

School of Management

**Understanding the role of leadership on a resources firm's culture of
belonging and its impact on future Environmental, Societal and
Governance (ESG) performance: Implications for leaders, investors
and regulators.**

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Declaration To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made. This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

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Abstract

Given the heightened and increasing focus on the environment and climate change, this study sought to explore the possibility that a lack of belonging is detrimental to the Environment, Society and Governance (ESG) performance of firms involved in the extractive industry. Mining and energy companies (resources firms) operate with a higher risk of impact on a broader number of stakeholders, than other industries, so their approach to embedding a 'sense of belonging' into their company culture is critical rendering them a sector to focus this research. These firms are now having to adapt and expand in the shift to net-zero because the shift requires more mining, not less (PwC - Mine 2022: A critical transition), and new sources of energy (McKinsey - Global Energy Perspective 2022). This implies a greater impact on the community and environment while also facing greater scrutiny from regulators, government and ENGO's on how they operate their business. It is argued in this study that in order to meet these challenges, it is not simply a matter of being the best but being your best.

A sense of belonging is described as the "experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment" (Anant, 1966, 21). A sense of belonging has long been essential to the human experience and was positioned by Maslow (1954) as one of his essential human needs. While psychology literature has dedicated considerable attention to a sense of belonging, little business research has explored the concept. This is surprising given that employee connectedness to organizations is believed to lift work ethic, productivity and willingness to contribute (Carr et al., 2019). Research in other fields has demonstrated that the reverse is true; that a lack of a sense of belonging can have serious implications on behavior and decision making (Baumeister et al. 2005; Thau et al. 2007).

To deepen an understanding of the significance of a sense of belonging in resources firms, the effect of sense of belonging and its influence on a firm's ESG performance is examined with reference to

the CEO letter contained within the annual report. Analysis performed on a sample of ASX listed firms from the resources industry using quantitative research methods to explore language in the CEO letter contained in the annual report, revealed a significantly positive relationship between sense of belonging and future environmental performance.

1. Introduction

1.1 Overview

While commentary and discussion on a sense of belonging has been increasing in organizational contexts in recent years, research linking it with firm performance in business academic literature is limited. Further, studies in business literature rarely conceptualize or systematically measure a sense of belonging beyond the issue of diversity. In a recent report from Boston Consulting Group (Dean et al., 2020), the authors conclude that the lack of diversity in top executive positions in firms is because women and racially and ethnically diverse employees do not feel that they are connected well enough to the cultural values and norms that would be expected to provide opportunities for all. In other words, they experience a weak sense of belonging. In another report by Deloitte, Volini et al. (2020) found that nearly 80 percent of surveyed firms believe that fostering a sense of belonging in the workforce is important to their success. The authors argue that creating a culture of belonging is vital to improving workforce satisfaction, productivity and output. Despite the potential value of a sense of belonging to the vitality and performance of firms (Dean et al., 2020; Volini et al., 2020), research gaps remain.

A sense of belonging is intangible. It is a feeling. Like other feelings, it is dynamic and can change or vary throughout the day. But before it could be compared with a tangible measure of performance, it was first necessary to fully explore its definition and application across multiple settings. What influences sense of belonging in the workplace, who is responsible and what can be done to enhance it, are all questions that this research set out to understand.

The measures of performance chosen for the study was Environment, Society and Governance metrics, more commonly known as ESG. From a firm financial performance, top ESG performers have higher valuations than other firms (Schear et al. 2022) and can attract and retain higher quality talent (Schear et al. 2022; Stevenson et al. 2021). In addition, the resources industry which in this study includes both mining and energy firms, has a direct impact on the environment and the communities they operate in and therefore have a social responsibility to protect them. These are the same communities that many of the employees employed by the firm live in. While the existing literature covers the importance of considering employees as important stakeholders in the context of social responsibility, on the basis that they are impacted by their firms' actions, what is generally not acknowledged is that employees are the firm, they are the resource and through their actions, have the direct impact on other stakeholders such as the environment and community.

1.2 Contributions

This study set out to contribute to literature in four ways. Firstly, providing a theoretical and empirically based model for those seeking to develop a sense of belonging, with a view to improving the culture and performance of their firm while also reducing the risk of poor, self-defeating decisions, and behaviors. This study follows the in the path of Amernic & Craig (2017) who describe CEO language as both an asset of strategic communication, but also an important reveal of aspects of their leadership. For instance, in their review of language used by BP's top management in the decade before the Deepwater Horizon disaster, Amernic & Craig (2017) found very little emphasis on safety and safety culture which suggested only a trivial attention to safety.

Secondly, while managers of successful companies, in general, are celebrated, history shows us that significant, controversial corporate events such as BP's Deepwater Horizon explosion, Rio Tinto's Juukan Gorges destruction and the Exxon Valdez spill have been the result of management failure through a singular focus on financial performance or optimization. It is this focus which Taleb, Goldstein and

Spitznagel (2009, p81) argue “makes companies vulnerable to changes in the environment.” CEO’s and their top management team (TMT), therefore, must be considered a source of risk (Garlick 2007). In addition, the governance implications are expanding with the complexities of business, requiring directors to be capable of validating intangible non-market and firm specific information (Biondi & Reberioux (2012). Taleb, Goldstein and Spitznagel’s (2009) example that grand chess masters focus on avoiding errors whereas novice players try to win is salient to this study in that an investment in sense of belonging could myopically be considered a cost, but it could help to reduce risk and errors, as well as harmful and expensive ESG controversies. Poor culture and management errors can have significant implications financially for firms and community, such as the Deepwater Horizon disaster which cost BP between \$65bn (Bouso 2018) and \$100bn if you include the cost to shareholders (Stout 2012). Similarly, for Rio Tinto, the 2020 Juukan Gorge destruction cost \$250m (Turner 2020) so understanding and identifying warning signs in advance would be beneficial for all.

Thirdly, hypothesizing that the CEO letter within the annual report conveys signals about firm culture, a new quantitative methodology was developed to analyze the CEO letter. Is it possible for a person external to a firm to assess a sense of belonging, without access to internal engagement or culture surveys? While this methodology provides a proxy measure of the firm's intent (or not) to create a sense of belonging, the results demonstrate that there are unique insights available into the CEO’s and TMT’s strategic approach.

Fourthly, it is considered that there are distinct differences in style and behavior between male and female leaders, however evidence on the relationship with firm performance has remained mixed, potentially because of the low sample size of female leaders. To extend the literature on the impact of gender on leadership, culture and ESG performance, the mediating role of CEO gender on sense of belonging was investigated. Using a quantitative approach to progress this investigation, the research

demonstrated a clear difference in the communication of a culture of belonging between female and male CEO's.

Finally, the study set out to investigate whether there is an observable relationship between the measure of sense of belonging and future ESG performance which would provide an important new leading indicator for both positive and negative performance, including ESG Controversies. While linking a greater focus on sense of belonging to improved performance would be of interest to shareholders, a potential link between sense of belonging and diminished environmental, society and governance performance (ESG) or ESG controversies would likely interest all stakeholders as a leading indicator. Resources firms in particular, operate with a higher risk of impact on a broad number of stakeholders than other firms, so their approach to a company culture of sense of belonging is critical and provides an important sector to focus this research. Resources firms are now having to adapt and expand in the shift to net-zero because the shift requires more mining, not less (PwC - Mine 2022: A critical transition), and new sources of energy (McKinsey - Global Energy Perspective 2022). This implies a greater impact on the community and environment while also facing greater scrutiny on how they operate their business. Using fixed effects linear regression, sense of belonging through data analyzed through the CEO letter predicted future environmental performance with positive statistical significance.

2. Literature Review

The literature review is compartmentalized into sections based on the hypothesized path to improving ESG performance through the development of a sense of belonging. The first section is devoted to developing the necessary understanding of a sense of belonging and its importance to the human experience. The second section looks at sense of belonging as a cultural archetype before section 3 focuses on a sense of belonging as a strategically valuable but intangible asset, viewed through the lens of the Resource Based Theory of the firm (Barney 1986). The fourth section summarizes the literature to

create a model for improving performance through creating a sense of belonging and the final, section 5 explores the “view from the top” and the mindset of the CEO and their TMT, using Freeman’s (1984) Stakeholder Theory to understand the strategic approach to stakeholders and whether they categorize employees as stakeholders. In addition, the communication medium that is subject to analysis, the CEO letter, is reviewed in greater detail. In section 6, the dependent variables for the study; ESG, are introduced and their significance in the Australian Resources Sector are explored.

2.1 Sense of Belonging

Within this section, the existing literature on belonging and a sense of belonging is reviewed. In order to understand the implications of a sense of belonging, it is defined in 2.1.1 and it is then explored in an evolutionary sense, in 2.1.2, and the psychological literature in 2.1.3.

2.1.1 Defining a Sense of Belonging

A sense of belonging refers to the “experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment” (Anant, 1966, 21). Indeed, not a new concept, as far back as the middle of the 20th century, there was recognition that humans have a need to feel that they belong (Maslow, 1954). More recent interpretations of a sense of belonging have begun to look at more explicit aspects of belonging and its correlation with wellbeing, including loneliness and alienation (Kohut, 1984; Cacioppo & Patrick, 2009; McBeath et al. 2017), valued involvement and fit (Hagerty et al., 1992), social connection (Baumeister & Leary, 1995), loneliness and centrality within a group (Cacioppo & Patrick, 2009), burnout (Leiter & Maslach 2017) and stress (Kaufman, 2020).

2.1.2 Our human need for belonging.

From an evolutionary standpoint, Baumeister et al. (2002) describes the benefits of belonging to a group as shared security, protection and support and sharing of information and group leadership to

make effective decisions. On the other hand, not belonging to a group means that one must be more able to survive due to an absence of the combined intelligence and strength of the group. Lambert et al. (2013) reported that having a sense of belonging brought about a secure feeling of fitting in, and also increased meaning in people's lives. Lambert et al. (2013) go on to argue that promoting a sense of belonging in groups is more likely to promote a belief that one's life is meaningful, with perceptions of belonging also being important mediators for depression, mental health and wellbeing (Cockshaw & Shocet 2010; McBeath et al. (2017).

2.1.3 The psychological impact of the absence of belonging

Equally important is the consideration of what occurs in the absence of belonging. Following Anant's (1966) definition of belonging, to not feel an integral part of a system is to feel excluded, which is supported by the significant literature on social exclusion and its impacts on behavior (Baumeister et al. (2005). Baumeister et al. (2005) studied the impacts of social exclusion and discovered that excluded or rejected people, while capable of self-regulation, experienced decrements in self-regulation due to ego depletion which impacted performance on tasks that require long term focus. What is significant from a sense of belonging perspective is that this diminished self-regulation can increase self-defeating behavior, further exacerbating social exclusion (Baumeister et al. 2005). Examples of self-defeating behaviors described produce short-term enjoyment with long term costs. More broadly, Baumeister et al. (2005) report that this lack of self-regulation can lead to a person becoming disgruntled and unwilling to make an effort; reduced discretionary effort. Thau et al. (2007) expanded this further by demonstrating that social exclusion and thwarted belonging can increase self-defeating and irrational behaviors, which undermine the achievement of their goals. Social exclusion and rejection were also found to increase levels of aggression towards other people, notwithstanding the neutrality of the person they were directing it to (Twenge et al. 2001; Buckley et al. 2004).

The literature points to self-defeating behavior being a likely outcome of a lack of belonging, however this is shown to manifest differently. It can cause some people to become unregulated and withdrawn, while for others, it increases aggression. There are several, possible explanations provided by the literature as to why this is the case. Slepian & Jacoby-Senhor (2021) concluded that a lack of belonging and exclusion might be separate constructs, with their study contributing that a lack of belonging creates feelings of inauthenticity, where exclusion has the impact of creating sadness and anger. The differing responses could also be attributed to our anthropological and evolutionary roots, and the human flight, fight or freeze response to threat and danger where for the early humans, the most dangerous position to be, was on the outer limits of the group, where you could be at risk to predators (Cacioppo & Patrick (2009). Individual response has been shown to differ depending on the nature and proximity of the threat, and that there are also gender differences in how males and females respond (Blanchard et al. 2001). For instance, if escape is not an option, then the most likely response is attack as a basis for defense, while if threat is sensed early, escape is a probable outcome (Blanchard et al. 2001). The literature confirms a fundamental psychological and physiological need for belonging that produces inconsistent reactions.

2.2 Sense of Belonging as a Cultural Archetype

This section explores the construct of organizational culture and connects the literature on culture and belonging to demonstrate that a sense of belonging can be considered a cultural archetype.

Humans have evolved to depend on the group with the psychology literature emphasizing the individuals dependence on the group for safety and wellbeing. While those on the outer of a group are now less vulnerable to attacks from saber-tooth tigers, the importance of belonging within a group remains in our psychology. The modern organization and therefore organizational culture can be seen as an analogue of the ancient group and community structures our ancestors were a part of which required individuals to work collectively in order to achieve their purpose.

2.2.1 Organizational Culture

Based on the definitions of what culture is in an organization by Kotter & Heskett (1992), O'Reilly and Chatman (1996), Sorenson (2002) & Guiso et al. (2015), this study hypothesizes that belonging is a cultural archetype. Organizational culture is largely understood as including beliefs, norms and values that are shared among employees (Barney, 1986; Sorenson 2002; Guiso et al. 2015). O'Reilly (1989) extends this to describe a sense of care that individuals may have for others around them and knowledge for how to behave. O'Reilly and Chatman (1996) describe organizational culture as playing the role of corporate control over how individuals within the firm operate, make decisions and behave. Board directors and CEO's will often refer publicly to the importance of having a strong culture, however this lacks specificity and they often do not elaborate beyond this description. Kotter & Heskett (1992, p15) describe a strong culture as where "almost all managers share a set of relatively consistent values and methods of doing business." Prajogo & McDermott (2011) discuss culture strength as the extent to which the preferred behaviors are embedded across the various levels within the organization. Similarly, a strong culture can be defined as producing "three outcomes: employees understand how management wants them to respond to any situation, employees believe the expected response is the proper one and employees know they will be rewarded for demonstrating the organization's values" (Mirza 2019, p11). Baumeister and Leary (1995) issue a warning related to cultures that promote control and conformity, rather than a sense of belonging because as described above, a sense of belonging is enhanced through celebrating peoples differences.

2.2.2 Cultural frameworks

Collins (2001) 'Good to Great' firms had a defined culture of discipline, whereas other firms had leaders that personally disciplined the organization, using sheer force. While the literature will also reference the necessity for strong cultures for performance, how culture affects variability and reliability is not often examined (Sorenson 2002). Also, consistency of practice across an organization appears

logical, but what if the strong, prevailing culture is wrong? Kotter & Heskett (1992) challenged the simplicity of a singular focus on a “strong culture” because in their study, there was only a moderate relationship between cultural strength and long-term financial performance. The research by Riketta & Van Dick (2004) and van Dick et al. (2005) illustrate the importance of the CEO, the executive and senior management to be intentional about engaging down throughout the hierarchy to build a sense of belonging. This logic is congruent with the culture literature which precludes that for social norms to be adopted across the organization, then it must be shared and followed by the executive (Guiso et al (2015), and not be championed singularly by the HR function. In other words, the CEO and executive must lead by example, and work in partnership with HR and line leaders (Mirza 2019).

Cameron & Quinn’s (2011) Competing Values Framework (CVF) describes four main cultural archetypes that exist in organizations, Clan, Adhocracy, Hierarchy and Market. The CVF measures the strength of culture across these four quadrants and enables a diagrammatic representation that shows where an organization may be weak in one, but stronger in another. An assumption could be made that a sense of belonging is most similar to the Clan culture because it describes an inclusive, team and collegiate focus. Similarly, a Hierarchy culture could be mistaken for representing the opposite of a sense of belonging culture, because it places importance on control, efficiency, formal rules and policies. While the CVF has proven to be very effective at diagnosing cultural issues, and supporting cultural change, Hartnell et al. (2011) meta-analysis of the CVF cautions that while dominant culture types may exist within an organization, it is a mistake to both ignore the interactions between different values that define the culture of the organization, and to assume that one cultural type fits all (Kotter & Heskett 1992).

According to Hartnell et al. (2011), Organizational culture is too complex to be defined only by a single dominant cultural type as there are situational factors which come into play. For instance, on an offshore drilling platform where the main priority is safety and efficient operation, the stronger CVF dimension is likely to be Hierarchy because of the necessity for important operational procedures and

processes. While an employee may experience limited personal autonomy in such a role, their competence and relatedness will influence their sense of belonging, potentially leading to discretionary effort and better performance. This is how the difference in firm performance could be explained by two separate firms, with similar equipment and technology. Ultimately, it is the responsibility of the leaders to ensure that there is a fit between the organizations cultural orientation and its goals (Prajago & McDermott 2011).

Sorensons (2002) research of 18 publicly traded firms across 18 different markets showed that that a “strong culture” lead to a more reliable performance in stable markets. Sorenson’s (2002) hypothesis was that homogenous beliefs within an organization would equal clear understanding of the organizations objectives and beliefs, as well as standardization of tasks and techniques, which therefore provide reliability of performance to the market, is likely to be only true if the organization were to operate in a bubble. It is for this reason that Kotter & Heskett (1992) refer to cultural norms developing over time because certain behaviors have proved to be successful in the past. Given the nature of business and organizations is volatile and subject to change, creating a culture based on environmental and market stability is unwise. Under a hierarchical, autocratic culture, Sorensons (2002) argument is that in the pursuit of procedure and conformity, a firms laser focus on limited areas means that they are at risk of missing external opportunities, such as innovation and adaptivity (Zeb et al. 2019) which is critical in the current industrial and regulatory climate for ESG.

