ATTITUDES AND ACTIONS TOWARDS SUSTAINABILITY: A SURVEY OF NORWEGIAN SMES

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Abstract

Sustainability is one of the biggest buzzwords and catchphrases of the 21st century, dominating not only management discourse but also the public debate in general. Today, many large organizations have bought into the idea that sustainability is essential and have already taken steps towards implementing more sustainable business practices. While past research indicates that SMEs are typically lagging behind their larger counterparts, our knowledge about the sustainability attitudes and actions of the small and medium-sized enterprises (SMEs) is limited. This is also the case in Norway, where there is minimal research on what impact sustainability ideas have had on business practices. More knowledge about sustainability in SMEs is crucial since these firms comprise a large and crucial part of the Norwegian economy. Therefore, this paper aims to examine sustainability attitudes and actions among managers of Norwegian SMEs employing an electronic survey. Drawing on existing research, we propose a typology of managerial responses to sustainability, distinguishing between four groups of managers, which are labeled: 1) skeptics; 2) adaptors; 3) posers and 4) enthusiasts. The findings of the survey suggest that most managers can be characterized as skeptics and that adaptors are the smallest group. While there has been a general increase in sustainability commitment, sustainability initiatives tend to be lagging behind. These findings have several practical and policy-related implications.

Keywords: Sustainability, Sustainable Development, SMEs, Attitudes, Actions, Survey

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1. INTRODUCTION

Sustainability and sustainable developments are two of the biggest buzzwords and catchphrases of the last couple of decades (Mitra, 2017; Palmer, Cooper, & van der Vorst, 1997; Zorn & Collins, 2007). While the view that the firm has a sole responsibility to increase shareholder profits was widely held in the
past (Friedman, 2002), today it is increasingly recognized that firms ought to act in more socially responsible ways and that they have a social responsibility and a moral obligation which extends beyond shareholders to include other organizational stakeholders (Carroll, 1991; McWilliams, 2000).

Hence, today there is a considerable pressure on organizations to act in more sustainable ways (Campbell, 2007), and take into account the impact not only on the environment but also on society at large. Some skeptical researchers have noted that sustainability could be the latest in a long line of management fashions and could go out of vogue (Zorn & Collins, 2007). To this point, researchers have shown that there are a plethora of consultants and company trainers who have commercialized the concept of corporate social responsibility (CSR) and make a living from selling books and seminar seats on how to implement CSR and sustainable business practices (Furusten, Werr, Ardenfors, & Walter, 2013; Madsen & Stenheim, 2014; Rademacher & Remus, 2014; Windell, 2007).

Increasingly, smaller and medium-sized enterprises (SMEs) are also subject to expectations of and pressures to implement sustainability practices (Roxas & Coetzer, 2012). Extant research has suggested that SMEs are laggards in terms of adoption and implementation of sustainability practices (Johnson & Schaltegger, 2016; Lawrence, Collins, Pavlovich, & Arunachalam, 2006) due to their particular characteristics such as limitations related to time and resources (Battisti & Perry, 2011; Caires & Lewis, 2011). Therefore, as a whole, we still know relatively little about the attitudes and actions of SMEs concerning sustainability.

In this article, the overall research question is: What are the managerial attitudes and actions towards sustainability among Norwegian SMEs? We seek to address this research question empirically by drawing on data collected in a survey of Norwegian SMEs. By doing this, our paper aims to make several contributions to the literature on sustainability practices in SMEs. The Norwegian context provides a particularly attractive setting to study sustainability attitudes and practices. There are several unique aspects of the institutional and cultural context in Norway (“Scandinavian model” or “Nordic model”). For example, Norwegian (and Scandinavian) firms place a sharper focus on stakeholders than what is seen in Anglo-American economies (Gjølberg, 2010; Näsi, 1995). This means that there are heightened expectations of and pressure for managers to espouse and/or implement sustainable business practices.

Carrying out a survey in the Norwegian context can also provide a picture of the attitudes and actions of Norwegian managers concerning sustainable business practices. Commentators have noted that CSR and sustainability are concepts that have deep roots in the stakeholder-oriented Scandinavian countries, and these countries are generally referred to as leaders in terms of sustainability (Jørgensen & Pedersen, 2015, 2018; Strand & Freeman, 2015; Strand, Freeman, & Hockerts, 2015). However, to date, we have little survey evidence that can say much about the broader impact of sustainability ideas and thinking and the extent to which it has actually changed the attitudes and actions of firms.

Finally, our paper contributes to the research on sustainability in the SME sector. This is particularly the case for Norway, where, to the best of our knowledge, there have been no prior surveys of SME practices concerning sustainability. Knowledge about how SMEs practices are influencing and used by firms in this sector is important since more than 99% of Norwegian firms are SMEs (Statistics Norway, 2015b).

