users in the accounting conceptual frameworks (FASB, 2010; IASB, 2010).

Concerning preparers, 45.24% are male while 54.76% are female. All preparers were above 26 years old and had a minimum of a post-matric certificate/diploma. With regard to occupation, 11.9% of the preparers were accountants, while 88.1% belonged to other professions. Although most preparers of environmental reports were non-accountants, they were generally well educated and knowledgeable, and thus appropriate to answer the questionnaire.

To minimise non-response bias, a series of T-Tests for equality of means (2-tailed) were performed on the responses of the users on each of the Likert scale questions by comparing the responses of the first 27 users that responded (early responders), to those of the last 27 users that responded (late responders). Similar tests were also conducted on the responses of preparers on each of the Likert scale questions, by comparing the responses of the first 21 preparers that responded (early responders), to those of the last 21 preparers that responded (late responders). The late responders served as proxies for non-responders, an approach that has been widely used in the prior literature (De Villiers & Van Staden, 2010). The T-Tests revealed no significant differences between the views of early and late responders for both users and preparers at 95% confidence level ($p < 0.05$). With high response rates, a variety of opinions from heterogeneous respondents and a lack of significant differences between the early and late responses, it is unlikely that the results of the current study were significantly influenced by non-response bias (De Villiers & Van Staden, 2010).

5. RESULTS AND DISCUSSIONS

5.1 What environmental reports should do and how they should be

Respondents were asked to rate the importance of 28 statements about what a company's environmental reports should do or how they should be. A five point Likert scale was used with weightings of one for not important at all, two for slightly important, three for fairly important, four for very important, and five for extremely important. Therefore the closer the mean was to five, the more important the statement was to the respondents. The responses of both users and preparers were then ranked according to the mean score of responses to each statement, in a descending order, and then compared to each other to determine whether there were differences in the perceptions of the two groups on the importance of the statements. In addition, the mean scores of the users' and preparers' rating of the statements were compared using T-Tests for equality of means (2-tailed) to determine whether there were any statistically significant differences between the perceptions of the two groups on the importance of the statements.

As summarised in Table 1, only four out of 28 statements were ranked equally by both users and preparers. These included the statement that “environmental reports should identify and describe key relevant issues”, ranked second by both groups, although the mean of the users was higher (4.61) than that of the preparers (4.31). Likewise both users and preparers ranked the statement that “environmental reports should adhere to well-established international guidelines” fifth, but the users' mean was higher (4.36) than that of the preparers (4.13).

Similarly, both groups ranked the statement that “environmental reports should indicate whether environmental management systems have been certified” 21st. Here again the users' mean was higher (3.75) than that of the preparers (3.31). Following the same pattern, both users and preparers ranked the statement that “environmental reports should be produced quarterly or bi-annually” 28th. However, the users' mean was again relatively higher (2.77) than that of the preparers (2.09). The foregoing indicates that users perceived the above statements to be more important than the preparers did, although both groups ranked them equally, which could suggest existence of an expectation gap between the two groups on the importance of the four statements.

Besides the four statements discussed above, all the other statements in Table 1 were ranked differently, but in all cases, the users' means were higher than those of the preparers. Even in cases where the preparers ranked a statement higher, the users' means remained relatively higher.