Chatman et al. (2014) argue that researchers in the past have not been clear enough in distinguishing aspects of culture. Instead, Chatman et al. (2014, p786) extend the definition as follows “1) culture consensus, the degree to which members agree about a broad set of cultural norms; 2) norm intensity, which they define as the force with which a specific norm is held and 3) norm content, which they define as the actual substance of particular norms that give rise to the attitudes and behaviors defining that content.” Importantly, Chatman et al. (2014) further examine the norm content and the

influence this might have on how an organization operates, and what one would expect from a conformity perspective. It is proposed that the 'norm content', together with the consensus and intensity in which it is held, creates variance in performance between similar firms operating in the same market. Chatman et al. (2014) studied the impact of adaptability as a form of norm content and found that high technology firms with a strong cultural consensus and intensity towards adaptability performed better over a three-year period than firms that had lower consensus and intensity.

2.2.3 Impact of culture on performance

O'Reilly et al. (2014) propose that the personality of the CEO can have a significant influence on the culture of the organization and that culture is related to a firm's financial performance. According to Guiso et al (2015), it is the perceptions of senior management by employees, and the congruency or incongruency between their words and actions which demonstrates the strength of a social norm. The 'interpersonal climate' that is created by the leader can be shown to be a necessary factor for autonomy support, intrinsic motivation (Baard et al. 2004), and potentially, a sense of belonging. In both O'Reilly et al. (2014a) and O'Reilly et al. (2017) results showed a link between the personality of the CEO, specifically narcissists, and a negative impact on the performance of the organization and reputation. Narcissistic CEO's are more likely to have unhappy employees, create a destructive work environment and will naturally inhibit the sharing of information within the organization O'Reilly et al. (2014a).

2.2.4 A culture of belonging and firm performance

A cultural perspective is not inconsistent with the psychology literature, where Deci and Ryan (1985) who developed Self-Determination Theory and Greguras and Diefendorff (2009), who relate sense of belonging to organizational values and norms, which is supported in the studies of Dean et al. (2020) and Volini et al. (2020). Reconciling the psychology literature further with the business practitioner literature provides a path forward to conceptualize how a firm can create a culture of sense of belonging.

The work of Deci & Ryan (1985b, 2000, 2005) and subsequently Gagne and Deci (2005) and Greguras and Diefendorff (2009) is important because the research offers a means to conceptualise a sense of belonging that according to the literature, influences performance. Nearly 40 years of research on self-determination theory of motivation have shown that for firms to elicit higher levels of performance from their employees, it is not a matter of paying them more money, it is a matter of how they are motivated. The application of self-determination theory requires the satisfaction of three intrinsic needs, autonomy, competence and relatedness, in order to promote self-motivation and effective functioning (Deci & Ryan, 1985b, Ryan & Deci 2000).

Studies have identified that when employees feel that they have control over their actions (autonomy), that their actions contribute to outcomes (competence) and that they are connected to others (relatedness), a sense of belonging is achieved (Gagne & Deci 2005; Greguras & Diefendorff, 2009; Levett-Jones & Lathlean, 2009). Denison & Mishra (1995) showed involvement, consistency, adaptability and mission as being effective cultural traits for organizational performance, with involvement and adaptability being more strongly associated as a predictor of growth, and consistency and mission being more strongly related to profitability. Additionally, Baard et al (2004) propose that job satisfaction is not related to performance if job satisfaction is not derived from the satisfaction of the needs of autonomy, competence and relatedness.

Lampinen et al (2018) studied Finnish social and health-care services managers and found that open interaction, effective conversation culture, support and encouragement, common values, a shared vision of the work and its objectives and leadership structure, were the most important factors in fostering a sense of belonging. Equally, the factors that prevented a sense of belonging were the negative work atmosphere, lack of common time, organizational structure, problems within the organizational structure and problems related to leadership and management. In looking at each of these factors, Lampinen et al (2018) concluded that interaction, mutual trust, respect and appreciation were the critical elements

required for fostering a sense of belonging among work colleagues. In a similar study, Cortese et al (2019) reported that a sense of belonging was positively associated with fairness, career and professional development, job autonomy and the sharing of organizational goals.

For sense of belonging to become more than just an intangible construct, CEO's and their TMT need a more structured framework to develop a sense of belonging in their firm. Consistent with the work of Cascio & Boudreau (2011), employees who feel connected to the organization are motivated to do more than what is expected of them in their role, discretionary effort.

From here, the literature review expands a sense of belonging to that of a culture of belonging; one that motivates, inspires and is developable as a valuable asset.

2.3 Culture of Belonging as an Asset

2.3.1 The value of intangible assets for firms

A sense of belonging and therefore a culture of belonging, is intangible and dynamic. Something which is 'felt' at a very personal level. The benefits of possessing a sense of belonging are well documented; as are the detriments when a sense of belonging is lacking in the context of organizations that are highly managed (hierarchical culture), an asset that is so intangible poses both a great opportunity and risk.

It is estimated that 52% of the total value of all publicly traded firms globally is made up of intangible assets, including human capital and culture, which highlights the importance and significance of the RBV (Haigh & Brown 2018; Klemash, et al. 2020). Yet, these intangible assets are not reported, or effectively measured and as a result, employees are treated as an expense, not an asset (Leopold et al. 2020). In a large sample studied by Graham et al. (2017) of North American CEO's and CFO's, they reported that 91% (of 1461) believed culture to be very important at their firms, and that it was a top 5 factor in determining the value of their firm.

Employees that are highly engaged and connected, devote extra effort, are more innovative, cooperative and are more effective in adapting to change (Griffin, Parker and Neal 2008; Cascio & Boudreau (2011)). However, according to a Mirza's (2019) report into the impact of toxic cultures in US organization, it was found that 1 in 4 Americans dreaded going to work, which is expected to correspond to \$86 billion in lost productivity.

2.3.2 Resource Based View of the Firm (RBV)

It is proposed that a culture of belonging is an intangible asset that can be enhanced and diminished, analogous to the existing acceptance in RBV theory that culture is an intangible asset (Barney 1986; Barney 1991). Carr et al. (2019) report that a high sense of belonging equates to a 56% increase in job performance, 50% drop in turnover risk and a 75% reduction in sick days. The RBV predicts that superior performance is explained by heterogeneous resources possessed by firms such as tangible resources including land, buildings, financial assets and other intangibles such as reputation and capabilities. Importantly, the RBV also emphasizes that intangible organizational resources, such as culture, are expected to explain differences in firm performance (Barney, 1986; Barney, 1991). This is because intangible resources tend to be valuable, rare, inimitable and non-substitutable (Barney, 1991; Galbreath, 2005). Such resources make competitor replication more difficult; hence, firms can build and preserve advantages that generate high levels of performance through these intangible assets. Consistent with Barney (1991), Dean et al. (2020) and Volini et al. (2020); firms that develop a culture of belonging are likely to be in a position of advantage. When organizational beliefs, norms and values create a culture of belonging, employees are likely to demonstrate improved effectiveness and efficiency, resulting in better firm performance. As simply put by Sisodia et al. (2014, p61), *“employees either benefit or burden every dimension of a company's existence. The extent to which they deliver one or the other is primarily a function of company culture and leadership's view of employees' value to the company.”*

2.3.3 The impact of a lack of belonging

If we consider a sense of belonging as a company asset, then there is a need to examine when the contrary exists. The literature highlights that not possessing a sense of belonging can cause anti-social behavior, selfishness, self-defeating and destructive behaviors, self-regulation, rejection, depression, risk taking, impaired cognition and logical reasoning. The work of Gagne and Deci (2005) and Greguras and Diefendorff (2009) is important. The findings offer a means to conceptualize a sense of belonging that influences performance.

If employees feel a lack of belonging, they are more likely to behave and make decisions in a manner that suits, and benefits them in their immediate circumstance, not those pertinent to their organization. While the sense of belonging research is increasing across many organizational fields, research linking it with performance in business academic literature is limited. Studies in business literature rarely conceptualize or systematically measure a sense of belonging. While there has been limited study of a sense of belonging in a business context, there are significant empirical studies in other fields where performance is important and are relevant to this research project. It is these studies which help ground insight into the link between a sense of belonging and firm performance given the weight of research that shows a sense of belonging to be a mediator of general and specific well-being. One such study by Levett-Jones and Lathlean (2009, p2872) using data from a sample of 362 third year nursing students, developed a broader interpretation of belongingness that applies to the organizational context:

Belongingness is a deeply personal and contextually mediated experience that evolves in response to the degree to which an individual feels (a) secure, accepted, included, valued and respected by a defined group, (b) connected with or integral to the group and (c) that their professional and/or personal values are in harmony with those of the group. The experience of belongingness may evolve passively in response to the actions of the group to which one aspires to belong and/or actively through the actions initiated by the individual.

The impact of not possessing a sense of belonging has already been discussed, as has the potential for outcomes such as anti-social behavior, selfishness, self-defeating and destructive behaviors, self-regulation, rejection, depression, risk taking, impaired cognition and logical reasoning. While these outcomes first display at a micro, individual level, the macro level impact manifests at an organizational level. These conflictive and negative behaviors have the potential to negatively impact most aspects of organizational effectiveness, including but not limited to which would firm performance, absenteeism, voluntary turnover, accidents, inefficiencies and technical errors. Thau et al. (2007) demonstrate that when an employee perceives that there is a gap between their desired and actual levels of belonging to their workplace, “self-defeating” behaviors can be created, further increasing the gap between desired and actual levels of belonging. Self-defeating behaviors described by Thau et al. (2007) include anti-social behaviors directed at others that are intended to validate one’s identity. This finding by Thau et al. (2007) is perhaps more illuminating when we consider the social psychology literature on conformity, where studies have shown that people will change their opinion, or decision, even if they know it is incorrect, based on consensus of the group (Asch 1955; Allen & Levine 1971; Mullen et al 1990). An example from the literature, comprising a study of 437 nurses in Malaysia, found that nurses deliberately withheld their knowledge to fit into the group; an outcome, which could only be to the detriment of the patients they were caring for (Mohamed et al. 2014).

While these studies tend to explore behavioral aspects of belonging to organizations and explore employee outcomes, little research has investigated the sense of belonging as part of organizational culture and whether or not the construct directly influences firm ESG performance. Literature to date on a lack of belonging in an organizational context documents findings on employee behaviors which are unlikely to provide an optimal environment for high performance across the many metrics used to ‘judge’ firm success. While much of the research has focused on health and education, the research findings have been consistent. Research on belonging in nursing has shown a sense of belonging to be an important

factor in learning and professional development (Levett-Jones & Lathlean 2009; Honda et al. 2016; Dunbar & Carter 2017), job satisfaction (Reinhardt et al. 2010) and retention (Reinhardt et al. 2010). Work within higher education has demonstrated that sense of belonging is important to academic success when the teacher demonstrated care for the students as individuals, and their learning, as opposed to a binary emphasis on their grades (Glasser, 1986; Walton & Cohen, 2007; Stevens et.al., 2007; Slaten et al., 2014).

Repeated findings in studies on nursing training and education demonstrate that a lack of belonging has impacted a nurses willingness to question poor practices, despite knowledge of best practice and resulted in group conformity with these poor practices (Levett-Jones & Lathlean 2009; Mohamed et al. 2014; Honda et al. 2016). Mohamed et al. (2014) found that in a clinical healthcare environment trainee nurses suppressed their knowledge in order to fit in, even when they knew the decisions being made by the group were incorrect. Extrapolating this finding to a culture of safety in resource firms, such as an offshore oil rig, or an underground mine site, has some significant ramifications beyond the impact on traditional measures of firm performance (Hoivik, Tharaldsen, Baste & Moen 2009).

Turning again to the factors which contribute to a positive sense of belonging, Lampinen et al (2018) studied Finnish social and health-care services managers and found that open interaction, effective conversation culture, support and encouragement, common values, a shared vision of the work and its objectives and leadership structure, were the most important factors in fostering a sense of belonging. Equally, the factors that prevented a sense of belonging were [a](#) negative work atmosphere, lack of common time, organizational structure, problems within the organizational structure and problems related to leadership and management. In looking at each of these factors, Lampinen et al (2018) concluded that interaction, mutual trust, respect and appreciation were the critical elements required for fostering a sense of belonging among work colleagues. In a similar study, Cortese et al (2019) reported that a sense of belonging was positively associated with fairness, career and professional development, job autonomy and the sharing of organizational goals.

2.4 Creating a Culture of Belonging to enhance performance

2.4.1 Understanding motivation

Creating a culture of belonging does not fall to one person, or just the human resources department. Highlighted be the definitions above, a sense of belonging is multidimensional, and too complex to just be considered in the realm of diversity and inclusion. Certainly, human resources have a foundational role to play through the orchestration of organizational development, but equally important is the role of the board, the executive, marketing and communications, finance, health, safety & environment, product design or engineering. The way each of these organizational functions interacts internally and behaves externally will arguably have an impact on an employee's sense of belonging and motivation to perform.

Gagne and Deci (2005) share that intrinsic and extrinsic motivation are not opposing ends of a spectrum, but two points on the continuum from amotivation to motivation. Tasks which are not interesting, require extrinsic motivation, or external regulation, and completion of these tasks achieves a desired consequence, or avoids an undesired one (Gagne & Deci (2005). While still being a form of regulation, once this external regulation becomes internalized through the acceptance of values, attitudes and structures, it becomes autonomous (Gagne & Deci 2005). Moving motivation along a step further, 'introjected motivation' is a form of external regulation where people are motivated (extrinsically) to behave in a certain way in order to feel worthy.

'Identified regulation' however, creates autonomous extrinsic behavior where people identify with the value of a behavior in order to achieve their own self-directed goals (Gagne & Deci 2005). Gagne & Deci (2005) use an example of patient care in a hospital environment whereby many tasks are intrinsically uninteresting and unpleasant, however because of the recognized value of completing these

tasks as part of the organizations purpose, i.e., patient care, they feel autonomous in completing them because doing so reflects an aspect of themselves. Gagne & Deci (2005) describe ‘internalized regulation’ as being where people have a sense that their behavior is a part of themselves, or this is who they are. Using the nursing analogy, a nurse would consider that their patient care behavior would extend beyond the workplace, as it is part of their identity to care for people. There would also be an appreciation that unpleasant and uninteresting tasks are a part of caring for someone and would be done autonomously.

In this research, a sense of belonging is therefore conceptualized as a part of organizational culture, a motivating force, consisting of three dimensions: 1) autonomy (cultural beliefs, norms and values that create a sense that employees have control over their actions); 2) competence (cultural beliefs, norms and values that create a sense of self-efficacy and that employees can readily contribute to outcomes); and 3) relatedness (cultural beliefs, norms and values that create a sense that employees can easily connect to the firm, its leaders and colleagues).

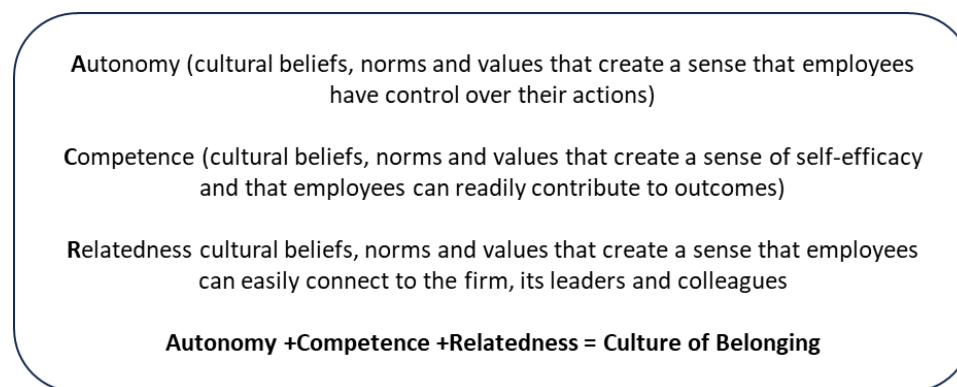


Figure 1: The three dimensions of a culture of belonging. Source: Author

By achieving each dimension, employees feel that they are an integral part of the system (Anant 1966), and a sense of belonging becomes a cultural archetype that can positively impact performance. In addition, Kovjanic et al (2012) connected the role of transformational leadership and its impact on positive employee outcomes, through the satisfaction of the three employee needs of Self Determination Theory

(SDT). The authors stress that it is important for organizations to invest in leadership training that focuses on the three needs of SDT (Kovjanic et al 2012). In the next section, a review of the literature details how the three dimensions (Figure 1) have been researched previously and how they each relate to firm performance.

2.4.2 Providing Autonomy

Frederick Taylor (1947, p.42), , testified that *“without the slightest hesitation, that the science of handling pig iron is so great that the man who is...physically able to handle pig iron and is sufficiently phlegmatic and stupid to choose this his occupation is rarely able to comprehend the science of handling pig iron.”* The authoritarian principles developed by Taylor essentially viewed labor as components of a machine that needed to be tightly controlled in order to work effectively. Workers were required to follow strict instructions and were not able to deviate from their set task. They were not required to know more than the component of what they were doing. Taylor’s workers operated with no autonomy. Gagne and Deci (2005) stress the importance of creating an environment of autonomy as being the critical factor for motivation while Yang & Choi (2009) demonstrated the positive impact of autonomy on performance.

The opposite of autonomy is control, which therefore implies a lack of trust. Control is also alienating (Deci & Flaste 1995). In an environment where autonomy is low, employees are not empowered to make decisions, improvements, to think, or contribute beyond what they have been told to do. Work environments where leaders listen to employee perspectives, provide choice and encourage self-initiation on the other hand are an example of an autonomy supportive work climate (Baard et al 2004, Gagne & Deci 2005).