The rest of the paper is structured as follows. In Section 2, we first provide a brief review of the literature on sustainability related to the SME context. Thereafter, we develop a typology of sustainability attitudes and actions in SMEs, distinguishing between four types of managers of SMEs (skeptics, adaptors, posers, and enthusiasts). In Section 3, we describe and discuss the methods and data, Section 4 the descriptive statistics, and in Section 5 we provide an analysis by category. In Section 6, we analyze the main differences and similarities between the four categories of managers. And finally, in Section 7 we provide a conclusion and a discussion of the study’s limitations and areas for future research.

2. LITERATURE REVIEW

2.1. Sustainability

2.1.1. Sustainability and sustainable development

The term sustainability has a history that can be traced back to the Brundtland Commission of 1987 and it is therefore far from a novel concept (ten Have & Gordijn, 2020). However, since the early 2000s, the terms “sustainability” and “sustainable development” have spread like wildfire in the business community and are currently two of the biggest buzzwords and catchphrases (Mitra, 2017; Palmer, Cooper, & van der Vorst, 1997; Zorn & Collins, 2007). These two terms are often used interchangeably in practice (Ilhen & Roper, 2014). Therefore, in the rest of the article, we will use the term sustainability, which following the Brundtland Commission Report, can be defined a type of development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987, p. 43).

The sustainability concept is hard to define. Researchers have pointed out that it is an elusive and fuzzy term (Palmer, Cooper, & van der Vorst, 1997; Salas-Zapata & Ortiz-Muñoz, 2019; Vogt & Weber, 2019; Zorn & Collins, 2007). As White (2013) notes, the term means different things to different people. The meaning of the term sustainability is continually changing as it is circulated between different contexts and shaped by different actors with different agendas (Sahlin-Andersson & Engwall, 2002). As commentators have noted, there is a large number of different definitions of the term, and its usage varies across different fields of study (Young & Dhanda, 2012).

2.1.2 Dimensions of sustainability

One way of approaching the term is to identify different dimensions of sustainability. Often a distinction in the literature is made between three
dimensions of sustainability, i.e., financial, environmental, and social sustainability. Recently, the COVID-19 crisis has led some commentators to argue for the need for a fourth dimension – human health (Hakovirta & Denuwara, 2020). Some researchers prefer to talk about five or even seven dimensions of the sustainability concept (Seghezzo, 2009; Vogt & Weber, 2019).

In this paper, we will focus on the typical distinction between three dimensions of sustainability, which have been widely used in sustainability research (Palthe, 2013; Roberts & Tribe, 2008), and are based on the influential “triple bottom line” (TBL) framework for assessing sustainability, which was introduced by John Elkington in the 1990s (Elkington, 1994). Palthe (2013) summarizes the conceptual discussion about the dimensions of sustainability as follows: “There is a growing consensus that sustainability has three distinct yet interrelated dimensions: economic, environmental, and social” (p. 112).

These three dimensions of sustainability form the basis for our understanding of the concept of sustainability as used in this study and form the basis for the development of our questionnaire. Before moving on, it is, therefore, appropriate to present these dimensions more thoroughly.

2.1.3. Sustainability in SMEs

As a whole, we know relatively little about the sustainability practices of SMEs. However, it is clear that, increasingly, smaller and medium-sized enterprises (SMEs) are also subject to expectations of and pressures to implement sustainability practices (Roxas & Coetzer, 2012). Extant research has suggested that SMEs, compared to their larger counterparts, are laggards in terms of adoption and implementation of sustainability practices (Johnson & Schaltegger, 2016; Lawrence et al., 2006). There are several possible reasons why SMEs have been slow to jump on the sustainability wave. For example, SMEs typically have limitations when it comes to time and resources (Battisti & Perry, 2011; Cassells & Lewis, 2011; Halme & Korpela, 2014).

In a study of sustainability in the context of SMEs, Klewitz and Hansen (2014) argue that sustainability-oriented innovations are necessary to achieve long-term competitive advantage. In their section on further research, Klewitz and Hansen (2014) outlined a conceptual framework for assessing SMEs’ commitment to sustainability oriented innovations. In this framework, SMEs are grouped into five distinct groups, which these authors label 1) “resistant”; 2) “reactive”; 3) “anticipatory”; 4) “innovation based” and 5) “sustainability rooted”.

These groups have different degrees of involvement in sustainability-oriented innovations and in terms of what drives business innovation. For example, there are different drivers behind innovation for the firms in the different groups, and there are different impact mechanisms and external factors that influence the focus on sustainability-oriented innovations between these groups.

Klewitz and Hansen (2014) describe the activities of the “resistant” group as “... ignore sustainability or environmental-related pressures and expectations” (p. 14). The firms in the group “reactive” are believed to respond to external stimuli, such as government regulations or pressures from external stakeholders. Demands or pressures from the authorities often drive sustainability oriented innovation in the reactive group. Innovation is usually focusing on processes, such as waste management. According to Klewitz and Hansen (2014), these two groups consider taking environmental and social conditions into account as an additional cost of doing business. The firms in the group “anticipatory” consider taking into account social and environmental factors to reduce costs.