Table 1: What a company's environmental report should do or should be

Number	Statement	User	Rank	Preparers	Rank	Statistical Significance of differences
		n=36		n=32		
		Mean		Mean		
1	Disclose both negative and positive aspects in a balanced manner	4.67	1	4.03	6	0.000*
2	Identify and describe key relevant issues	4.61	2	4.31	2	0.098
3	Be specific and contain accurate information	4.47	3	4.39	1	0.634
4	Provide future oriented information	4.42	4	3.72	11	0.001*
5	Adhere to well-established international guidelines	4.36	5	4.13	5	0.226
6	Provide targets	4.36	5	3.88	8	0.019*
7	Identify and address key stakeholders and their concerns	4.33	7	4.16	4	0.365
8	Demonstrate top management commitment to environmental issues	4.33	7	4.25	3	0.669
9	Compare quantitative outputs/impacts against best practice/industry standards	4.33	7	3.50	17	0.000*
10	Demonstrate the integration of environmental issues into core business processes	4.33	7	3.69	12	0.009*
11	The reports should be readily accessible via multiple media (Printed hard copies and soft copies via Internet)	4.31	11	3.72	10	0.008*
12	Allow for quick reading (executive summary, and fact sheet of key indicators)	4.28	12	4.00	7	0.254
13	Show trends (performance over time)	4.19	13	3.69	12	0.018*
14	The report should provide quantitative/monetary disclosure of significant outputs/impacts	4.17	14	3.69	12	0.024*
15	Include interpretation and benchmarks to provide context	4.17	14	3.63	16	0.019*
16	Include an assurance statement from an independent third party	3.94	16	3.45	19	0.074
17	Enhance readability using multiple languages, pictures, charts, explanations	3.86	17	3.23	23	0.027*
18	Description of the organisation's structures that deal with environmental matters	3.83	18	3.26	22	0.037*
19	The reports should provide contacts for feedback and further information	3.78	19	3.69	12	0.725
20	Indicate whether internal auditing coverage is extended to environmental systems and procedures	3.78	19	3.34	20	0.073

21	Indicate whether environmental management systems have been certified	3.75	21	3.31	21	0.114
Number	Statement	User	Rank	Preparers	Rank	Statistical Significance of differences
		n=36		n=32		
		Mean		Mean		
22	Describe the management system	3.74	22	3.50	17	0.323
23	Be produced annually	3.74	22	3.88	8	0.595
24	Enhance accessibility of information using navigation tools	3.50	24	2.88	25	0.017*
25	Include stakeholder voices	3.42	25	3.06	24	0.181
26	Be produced on a real time basis	3.06	26	2.48	27	0.103
27	Be interactive	2.97	27	2.53	26	0.102
28	Be produced quarterly or bi-annually	2.77	28	2.09	28	0.019*

Scale: 1 = not important at all; 5 = extremely important

*statistically significant differences ($p < 0.05$) at 95% confidence level

The foregoing suggests that the users perceived the 28 statements to be more important than the preparers did, which further suggests the existence of an expectation gap between the two groups with regard to the perceived importance of the 28 statements.

The results of the T-Tests for equality of means (2-tailed) revealed significant differences ($p < 0.05$) between the responses of users and preparers in 13 (46% of all statements) out of 28 statements at a 95% confidence level. Of the 13 significant differences, four relate to statements associated with comparability, four to statements linked to understandability, three to statements related to reliability, one to a statement associated with relevance and another to a statement related to timeliness. The foregoing discussion suggests that the significant differences found mostly relate to statements associated with enhancing qualitative characteristics, as nine out of the 13 statements with significant differences relate to these characteristics.

Although the above results suggest the existence of an expectation gap primarily related to the enhancing qualitative characteristics, three of the significant differences found in statements relate to reliability of the environmental reports and one to relevance, but on a key statement namely that “environmental reports should identify and address key stakeholders and their concerns”. One can therefore conclude that there was an expectation gap between users and preparers with regard to the qualitative characteristics that decision-useful environmental reports should have.

The above results are consistent with the findings of prior studies (Mitchell & Quin, 2005; Myburgh 2001; Deegan & Rankin, 1999), which also found an expectation gap between users and preparers on various issues related to environmental reporting.

5.2 How environmental reports are read and the media from which the reports are read

5.2.1 How environmental reports are read

Bearing in mind that the technique employed to read a report determines how well it's understood, and used to influence decisions, the users were asked to indicate how often they employed five techniques when reading environmental reports. The techniques included, scanning (to locate specific information), skimming (rapid reading of headings, topic sentence to get the main idea), exploratory reading (to get a fairly accurate picture of the entire report), study reading (to maximise understanding of the main ideas) and critical reading (questioning, analysing and evaluating the text). Likewise the preparers were asked to express an opinion on how often their readers employed the five reading techniques. A five point Likert scale was used with weightings of one for never, two for rarely, three for sometimes, four for often, and five for almost always. Therefore the closer the mean was to five, the more often a reading technique was used by users or was perceived by preparers to be used by users.