To promote autonomy, Kovjanic et al. (2012) propose that leaders provide meaning for their work by articulating value-laden descriptions of tasks and communicating attractive goals for the future; encouraging employees to develop new approaches; providing the link between collective goals to the

self of followers; an absence of close control. An organizational environment where the leader is not autonomy supportive, such as in Taylor's factories, would be where employees are solely dependent on the leader (Kark et al 2003), and therefore would not be in a position to make a decision or move forward without guidance from the leader. Employees therefore need to be compliant with the leader. Employee motivation and self-esteem is subsequently dependent on the recognition and approval from the leader (Kark et al. 2003) which is the opposite of transformational leadership; recognized as transactional leadership. Bock (2015) stresses the importance of managers' trusting employees in order for them to understand how they impact management objectives and goals. Through a contemporary lens on belonging and inclusion, it is the acceptance of people for being individuals, and celebrating their differences, as opposed to conforming to a prototype, which is most important (Buengeler et al. 2018).

Cameron & Quinn's (2011) competing values framework describes a 'Hierarchy' culture where the focus is on the control systems and procedures dictated by the leaders of the organization, which don't promote flexibility, differentiation or discretion within the business. A hierarchical culture might be important in some industries such as aviation, resources, where safety is a primary concern, but a lack of autonomy can impact a sense of belonging and requires the hierarchical lens to be applied to critical process and procedural elements only. I argue that leaders, who place value on hierarchy and control, want conformity as articulated by Lustgarten (2012, p27) when describing the aftermath of the Exxon Valdez accident where Exxon learned to "manage its risk and safety operations with a militaristic control and total conformity among its 104,000 global employees". Based on the literature, there could be an argument that leaders in this type of culture would issue orders, rather than facilitate or coach employees towards an outcome.

As discussed by Hackman (2002, p102), managers who try to control every aspect with overly prescriptive procedures to manage risk, often "undermine the very aspiration that the procedural specifications were put in place to achieve." This style of leadership would be expected in the military;

however, even this has also changed because it was ineffective in dynamic and rapidly changing situations (McChrystal et al. 2015). Not surprisingly Liao (2018) cautions that a total focus on stability and control can have a negative impact on innovation and will naturally impact the performance of the business over time.

According to Deci & Flaste (1995), the motivation to behave in a self-defeating manner is caused by a lack of control and autonomy over decision making, and therefore one's desire for a level of self-determination. This is congruous with scenarios described in the literature where a sense of belonging is lacking. In an organizational context, employees who lack autonomy will make decisions that are pleasant in the short term, will ultimately be harmful to the long-term goals of the organization. Again, this is them regaining some sense of control, regardless as to whether it benefits them or the organization.

Baard et al. (2004) summarize the levels of autonomy support as: 'highly controlling' where managers prescribe a solution and demand that it be followed with the promise of reward or threat; 'moderately autonomy-supportive' where managers encourage subordinates to figure out a problem by observing how others deal with it; and 'highly autonomy-supportive' where managers enable subordinates to devise their own plan to handle the problem, and provide relevant information or feedback, only if it is useful. Beard et al. (2004) contest that it is the perceived autonomy support and interpersonal climate experienced by employees, not the characteristics of the job itself, that contribute to their needs satisfaction. Promotional supports, including meaningful rationales, acknowledgement of employee feelings and attitudes and a lack of control, assist to integrate the importance of completing uninteresting tasks (Deci et al 1994).

Autonomy can be summarized as a critical dimension, required for developing a culture of belonging that improves performance on the basis that employees can better contribute to the long term ESG goals of the firm through being able to innovate and better decision making. I argue that greater

autonomy will mitigate the impact of poor decisions that prove to be beneficial to the individual or organization in the short term but are ultimately detrimental to the environment and community.

2.4.3 Trust in Competence

In the same context that belonging is seen as a fundamental need, so is the drive for personal growth (Schmader & Sedikides 2018), self-esteem and self-actualization (Kaufman 2020). Much of the research in the health sector centers on the impact that a sense of belonging has on learning and competence, and that embedded learning is increased through better belonging. Competence can be considered in the present tense but should also be considered in the context of providing the opportunity to improve and master one's skills. For most people, unless they worked in Frederick Taylor's workshop, work is the place where they can exercise their most sophisticated skills (Leiter & Maslach 2015) and demonstrate their refined levels of expertise. Logically, learning further enhances the ability to demonstrate competence, which in turn increases one's sense of belonging and acceptance (Sedgwick & Yonge 2008; Borrott et al. 2016).

Effective leaders can increase a sense of employee competence by communicating confidence that employees can meet their expectations, being optimistic and also emphasizing the skills and capabilities of their employees (Kovjanic et al 2012). Undermining an employee's sense of identity, and social value can have a negative impact on performance, while also creating the conditions domain to anti-social behavior and a short-term desire to validate self (Aquino & Douglas 2004; Thau et al 2007). This recognition is important given that validation is necessary for social relationships, and therefore a sense of belonging (Walton & Brady 2017). Effective leaders understand this requirement and will seek to enhance employee self-efficacy through modelling and verbal persuasion (Salanova et al. 2011), while also increasing engagement and extra-role performance.

It must also be the role of the leader to promote employee capability, rather than a dependence on the leader as the problem solver (Bass 1990). An effective relationship with one's manager, whereby

the manager demonstrates interest in the employee's skill developments would be seen to be an effective strategy (Lampinen et al. 2017). Feedback is critical, whether it be written, verbal or data driven; and teams need to understand how they are doing, in order to understand how they might improve (Hackman 2002). Providing individual consideration, coaching and advice for an employee is also a key element of transformational leadership (Bass 1990).

While the role of the manager is to provide feedback to an employee, Deci et al. (1975) report the importance of how praise is delivered. These authors cite feedback such as "living up to expectations" and "doing as you should" as being examples of controlling statements that can have a negative effect on intrinsic motivation. Deci et al. (1975) refer to more simple statements such as "you've done very well" as statements which achieve a positive effect.

The dilemma is that in order to feel competent, you must perceive a level of trust and autonomy support (Deci & Flaste 1995). Therefore, a sense of competence will not exist in isolation. A lack of control in an organizational context has been found to correlate with a lack of trust and a lack of trust from management can be inferred as a lack of competence by an employee (Deci & Flaste 1995). As Deci and Flaste (1995) describe an employee who is competent but does not receive autonomy support will soon feel that they are not self-determined or operating on their own volition. Ultimately, this outcome will reduce an employee's sense of belonging and intrinsic motivation to perform. As seen with the trainee nurses in Mohamed et al. (2014) study, a lack of perceived competence results in increased conformity to management expectation, and therefore it is less likely that management decisions will be challenged (Aronson 2004).

Consistent with findings from studies into Taylor's scientific management theory, where workers were never able to see the bigger picture (Taylor 1947), Volini et al. (2020) report a link between a sense of belonging and a feeling of contribution to an organization's objectives. Recent studies into environmental performance show the significance of communicating the shared vision (Alt et al. 2015)

and developing employees competence to make a more meaningful contribution to the firms environmental strategy. A feeling of contribution would suggest that an employee believes their work to be meaningful, which requires effort on the part of the organization to articulate how employees actions help to achieve their purpose. Walton & Brady (2017) conclude that helping people to feel positive about who they are, or who they could become, promotes a sense of belonging, and a fit between setting and self. As reported by Cortese et al. (2019), a sense of belonging is positively associated with the sharing of organizational goals. From a leadership perspective, it is important to create an environment where employees feel competent because they understand their contribution to organizational goals.

The importance of autonomy, and the ability to be self-directed, can also be diminished through unmanageable workloads. If an employee perceives that they are not able to manage the workload, then this has two consequences (Leiter & Maslach {2015). Firstly, overwork can take away an employee's agency and autonomy through the ability to control how they perform the work. Secondly, the employee's experience of competence is diminished because they cannot manage their workload (Leiter & Maslach 2015).

As the second dimension for creating a culture of belonging, a perception of competence requires both the autonomy and recognition from managers that an employee is able to contribute to the organizations goals. This then provides the foundation for the third dimension, relatedness and the knowledge that one is considered to be a valued member of the firm (Leiter & Maslach 2015).

2.4.4 Demonstrating Relatedness

Much of the research on motivation focuses on autonomy and competence and provides limited focus on relatedness beyond Baumeister & Leary (1995). This however contrasts with the social and organizational identity research that provides significant emphasizes on the impact social context has on group motivation, as well as other critical organizational behaviors (Cornelissen et al. 2007). In seeking to understand the necessary elements required for creating relatedness within an organization, research

into identity has proved most salient. Gagne & Deci (2005) demonstrated that relatedness, identification to the organization, and social context are crucial factors for the internalized regulation of motivation, leading to high performance through discretionary effort. From a firm performance perspective, a focus on identity is related to reduced social loafing & tardiness (Ellemers et al. 2004), whereas identity threat has been linked to anti-social behavior, and self-destructive behaviors (Aquino & Douglas 2003).

The psychology literature on social and organizational Identity theory provides a useful framework basis to understand relatedness in the organizational context, as the research often pertains to group membership and identification. Ashforth & Mael (1989, p21) describe social identification as the “perception of oneness with or belongingness to some human aggregate”. Accordingly, a natural consequence of not identifying with the group, or a sense that one’s identity is not compatible, is a lack of belonging (Slepian & Jacoby-Senghor 2021). A challenge, according to Ashforth & Mael (1989) is that identity can be derived across work groups and departments, not just the organization. As a consequence, employees can have multiple identities within the workplace. That is because a social identity is one that is shared and distinguishes between groups, whereas a personal identity distinguishes between individuals (Ashforth et al. 2008).

Brewer (1991) demonstrated the various levels of organizational identity using a series of concentric circles, where personal identity remains at the center of the circles, with outer circles representing the work team, department, profession and organization. This correlates with research by Slepian & Jacoby-Senghor (2021) who found a positive relationship between a lack of belonging and a feeling that one cannot be oneself. A key tenet of Brewer’s (1991) work is that there is an optimal level of distinctiveness of identity, where maintaining some level of individuality is required even in the most inclusive and identity supporting group. However, being too distinct from the group is uncomfortable. If there is a sense of not being able to be oneself, one cannot be vulnerable or be seen to make mistakes. This knowledge can have several applications, one being that the literature on innovation and creativity

generally suggests that employees need to be rewarded for trying and taking risks, rather than being punished for unsuccessful attempts (Yang & Choi 2009). This notion of vulnerability can be extended further to consider the growing discussion on psychological safety in the workplace.

McBeath et al. (2017) refer to social support and social connectedness as a determinant of relatedness. As with providing autonomy and competence, Ellemers et al. (2004) report on the important role of leaders in developing employee relatedness and identification within the workplace. Of equal importance is the extent to which employees perceive themselves as in-group members. Ellemers et al. (2004) help to clarify this paradox with the reasoning that hiring a new leader for their superior individual capabilities, who stands out from the group, might not be optimal for motivating group performance. The authors apply this reasoning to leader reward structures, noting that there is an acceptance that senior management will be paid more. However, when the reward gap becomes too large, the distinction between the leaders and followers is emphasized creating a negative impact on the group identification (Ellemers et al. 2004). Effective leaders are found to positively influence both personal and work-group identification, which is important given work-group identification is associated with performance and turnover intentions (Kark et al. 2003; Cicero & Pierro 2007). Leaders who emphasize morale and high ethical standards, and who are willing to sacrifice their own interests for the good of the group, reinforce their 'in-group' status as described by Ellemers et al. (2004) and build relatedness more effectively than those who do not (Kovjanic et al. 2012). Communication by such leaders will also emphasize their group goals, highlight past achievements, and distinguish the organization and its mission from others (Kovjanic et al 2012)

van Dick (2004) and Ashforth et al. (2008) propose that as society becomes more turbulent, an employee's need and desire for individual identification with the organization is likely to increase. Therefore, in order for an organization to create an overarching identity, leaders must understand the multiplicity of identity and recognize that identity is more than just goals and values. Cornlissen et al

(2007) define the multiple levels of organizational levels of identity as: how the employee relates as an individual and their specific role; the shared identity of the team; how the employee as an individual relates to the identity of the organization; and lastly, how they relate as an individual of the organization within society. Broadly speaking, it is the overlap between oneself image and the employee's image of the organization (Riketta & van Dick 2004).

Organizational identification is different to organizational commitment. The literature suggests that organizational commitment is based on similarity between goals and values, and a positive attitude to the organization, which is limiting. The analogy is, if another organization proved to be more convenient for that employee, and both provided the necessary conditions for organizational commitment, an employee would not be sacrificing much to leave and join the other organization (Ashforth & Mael (1989); Ashforth et al. 2008). In essence, the authors conclude that while organizational commitment has an influence on job satisfaction, it does not provide the emotional hook and sense of oneness that organizational identification does. If organizational commitment exists without organizational identification, it is arguable that there would be less psychological loss experienced in leaving an organization.

To enhance identification beyond personal, career and team identification, and towards identification with the entire organization, logic and research indicates that there has to be a very good reason why. Sinek (2009) has since popularized the notion of "Why" and the importance of not what you do, but why you do it. In a study of eudemonic wellbeing in veterinarians, Wallace (2019) provided evidence that while helping animals and people were important predictors of meaningful work, however, they are not directly related to well-being. Wallace (2019) suggests that a focus on creating greater meaning for the work was going to be more impactful on the wellbeing of veterinarians, than the demanding, operational requirements of being a veterinarian such as workload, client interactions, physical safety and financial concerns.

Similarly, the sense of relatedness to organizational goals promotes a sense of self-determination, and reinforces one's authenticity (Schmader & Sedikides 2018). Pink (2010) also identifies a shared purpose as being an integral component of relatedness and connects purpose to motivation. Therefore, what creates the sense of relatedness is a sense that everyone is working together to achieve a shared purpose. This is supported by Lampinen et al. (2017), who concluded that a shared vision of the importance of the work and its objectives is a factor in creating a sense of belonging. In looking at this through the motivation lens, it is sufficient to rely on the stated purpose and values of the firm, it must be done so in concert with efforts to build autonomy and competence while acknowledging that the group contributes to the achievement of the firm's goals (Sedgwick & Yonge 2008; Cortese et al. (2019).

It is becoming increasingly clear that the nature, and beneficiaries of the goals and purpose of the organization are important in creating relatedness. Specifically, whether an organization "exists" for the sole purpose of creating returns for shareholders, as opposed to a broader range of different stakeholder groups, is a defining question. For instance, it is a societal expectation that firms must progress beyond simple corporate social responsibility and bring societal issues to the core of their business (Porter and Kramer 2011). As evidenced by a growing presence of 'employee activism' toward large companies such as Google (Bhuiyan 2019) and Apple (Nicas & Browning 2021), employees themselves will take a stand against capitalism where an organization is primarily focused on economic efficiency and profit.

Addressing environmental concerns through innovation not only has an impact on contenting employees and community, but it being also increasingly shown to have a dramatic impact on a firm's financial performance. Porter and Kramer (2011) cite the example of Wal-Mart who saved \$200m through the reduction in plastic and better management of delivery routes, even though they shipped more products. Humanistic, or firms of endearment as described by Sisodia et al (2014), exist to maximize their value to everyone in the society, not just shareholders, so that stakeholders and others develop an emotional connection with the business. Through the social identity lens, such actions by the organization

create positivity and a sense of pride, which further enhances identification and relatedness with the organization. Societal backlash against firms for environmental damage should also be taken into consideration when considering performance variability. Person-situation fit, which O'Reilly et al. (1991) used to predict job satisfaction and organization commitment, is mostly related to the congruence between the culture of the firm and the persons self-concept. Leiter and Maslach (2015) describe this fit between personal and workplace values as being a necessary requirement for personal fulfilment, and intrinsic motivation.

Based on research of Riketta & van Dick (2005) in which the authors demonstrate the strength of work group identification and organization identification, it may be that the work group identification is more noticeable on a day-to-day basis. However, if the organization does something that contravenes an employee's self-image, that is when the importance of organizational identification may supersede the work group identification. This is conceptually discussed by Collier & Estaban (2007) using the example of Enron. That is, if an employee does not see that an organization's attributes are attractive, then they will not personally identify with the organization, and are unlikely to demonstrate proactive and cooperative behaviors. In essence, a conflict between identities ensues (Ashforth & Mael 1989). It is important for organizations to understand that employees need to see themselves as a winner, as they will look for positive distinctiveness between their group and an outgroup (Ashforth & Mael 1989; Cornelissen et al. 2007; Ashforth et al. 2008). The natural consequence of not identifying with the organization, or seeing themselves as a loser, is turnover (van Dick et al. 2005). In contrast, identification will motivate employees to enhance positive distinctiveness further (Ellemers et al. 2004).

Research has demonstrated that the organization's physical environment can have an impact on providing necessary relatedness, as a sense of belonging is developed through inferences, cues, events, experiences and relationships (Walton & Brady 2017). For instance, if the marketing material of an engineering company presents only white, male faces, this could lead others to question whether they

would belong in such a company. In the Qantas 2019 annual report, the top expenditure item in their profit and loss statement is “Manpower and staff-related”; notably not discussed in the CEO letter. Research suggests that it is the symbolic interactions, and shared language (both verbal and non-verbal), that evolve the social identification within an organization (Ashforth and Mael 1989; Cornelissen et al. 2007).