“Innovation based” SMEs are actively trying to innovate to try to safeguard against environmental and social changes, and consider innovation in sustainability as an opportunity to acquire a competitive advantage: “The consideration of environmental and social issues can lead to market success in the form of differentiation. Incremental process, organizational, and incremental (limited radical) product innovations can be expected.” (Klewitz & Hansen, 2014, p. 14).

“Sustainability rooted” innovation goes even a step further. These businesses build business models taking into account the TBL dimensions. They use environmental, social, and economic variables to contribute to the sustainable development of markets and society by spreading sustainability-oriented innovation in niche and mass markets. This strategy can lead to more radical innovation. Klewitz and Hansen (2014) explain this as follows: “This strategic sustainability behavior is more likely to lead to a radical product, process, and organizational innovations and their interaction with external actors will be extensive” (p. 14).

Both “innovation based” and “sustainability rooted” SMEs cooperate to a greater extent with other parts of the value chain. These businesses are also more likely to carry out major sustainability related investments and spend more time on sustainability oriented innovation. Sustainability rooted SMEs also cooperate more closely with knowledge-oriented institutions to achieve more radical innovation.

2.2. A typology of sustainability attitudes and actions in SMEs

In this section, we develop a typology of sustainability attitudes and actions in SMEs with Klewitz and Hansen’s categorization of firms’ actions as a source of inspiration. Later in the article, we will utilize this typology to divide our respondents into categories based on their attitudes and actions for sustainability. However, before proceeding, we will briefly describe the theory, which forms the basis for the two dimensions of the typology: 1) sustainability attitudes and 2) sustainability actions.

A key topic in research on attitudes is the relationship between attitudes and behavior, and this relationship has been studied extensively in the field of social psychology for decades (Ajzen & Fishbein, 1980; Eagly & Chaiken, 1993). For example, social psychologists often argue that attitudes consist of three dimensions (cognition, emotion, behavior) and that the active component is one of the three dimensions of an attitude.

This indicates that they may be a close correspondence between what the person does (behavior) and other attitudinal expressions (cognition, emotion). However, we cannot assert that
attitudes always lead to action; there is considerable research that points out that the relationship between attitude and action is sometimes weak.

One of the most widely used theories for examining the relationship between attitudes and actions is Fishbein and Ajzen’s “Theory of Reasoned Action” (TRA). This theory is, according to Bagozzi (1992), “a fundamental model for explaining social action” (p. 2). According to TRA, intention to action is the most important predictor of whether an individual will perform an act or not (Ajzen & Fishbein, 1975, p. 302). The theory attempts to explain how attitudes and subjective norms influence the intent to act. According to this theory, a person’s intention to perform a particular action is the best predictor of whether the action will be performed or not.

Related to the topic of sustainability, is it possible to distinguish those who talk about sustainability (“talk the talk”) from those who actually implement sustainability practices (“walk the walk”)? By examining the relationships between the attitudes that respondents espouse and the actual actions they perform, we will attempt to determine whether businesses are “walkers” or merely “talkers.”

In the following, we will develop a typology which we will use to assess Norwegian SMEs’ attitudes towards sustainability and the actions that they undertake. This typology will be used to divide our respondents into categories based on their attitudes and actions for sustainability. The typology is inspired by the grouping used in the studies by Kiron, Kruschwitz, Rubel, Reeves, and Fuisz-Kehrbach (2013) and Klewitz and Hansen (2014). For example, two of the categories (“resistant” and “reactive”) in the framework developed by Klewitz and Hansen (2014) have inspired two of our categories (“skeptics” and “adaptors”). Additionally, the study by Kiron et al. (2013) provided inspiration for our remaining two groups (“posers” and “enthusiasts”).

In the typology, the attitudinal dimension is labeled “sustainability commitment,” while the action dimension is named “sustainability initiative.” In Figure 1, the vertical axis denotes sustainability commitment, while the horizontal axis denotes sustainability initiative. Together, these two dimensions are used to develop a 2x2 matrix with four quadrants: 1) skeptics; 2) adaptors; 3) posers and 4) enthusiasts.

**2.2.1. Skeptics**

We have chosen to label the first category, “skeptics.” Skeptics are characterized by a low degree of commitment in relation to sustainability issues. This group can be compared to group “resistant” in Klewitz and Hansen (2014). We assume that this is a group of managers who remain passive in relation to sustainability. Additionally, it is reasonable to assume that since these managers do not perceive sustainability to be of great importance, they do not carry out actions related to sustainability.

**2.2.2. Adaptors**

In the second category of managers, we have chosen to label “adaptors.” Adaptors are characterized by a low degree of commitment in relation to sustainability issues. We assume that this is a category of managers who are driven primarily by external pressures. Similar to the “reactive” group suggested by Klewitz and Hansen (2014), we assume that the actions of “adaptors” are driven by government regulation, rather than market pressures or a desire to be sustainable.