Table 2: Frequency of usage of various reading techniques by users

Number	Reading technique	User	Rank	Preparers	Rank	Statistical Significance of differences
		n=36 Mean		n=32 Mean		
1	Scanning (to locate specific pieces of information)	4.06	1	3.81	1	0.239
2	Skimming (rapid reading of headings, topic sentence to get the main idea)	3.89	2	3.68	2	0.291
3	Exploratory reading (to get a fairly accurate picture of the entire report)	3.68	3	3.00	3	0.000*
4	Study reading (to get a maximum understanding of the main ideas)	3.37	4	2.71	4	0.006*
5	Critical reading (questioning, analysing and evaluating the text)	3.34	5	2.55	5	0.033*

Scale: 1 = never; 5 = almost always

*statistically significant differences at 95% confidence level

The responses of both users and preparers were then ranked according to the mean scores for the responses, in a descending order, and then compared to each other. In addition, T-Tests for equality of means (2-tailed) were performed to determine whether there were statistically significant differences between the perceptions of the two groups with regard to the frequency of usage of the five reading techniques.

As summarized in Table 2, the ranking of the five reading techniques, based on the means of the users and preparers are identical. However, the means of the users on the five reading techniques are higher than those of the preparers, indicating that users perceived themselves to have used the reading techniques more often than was perceived by the preparers, which suggests the existence of an expectation gap between the perceptions of users and preparers. Indeed, the T-Test for equality of means (2-tailed) reveals three significant differences ($p < 0.05$) in the perceptions of the users and preparers pertaining to exploratory reading, study reading and critical reading at 95% confidence level, which further confirms the existence of an expectation gap. The apparent expectation gap particularly on the three reading techniques considered to be more effective, could perhaps explain the provision of lengthy environmental reports documented in the prior literature (KPMG & Sustainability, 2008; Solomon & Solomon, 2006; Spada, 2008). The lengthy environmental reports are meant to be read using lesser effective reading techniques such as scanning and skimming, techniques that are unlikely to inform sound decision-making.

5.2.2 Media from which environmental reports are read

Users were asked to indicate how often they read environmental reports from various media, primarily the print media and company websites. With regard to the print media, the users were required to specify how often they read environmental reports from integrated annual reports or sustainability reports. Likewise, with regard to the company websites, the users were required to specify how often they read environmental reports in integrated annual reports, or stand-alone sustainability reports, and the format of the reports that they often read (Hyper Text Mark-up Language (HTML) format or Portable Document Format (PDF)). Preparers were also asked to express an opinion on how often their users read environmental reports from the media mentioned above. A five point Likert scale was used with weightings of one for never, two for rarely, three for sometimes, four for often, and five for almost always. Therefore, the closer the mean was to five, the more often environmental reports were read or were perceived to have been read from a given medium.

The responses of both users and preparers were then ranked according to mean scores of responses, in a descending order, and then compared to each other. In addition, T-Tests for equality of means (2-tailed) were performed to determine whether there were statistically significant differences

between perceptions of the two groups.

Table 3: Comparison of users' and preparers' perceptions on how often users read environmental reports from different media

Number	Medium	User n=36 Mean	Rank	Preparers n=32 Mean	Rank	Statistical Significance of differences
1	PDF integrated annual reports on companies' websites	3.46	1	4.30	1	0.005*
2	PDF stand-alone sustainability reports on companies' websites	3.43	2	4.07	4	0.057
3	HTML format stand-alone sustainability reports on companies' websites	3.32	3	4.10	3	0.010*
4	HTML format integrated annual reports on companies' websites	3.29	4	3.29	5	0.989
5	Print medium integrated annual reports	2.83	5	4.23	2	0.000*
6	Print medium stand-alone sustainability reports	2.74	6	3.19	6	0.178

Scale: 1 = never; 5 = almost always

*statistically significant differences ($p < 0.05$) at 95% confidence level

As illustrated in Table 3, the ranking of three media was identical for both users and preparers, namely, PDF integrated annual reports on companies' websites, ranked first, HTML format stand-alone sustainability reports on companies' websites, ranked third, and print medium stand-alone sustainability reports ranked sixth. In addition, the ranking of HTML format integrated annual reports on companies' websites was more or less the same for both users and preparers, as users ranked it fourth whereas the preparers ranked it fifth. However, the rankings of users and preparers differed with regard to PDF stand-alone sustainability reports on companies' websites which users ranked second, whereas the preparers ranked it fourth. Likewise, the users ranked print medium integrated annual reports fifth, whereas the preparers ranked it second.