Cheryan et al. (2009) & Master et al. (2016) found that a stereotypical physical learning environment predicted girls' lack of belonging and interest in computer science. Similarly, Good, Rattan & Dweck (2012) found that gender stereotyping with respect to mathematics ability in the learning environment had a negative impact on sense of belonging and ultimately the intent for women to pursue further study the field of education. Diekman et al. (2011) found evidence that highlighting communal goals, as opposed to agentic, positively influenced women’s interest in STEM careers, as STEM careers are typically thought of as not being communal. For women in the workplace in particular, King (2020) discusses the energy required by women to “fit in” into a traditional male dominated organization, as they need to change or hide elements of their true self to meet the organizational profile of what a successful employee presents. Due to the energy required to do this, King (2020) reports that this will negatively impact performance and employee retention over time. This is substantiated by Slepian & Jacoby-Senghor’s (2021) connection of inauthenticity to define a lack of belonging, and the expectation that this causes increased self-consciousness, self-monitoring and specific behavioral adjustments. Similar research exists with respect to older workers. Rahn et al. (2021) demonstrated that negative age stereotypes reduce sense of belonging and encourage social withdrawal in the workplace, which is a contributing factor to resignation and retirement.

In an organizational setting, the ability to personalize one’s work environment is positively associated with wellbeing and satisfaction, noting that personalization is more important to women than it is to men (Wells 2000). Wells (2000) showed that women are more likely to personalize their work

environment with elements that represent them and their lives outside of work, whereas men were more likely to personalize through displaying their achievements and status. It begs the question as to what the likely outcome of depersonalizing the office environment is, as was the case with BHP's clean desk policy in 2012 (Robin 2012). The policy prescribed that only one A5 photo frame could be displayed on a desk, and if an award was won at work, this could replace the photo frame (Robin 2012). Given the association between job satisfaction and workplace personalization, it would have been a worthwhile study investigating the impact of the BHP policy on job satisfaction (Wells 2000).

Diekman et al. (2011) found evidence that highlighting communal goals, as opposed to agentic goals, positively influenced women's' interest in STEM careers, because STEM careers are typically thought of as not being communal. King (2020) discusses the energy required by women to "fit" into a traditional male dominated organization, proposing that they need to change or hide elements of their true self to meet the expected organizational profile of success. Due to the energy required to hide their true selves, King (2020) reports the potential for negative impacts on performance and employee retention over time. This belief is substantiated in research by Slepian & Jacoby-Senghor's (2021) where the authors connected inauthenticity with a lack of belonging, noting negative workplace behaviors such as increased self-consciousness, self-monitoring and specific behavioral adjustments.

Similar research exists with respect to older workers describing this as strategic assimilation. Rahn et al. (2021) demonstrated that negative age stereotypes reduce sense of belonging and encourages social withdrawal in the workplace, a contributing factor to resignation and retirement. From the research, it would appear that to create a sense of relatedness, conformity should not be the objective, but instead, the importance of personal experience, individualism and personalization.

To conclude this section, the research provides substantive evidence that in order to create a culture of belonging that can motivate employees to perform, firms must focus on providing employees

with autonomy, an ability to demonstrate competence and a sense of relatedness recognizing the importance of personal experience and identify.

2.5 Exploring the strategy of the firm through the CEO letter

To understand the strategy of firms and intent to create a culture of belonging as a strategic and valuable asset, the CEO letter from the annual report was chosen as the medium for analysis. While this was the only medium used for analysis in this study, this is not the first time that the CEO letter has been used to assess strategy and culture within a firm.

2.5.1 Influence of the Top Management Team

Whether they consciously do it or not, the CEO and TMT of an organization create a representation of the necessary social identity prototype for employees to adopt, build personal identification with, and embody a commitment to the mission and goals of the organization (Reicher et al. 2005; Cicero & Pierro (2007). Kotter & Heskett (1992) stress the significance of the continual and frequent emphasis by the senior leadership on values, management philosophy and the essence of the organization, as being fundamental to the development of organizational culture. This is important given that the top management team are likely to model their own leadership style and behaviors on their immediate manager, the CEO (Bass 1990). This echoes Upper Echelon theory (Hambrick & Mason 1984), where the CEO promotes the culture that they want and the annual report, in particular, is a discourse in which they can do this. Conversely, the CEO may choose not to promote the culture of the organization, or the strength and contribution of employees and may instead use it as an opportunity to convey their own abilities, the worth of their assets or something else entirely.

Reicher et al. (2005) describe leaders as being the 'entrepreneurs of identity, which they describe as their responsibility to shape the organization and create an inclusive category which helps to mobilize

employees to deliver upon objectives. Reicher et al. (2005, 564) concludes that if leaders are entrepreneurs of identity, which implies that their followers are consumers of this identity, the followers can also “reject leaders who violate their understandings of either identity or of social reality.”

2.5.2 The CEO, TMT and Stakeholder Theory

The body of research that followed the introduction of stakeholder theory by Freeman in 1984 is expansive and generally confirms the significance of ensuring that a firm fulfills greater stakeholder interests, not just those of the shareholder. Initially, Freeman’s (1984) theory was positioned within strategic management, however over time, it has now settled firmly within the business ethics realm. While it was written nearly 40 years ago, Freeman (1984) decreed the significant importance of executives taking multiple stakeholder groups into account, particularly those that affect their business. By attending to a wider variety of stakeholders (Fu et al. (2022), the firm can reduce its overall risk.

It is the messaging from the CEO and TMT, which provides an understanding of the firms strategy and sets the example of stakeholder management for the rest of the organization to follow (Freeman 1984). Stakeholder theory has not been without its critics however, according to Mitchell (1997) as some labelled the definition as being vague and without specific direction as to who could be classed as a stakeholder.

Freeman et al. (2004, p364) describes the value of stakeholder theory on the basis that it directs managers on how to operate and that “Economic value is created by people who voluntarily come together and cooperate to improve everyone’s circumstance. Managers must develop relationships. Inspire their stakeholders and create communities where everyone strives to give their best to deliver the value the firm promises.” Kaler (2002) took this further by arguing that stakeholder theory has to be about improving the moral conduct of business, ensuring that the interests of more than just the owners are served. In the resources firm of today, a 100% focus on managing costs and schedules implies that the only stakeholders the firm considers to be important are the shareholders.

2.5.3 The CEO Letter and its significance to a culture of belonging

With respect to understanding a culture of belonging, verbal and written communication have been shown to provide cues that influence a sense of belonging. The pertinent description of belonging by Elliot et al. (2014) is that it is an interpretation of cues that suggest whether or not one fits in and is welcome. Elliot et al. (2014) specify that belonging is inferred based on observations, interactions, values, and past events that define the culture and environment. “Words and actions are watched carefully by the staff for changes in cultural priorities and therefore the consequent power, reward and punishment systems” (Garratt 2010 p111) thereby close analysis of the language used by leaders can provide an insight into the inner workings of the firm. The importance of symbolism through written and verbal communication for the creation of identification (Ashforth & Mael 1989), which extends to a sense of relatedness, has been shown to be insightful. It is for these reasons that the CEO letter was chosen as the subject for analysis in this study.

The CEO letter has been widely used for analysis to assess a wide range of individual and organizational constructs, including; corporate vision (Kendall 1993), validity of assertions about innovation (Michalisin 2001), organizational motives (Prasad & Mir 2002), organizational (GE) approach to change (Palmer et al. 2003), CEO charisma and firm performance (Agle et al. 2006), predicting firm reputation (Geppert & Lawrence 2008), McKenny et al (2012), focus of attention (Surroca et al. 2016), founder centrality (Conte et al. 2017), safety culture at BP (Amernic & Craig (2017) and Exxonmobil’s social messaging (Grantham & Viera 2018).

The representation of a company’s strategy and culture through the CEO letter is described as a “window on the executive soul” (Sisodia et al. 2014, p28). Amernic et al (2007) also argue that supporting sections to financial statements, primarily the CEO letter, is an asset of strategic communication and is the most read because it can reveal aspects of the CEO’s leadership. CEOs convey and enact leadership through communication (Craig & Amernic 2011) and according to Hambrick and Mason (1984) and Boyd

(2020), the CEO has the ultimate responsibility for creating a positive culture (Kotter & Heskett 1992) and consequently, a culture of belonging for employees.

McKenny et al (2012) proposes that CEO letters serve the purpose of persuading readers of the strategy and virtues of the organization, or what they hold as most important, such as the norm of a culture of belonging, safety, efficiency or the admiration of shareholders. Importantly, corporations must realize, if they don't already, that strategically important information, such as approaches to social responsibility in the CEO letter is consumed by both internal and external stakeholders on the basis of evaluating the organizations commitment to stakeholder interests (Grantham & Vieira 2018).

In assessing the language of the CEO, the CEO could be observed to understand their important cues to employees within the organization about culture and belonging. For instance, emphasizing shareholder returns over community, environment or broader stakeholders provides a clear signal to everyone within the organization that the CEO values profit before anything else (Mackey & Sisodia 2014). That a CEO may not understand the impact of their cues to employees also needs to be considered. Amernic & Craig (2017, p74) concluded that "close monitoring of the language of CEO's is important in an age of powerful global corporations. This is especially the case when many corporate leaders become insulated by extreme wealth, protected from reality by boards and colleagues, and influenced by ideology of extreme efficiency. They lose grip on things that matter most - such as putting in place a safe environment offering an absence of harm." In terms of communication and leadership, Short et al. (2009) proposed that a focus on culture and, therefore, an intent to create a culture of belonging, is likely to be communicated through the CEO letter. As Brown et al. (2005) point out, when employee attention might easily be distracted by messages about the bottom line, it is necessary for leaders to continually focus attention and model behavior, on broader ethical messages as this influences employee satisfaction and dedication but importantly, leads to a greater willingness to report problems to management.

In Amernic & Craig's (2017) analysis of language used by BP's top management in the decade before the Deepwater Horizon disaster, they found very little emphasis on safety and safety culture which suggested only a trivial attention to safety. This focus on cost over safety has now been verified by other means (Lustgarten, 2012; Norazahar et al. 2014). Where Amernic and Craig (2017) focused on the prevalence of conceptualizations of safety in their analysis of BP CEO speeches to understand the CEO's contribution to the construction of BP's safety culture, this study seeks to determine the contribution to the development of a culture of belonging. With respect to the CEO letter, whatever is included, or excluded, in the top executive's discourse deserves to be noticed (Amernic & Craig 2017).

The CEO must, however, continue to manage the competing priorities of stakeholders which include shareholders whose priorities might be more traditionally focused on financial return (Ramaswamy, 2022). The majority of organizations would stress that their employees are their most important asset, as did Freeman (1984) in the context of strategic management, so it is anticipated that this would be reflected in their written communication, regardless of the intended audience.

2.5.4 Employees as Stakeholders

"To create value for stakeholders, executives must understand that business is fully situated in the realm of humanity. Businesses are human institutions populated by real live complex human beings. Stakeholders have names and faces and children. They are not placeholders for social roles. As such, matters of ethics are routine when one takes a "managing for stakeholders" approach. In the words of one CEO, "The only assets I manage go up and down the elevators every day." (Freeman et al. 2010, p29). This passage illustrates the significance of developing a culture of belonging and the analogue of a culture of belonging and viewing employees as a significant stakeholder.

The broad significance of stakeholder theory is that it removes the distinction between financial and social value (Freeman et al. 2010) which includes social value for employees as well as the community and environment. Despite the earlier criticism of stakeholder theory for its ambiguity, frameworks have

since evolved to help identify and analyze stakeholders, particularly focusing on the salience of stakeholders (Mitchell 1997). Employees are a significant part of a firm's value chain and must be considered stakeholders with a high degree of salience, particularly when it comes to environmental performance as demonstrated in the Alt et al. (2015) study which showed employee impact on performance was more significant than other stakeholders. This therefore highlights the confluence between a culture of belonging and stakeholder theory, as well as the important consideration of employees as stakeholders.

While this is not the first study to consider employees as stakeholders, in fact, it was discussed in Freeman's (1984) seminal works, empirical research beyond theoretical contributions is not abundant. Greenwood and Anderson (2009) have been one of the few since to look at the significant implications and benefits for organizations by labelling employees as stakeholders, rather than human resources, which in their ethical analysis of human resource management, Greenwood and Freeman (2011) argue is bordering on categorizing employees in the same way as a firm categorizes office furniture.

Firstly, Greenwood and Anderson (2009) consider that the intent of most organizations is the homogenizing and unifying of a diverse range of employee interests. In doing so, this contradicts stakeholder theory and from the literature covered above, a culture of belonging. The implications of homogenizing the interests of employees are a critical component of a culture of belonging. Despite many firms stating the importance of employees to the success of their firm, this study aims to serve as both a reminder of this importance, and also as a guide on how to demonstrate to employees, as a stakeholder, of their importance. Both Freeman (1999) as well as Greenwood and Anderson (2009, p188) propose that the application of stakeholder theory requires a level of pragmatism, in that an "effective firm will manage the relationships that are important." This pragmatism, of course, assumes that firms consider relationships with their employees to be important in the first place.

For stakeholder theory to be applied correctly, employees, as stakeholders, must have their multiple positions and interests recognized and met. Greenwood and Freeman (2011) argue that human resource management's unitarist approach is typically in direct contrast to the critical theorists, of human resource management, pluralist and collectivist views of the nature of employees. As described by Greenwood and Anderson (2009), these pluralist roles could present as an owner or shareholder, manager, community member, Traditional Owner or even Elder, where distinct groups within the firm have their own valid needs and interests. From a resources perspective, the energy transition to net zero or low carbon will directly impact the nature of the workplace if employees do not feel that the importance of 'planet earth' as a stakeholder, isn't rated as highly as what they do (Stevenson et al. 2021). This has significant implications for a culture of belonging and what can occur when it is diminished, particularly when "responsibility for the environment is increasingly assumed by the whole organization" and employees have daily activities as part of their roles that have a significant impact on the environment (Boiral 2005, p339).

The challenge for leaders and organizations is to recognize the multiple roles and interests of employees as stakeholders, while unifying them behind a common, centralized purpose, creating a connectivity that motivates and inspires. While this study takes an ethical approach, supporting the proposition that employees are humans, not resources (Greenwood and Freeman 2011), stakeholder theory strongly supports the role and impact of employees as contributors to the firms success, and the proposition that a culture of belonging is an intangible and valuable asset.

2.5.5 Gender and leadership

While there may be some conjecture about the authorship of the CEO letter, Upper Echelon Theory (Hambrick & Mason 1984) along with previous research on the CEO letter referenced above, confirms its suitability as an appropriate discourse for study. It also provides a method to understand the

influence and impact of gender on CEO focus. There is general consensus in the research that there are differences in styles and perspectives in male and female leaders and this research sets out to understand the influence of not only the mediating influence of gender on a culture of belonging, but also the moderating influence of board and TMT diversity on both male and female CEOs. With the TMT being responsible for the firm's strategic decisions (Hambrick & Mason 1984), confirming a relationship between gender on culture of belonging and firm performance, would be instructive for boards and CEO's. Consistent with studies concerning the impact of CEO gender and board diversity, the growing literature on the diversity of the TMT reports the positive influence on the strategic decisions of the firm (Neilsen & Huse 2010), organizational ethics (Brown et al 2005), the reduction of risk (Perryman et al. 2016), the adoption of environmental standards in emerging countries (Saeed et al. 2022) and firm performance (Pham & Lo 2023). It should be noted that despite the body of evidence supporting the benefits of diversity at this level, there are some inconclusive results (Adams & Ferriera 2009; Quintana-Garcia & Benavides-Velasco 2016).

Leadership is described as a social interaction between leaders and subordinates (Ayman & Korabik 2010), so the contrast between male and female leadership is strategically important in the context of the firm. Research focused on the differences between male and female leaders has generally asserted that men and women who hold the same position would behave very differently (Eagly & Johansen-Schmidt 2001). For instance, agentic behaviors are typically seen in male leaders and corresponds with autocratic, aggression, dominance, competitiveness and independence, whereas female leaders are likely to be more associated with interpersonal, participative, communal behaviors that are primarily concerned with the welfare of others and sensitivity to the group (Eagly & Johnson 1990; Eagly & Johansen-Schmidt (2001); van Engen & Willemsen 2004). Despite the focus on increasing the gender diversity at the executive level, there still remains a dominance of male CEOs, which implies an implicit gender bias in leadership and culture research, particularly to white men in the US (Ayman &

Korabik 2010; (Ho et al 2015). This underscores the limitations for understanding the value that women bring to organizations (Hoobler et al. (2016), given the existing research does generally demonstrate the positive performance benefits of female CEOs.

Zolin et al (2013) demonstrated that female lead firms did not underperform firms led by males and hedge fund activists who target female CEO's, experience greater operational improvement and more positive short term abnormal market returns than when working with male CEO's (Francis et al 2021). Rather than this targeting being due to discriminatory reasons, Francis et al. (2021) event study analysis provided support for the theory that hedge fund activists target female CEO's due to their strong communication and interpersonal skills, illustrative of a transformational leadership style, which enables better cooperation and collaboration than when compared to their male counterparts.