**2.2.3. Posers**

The third category is labeled “posers.” These managers like to portray to the outside world that they are committed to sustainability issues. Posers are managers who view sustainability as an essential issue, but do not follow through with any actions (“talk the talk, but do not walk the walk”). This category is similar to the category labeled “talkers” in Kiron et al. (2013). These managers may, for example, perceive sustainability to be important, but

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**Figure 1. Typology of firm attitudes and actions towards sustainability**

![Typology Diagram](image_url)
do not have the necessary resources or time actually to implement sustainability practices. Posers can also be managers who “greenwash” (Delmas & Burbano, 2011; Laufer, 2003) their image to give the impression of being sustainable, while not focusing on sustainability in their actual operations. We assume that posers are reacting to market pressures as well as various institutional pressures, and realize that they have to do what is considered necessary to retain legitimacy.

2.2.4. Enthusiasts

We label the final category of managers “enthusiasts.” This category is similar to what Kiron et al. (2013) label “walkers.” We have chosen to label these managers “enthusiasts” because this label indicates both a high level of engagement and commitment to sustainability and high levels of activity about sustainability initiatives. Hence, these managers are characterized by scoring high on both sustainability engagement and sustainability actions. We assume that this category of managers is market-oriented and believes that sustainability has a direct impact on profitability.

In the empirical part of the article, we will utilize this typology to categorize the respondents and analyze differences between the categories.

3. METHODS AND DATA

3.1. Research approach

This article draws on data collected and analyzed as part of a master’s degree project under the supervision of the other co-authors. The thesis (including questionnaire) is available in Norwegian via the University of South-Eastern Norway’s institutional depository (Sveen & Gresaker, 2015).

In this research, we utilized an electronic survey methodology (Jansen, K., J., Corley, & Jansen, B., J., 2007). Electronic surveys have apparent benefits in terms of speed and cost-efficiency, as well as the ability to reach large samples of respondents, which is especially important in studies of the practices of SMEs since the population is vast.

3.2. Population and sampling

According to Statistics Norway (2015b), 99.5% of Norwegian firms can be characterized as SMEs. At the beginning of 2015, there was a total of 268,056 SMEs that fit our definition of an SME.

As pointed out by Mitchell and Jolley (2012), sometimes the population is so large that it becomes difficult to reach everyone. Therefore, it becomes more practical to survey a sample instead of the entire population. In such instances, an important aim is to make sure that the sample is representative of the population as a whole.

3.3. Response rate

The survey was administered in 2015 and was sent to a total of 24,495 firms. We received a total of 1,159 responses, which equals a response rate of 4.7%. Judging by the standards in the research methods literature (Ghauri & Grønhaug, 2002; Mitchell & Jolley, 2012), this can be considered a very low response rate. However, it should be noted that electronic surveys tend to get lower response rates than traditional mail surveys (Cook, Heath, & Thompson, 2000; Shih & Fan, 2008).

Possible reasons for the low response rate in the current study could be that the questionnaire was relatively comprehensive and time-consuming to fill out. The survey was also sent out during February, which is a busy month for Norwegian managers.

Forty-one respondents were excluded because they represented firms with more than 100 employees. This brings the number of respondents down to 1,118. Of these 1,118 respondents, 158 of them reported that they were not informed about the firm’s sustainability practices, and were excluded. In the end, we had a total of 960 usable responses.

4. RESULTS

4.1. Demographics

The sample is male-dominated (75.7% men). This corresponds relatively well with the distribution provided by Statistics Norway. According to Statistics Norway (2015a), there is a majority of male business managers (64.3%). The gender difference in our sample, therefore, mirrors in no small degree the gender differences in the population of SMEs in Norway.

When it comes to the educational background of the respondents, we see that 77.6% have a bachelor’s degree or higher. 77% of the respondents report the title CEOs, 7% report chairman of the board, while 6% report CFOs. Moreover, some respondents report that they have multiple roles, e.g., owner-manager or “entrepreneur and jack of all trades”. These are roles that are typically found in studies of the SME sector (Storey, 1994). As a whole, we may conclude that persons in managerial positions mostly answered the survey.

Geographically, all of the counties in Norway are represented. The county with the most respondents is Oslo (17%), which is to be expected since a large part of the population of Norway lives in this county. Moreover, a broad spectrum of industries is represented, with construction being the most common industry (24%).

4.2. Awareness of the firm’s sustainability practices

We asked the respondents about their awareness of their firm’s sustainability practices. As Table 1 shows, nearly 70% of the respondents answer that they are fully informed, about 10% answer that they are somewhat informed, while about 10% answer that they are not informed at all.