What is noteworthy in the above results is that the preparers' means were relatively higher than users' for all the media except HTML format integrated annual reports on companies' websites, which were equal for both groups (3.29). The foregoing suggests the existence of an expectation gap as preparers perceived that users read more often from the media provided in Table 3, than the users themselves did.

The T-Tests for equality of means (2-tailed) revealed three statistically significant differences ($p < 0.05$) in the perceptions of the users and preparers with regard to the media that users most often read their environmental reports from. The significant differences pertained to how often users read environmental reports from three media namely PDF format integrated annual reports on companies' websites, HTML format stand-alone sustainability reports on companies' websites, and print medium integrated annual reports. These differences suggest the existence of an expectation gap that could undermine the decision-usefulness of the environmental reports. In other words, the preparers could be using inappropriate or inconvenient media, particularly the print medium integrated annual reports, to disseminate the environmental reports, and yet the users do not read often from this medium, a situation that undermines the decision-usefulness of the environmental reports. The above results suggest that HTML format integrated annual report found on companies' websites is the optimal media as there is no expectation gap between the users and preparers with regard to its usage.

The above results are consistent with the findings of prior studies (Deegan & Rankin, 1999; Mitchell & Quin, 2005), which found an expectation gap between the users and preparers with regard to the usage of annual reports for environmental reporting. In particular, Deegan & Rankin (1999) found that a majority of users (67.8%) sought the environmental information in the annual reports, whereas only 24.1% of the preparers disclosed this information in their annual reports, and fewer had plans of doing so in the future.

5.3 Explanation for the expectation gap

Accounting conceptual frameworks assert that providing decision-useful accounting information is limited by cost constraint (FASB, 2010; IASB, 2010). Specifically, the frameworks assert that accounting information can be useful and yet too costly to justify providing it. To be useful and worth providing, the perceived benefits of providing the information should exceed its perceived costs (FASB, 2010; IASB, 2010). The costs of providing information include costs of collecting, classifying, processing, verifying, disseminating as well as the costs that arise as a consequence of providing such as litigation and lost competitive advantages (FASB, 2010; IASB, 2010). The benefits of providing information include avoidance of regulation, lower cost of capital, attraction of quality labour, enhanced reputation and customers' goodwill (Kamala, 2015). As apparent from the foregoing, the benefits of disclosing accounting information are not always evident or measurable, and are thus more difficult to quantify than the costs (FASB, 2010).

The more decision-useful an environmental report is, the more costly it is to produce (FASB, 2010;

IASB, 2010). For example, producing a more relevant environmental report may require a more thorough and costly stakeholder engagement exercise. Likewise, producing a more reliable report may require a reasonable assurance statement from a third party, which costs more than producing a less reliable report that does not need a reasonable assurance statement.

Although users too do incur costs of obtaining environmental information, their costs are a small fraction of the preparers' and in fact it could be deemed to be negligible (FASB, 2010). In fact, most of the costs of providing environmental information fall initially on the preparers, while the benefits are reaped by both users and preparers (FASB, 2008). Considering that some of the benefits of providing decision-useful environmental reports are intangible, unquantifiable and even questionable, and bearing in mind that the more decision-useful an environmental report is, the more costly it is to produce, preparers may be reluctant to produce environmental reports of a decision-usefulness level, and in media desired by users, as the benefits of those reports are not as apparent as their costs are (FASB, 2010). It is thus probable that preparers will perceive that the any environmental reports currently provided in a variety of media are adequately decision-useful and value for money, even if the opposite is true, given that users do not initially contribute to the cost of providing such reports, a scenario that could result in an expectation gap (IASB, 2010).

Likewise the users may be oblivious of the costs involved in producing environmental reports of a decision-useful level that they desire, and thus may thus expect reports of a decision-useful level, and in types of media beyond what can be reasonably provided. Users may also want to avoid the cost of erroneous decisions that could arise when the reports provided are not decision-useful (FASB, 2008). However the cost of erroneous decisions may not be apparent to preparers, a scenario that is likely to result in an expectation gap.