Female CEO's have also been found to be more effective in modulating risk (Martin et al. 2009), increased firm survival (Faccio et al. 2012 and Palvia et al. 2015), reducing fraud (Cumming et al. 2012), holding more conservative levels of capital (Palvia et al. 2015), accounting conservatism (Ho et al (2015), firm performance (Hoobler et al. 2018) and innovation (Javaid et al. 2021). These are indicators of a long term, strategic focus, which is not consistent with Thosuwanchot's (2021) study on female CEO's from S&P 500 firms which indicated a greater focus on short term performance, rather than longer term investments in community engagement, suggesting that female CEOs may feel a greater level of pressure to perform because of the scrutiny they face as a female CEO. An interesting finding from Baard et al (2004) was that women tended to find managers less autonomy supportive than men, and considered that either male managers were less supportive, or that women tend to perceive ambiguous messages as less supportive than men, and are more concerned with the satisfaction of relatedness than men, which is in line with other research. In essence, the quandary according to Baard et al (2004) is that even if the autonomy support provided by the manager is consistent, women perceive less autonomy support from these leaders and less relatedness than men. It is hypothesized in this study that that the innate female

style, as described by (Eagly & Johnson 1990; Eagly & Johansen-Schmidt (2001); van Engen & Willemsen 2004) will result in a greater emphasis on a culture of belonging by female CEO's and firms with a higher proportion of female executives on the TMT.

2.5.6 Gender and the Board

It is hypothesized that the gender will have a similar influence on a culture of belonging as anticipated for the gender of the CEO and gender diversity of the TMT. Diversity at board level has been found to have positive impacts on firms including better acquisition decisions (Chen et al. 2019), financial performance (Liu et al. 2014; Chen et al. 2019), performance following a controversy (Chen et al. 2019) while reducing male CEO 'overconfidence' Chen et al. (2019). "Overconfidence" is generally linked with greater risk taking. The role that female directors play at board level is likely to be more independent, and less conformist than male directors (Adams & Ferreira 2009) meaning that CEO's are more likely to be exposed to divergent thinking and will be more cognizant of a broader range of stakeholder perspectives (Chen et al, 2019). However, it must be noted that there are studies which provide contrary results, particularly in the use of quotas resulting in the appointment of less experienced female directors (Bøhren & Staubo 2014). Nonetheless, the central theme in the literature is that greater diversity at a board level led to a focus on a broader range of stakeholders and better corporate governance (Saeed & Sameer 2017), particularly when there is more than one female board member (Owen & Temesvary 2018).

2.6 ESG performance and its significance to resources firms

Researchers looking to measure the impact of strategy and culture on performance have typically looked to traditional financial measures of performance such as net profit, return on equity or Tobin's Q. For its growing significance to resources firms, as a measure of how a firm is run and what it considers to be most important, ESG metrics have been chosen as the dependent variable for this study. An ESG rating is defined as an evaluation of a company that is based on a comparative assessment of their performance

on environmental, society and governance issues (Christensen et al. 2022). ESG as a measure has been shown to be increasingly on the radar of governments (Govindan et al. (2014); regulators; investors (Utz 2019) and more recently employees (Grantham & Vieira 2018). This section provides an introduction to ESG and an overview of its importance, particularly to resources firms.

2.6.1 An Introduction to ESG

The emergence of ESG in the last decade is considered as a response to the limitations of corporate social responsibility (CSR) according to Nielsen and Villadsen (2023), because it enables a broader and more detailed analysis of company data. The additional data points provided by ESG can therefore be integrated into investment decisions (Christensen et al. 2022). Nielsen & Villadsen (2023) provide a succinct description of the transition from CSR to ESG, in that corporate sustainability has evolved from signposting to substance; sustainability initiatives are integrated into a single system, not a niche factor; and the integration of ESG provides a strategic driver for growth and performance.

2.6.2 ESG as a representation of firm strategy

While Galbreath (2013) describes ESG as indicator of management competence, Cornell (2020) extends this description to a tangible representation of good governance. In the transition from CSR to ESG, ESG is now seen as financially material (Galbreath 2013) and Utz (2019, p486) declares that “the generation of profits in a socially responsible way has become a major issue in management science.” Adding to this issue for the resources sector, PwC (2022) argue that what it means to be a operate with the changing need for critical minerals, is changing rapidly, with the pressure to own more of their supply chain, deploy more capital to transition to net zero and to build trust with stakeholders by focusing on ESG. Despite the critics of ESG, good ESG is no longer an optional point of difference; it is seen as the minimum operating standard. Cornell (2020) highlights the conceptual challenge that many managers face with ESG; it is a perceived by some that it is a matter of putting the interests of other stakeholders ahead of shareholders. For their impact on the communities and environment in which they operate,

increased external scrutiny on resources companies has meant that they are now evaluated on how they perform with respect to society and community issues (Govindan et al. 2014). However, instances of unacceptable practices, where shareholders are prioritized, still occur as can accidents. In addition, Stevenson et al. (2021) argue that by the very nature of the oil and gas sector, their ESG credentials will always be challenged.

2.6.3 External scrutiny of ESG metrics

Public cynicism remains as to the motivation of firms, particularly in the resources sector when it comes to the promotion of their ESG efforts. As a consequence, Berg et al. (2022) report the considerable reliance and value that investors place on third party assessments of ESG performance, particularly for the ability of ESG ratings to influence decisions. The institutions that now provide ESG data and analysis are highly influential given the PRI (2020) report detailing the 3,038 investors with over \$100 trillion in assets that have committed to integrating ESG information into their investment decisions. Utz (2019) highlights the desire of investors to avoid investments in firms where there is an elevated risk of ESG controversy. This desire is not just about mitigating reputational risk because ESG controversies are also likely to be detrimental for firm performance (Nirino et al. 2021).

While the Govindan et al. (2014) study of the Indian mining sector has its limitations, their results highlighted that government was the most significant driver of corporate social responsibility actions, not internal or community stakeholders. Governments and their regulatory agencies, according to PwC (2022), are now taking on the role of activist and setting higher expectations on firms in the industry for ESG standards. This scrutiny on resources firms to be socially and environmentally responsible, particularly in a growth phase, both from external and internal stakeholders, which creates a pressure to maintain their 'social license to operate' and could lead to overstating or communicate their performance according to Kim & Lyon (2015).

2.6.4 Employee perceptions and organizational transparency

The influence and power of environmental non-government organizations (ENGO's) has increased rapidly (Galbreath 2013) meaning that they are well positioned to hold resources firms, in particular, to account, in a very public manner. The public, including employees, are the direct target of ENGO campaigns against firm activities, meaning that firms are now operating under greater levels of scrutiny and expectations of transparency. Employees want to work for a socially (Grantham & Vieira 2018) and environmentally responsible businesses (Galbreath 2013) and directly experience the strategies messaged in the corporate communication of the CEO. There is a risk then to a culture of belonging if there is a misalignment between the written and verbal communication, they observe from their leadership to what they experience in the workplace. This could be perceived by employees as "greenwashing" (Kim & Lyon 2015). If this is in fact were greenwashing, then it would align with Nirino et al (2021) and Kim et al. (2012) proclamation that credibility of both the firm and the messaging would be diminish over time.

Interestingly, Kim & Lyon (2015) also tested the alternate scenario where firms in environments with lower profits understate, or "brown wash" their ESG performance on the basis that they are self-conscious about perceptions of overinvesting in their license to operate when they could be providing more returns to shareholders. It has also been demonstrated that the integration of employees as stakeholders has the ability to improve environmental performance through the development of them as an asset, aligned with the RBV of the firm, through specific training (Sarkis et al 2009) and the shared vision of proactive environmental strategies (Alt et al 2015).

To summarize, firms need to recognize that the perceptions and attitudes of employees as to what constitutes acceptable ESG performance mirrors those external to the firm. In the context of a culture of belonging, a misalignment of what is being reported and what is actually occurring within the firm would represent a deleterious impact on 'relatedness' and therefore a sense of belonging to the firm.

2.6.5 Criticisms of ESG

Chatterji et al (2016), Utz (2019) and Berg et al. (2022) challenge the accuracy and reliability of ESG ratings, as a measure of overall corporate social responsibility, which provides grounds for further investigation and verification using other constructs like a culture of belonging. The accuracy and reliability that they refer to is based on the variability between ratings agencies, which then begs the question, asked by Christensen et al. (2022) what does good ESG performance look like and what additional impacts are caused by ESG disagreement? Adding further to this complicating factor, Cornell (2020) raises the issue of increased costs to firms to disclose and report this information on its operations which is compounded by the fact that the data a firm is expected to disclose, is continually changing.

Cornell's (2020) concern is parallel to the issue of subjectivity when it comes to what firms disclose and what they don't described by Christensen et al. (2022). For instance, if there is variance in the level of disclosure between firms, then lower ESG performance could be the result of greater disclosure, not a lack of performance. This would make the opposite true as well in that firms with greater available resources to disclose and report their ESG data could in effect still perform poorly from an ESG perspective but effectively dilute these negative performances through overreporting positive performances. The reliability of ESG, particularly with respect to predicting controversies has also been shown to be limited as was with the case of Volkswagens inclusion in the Dow Jones Sustainability Index only to be removed a few days later when their emission scandal became public (Makortoff 2015; Utz 2019). Given the significant damage that occurs from an ESG controversy both financially and from a reputational perspective, the ability to find appropriate and reliable quantitative measures to assess, and potentially predict, ESG controversy remains of significant interest (Utz 2019). Significant financial impacts following ESG controversy have been repeatedly demonstrated in the literature; scandal announcements (Long & Rao 1995; Janney & Gove 2011); Arthur Anderson's role with Enron (Nelson et.

Al. 2008); scandals involving CEO's (Jory et al. 2015); Volkswagen's market cap contracts by \$25billion (Hepler 2015).

While the focus of firms on broader environmental and social goals is necessary, it is not without dangers according to Cornell (2020) who argues that those with the greatest responsibility for the achievement of these goals is the government who develop policy. Cornell (2020, p67) concludes that while climate change, in particular, is a matter of significant importance, it is "not one that should be handed over to corporate executives or investment managers" to solve.

3. Conceptual Model and Research Hypothesis

The literature review above has provided theoretical and empirical evidence of the importance of a culture of belonging can have on individual and firm ESG performance, as well as a basis for firms to understand and develop the construct. This section will now augment the evidence provided on sense of belonging and the development of a culture of belonging into a conceptual model that provides a tangible methodology for developing an intangible asset's potential for impact on firm performance.

3.1 Proposed Conceptual Model

3.1.1 The CEO letter as a proxy for culture and strategy

Taken as a proxy, the methodology created assesses the level of signaling by the CEO to readers on their intent to create a culture of belonging. It signals to the reader what they value, and the importance it places on its stakeholders, which has been discussed in the previous section. Stakeholders are looking for signals, whether they be actions or words which may provide information about potential future outcomes (Bergh et al. 2014).

In considering employees as stakeholders, whether there is the ability for them to create equilibrium between a signal and subsequent experience, which is there are behaviors or characteristics

that support the signal, or those that do not is informative (Bergh et al. 2014). This supports the earlier work of Cornelissen et al. (2007) which reinforces the alignment across the levels between experienced reality and projected reality.

3.1.2 A culture of belonging as a cultural archetype and valuable intangible asset

A culture of belonging is conceptualized as a firm culture archetype—an intangible resource predicted to lead to a competitive advantage (Barney, 1986, 1991). As covered in the literature review, many previous studies have explored and measured firm culture in a variety of ways, however, none have operationalized and measured a culture of belonging. Given a lack of standardized or academically accepted measures (e.g., established surveys), a proxy measure of sense of belonging that accounts for multiple years of data was chosen as the best pathway. The reason being is that culture is not developed in a cross-sectional way (Smircich, 1983), and therefore multiple years of data were needed. A method that is able to measure sense of belonging over multiple years via secondary data was preferred. In this way, a proxy measure is adequate (Boyd et al., 2005) and to achieve this end, a digital content analysis of company documents was employed, focusing on the CEO letter within the annual report.

3.1.3 Creating a culture of belonging

The literature on belonging and motivation confirms the requirement for three distinct dimensions to foster contribution to positive group performance; autonomy, competence and relatedness.

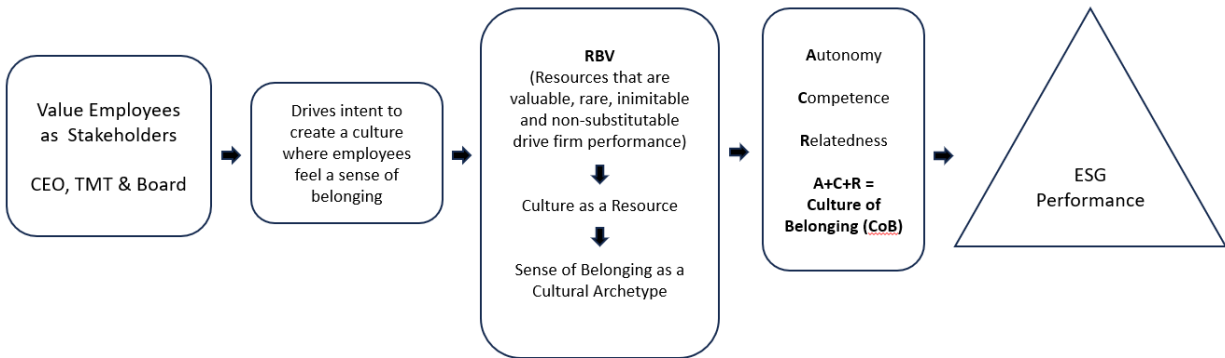


Figure 2: Conceptual model for enhancing ESG performance through the development of autonomy, competence and relatedness to create a culture of belonging. Source: Author

Dimension	Definition	Theoretical Underpinnings	Practical Implications
Autonomy	In an environment where autonomy is low, employees are not empowered to make decisions, improvements, to think, or contribute beyond what they have been told to do (Author).	Deci & Flaste 1995 Hackman (2002) Kark et al. (2003) Baard et al 2004, Gagne & Deci 2005 Kovjanic et al. (2012) Lustgarten (2012, p27) Bock (2015)	Focus on empowerment and purpose. Non-reliance on the leader or manager. Encourage new approaches to solving problems. Value laden descriptions of tasks Communicate attractive goals.
Competence	It must also be the role of the leader to promote employee capability and competence, rather than a dependence on the leader as the problem solver (Bass 1990)	Bass (1990) Sedgwick & Yonge 2008 Borrott et al. 2016 Schmader & Sedikides (2018) Leiter & Maslach (2015) Cortese et al. (2019) Kaufman (2020) Volini et al. (2020)	Recognise competence, achievement. Provide opportunity to meaningfully contribute to firms goals. Emphasize skills and capabilities. Non-controlling statements. Insufficient resources to complete the work gives feeling that one is not competent to complete work.
Relatedness	Gagne & Deci (2005) demonstrated that relatedness, identification to the organization, and social context are crucial factors for the internalized regulation of motivation, leading to high performance through discretionary effort	Ashforth & Mael (1989) Brewer's (1991) Aquino & Douglas 2003 Ellemers et al. (2004) Gagne & Deci (2005) Yang & Choi (2009) Kovjanic et al 2012) McBeath et al. (2017)	Identity threat linked to negative behaviors. Optimal level of identity to the firm. If there is a sense of not being able to be oneself, one cannot be vulnerable or be seen to make mistakes.

		Slepian & Jacoby-Senghor 2021	<p>Reward for trying and taking risks, rather than being punished for unsuccessful attempts.</p> <p>Important role of leaders in developing employee relatedness and identification within the workplace.</p> <p>Emphasize group goals, highlight past achievements, and distinguish the organization and its mission from others.</p>
Sense of Belonging	<p>The “experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment” (Anant, 1966, 21).</p> <p>For firms to elicit higher levels of performance from their employees, it is not a matter of paying them more money, it is a matter of how they are motivated.</p> <p>The application of self-determination theory requires the satisfaction of three intrinsic needs, autonomy, competence and relatedness, in order to promote self-motivation and effective functioning (Deci & Ryan, 1985b, Ryan & Deci 2000).</p> <p>Belonging enables effective decisions (Baumeister et al. (2002)</p> <p>Lack of belonging can increase self-defeating and irrational behaviors (Thau et al. 2007)</p>	<p>Anant (1966). Baumeister et al. (2002) Baumeister et al. (2005) Thau et al. (2007) Mohamed et al. (2014)</p>	<p>A sense of belonging creates an environment where employees make effective decisions which benefit the firm in the long term.</p> <p>A lack of sense of belonging will influence employees to make decisions that may improve their sense of belonging in the short term but will be detrimental to long term firm performance and other stakeholders.</p>
The importance of a culture of belonging to ESG performance	<p>Sustainability initiatives are integrated into a single system, not a niche factor; and the integration of ESG provides a strategic driver for growth and performance Neilsen & Villadsen (2023)</p> <p>“Employees either benefit or burden every dimension of a company’s existence. The extent to which they deliver one or the other is primarily a function of company culture and leadership’s view of employees’ value to the company.” Sisodia et al. (2014, p61)</p>	<p>Thau et al. (2007) Levett-Jones and Lathlean (2009) Mohamed et al. (2014) Sisodia et al. (2014) Galbreath 2013) Guiso et al (2015) (Grantham & Vieira 2018) Dean et al., (2020) Volini et al. (2020) Neilsen & Villadsen (2023)</p>	<p>Creating a culture of belonging is vital to improving workforce satisfaction, productivity and output</p> <p>Employees are the firm, they are the resource and through their actions, have the direct impact on other stakeholders such as the environment and community.</p> <p>Employees want to work for a socially and environmentally responsible firm.</p>

Table 1: Summary of the dimensions belonging and their connection to ESG firm performance. Further background on the theoretical definitions is included in the Literature Review

3.2 Introduction to the Research Hypotheses

The objective of this research was to confirm the influence of a culture of belonging on firm ESG performance using the digital analysis of the CEO letter.