An explanation for the high level of awareness among the respondents could be that the respondents are managers of SMEs. It is reasonable to assume that managers of SME generally are informed about all parts of the operations since these organizations are small and transparent due to low levels of complexity and specialization.
Table 1. Knowledge about sustainability initiatives

| How informed are you with respect to the firm's sustainability initiatives? | No.  | %    |
|--------------------------------------------------------------------------|------|------|
| Not informed                                                             | 117  | 10.47%|
| Somewhat informed                                                        | 251  | 22.45%|
| Fully informed                                                           | 750  | 67.08%|

4.3. Importance of sustainability

The respondents were also asked about the importance of sustainability. In response to the question “which of the following statements best describe the firm’s prioritization of sustainability”, nearly half of the respondents answered that sustainability plays a vital role in the strategy process. Nearly a third reports that sustainability is important, but not important enough to be part of the manager’s agenda. About five percent of the respondents report that sustainability is only important in parts of the firm, while nearly four percent report that sustainability is not important.

These answers suggest that sustainability is seen as quite important, and only a small minority downplay the importance of sustainability.

Table 2. Prioritization of sustainability

| Which of the following statements best describe the firm’s prioritization of sustainability? | No.  | %    |
|--------------------------------------------------------------------------------------------|------|------|
| Sustainability is not important                                                            | 41   | 4.10%|
| Sustainability is important for parts of the firm, but not for the firm as a whole          | 46   | 4.60%|
| Sustainability is important, but not important enough to be part of the managers’ agenda    | 144  | 14.39%|
| Sustainability is sometimes on the managers’ agenda, but not part of the core business/strategy | 315  | 31.47%|
| Sustainability is part of the foundation of the managers’ strategy and plays a role in the strategic assessments | 446  | 44.56%|
| Do not know                                                                                | 9    | 0.90%|

4.4. Importance of having a sustainability strategy

The respondents were asked about whether their firm had formulated a written sustainability strategy. As Table 3 shows, about 65% of the respondents answer that they have not formulated such a strategy, while about 33% answer yes.

Table 3. A written strategy for sustainability

| Has your firm formulated a written strategy for sustainability? | No.  | %    |
|-----------------------------------------------------------------|------|------|
| No                                                              | 633  | 65.94%|
| Yes                                                             | 314  | 32.71%|
| Do not know                                                     | 13   | 1.35%|

4.5. Profitability

We asked the respondents about their perception of the link between sustainability and profitability. As Table 4 shows, about 40% of the respondents report that they perceive that sustainability initiatives have had a positive effect on profitability (marked 4 or 5 on the 5-point Likert scale). Only a small minority mark 1 or 2, while about 20% do not know.

Table 4. Perception of the link between sustainability initiatives and profitability

| To what extent do you think that the firm’s sustainability initiatives have affected profitability? | No.  | %    |
|-------------------------------------------------------------------------------------------------|------|------|
| 1                                                                                               | 18   | 1.88%|
| 2                                                                                               | 31   | 3.23%|
| 3                                                                                               | 324  | 33.75%|
| 4                                                                                               | 279  | 29.06%|
| 5                                                                                               | 113  | 11.98%|
| 0                                                                                               | 193  | 20.10%|

4.6. Evaluation of the importance of dimensions of sustainability

As mentioned previously, there are different dimensions of sustainability. Therefore, we asked the respondents what type of sustainability that they consider to be the most important. As Table 5 shows, more than 90% of Norwegian SMEs consider the financial dimension to be the most important (marked 4 or 5 on a 5-point Likert scale). The respondents also judge social sustainability to be somewhat more important than environmental sustainability.

Table 5. Importance of three types of sustainability

| How important are the following types of sustainability for the firm? | 1   | 2   | 3   | 4   | 5   | 0   |
|---------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|
| Social                                                              | 1.46%| 2.19%| 15.31%| 40.00%| 44.17%| 0.94%|
| Environmental                                                       | 3.44%| 9.06%| 20.94%| 35.31%| 29.90%| 1.53%|
| Financial                                                           | 0.31%| 0.52%| 4.48%| 28.13%| 64.38%| 2.19%|
4.7. Measurement of the TBL dimensions

We wanted to explore whether firms measure the effects of sustainability initiatives. As Table 6 shows, 58% report that they do not measure the effects of their sustainability initiatives at all. Among those who measure the effects of sustainability initiatives, most measure financial performance (34.3%). 16.5% measure social sustainability, while 15.5% measure environmental sustainability.

Table 6. Measurement of the TBL dimensions

| TBL dimension                                      | No.  | %       |
|----------------------------------------------------|------|---------|
| Social performance                                 | 158  | 16.46%  |
| Environmental performance                          | 149  | 15.52%  |
| Financial performance                              | 329  | 34.27%  |
| The firm does not measure the effect of sustainability initiatives | 536  | 57.90%  |
| Do not know                                        | 36   | 3.75%   |

5. ANALYSIS BY CATEGORY

5.1. Skeptics

The skeptics comprise the largest category of managers (349 respondents). The skeptics are characterized by a low degree of sustainability commitment (attitude) as well as a low degree of sustainability initiatives. Typically, the skeptics are relatively well-educated (46% have a bachelor’s degree; 32% have master’s degrees or higher). They generally are located in the capital city of Oslo, and the firms typically are small (5-20 employees). The main driver of sustainability for skeptics comes from management.