6 SUMMARY AND CONCLUSION

This article provides evidence of research undertaken to determine whether an expectation gap exists between users of environmental reports produced by listed South African companies and the preparers of the reports with regard to the qualitative characteristics that a decision-useful environmental report should have. The results presented in this article show that such a gap exists. The users of environmental reports produced by these companies are more likely to suggest that environmental reports should disclose both negative and positive aspects in a balanced manner, provide future oriented information, provide targets, compare quantitative impacts against best practice and demonstrate the integration of environmental issues into core business processes than

is perceived to be the case by the reports preparers.

In addition the users are also more likely to suggest that environmental reports should be readily accessible via multiple media, show trends, provide quantitative/monetary disclosure of significant impacts, include interpretation and benchmarks to provide context, enhance readability using multiple languages, pictures, charts, explanations, than is perceived to be the case by the reports preparers. Furthermore, users are also more likely to suggest that environmental reports should describe the organisation's structures that deal with environmental matters, enhance accessibility of information using navigation tools and be produced quarterly or bi-annually than is perceived to be the case by the reports preparers.

The results also show that an expectation gap exists with regard to the reading techniques most frequently used by users when reading environmental reports and the media from which the reports were frequently read. Specifically, users were more likely to use more thorough reading techniques such as exploratory reading, study reading and critical reading than was perceived to be the case by preparers. Likewise, users were more likely to read the reports from PDF integrated annual reports on companies' websites, HTML format stand-alone sustainability reports on companies' websites and print medium integrated annual reports reading than was perceived to be the case by preparers.

Given the above expectation gap, it is rather not surprising that the users perceived the reports read to be of lesser understandability, relevance, timeliness, reliability and verifiability than the preparers did. The existence of an expectation gap may be explained in part by the fact that preparers incur the initial costs of producing environmental reports but they do not derive immediately apparent benefits from such reports. Accordingly they are reluctant to provide decision-useful reports that meet the expectations of users as this requires that extra costs be incurred. Alternatively, users may be oblivious of the costs that are involved to prepare the reports at a decision-useful level that they desire because they do not pay for these costs, thus may expect the reports to be at a decision-usefulness level beyond what can be reasonably provided.

The findings of this article have implications for preparers to find ways, perhaps using technology to engage users more effectively in order to reduce the expectation gap. Professional bodies could develop standards to improve the quality of environmental reports. The work of this study could be extended further to investigate whether an expectation gap exists in other forms of corporate reports. An obvious limitation of this article is the limited sample used and the selection of only three user groups to represent the diverse possible users of environmental reports in South Africa

and the narrow focus on preparers from listed companies.

REFERENCES

1. Danastas, L. & Gadenne, D. 2004. *A Study of external pressure groups: users of corporate social disclosure*. Paper presented at the Corporate Governance and Ethics Conference, Sydney. June.
2. Deegan, C. & Rankin, M. 1997. The materiality of environmental information to users of annual reports. *Accounting Auditing and Accountability Journal*, 10(4):562–583.
3. Deegan, C. & Rankin, M. 1999. The Environmental Reporting Expectations Gap: Australian Evidence. *British Accounting Review*, 31:313–346.
4. Delmas, M. & Burbano, V.C. 2011. The Drivers of Greenwashing. *California Management Review*. 54(1):64–87.
5. De Villiers, C.J. & Van Staden, C.J. 2010. Shareholders' corporate environmental disclosure need. *South African Journal of Economic and Management Sciences*, 13(4):436–445.
6. Financial Accounting Standards Board (FASB). 2008. *Conceptual framework: statement of financial accounting concepts No. 8*. Available at: <http://www.fasb.org/cs> [accessed 2010-06-16].
7. Financial Accounting Standards Board (FASB). 2010. *Conceptual framework: statement of financial accounting concepts No. 8*. Available at: <http://www.fasb.org/cs/BlobServer> [accessed 2011-01-15].
8. Fowler, F.J. 1988. *Survey research methods*. Beverly Hills, California: Sage.
9. Global Reporting Initiative (GRI). 2008. *Global Reporting Initiative sustainability report*. <http://www.globalreporting.org/NR/.../SR_FINAL_09_06_with_links.pdf> Accessed 28 May 2011.
10. Global Reporting Initiative (GRI). 2013. *G4 Guidelines – Reporting principles and standard disclosures*. <<https://www.globalreporting.org/resourcelibrary/GRIG4-Part1-Reporting-Principles-and-Standard-Disclosures.pdf>> Accessed 16 September 2014.
11. Global Reporting Initiative (GRI). 2014. *Trends in external assurance of sustainability reports*. <<https://www.globalreporting.org/resourcelibrary/GRI-Assurance.pdf>> Accessed 16 September 2014.
12. Gray, R. 1992. Accounting and environmentalism: an exploration of the challenge of gently accounting for accountability, transparency and sustainability. *Accounting, Organizations & Society*, 17(5):399–425.
13. Greening, D.W. & Turban, D.B. 2011. Corporate social performance as a competitive advantage in attracting a quality workforce. *Business and Society*, 39:254–280.
14. Haque, S., Deegan, C. & Inglis, R. 2013. *Disclosure of climate change-related corporate*