A lack of belonging has been shown to increase the likelihood of decisions and behavior that benefit the individual in the short term but are self-defeating for the individual and others in the long term (Baumeister et al. 2005; Twenge et al. 2001; Buckley et al. 2004; Thau et al. 2007). As a potential corollary of short term focused behavior, ESG Controversy, as the dependent variable provides a potentially valuable data point to the observer on the basis that while ESG Controversies may represent genuine accidents or incidents beyond a firms control, the literature suggests that ESG Controversies typically have their genesis in the strategy and culture of the firm (Garratt 2010; Lustgarten, 2012; Norazahar et al. 2014; Amernic & Craig 2017).

As per the conceptual model proposed above in figure 2, hypotheses 1, 2, and 3 focus on the influences on the CEO letter by the gender of the CEO, the gender diversity of the TMT and the board. Hypotheses 4 and 5 focus on the influence of culture and belonging on ESG performance.

H1: Culture of belonging scores for firms with a female CEO will be statistically higher than those with a male CEO.

Given the impact a CEO's personality can have on the performance of the firm (O'Reilly et al. 2014a) assessing the differences between male and female CEO's for a culture of belonging is important. While there is an abundance of literature concerning differences between the characteristics between male and female leaders, the cultural environment created by the CEO and therefore the language used by the CEO in the CEO letter has largely focused on male CEO's, presumably because of the dearth of

female CEO's globally in CEO roles in publicly listed firms, therefore there is a lack of literature assessing whether these differences can be observed through their written communication.

H2: Firms with one or more female executives will have higher levels of culture of belonging than male only top management teams.

Given the conclusions made by Bass (1990) that TMT's are likely to adopt leadership style and behaviors from the CEO and that the interpersonal climate that is created by the CEO significantly contributes to autonomy support and intrinsic motivation (Baard et al. 2004), the language communicated through the CEO letter is an important medium for analysis.

Upper echelon theory relates that CEO's and the TMT view their situations through their own personalized lenses (Hambrick & Mason 1984). In the context of this study, being able to observe the influence of female executives on the CEO letter, which is a proxy representation for the firm's overall strategy, would vindicate calls to increase the development of females in leadership positions and strategies to support female career progression. This is particularly important given previous research which concludes that gender diversity has a positive impact on the strategic decisions of the firm (Neilsen & Huse 2010), organizational ethics (Brown et al 2005), the reduction of risk (Perryman et al. 2016), the adoption of environmental standards in emerging countries (Saeed et al. 2022) and overall firm performance (Pham & Lo 2023).

H3: Firms where there are 2 or more female board members will have higher levels of culture of belonging than firms with only one or no female board members.

There has been a concerted push in recent years to increase female representation on boards in the resources sector. Understanding the influence of having female representation on levels of culture of belonging will potentially be instructive to investors and others external to the firm. What is currently known is that greater diversity at board level ensures a raft of benefits to the firm including better

governance (Saeed & Sameer 2017; Owen & Temesvary 2018) better acquisition decisions (Chen et al. 2019), and greater financial performance (Liu et al. 2014; Chen et al. 2019). Female board members are typically more independent and less conformist (Adams & Ferreira 2009) than male board members which is considered good governance. In addition, female board members provide greater divergent thinking and a wider appreciation for the benefits of a broader range of stakeholder perspectives (Chen et al, 2019).

H4: Firms with lower culture of belonging will have more ESG Controversy than firms with high sense of belonging in both the current and following year.

On the basis that a culture of belonging exists, then decisions that benefit the firm and others in the long run, will be made, as opposed to decisions that have better short-term benefits for the firm only (Baumeister et al. 2005; Twenge et al. 2001; Buckley et al. 2004; Thau et al. 2007). It is hypothesized that it is these short-term impacts are the type that could result in an ESG controversy.

H5: Culture of Belonging (PCA) will be positively correlated with a firm's future (T+1) ESG metrics, meaning that higher sense of belonging scores will correspond with higher ESG metrics.

The literature supports the hypothesis that in an environment where a culture of belonging exists, employees are going to be more willing to perform at a level that benefits the firm (Deci & Ryan 1985b; 2000; 2005; (Griffin, Parker and Neal 2008; Levett-Jones & Lathlean 2009; Cascio & Boudreau 2011) and are less likely to make decisions that impact the firm negatively in the long term.

4. Methodology

The objective for the study was to create a methodology that could be used as a proxy measure to assess the extent to which CEO's seek to create a culture of belonging through their language. In

essence, this study seeks to empirically explain firm performance differentials, a central feature of strategy research (Rumelt et al., 1991) in the form of ESG, hence, a quantitative, positivistic approach is used (Wicks & Freeman, 1998). The positivistic approach not only allows researchers to test their hypotheses and rely on objective measures (data) to support their findings, but also permits replication for verification purposes in future studies.

The methodology section is separated into two parts. In 3.1, the methodology for the development of the sense of belonging dictionary is described and 3.2 focuses on the analysis of sense of belonging in relation to firm ESG performance.

4.1 The Culture of Belonging Dictionary

Following the digital content analysis methodology of Short et al. (2010), the first step in the process to develop a sense of belonging dictionary was to identify a formal definition that was applicable to the organizational environment. Borrowing from the psychology literature, Anant's (1966, 21) definition for belonging was chosen. Typically, in the psychology literature, belonging instruments have generated items to reflect the psychological experience of an individual's feeling that they 'fit in' to an environment or a sense of involvement, connection, acceptance, and support such as the sense of belonging Instrument (Hagerty & Patusky 1995); Social Connectedness Scale (Lee & Robins (1995); and General Belongingness Scale (Malone & Pillow 2012). Each of these measures include negative factors such as 'I feel like an outsider' or 'because I do not belong, I feel distant during the holiday season' (Malone & Pillow 2012).

Given this research sought to understand a firm's representation of its culture of belonging, and whether there was an intent to create a sense of belonging, relying only on words from past instruments was not going to be sufficient. In seeking to understand how sense of belonging could be operationalized, and impact on performance, it was necessary to understand how leaders could attempt to signal a culture of belonging through their communication efforts. Using the inductive process reported by Short et al.

(2010), the initial step was to identify synonyms for the three proposed dimensions of a culture of belonging as per the theoretical model: autonomy, competence, and relatedness. The initial word lists for each dimension were identified using www.thesaurus.com however management literature was also scrutinized to understand the three dimensions of autonomy, competence, and relatedness in an organizational setting. This list was then reviewed independently by the author and supervisors to assess reliability of the chosen words in the sense of belonging dictionary, and to also explore whether additional words could be added. The sense of belonging dictionary does not include negatively coded words following the logic that the organization is either trying to promote a sense of belonging because it recognizes its importance and value, or it does not. The lack of emphasis will illustrate the lack of value the organization places on it. Conversely, there may be situations where a firm may overcompensate, and be excessive, in its language.

Autonomy	accountability, accountable, advancement, aptitude, autonomy, choice, circumspect, Communicate, Communication, Contribution, creating, creative, creativity, deciding, decision, delegate, develop, development, discretion, embark, employees, empower, empowering, empowerment, Enable, Enablement, experiment, experimental, flexible, flexibility, Freedom, growth, Honesty, humble, Independent, Independently, Individual, ingenious, initiative, innovate, innovation, innovative, Integrity, intelligence, knowledge, latitude, leaders, leadership, Learn, Learning, leeway, management, Opportunity, optimism, optimistic, potential, power, preference, reliable, Respect, scope, self-determined, self-directed, self-direction, self-reliance, trust, understand, valued
Competence	Ability, able, accomplishment, achieve, achievement, acumen, adept, alertness, brains, bright, caliber, capabilities, capable, capacity, challenges, character, Competence, competency, competent, completed, craft, discerning, effective, effectiveness, effort, employees, engaged, engagement, enhance, expertise, finesse, flair, fluent, foresight, fulfilling, growing, growth, ingenious, intelligence, invest, knack, know-how,

	knowledge, learn, learning, mastery, mentee, mentor, mentoring, mindset, proficiency, prominent, qualification, qualified, quality, readiness, recognized, reliability, resourceful, savvy, skill, skillful, skills, solution, sophistication, specialty, strengths, success, talent, technique, training
Relatedness	affiliated, affinity, authentic, balance, belong, belonging, care, caring, clan, close, commitment, committed, communities, community, connected, connectedness, connections, culture, devoted, diverse, diversity, engaging, equal, ethically, ethics, fairly, gender, humility, inclusion, inclusive, kindred, members, mutually, mutual, partners, people, pride, purpose, reciprocal, relationship, respect, responsibility, safe, safety, social, supporting, sustainable, team, together, tribal, tribe, united, value, we, women

Table 2: The Culture of Belonging Dictionary. Source: Authors Literature Review

4.2 Digital Content Analysis of the CEO Letter

To capture the focal construct, digital textual analysis of the CEO letter contained in annual reports of listed firms was used. Content analysis of company documents is particularly relevant and has been used extensively in the past, for annual reports or CSR/sustainability reports (Galbreath, 2011). Analyzing and capturing (measuring) the language used in the CEO letter of annual reports serves as a proxy measure of sense of belonging across the three posited dimensions. Short et al (2010) states the greater reliability and validity benefits of digital aided text analysis over human coding, and the extensive “user guide” that they created for digital aided text analysis has been utilized in this research. While there are several text analyses packages available, this study takes the lead of Geppert and Lawrence (2008), Short et al. (2010), McKenny et al. (2010), Amernic & Craig (2017), Craig & Amernic (2018) and Craig & Amernic (2021) who use DICTION software to analyze CEO letters, for its function of being able to create your own dictionaries. The sense of belonging dictionary was uploaded into DICTION and then the CEO letters were analyzed providing a score of autonomy, competence, and relatedness. To account for

variances in the sizes of the CEO letters, DICTION analyzes the text in 500-word units and provides an average as per Craig and Amernic (2018), as well overall trends and themes (Craig & Amernic 2021).

Digital content analysis has been used to analyze the language used by CEOs in letters to shareholders to investigate the accuracy of assertions in the annual report text (Michalisin 2001), firm performance (Geppert & Lawrence 2008), entrepreneurial orientation (Short et al. 2010), the use of metaphor Bujaki and McConony (2012), organizational psychological capital (McKenny et al. 2012), correlation between advertised values and financial performance (Guiso et al. 2015), and personality styles such as narcissism (O'Reilly et al. 2018), hubris (Craig & Amernic 2016), culture promotion (Zhao et al. 2018), social responsibility (Grantham & Vieira (2018) and need for power (Veenstra 2020).

Of particular relevance to this study was Amernic & Craig's (2017) analysis of the speeches of the CEO of BP preceding the Deepwater Horizon disaster which highlighted a culture focused on economic efficiency and cost control. This, they argue, was inconsistent with a safety culture and provided warning signs to those who read closely. As highlighted by Amernic & Craig (2017, 72) in their study on safety culture, a CEO letter that is narrowly focused on shareholders is "disingenuous, since the economic welfare of shareholders depends fundamentally on constructing and enabling a robust safety culture." The statement is supported through the stakeholder theory discussed in the literature review above and is a central point of exploration in this study. As Amernic and Craig (2017) argue for safety culture, if the CEO understands the importance of creating a culture of belonging, then they should communicate through their letters and speeches. Amernic and Craig (2017, 74) concluded that "Close monitoring of the language of CEO's is important in an age of powerful global corporations. This is especially the case when many corporate leaders become insulated by extreme wealth, protected from reality by boards and colleagues, and influenced by ideology of extreme efficiency. They lose grip on things that matter most - such as putting in place a safe environment offering an absence of harm. The CEO and the firm's managers have access to more information about the firm's operations and therefore Michalisin (2001) proposed

that where information asymmetries existed between CEOs and shareholders, there was a greater opportunity for the CEO to pursue their own interests. As a consequence, then, not only are the results of this study important to the shareholder, but it could also be vitally important to the board as well, given their responsibility is to the shareholder. Biondi & Antoine Rebérioux (2012, 284) state that “the discovery and reporting of information about intangible drivers of the economy of the firm is, therefore, essential for efficient corporate governance and control.”

4.3 Sample – The Australian Resources Industry

The resources industry in Australia is a significant contributor to the Australian economy but operates in an increasingly challenging operating and regulatory environment with respect to climate change and expectations on ESG performance. The largest resources firms listed on the Australian Stock Exchange (ASX), within the ASX200 were chosen as the sample for the initial analysis. The top firms at the start of 2013 financial year were identified and then only remained in the sample if they were still trading on the ASX at the end of the 2019 financial year. This time period was selected on the basis that it immediately preceded the COVID-19 pandemic, and therefore was not subject to its influence. There is a requirement of being listed on the Australian Stock Exchange that firms provide an annual report that is made accessible to the public, as well as to the investment market, for scrutiny.

Annual reports were collected from each firm within the sample over the time period. The annual reports were then scrutinized to ensure that there was a CEO letter included with the report for each year of the time period. After scrutinizing the annual reports for the CEO letter, only 22 firms (154 letters or firm year observations) remained available for analysis.

AGL	FMG	Monadelphous	Orica	Resolute Mining	Western Areas
Beach Energy	Iluka	MRL	Origin	Rio Tinto	Woodside
BHP	Lynas	Newcrest	Paladin	Sandfire Resources	
EMECCO	MMA	NRW	Perseus	Santos	

Table 3: The 22 firms included in the sample

4.4 Analyzing a culture of belonging against ESG Performance

4.4.1 Dependent Variables

On the basis of understanding whether a culture of belonging could be considered a valuable, but an intangible asset, (Barney, 1991), ESG indicators were used as dependent variables. ESG performance data was collected using the Refinitiv (<http://www.Refinitiv.com>) ratings platform for its ability to construct and generate reports and was analyzed against the culture of belonging data from Diction in STATA. While not explored as a part of this study, it must be recognized that not all ratings platforms record ESG metrics in the same way, as shown in the study by Berg et al. (2022).

The primary individual ESG metrics explored in the analysis are Environment, Society and Governance, as well as the aggregated measure ESG and ESG controversy which will be detailed in this section.

Environment – The Environment metric “measures a company's impact on living and non-living natural systems, including the air, land and water, as well as complete ecosystems. A higher score, out of 100, reflects how well a company uses best management practices to avoid environmental risks and capitalize on environmental opportunities in order to generate long term shareholder value” (Refinitiv).

Society - The Society metric “measures a company's capacity to generate trust and loyalty with its workforce, customers and society, through its use of best management practices. A higher score, out of 100, reflects the company's reputation and the health of its license to operate, which are key factors in determining its ability to generate long term shareholder value” (Refinitiv).

Governance - The third metric, Governance, “measures a company's systems and processes, which ensure that its board members and executives act in the best interests of its long-term shareholders. It reflects a company's capacity, through its use of best management practices, to direct

and control its rights and responsibilities through the creation of incentives, as well as checks and balances in order to generate long term shareholder value” (Refinitiv). As per the Environment and Society scores, the Governance metric is also out of 100, with 100 representing the highest possible score.

ESG Combined Score

Refinitiv provides an aggregated metric, the ESG Combined score which is an overall score out of 100 which represents the individual metrics of Environment, Society and Governance but with an ESG Controversy score overlay.

ESG Controversy - The Refinitiv ESG Controversy metric "measures a company's exposure to environmental, social and governance controversies and negative events reflected in global media." (Refinitiv). ESG Controversy scores are based on global media exposure to ESG controversies, so firms such as BHP and Rio Tinto with global operations, would naturally gain greater exposure than a mining or energy company that only operates within Australia. A score of 100 represents zero ESG Controversies covered in the media in the reported year which in essence means that a low ESG Controversy Score means that a firm has had significant ESG Controversies.

As part of the analysis Controversy scores were also categorized into four categories: high, moderate, low, and no controversy as per Franco (2020, p35), as well as the parameters for the controversy values.

Controversy Level	Controversy Value
No	CV = 100
Low	51<=CV <=99
Moderate	21<=CV <=50
High	CV<=20

4.4.2 Independent Variables

Sense of Belonging (SoB) – As described in the literature above, the culture of belonging is proposed to be multidimensional, consisting of three dimensions, autonomy, competence and relatedness. These variables were developed first through the development of separate “dictionaries” for each dimension within DICTION and then scores were produced for each dimension following the analysis of the CEO letters. For each firm, a raw, overall sense of belonging score was created by aggregating the scores of the three dimensions. This is a new, novel method of assessing the construct of belonging that hasn’t been used previously, which does have its limitations.

Culture of Belonging (CoB) - Given the multidimensional aspects of CoB, principal component analysis was an appropriate analytical method to capture these aspects. Using principal component analysis, the raw scores for Autonomy, Competence and Relatedness were analyzed to create a new variable in STATA. Principal component analysis (PCA) is described by Abdi & Williams (2010) as the most popular multivariate statistical technique, that is used across all scientific disciplines. PCA is an important technique for this study given the three dimensions which make up sense of belonging, could be argued to be inter-related. According to Machlev et al. (2020, p3) “PCA simplifies the complexity of high-dimensional data while retaining trends and patterns, by transforming the data into a lower dimension.” Abdi & Williams (2010, p433) summarize that PCA can analyze a data table representing several dependent variables to “extract the important information from the data table and to express the information as a set of new orthogonal variables called principal components.” Therefore, the CoB variable can be considered a far more robust variable than raw SoB and it was decided to use this as the dependent variable for hypothesis 5.

CEO Gender - Despite the number of female CEO’s captured in the sample (8 observations), CEO Gender was included as a dummy variable, with a female CEO being coded as 1 and male CEO’s coded as

0. Given that the discourse chosen for analysis was the CEO letter, and the impact of gender is being assessed, controls were included for gender. Previous analysis of CEO letters authored by female CEOs is limited given the male dominance of CEO positions.

Executive Gender Diversity (EGD) - A Dummy variable was generated to define the level of participation of females in the top management team. As per Pham & Lo (2023) and Saeed & Sameer (2017), EGD was code 1 if there is 1 or more female listed within the Annual Report as an Executive or Key Management Personnel.