Klewitz and Hansen (2014) assume that the category with the lowest involvement in sustainability is more driven by pressures from authorities than by market pressures. Our data show that in addition to assessing NGOs and capital provisions to be of little importance, competitors, suppliers, industry associations, and contractors also receive mean scores of less than 3. Management is the only stakeholder with a score above 4, which suggests that management is considered important for the design of a sustainability strategy. Customers are also considered relatively important (mean = 3.90), while authorities are slightly less important (mean = 3.32) in terms of influencing the design of sustainability strategy.

At the outset, we assumed that the “skeptics” would largely coincide with the category of “resistant” in the framework by Klewitz and Hansen (2014). We observe that skeptics tend to view the financial dimension of sustainability as most important (mean = 4.43), although the social dimension is viewed as somewhat less important (mean = 3.97).

The skeptics report that climate change is not important for the firms’ future competitive power (mean = 2.53). This category of managers is neutral in response to the question of whether the firm is prepared for the challenges that accompany climate change (mean = 3.36), which may indicate that they are unsure whether they are prepared or not. Despite the low attitude to how climate change affects future competitiveness, skeptics agree that climate change is real (mean = 4.08). When asked whether human activity plays a crucial role in climate change, they tend to mostly agree with this statement (mean = 3.96).

5.2. Adaptors

Adaptors are the smallest category of managers (127 respondents). The adaptors can be characterized by a low degree of attitude, but a high degree of action. Typically, the adaptors are well-educated, with most bachelor’s degrees, while the proportion of master’s degrees is slightly lower than for the skeptics. The adaptors are primarily located in Oslo, but a relatively large percentage of respondents are located in the county of Trøndelag. The firms are typically small (5-20 employees).

In the framework by Klewitz and Hansen (2014), it is assumed that the authorities and legislation influence the “reactive” group. While this is generally in line with the results for the adaptors, the adaptors are the group that considers the authorities to be the most important (mean = 3.49). In response to the question of how much the business model has changed as a result of sustainability, the adaptors are relatively neutral (mean = 3.24).

Adaptors are the category of managers, which is most influenced by political pressure and changes in government regulations. They tend to have a relatively neutral view of whether changes in government regulations are an important factor for changing the business model (mean = 3.22). Other factors are more important than regulations, such as customers (mean = 4.16). Another finding that indicates that adaptation takes place is that this category of managers considers the focus of competitors with respect to sustainability, to be important.

Generally, the adaptors category lines up well how Klewitz and Hansen (2014) describe the “reactive” group. Our results indicate that these managers do not have strong opinions when it comes to sustainability. Instead, they are trying to adapt to various external factors. However, our findings indicate that the adaptors differ slightly from the “reactive” group when it comes to the assessment of the TBL dimensions. For example, the adaptors report that the social dimension is important (mean = 4.09).

5.3. Posers

The posers comprise 171 respondents. Similar to the skeptics and adaptors, most of the posers also have education at the bachelor’s level (33%) or the master’s level (32%). It is also within this group that we find the second-highest proportion of respondents with more than five years of education (12%). The respondents’ firms are mostly located in Oslo, but a large proportion is also located in Vestfold. The typical size of these businesses is between 5 and 20 employees.

The posers have a high degree of sustainability commitment but score low on sustainability
initiatives. In other words, they “talk the talk” but do not “walk the walk”. The posers correspond to the “talkers” group in the article by Klewitz and Hansen (2014). This category of managers seems to be more driven by market pressures rather than by government pressures. For example, political pressure is reported to have very little impact on changing the business model (mean = 1.88). The authorities have a neutral to positive influence on the firm’s sustainability strategy (mean = 3.44).

The posers report that their business models have not changed as a result of its sustainability commitment (mean = 1.3). Thus, it can be argued that the sustainability commitment of the posers does not lead to changes in the business model. The survey by Kiron et al. (2013) suggests that this may be due to “greenwashing”, which implies that firms want to appear sustainable, but that they do not actually want to use resources to improve their practices. If firms perceive that there are benefits related to appearing “green,” they may want to build a “green image” in the market without actually being any greener in practice.

Another explanation of why the posers do not actually “walk the talk” could be that they only recently have become interested in the topic of sustainability. Thus, they may not have had time to convert their attitudes into actions.