- governance practices*. Paper presented at the Asia Pacific Interdisciplinary Research in Accounting Conference, Kobe, Japan. July.
15. International Accounting Standards Board (IASB). 2008. *Exposure draft of an improved conceptual framework for Financial Reporting*. <http://www.iasb.org/NR/...00FD.../conceptual_framework_exposure_draft.pdf> Accessed 01 September 2011.
 16. International Accounting Standards Board (IASB). 2010. *Conceptual framework for financial reporting 2010* Available at: <http://www.ifrs.org/News/Press-Releases/.pdf> [accessed 2011-09-01].
 17. Kamala, P.N. 2015. The decision-usefulness of corporate environmental reports in South Africa. Unpublished Doctor of Commerce thesis. Pretoria. University of South Africa.
 18. KPMG. 2013. *The KPMG Survey of Corporate responsibility reporting 2013*. <<http://www.kpmg.com/global/en/issuesandinsights/articlespublications/corporate-responsibility/pages/corporate-responsibility-reporting-survey-2013.aspx>> Accessed 31 December 2013.
 19. KPMG. Centre For Corporate Governance In Africa (CFCGIA), Global Reporting Initiative (GRI) & United Nations Environmental Programme (UNEP). 2013. *Carrots and sticks: Sustainability reporting policies worldwide – today's best practice, tomorrow's trends*. <<https://www.globalreporting.org/resourcelibrary/carrots-and-sticks.pdf>> Accessed 29 December 2013.
 20. KPMG & Sustainability 2008. *Count me in – The readers' take on sustainability reporting*. <<http://www.kpmg.com/GR/en/.../Sustainability/Documents/CountMeIn.pdf>> Accessed 12 July 2012.
 21. Laud, R.L. & Schepers, D.H. 2009. Beyond transparency: Information overload and a model for intelligibility. *Business and Society Review*, 114:365–91.
 22. Mitchell, C.G. & Hill, T.R. 2010. An exploratory analysis of stakeholders' expectations and perceptions of corporate social and environmental reporting in South Africa. *Southern African Journal of Accounting Research*, 24(1)29–78.
 23. Mitchell, C.G. & Quinn, N.W. 2005. Environmental reporting disclosure in South Africa: A comparative study of the expectations of selected groups of preparers and users. *Meditari Accounting Research*, 13(2):17–33.
 24. O'Dwyer, B., Unerman, J. & Hession, E. 2004. The emergence and future development of Corporate Social Disclosure in Ireland: The perspectives of Non-Governmental Organisations. *Accounting, Auditing and Accountability Journal*, 18(1):14–43.
 25. Solomon, J.F., Solomon, A. 2006. Private social, ethical and environmental disclosure. *Accounting, Auditing & Accountability Journal*, 19(4):564–591.
 26. Spada. 2008. *Environmental reporting trends in FTSE 100 sustainability reports*. <<https://www.spada.co.uk/.../2008/.../environmental-reporting-spada-white-paper>> Accessed 30 January 2011.
 27. Strandberg Consulting. 2009. *The business case for sustainability*.

<http://www.corostrandberg.com/.../Business_Case_for_Sustainability_21.pdf> Accessed 29 December 2011.

28. Tilt, C.A. 1994. The influence of external pressure groups on corporate social disclosure. *Accounting, Auditing and Accountability Journal*, 7(4):47-72.