Board Gender Diversity (BGD) - Board Gender Diversity was created as a dummy variable, following Owen & Temesvary (2018) where firms with 2 or more females listed within Annual Report as a Non-Executive Director equal 1 and those with 1 or 0 female directors, equal 0.

4.4.3 Control Variables

Total Assets (log_totalassets) - To control for firm size, a logarithm of total assets was created using STATA following the process of Nirino et al. (2021) Saeed et al. (2022). The total assets control is important in the context of the ESG Controversy variable given that larger firms are more likely to receive media exposure to negative events than smaller firms. Creating a logarithm of total employees as per Nirino et al. (2021) was considered however not all firms in the sample reported this information.

Return on Equity (ROE) - ROE was included as a control measure following Gul et al. (2011), Nirino et al. (2021) representing a firms efficiency for creating profits.

Return on Assets (ROA) - In addition, ROA, was used as an additional control for financial profitability as per Saeed et. al (2022), Brammer and Pavelin (2006), Ben-Amar et al. (2017), Nirino et al. (2021).

Market to Book Value (MVR) - On the basis that firms with a higher market to book value are more likely and able to invest in opportunities and business improvements (Saeed et. al 2022; Gul et al.

2011), this study incorporated MVr as a control variable.

5. Results

5.1 Descriptive analysis

The descriptive analysis of the 154-year observations provided insights on the use of language in the CEO letter (Table 5). DICTION provided a mean score per 500 words which enables CEO letters of varying sizes to be compared. This then provides scale to the research to understand that the mean use of words representing Autonomy across the sample is 6.889 per 500 words. Words representing Competence are lower at 5.596 per 500 words and Relatedness words, are the most frequently used at 14.038 per 500 words (Table 4). In figure 3, which shows the mean scores over time, the mean Relatedness score and consequently the culture of belonging score is higher in the final three years of the sample, while Autonomy and Competence remains consistent over the study. This change in the dialogue of the CEO over this period potentially reflects a change in the general intent and awareness of the CEO and is worthy of further exploration.

	Obs.	Mean	Std.Dev	Min	Max
Autonomy	154	6.889	3.100	1	17.07
Competency	154	5.596	3.011	1	18.07
Relatedness	154	14.038	8.196	1	38.84
Sense of Belonging	154	26.524	11.077	6.25	69.53
CoB (PCA)	154	-0.135	0.849	-1.432	3.382
Environment Score	154	42.557	22.263	0	88.43
Society Score	154	51.903	23.195	6.46	93.52
Governance Score	154	62.192	20.975	15.54	100
ESG Score	154	48.016	16.641	12.09	81.04
ESG Controversy Score	154	87.798	26.456	1.85	100
Log_Total Assets	154	8.251	1.858	5.705	11.996
Return on Equity	154	4.421	29.682	-147.89	136.29
Return on Assets	154	4.188	11.870	-70.89	30.88
Market Value Ratio	154	1.676	1.484	-10	7.6

Table 5: Mean Scores for Sense of Belonging Dimensions and other variables. Source: Refinitiv, DICTION

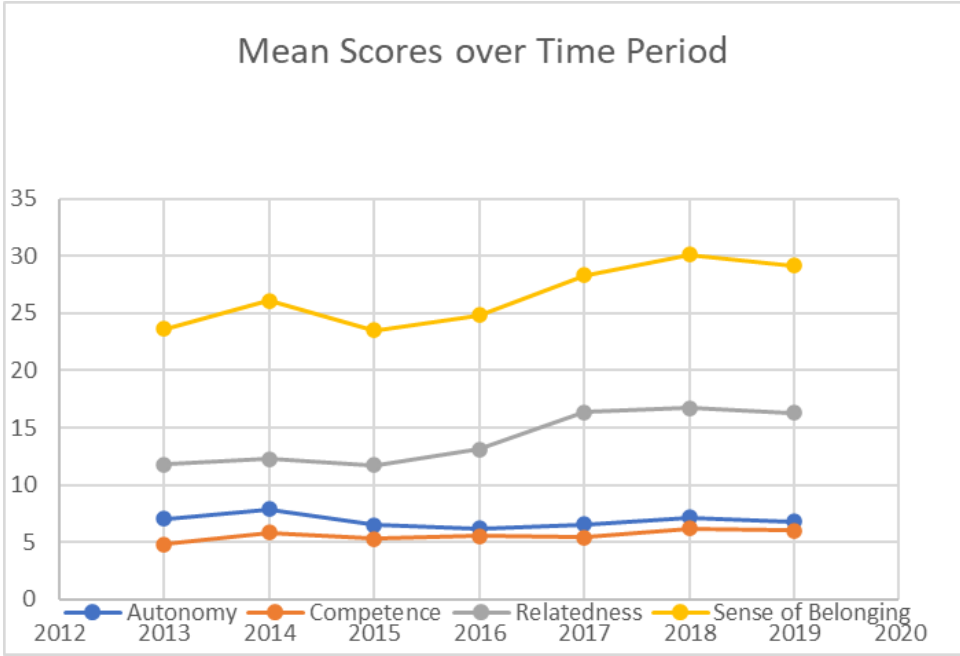


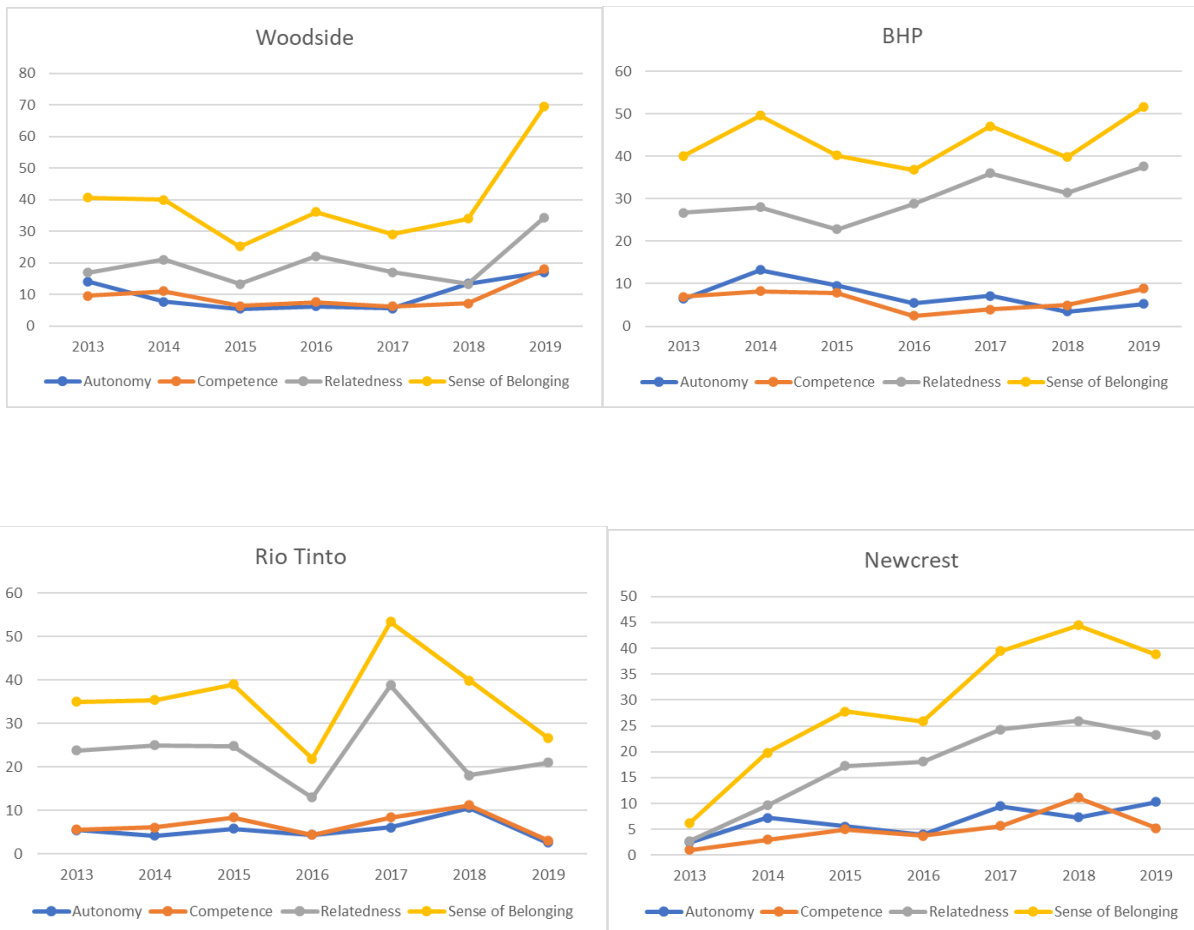
Figure 3: Sense of Belonging Dimension means over the time period. Source: Refinitiv, DICTION

In proposing that a culture of belonging is a rare, inimitable, intangible asset, firms will therefore have a unique representation of sense of belonging, differing from other firms. Firms representing the top culture of belonging scores were chosen to represent the unique pattern of culture of belonging communicated through the CEO letter in figure 4 below. These firms include mining firms BHP, Rio Tinto, Newcrest and Lynas; mining services firms Orica and MRL and energy firm, Woodside.

There are some significant fluctuations observable within some of the firms which provide some unique insights into the firm. For instance, the significant change in the culture of belonging score for MRL in the 2018 year to previous years and even the following year in 2019 is worthy of additional scrutiny in order to understand such a variation given the CEO did not change through this period.

Another interesting observation is the period from 2015 to 2019 for Rio Tinto. Long time CEO Sam Walsh was succeeded by JS Jacques in 2016, where we can see a 43.76% reduction in sense of belonging between 2015 and 2016. In 2017, there is a 59% swing upwards in the other direction before

there is a clear decline across the final 2 years of measurement before 2020. JS Jacques was the CEO of Rio Tinto at the time of the Juukan Gorges controversy in early 2020 and subsequent investigation has highlighted the change of focus and personnel within the organization at the time which potentially explains the results captured in the CEO letter using the culture of belonging measurement. Lynas in 2015 had a significant decrease in its culture of belonging, just 36% of its 2014 score. We now know that 2015 was at the end of a difficult financial period for Lynas coming out of the brink of receivership (Robins 2015).



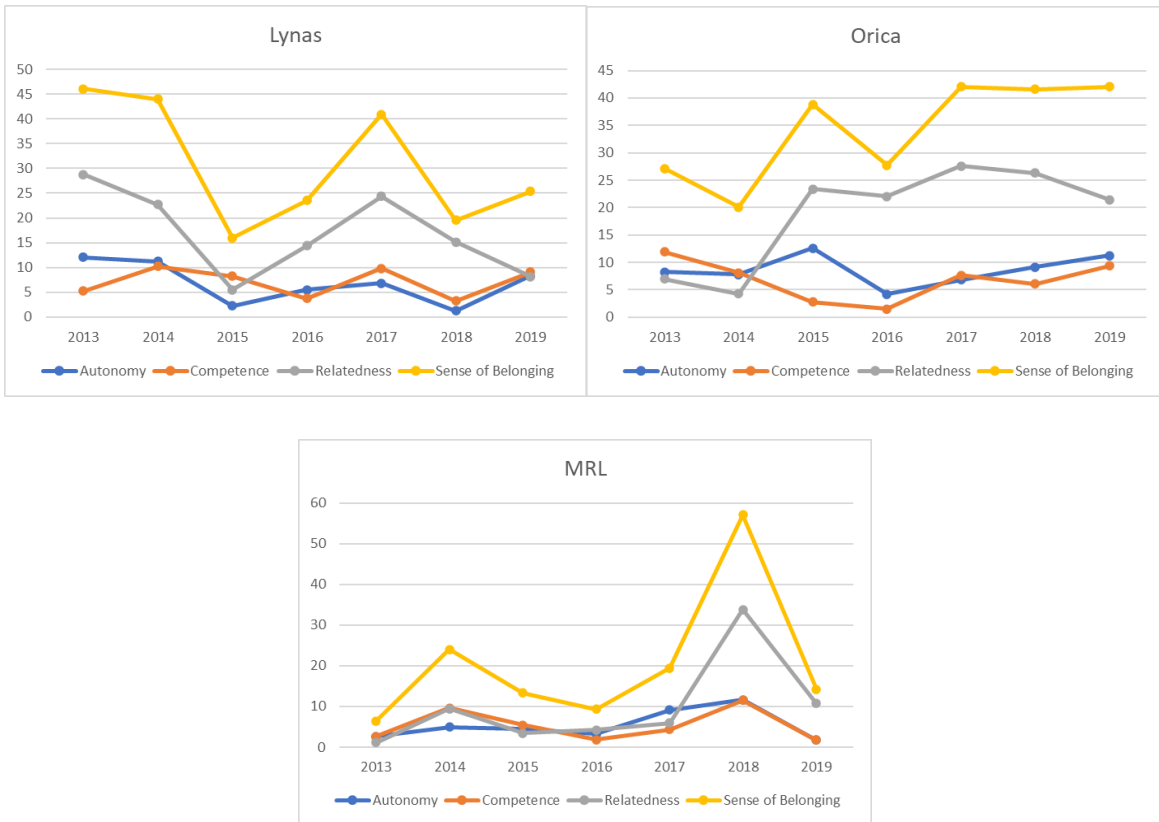


Figure 4: Graphical representation of sense of belonging dimensions.

5.2 Tests of Hypotheses

Having described the temporal properties of the culture of belonging measure, we can now begin testing the hypotheses.

H1: Sense of belonging scores for firms with a female CEO will be statistically higher than those with a male CEO.

A one-way ANOVA (Table 6) was conducted to determine the influence of gender on the CEO's letter. Female CEO's (n=8), compared to males (n=146), are significantly underrepresented in the sample of 154 observations. While the mean sense of belonging for female's CEO's is higher at 31.083 than 26.274 for male CEO's, the difference between the two is not statistically significant ($F(1,152)=1.43$, $p=0.2330$) so the hypothesis can be rejected on this result. Further study is required, with a larger sample of female CEO's, to appropriately test this hypothesis.

Source	SS	df	MS	F	Prob>F
Between Groups	174.442	1	175.442	1.43	0.2330
Within Groups	1859.041	152	122.632		
Total	18774.4845	153	122.362		
		Summary of SoB			
	Mean	Std.Dev	Freq.		
Male CEO	26.274	11.060	146		
Female CEO	31.083	11.094	8		
Total	26.524	11.077	154		

Table 6: One Way ANOVA Sense of Belonging and CEO Diversity. Source: Refinitiv, DICTION and Authors Calculations.

H2: Firms with one or more female executives will have a higher sense of belonging score than male only top management teams.

Following the tenets of upper echelon theory and the influence of the top management team on the CEO, firms with one or more female executives were hypothesized to have higher levels of sense of belonging than male only top management teams. A one-way ANOVA (Table 7) was conducted to determine the influence of gender diversity on Sense of Belonging. An independent variable was created called EGD Influence which was separated into four groups; Male CEO; Female CEO, Male CEO + EGD, Female CEO + EGD. EGD represented the presence of 1 or more female members of the top management team. There were however no observations for the second group, which represented a Female CEO with no EGD, leaving only three groups for comparison. The one-way ANOVA revealed a statistically significant difference between the three groups $f(2,151)$, $F=13.07$, $p=0.0000$.

Source	SS	df	MS	F	Prob>F
Between Groups	2770.743	2	1385.371	13.07	0.000
Within Groups	16003.74	151	105.985		
Total	18774.484	153	122.709		
		Summary of SoB			
	Mean	Std.Dev	Freq.		
Male CEO	21.08	10.321	58		
Male CEO + EGD	29.677	10.21	88		
Female CEO + EGD	31.083	11.094	8		
Total	26.524	11.077	154		

Table 7: One-way ANOVA assessing the influence of Executive Gender Diversity (EGD) on Sense of Belonging. Source: Refinitiv, DICTION and Authors Calculations.

A Tukey post-hoc test (Table 8) revealed that there was a statistically significant difference between Male CEO + EGD vs Male CEO ($8.616+1.741$, $p=0.000$ and Female CEO + EGD vs Male CEO ($10.002+3.882$, $p=0.029$.) There were no statistically significant differences between Female CEO + EGD vs Male CEO +EGD ($1.386+3.801$, $p=0.929$). These results support the hypothesis that the presence of

female executives is important for sense of belonging. This result adds to the existent upper echelon literature and the benefits of the broader adoption of stakeholder theory.

Sense of Belonging	Contrast	Std.Error	Tukey		Tukey	
			t	P> t	[95% conf.	interval]
Male CEO + EGD vs Male CEO	8.616	1.741	4.95	0.000	4.494	12.737
Female CEO + EDG vs Male CEO	10.002	3.882	2.58	0.029	0.812	19.193
Female CEO + EGD vs Male CEO + EGD	1.386	3.801	0.36	0.929	-7.611	10.385

Table 8: Tukey post hoc test Executive Gender Diversity (EGD) on Sense of Belonging. Source: Refinitiv, DICTION and Authors Calculations.

Due to the limited sample size of female CEO’s a further ANOVA (Table 9) was completed that focused on the influence of executive gender diversity on the firms sense of belonging regardless of CEO gender. From this analysis, the presence of executive gender diversity has a statistically significant influence on the firms sense of belonging represented in the CEO letter ($F(1,152)=26.16$, $p=0.0000$).