5.4. Enthusiasts

The enthusiasts comprise a large number of respondents (313 or 32.6%). Enthusiasts are characterized by both a high degree of sustainability commitment and a high level of sustainability initiatives. Among the enthusiasts, most have a bachelor’s degree (43%), while 39% of enthusiasts have a master’s degree. The majority of the enthusiasts’ firms are located in Oslo. The firms typically have between 5 and 20 employees, but the enthusiasts contain the largest share of firms with between 21 and 50 employees. Thus, it appears that enthusiasts tend to represent relatively larger SMEs than the other three categories in our typology.

Even though management and owners/investors are the two stakeholder groups who have the greatest impact on the formulation of the firm’s sustainability strategy, enthusiasts report that customers are relatively important (mean = 4.2). Another point that underlines that enthusiasts’ actions are primarily market-driven is that the enthusiasts perceive customer desires for sustainable products and services as most important in terms of driving changes in the business model. Only the owner’s requirements for better value creation are perceived to be of nearly equal importance (mean = 3.8). The fact that owner demand is a relatively important driver for changing the business model in a more sustainable direction suggests that the owners of firms in this group perceive sustainability to be a necessary condition for firm profitability.

Political pressure is not perceived as important in driving the business model (mean = 2.29), indicating that enthusiasts are largely driven by other factors. Changes in the business model are more affected by market pressures or a desire to be sustainable rather than government pressures.

In response to the question of how sustainability has affected profitability, it appears that this group has experienced improved financial performance as a result of their sustainability efforts (mean = 3.97). The firms in the enthusiasts’ category generally report the most financial impact as a result of sustainability initiatives. These findings indicate that sustainability practices are not primarily driven by external political pressures, but rather by a perception that such changes to the business model are needed to retain competitiveness, improve customer satisfaction and improve profitability.

6. DIFFERENCES AND SIMILARITIES

The main similarities between the different manager categories are found in purely demographic questions. As we have discussed previously, our results show that all four categories of managers are very similar in terms of education, gender, geographical locations, and a number of employees.

6.1. The relative importance of the TBL dimensions

The four manager categories have the same ranking of the TBL dimensions. The financial dimension is the most important, and all categories of managers consider the financial dimension to be important. We do not find statistically significant differences between the management categories’ assessment of the financial dimension. In general, the environmental dimension is the least important. The enthusiasts are the only category that considers the environmental dimension to be important, while the other management categories have a relatively neutral attitude towards the environmental dimension.

The biggest difference between the manager categories is in their view of the environmental and social dimensions, while the smallest difference is in their views of the importance of the financial dimension. The skeptics have the lowest average for all three dimensions, while the enthusiasts have the highest averages.

6.2. Sustainability and profitability

The results indicate that there are statistically significant differences between the groups’ assessment of whether sustainability initiatives have affected firm profitability. Enthusiasts tend to believe that profitability has increased somewhat as a result of sustainability (mean = 3.97). The other management categories score from 3.07 to 3.57, which we assume means they do not believe profitability has increased or decreased as a result of sustainability initiatives. All four manager categories report that managerial commitment, clear external communication, and a link between sustainability and financial incentives are the most important measures for managing social, environmental, and financial performance.

When it comes to what types of sustainability measures are considered important, all the categories report that customer feedback is the most important. Both enthusiasts and adaptors emphasize the link between sustainability and financial incentives, as well as clear external
communication. Since the enthusiasts are the ones who believe in greater profitability as a result of sustainability, it is not surprising that these are more likely to link sustainability efforts to financial incentives.

6.3. The role of sustainability reporting

Sustainability reporting is considered as less important by our respondents. There were statistically significant differences between the manager categories. The adaptors and enthusiasts perceive sustainability reporting as more important than skeptics and the posers. These types of managers are more likely to take action in relation to sustainability.

A designated sustainability manager in the firm is an initiative that is considered to be of little importance to all four manager types. This finding may be due to the fact that we are investigating SMEs. For smaller firms, having an additional support function may not make sense from a cost-benefit standpoint.

6.4. The role of climate change

The differences between the manager categories in terms of whether they believe that climate change is real and caused by human activity are too small to suggest any statistically significant differences between the groups. However, we found a statistically significant difference in terms of whether managers perceive the climate issue as important in relation to their competitive position. The skeptics (mean = 2.53) and posers (mean = 2.74) stand out, which suggests that they tend to slightly disagree that climate change is important for their future competitive position.

Adaptors (mean = 3.02) are slightly more neutral, while the enthusiasts (mean = 3.40) take a relatively neutral stance when it comes to whether climate change may affect future competitiveness. The differences between the enthusiasts and the other groups are large enough to argue that there are statistically significant differences between the skeptics and posers.

7. CONCLUSION

Although there has been considerable research on sustainability and sustainable business practices in recent years, we know relatively less about the response of SMEs to sustainability pressures. This is especially the case for Norway, which has a particularly large SME sector. Therefore, the current study provides needed evidence about the sustainability practice of firms in this important sector of the Norwegian economy.

Building on past research (Kiron, Kruschwitz, Haanaes, Reeves, Fuiß-Kehrbach, & Kell, 2015; Kiron et al., 2013; Klewitz & Hansen, 2014), we have proposed a typology of managerial responses to sustainability, distinguishing between four groups of managers which are labeled: 1) skeptics; 2) adaptors; 3) posers and 4) enthusiasts. Furthermore, we have shown how this typology can be used to illustrate the responses of Norwegian managers to sustainability.

Our article has several practical and policy-related implications. The findings should be of interest to managers of SMEs interested in sustainability ideas and practices. The survey has provided a window into Norwegian SMEs’ attitudes and actions related to sustainability. The distinction between the four categories in manager typology makes it possible to define appropriate measures that can motivate increased sustainability efforts for each category of managers.

The results of our study indicate that the firms’ sustainability commitment has been increasing over the past year. Approximately 52% report increased engagement for sustainability. The results further indicate that managers in Norwegian SMEs perceive climate change as a real issue and that humans play a key role in affecting these changes. Still, we find that relatively few managers in Norwegian SMEs perceive climate change as important in determining the company’s future competitive power.

This can be linked to the fact that the environmental dimension is considered the least important by managers irrespective of category. However, managers’ lack of focus on this dimension could change in the future if the authorities and stakeholders start exerting more pressure in this area. If the firms’ stakeholders start focusing more strongly on sustainability, this will likely increase managers’ focus on the environmental dimension.

The financial dimension is considered to be the most important performance dimension. Thus, the financial dimension can be regarded as a key driver for the firm’s sustainability focus. This implies that financial incentives could affect firms’ focus on sustainable operations. The social dimension is viewed as important by all categories except for the skeptics who are relatively neutral.

More than half of the respondents agree that it is important to develop a sustainability strategy, yet do not really prioritize it in practice when developing and formulating their own strategies. This indicates that there could be a discrepancy between the managers’ attitudes towards sustainability and their actions. The aforementioned survey by Kiron et al. (2013) finds that a larger proportion of managers in their study have developed a sustainability strategy. In our study, we find that 41% of the respondents state that firm profitability has increased as a result of sustainability initiatives.

Customers and owners stand out as the most important stakeholders who can contribute to changing the business model in a more sustainable direction. This may indicate that changes in business models are mostly driven by a desire to adapt to market pressures. If the market is increasingly demanding green products, opportunities for increased profitability will also be available to those firms that choose to invest in developing sustainable products. This could mean that attitude-building work should initially be aimed at the consumer market. If the demand for green products increases, it is reasonable to assume that SMEs will adapt to this demand. Firms that start developing green products would thus be in a good position to obtain a competitive edge in the market.

Our results generally indicate that managers in Norwegian SMEs consider the TBL dimensions to be important, and it seems that the attitudinal basis is present. On the other hand, the action dimension is
lagging. This implies that the authorities should not only focus on attitude-building work but should also focus on developing incentives that could help stimulate actions. Such a carrot-and-stick policy could help create a greener economy in Norway, which could generate new jobs in the future.

Since relatively little research has been done on sustainability in the context of Norwegian SMEs, there is certainly room for further studies to expand and improve upon our study in different ways. A replication of this survey will also be able to identify development in SMEs’ attitudes and actions over time. This could shed light on whether managers’ attitudes towards the TBL dimensions evolve over time. The attitudes are likely dynamic since more than half of respondents report an increase in their sustainability commitment during the past year.

The current study could also be expanded and elaborated on by using different methodological approaches. For example, researchers may draw on qualitative methods and data to get a better understanding of how respondents interpret and understand the rather fuzzy concept of sustainability (Palmer, Cooper, & van der Vorst, 1997; Zorn & Collins, 2007), what measures they use to measure sustainability (Bell & Morse, 2012; Epstein & Roy, 2001), as well as other relevant factors. Other quantitative methods and analyses could also be used. The questionnaire used in this study could also be extended to accommodate the use of statistical tests, such as correlation and regression analyses, which could provide more robust findings, and would allow researchers to more accurately reveal the extent to which attitudes affect actions.

To increase the number of respondents, we recommend trying to reduce the scope of questions used in the current questionnaire. In our study, we experienced that there were many respondents who opened the questionnaire but did not complete the survey. This was probably due to the fact that the form was rather extensive and time-consuming. By choosing to only follow up on the most important findings from this study, it should be possible to obtain a higher response rate.

In our study, we discovered that changes in government regulations were perceived as an important factor for driving changes in a firm’s business model in a sustainable direction. By conducting qualitative in-depth interviews, researchers may, in future studies, attempt to uncover potential measures that will cause the firms to change their business models in a more sustainable direction.

Finally, the recent study by Kiron et al. (2015) examines how collaboration between businesses, stakeholders in the value chain, and NGOs has increased as a result of sustainability. While we did not choose to focus on this topic in the current study, it could be an interesting avenue for future research.

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