Source	SS	df	MS	F	Prob>F
Between Groups	2756.641	1	2756.641	26.16	0.000
Within Groups	16017.843	152	105.380		
Total	18774.484	153	122.709		
		Summary of SoB			
	Mean	Std.Dev	Freq.		
CEO without EGD	21.080	10.321	58		
CEO with EGD	29.812	10.231	96		
Total	26.524	11.077	154		

Table 9: One Way ANOVA Sense of Belonging and Executive Gender Diversity (EGD). Source: Refinitiv, DICTION and Authors Calculations.

H3: Firms where there are 2 or more female board members will have higher sense of belonging scores than firms with only one or no female board members.

With female CEO's being underrepresented, a further one-way ANOVA (Table 10) was conducted to determine the level of influence that the presence of female board members can have on the sense of belonging communicated by the male CEO. An independent variable, consisting of four groups called BGDInfluence was created, with the following values of Male CEO; Female CEO; Male CEO + BGD; and Female CEO + BGD. BGD represents the presence of 2 or more female board members. There was a statistically significant difference between the groups as determined by the one-way ANOVA $f(3,150) F=14.47, p=0.0000$), however, the sample size is very small.

Source	SS	df	MS	F	Prob>F
Between Groups	4236.05	3	1412.016	14.57	0.000
Within Groups	14538.43	150	96.922		
Total	18774.48	153	122.709		
		Summary of SoB			
	Mean	Std.Dev	Freq.		
Male CEO	21.534	9.104	79		
Female CEO	28.241	11.555	6		
Male CEO + BGD	31.862	10.592	67		
Female CEO + BGD	39.61	0.381	2		
Total	26.524	11.077	154		

Table 10: One Way ANOVA Sense of Belonging and Board Gender Diversity (BGD), by CEO gender. Source: Refinitiv, DICTION and Authors Calculations.

A Tukey post-hoc test (Table 11) was conducted revealing that for firms lead by male CEOs with the presence of 2 female board members, their Sense of Belonging was statistically significantly higher ($10.327 + 1.63, p=0.000$) than firms lead by male CEOs with 1 or less female board members. The influence of the 2 female board members on female CEO's only produced a weak significant difference ($18.075 + 7.048, p=0.054$) to the firm lead by a male without the 2 female board members. There were no statistically significant differences between Female CEO vs Male CEO ($6.706+4.16, p=0.377$), Male

CEO + BGD vs Female CEO (3.620+4.195, $p=0.824$), Female CEO + BGD vs Female CEO (11.368+8.038, $p=0.492$) and Female CEO + BGD vs Male CEO + BGD groups (7.747+7.064, $p=0.692$). The hypothesis that the presence of 2 or more female board members can have a positive influence on the extent to which a male CEO creates a sense of belonging in his CEO letter is supported.

Sense of Belonging	Contrast	Std.Error	Tukey		Tukey	
			t	P> t	[95% conf.	interval]
Female CEO vs Male CEO	6.706	4.169	1.61	0.377	-4.124	17.538
Male CEO + BGD vs Male CEO	10.327	1.635	6.32	0.000	6.079	14.575
Female CEO + BDG vs Male CEO	18.075	7.048	2.56	0.054	-0.238	36.388
Male CEO + BGD vs Female CEO	3.62	4.195	0.86	0.824	-7.278	14.520
Female CEO + BGD vs Female CEO	11.368	8.038	1.41	0.492	-9.515	32.252
Female CEO + BGD vs Male CEO + BGD	7.747	7.064	1.1	0.692	-10.606	26.101

Table 11: Tukey post hoc test Board Gender Diversity (BGD) on Sense of Belonging. Source: Refinitiv, DICTION and Authors Calculations.

Given the challenge of the small sample of female CEO’s available to test this hypothesis, a further ANOVA (Table 12) was completed which focused on testing the influence of board gender diversity on the CEO regardless of CEO gender. The results represented in Table 19 below demonstrate a statistically significant difference between the CEO letters of firms with board gender diversity versus firms without ($f(1,152) F=39.45, p=0.0000$).

Source	SS	df	MS	F	Prob>F
Between Groups	3868.638	1	3868.638	39.45	0.0000
Within Groups	14905.845	152	98.064		
Total	26.524	11.077	98.064		
		Summary of CoB			
	Mean	Std.Dev	Freq.		
CEO without BGD	22.008	9.375	85		
CEO with BGD	32.086	10.517	69		
Total	26.524	11.077	154		

Table 12: One Way ANOVA Sense of Belonging and Board Gender Diversity (BGD). Source: Refinitiv, DICTION and Authors Calculations.

H4: Firms with lower sense of belonging scores will have more ESG Controversy than firms with high sense of belonging scores in both the current and following year.

Part A: Sense of Belonging and ESG Controversy

On the basis that a lack of sense of belonging is shown in the literature to create self-defeating, short term focused behaviors, it was hypothesized that this will be reflected in lower ESG Controversy scores, remembering that a lower ESG Controversy score is reflective of more instances of ESG controversy. To understand this further and explore the relationship between Sense of Belonging and ESG Controversy, an independent variable was created with four separate groups; No ESG Controversy, Low ESG Controversy, Moderate ESG Controversy and High ESG Controversy (See table 4 in previous section). The Moderate ESG Controversy group had the highest Sense of Belonging mean score of 35.36 (n=8) with the No ESG Controversy group (n=118) having a mean score of 25.283. A one-way ANOVA (Table 13) determined that there was a statistically significant difference between the four groups ($f(3,150)=3.85, p=0.010$).

Source	SS	df	MS	F	Prob>F
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Between Groups	1343.324	3	447.774	3.85	0.011
Within Groups	17431.16	150	116.207		
Total	18774.484	153	122.207		
		Summary of SoB			
	Mean	Std.Dev	Freq.		
No ESG Controversy	25.283	10.436	118		
Low ESG Controversy	26.457	12.063	17		
Moderate ESG Controversy	35.36	13.716	8		
High ESG Controversy	33.510	10.212	11		
Total	26.524	11.077	154		

Table 13: Sense of Belonging and ESG Controversy. Source: Refinitiv, DICTION & Author calculations

However, after further analysis of the four ESG Controversy groups using a Tukey post hoc test (Table 14), it was revealed that there was a weak statistically significant difference between the Moderate ESG Controversy vs No ESG Controversy groups (10.076+3.938, p=0.055) groups; and High ESG Controversy and No ESG Controversy groups (8.227+3.398, p:0.077). There were no statistically significant differences revealed across the other groups.

Sense of Belonging	Contrast	Std.Error	Tukey		Tukey	
			t	P> t	[95% conf.	interval]
Low ESG Controversy vs No ESG Controversy	1.174	2.796	0.42	0.975	-6.091	8.439
Moderate ESG Controversy vs No ESG Controversy	10.076	3.938	2.56	0.055	-0.155	20.308
High ESG Controversy vs No ESG Controversy	8.227	3.398	2.42	0.077	-0.601	17.056
Moderate ESG Controversy vs Low ESG Controversy	8.902	4.621	1.93	0.222	-3.105	20.910
High ESG Controversy vs Low ESG Controversy	7.053	4.171	1.69	0.332	-3.784	17.890
High ESG Controversy vs Moderate ESG Controversy	-1.849	5.009	-0.37	0.983	-14.862	11.164

Table 14: Tukey post hoc test – Sense of belonging and ESG Controversy. Source: Refinitiv, DICTION & Author Calculations

Part B: Sense of Belonging and ESG Controversy T+1

In an attempt to understand the predictive nature of sense of belonging on ESG Controversy, the first step was to conduct analysis using a lagging measure of Sense of Belonging. The one-way ANOVA (Table 15) revealed that that there was a statistically significant difference between the groups ($f(3,128)=3.67, p=0.0140$) with firms that had High ESG Controversy ($n=8$) also having the highest mean Culture of Belonging score (34.416) in the previous year.

Source	SS	df	MS	F	Prob>F
Between Groups	1172.625	3	390.875	3.67	0.014
Within Groups	13614.17	128	106.36		
Total	14786.799	131	112.876		
		Summary of SoB			
	Mean	Std.Dev	Freq.		
No ESG Controversy	24.688	9.828	104		
Low ESG Controversy	31.884	13.758	12		
Moderate ESG Controversy	27.255	10.959	8		
High ESG Controversy	34.416	10.338	8		
Total	26.087	10.624	132		

Table 15: Sense of belonging and ESG Controversy $T+1$. Source: Refinitiv, DICTION & Authors calculations

The Tukey post-hoc test (Table 16) revealed a weak statistically significant difference between the High ESG Controversy vs No ESG Controversy group ($9.727+3.783, p=0.054$). There were no statistically significant differences between the other groups. The hypothesis that firms with higher sense of belonging scores would have less ESG controversies can be rejected. However, results confirming that higher sense of belonging scores are more closely related to higher levels of ESG controversy, cannot be ignored and is perhaps symptomatic of greenwashing and oversignalling.

Sense of Belonging	Contrast	Std.Error	Tukey		Tukey	
			t	P> t	[95% conf.	interval]
Low ESG Controversy vs No ESG Controversy	7.195	3.144	2.29	0.106	-0.989	15.38

Moderate ESG Controversy vs No ESG Controversy	2.566	3.783	0.68	0.905	-7.283	12.416
High ESG Controversy vs No ESG Controversy	9.727	3.783	2.57	0.054	-0.122	19.577
Moderate ESG Controversy vs Low ESG Controversy	-4.629	4.707	-0.98	0.759	-16.882	7.624
High ESG Controversy vs Low ESG Controversy	2.532	4.707	0.54	0.95	-9.721	14.785
High ESG Controversy vs Moderate ESG Controversy	7.161	5.156	1.39	0.509	-6.261	20.584

Table 16: Tukey post hoc test – Culture of belonging and ESG Controversy T+1. Source: Refinitiv, DICTION & Authors calculations.

Part C: Regression

A binomial logistic regression (Table 17) was used to understand the relationship between future (T+1) ESG Controversy and sense of belonging, with the influence CEO gender, top management team and board diversity. As binomial logistic regression requires the dependent variable to be binary, these firms were categorized on the basis of either having an ESG Controversy (=1, or no ESG Controversy (=0). The number of female CEOs with a future controversy was 0 so CEO Gender control result was omitted from the regression. When including all independent variables, the log_totalassets variable was the only statistically significant variable (p=000) for predicting a future ESG Controversy. This supports prior research by Dremptic et al. (2020) which has concluded that larger firms are more likely to receive negative media attention which is then categorized as an ESG controversy. While the hypothesis was that lower SoB would result in ESG Controversies, the results present the opposite that higher culture of belonging is linked to more controversies which perhaps supports the observations of Chatterji et al (2016) that highly rated firms can still be the subject of scandals and ESG controversies.

ESG Controversy	Coefficient	Std.Error	z	P> z	[95% conf. interval]	
SoB	-0.257	0.383	-0.670	0.502	-1.008	0.493
log_totalassets	1.129	0.262	4.300	0.000***	0.615	1.643
ROE	-0.017	0.016	-1.010	0.313	-0.050	0.016
ROA	0.046	0.045	1.030	0.303	-0.042	0.135

MVR	0.054	0.349	0.160	0.875	-0.630	0.740
EGD_Dummy	-0.274	0.635	-0.430	0.665	-1.520	0.970
BGD_Dummy	-1.182	0.842	-1.400	0.160	-2.833	0.468
CEO Gender	0	omitted				
_cons	-10.865	2.221	-4.890	0.000	-15.220	-6.511

Table 17: Binomial Regression – ESG Controversy T+1. Source: Refinitiv, DICTION & Authors calculations

H5: A culture of belonging (PCA) will be positively correlated with a firm's future (T+1) ESG metrics, meaning that higher culture of belonging scores will correspond with higher ESG metrics.

As explained in section 4.3.2, the Culture of Belonging (PCA) independent variable was created using principal component analysis and chosen for its robustness in testing hypothesis 5 using fixed effects regression, as opposed to the raw, aggregated sense of belonging score.

It was hypothesized that a culture of belonging would be positively correlated with a firm's future (T +1) ESG metrics, meaning that higher culture of belonging scores will correspond with higher ESG metrics. Demonstrating a relationship between a culture of belonging and future firm ESG performance was the primary basis of this study as a positive result would demonstrate that a culture of belonging is an intangible asset that creates value for the firm. Fixed effects regression in STATA was used to individually assess the impact of culture of belonging on each ESG metric.

Environment Score (Table 18): Model one analyzed the impact of the control variables demonstrating that ROE positively correlates $\beta=0.029$, $p<0.05$ with Environment. In model 2, ROE positively correlated with Environment ($\beta=0.030$, $p<0.05$), however CoB was most influential ($\beta=2.246$, $p<0.05$). In model three, four and five, adding the diversity variables, positive findings for CoB influence on future Environment Score increased slightly while remaining significant (Model 3: $\beta=2.245$, $p<0.05$ Model 4: $\beta=2.626$, $p<0.05$ Model 5: $\beta=2.726$, $p<0.05$).

The role of gender diversity provided mixed results. CEO gender provided a higher coefficient to culture of belonging but was only significant to 0.1 ($\beta=3.949$, $p<0.1$ and board gender diversity provided

a negative result ($\beta=-5.753$, $p<0.05$) compared to culture of belonging. Executive gender diversity also provided a negative and insignificant result.

These results confirm the positive influence of the culture of belonging on a firm's future environmental performance.

Society Score (Table 19): The only variable positively correlated with Society across all models was ROE (Model 1: $\beta=0.046$, $p<0.05$; Model 2: $\beta=0.047$, $p<0.05$; Model 3: $\beta=0.049$, $p<0.05$; Model 4: $\beta=0.051$, $p<0.05$; Model 5: $\beta=0.050$, $p<0.05$).

A culture of belonging did not demonstrate any statistically significant relationship across the 5 models. The results did not support any significant influence of diversity at CEO, TMT or board level.

Governance Score (Table 20): In model one to three, ROE is weakly correlated to Governance (Model 1: $\beta=.196$, $p<0.1$; Model 2: $\beta=0.098$, $p<0.1$; Model 3: $\beta=0.186$, $p<0.1$) however this diminishes in model 4 and 5 with the addition of the EGD and BGD variables. In model 3, CEO Gender is only statistically significant related with Governance ($\beta=11.580$, $p<0.01$), however this significance also diminishes with the addition of the EGD and BGD variables (Model 4: $\beta= 9.308$, $p<0.1$; Model 5: $\beta=9.168$, $p<0.1$). A culture of belonging was not statistically significant across all 5 models thereby allowing the conclusion that there is no influence with the Governance dimension in this sample.

ESG Score (Table 21): ROE is statistically significant for ESG across all 5 models (Model 1: $\beta=0.027$, $p<0.05$; Model 2: $\beta=0.029$, $p<0.05$; Model 3: $\beta=0.032$, $p<0.01$; Model 4: $\beta=0.034$, $p<0.01$; Model 5: $\beta=0.034$, $p<0.01$). As a control measure, these results suggest that firms are more efficient at generating returns and also tend to have higher ESG scores. The coefficients and standard error are consistent across the four models for SoB, each being statistically significant to $p<0.1$ (Model 2: $\beta=1.979$, $p<0.1$; Model 3: $\beta=1.915$, $p<0.1$; Model 4: $\beta=1.821$, $p<0.1$; Model 5: $\beta=1.825$, $p<0.1$). While culture of belonging is only significant to $p<0.1$, compared to ROE which ranges from $p<0.01$ to $p<0.05$, culture of

belonging returns a higher coefficient which, along with the significance shown with the Environment dimension, provides further support for the hypothesis. It is also clear that the gender of the CEO has the strongest influence on the ESG dimension (Model 3: $\beta=7.151$, $p<0.05$; Model 4: $\beta=6.250$, $p<0.05$; $\beta=6.259$, $p<0.05$), however we know that the ESG score has an “ESG Controversy” overlay and out of the 8 female CEO letter observations, there were no ESG controversies recorded.

ESG Controversy (Table 22): None of the variables provided evidence for strong relationship with the ESG Controversy dependent variable. While the models show statistical significance for the role of CEO Gender on ESG Controversy, this is because there were zero ESG Controversy observations for female CEOs in the dataset. In isolation, one could assert that there was no ESG controversies because the CEO was female, however given the lack of female CEO’s in the sample, this is not a credible statement. A lack of female CEO’s in general, not just this study, means that conducting meaningful analysis of gender diversity at the highest executive level is problematic.

	Model 1	Model 2	Model 3	Model 4	Model 5
Dependent Variable	Environment Score + 1	Environment Score + 1	Environment Score + 1	Environment Score + 1	Environment Score + 1
	Coefficients	Coefficients	Coefficients	Coefficients	Coefficients
	Std.Error	Std.Error	Std.Error	Std.Error	Std.Error
Constant	62.768	64.907	64.867	62.972	60.023
	40.220	40.808	41.574	34.726	35.711
Control Variables					
Firm Size (log_TotalAssets)	-2.321	-2.537	-2.532	-1.757	-1.180
	4.902	4.983	5.072	4.280	4.408
Return on Equity	0.029	0.030	0.030	0.024	0.027
	0.010***	0.010***	0.010***	0.012*	0.012*
Return on Assets	-0.064	-0.059	-0.059	-0.006	-0.033
	0.071	0.068	0.069	0.720	0.075
Market to Value Ratio	-0.365	-0.386	-0.386	-0.414	-0.351
	0.626	0.586	0.588	0.453	0.414
Independent Variables					
CoB		2.246	2.245	2.626	2.726
		1.066*	1.066*	1.108**	1.093**
CEO Gender			0.061	3.701	3.949
			2.023	2.599	2.207*
Executive Gender Diversity				-7.705	-6.680
				4.564	3.894
Board Gender Diversity					-5.753
					2.038**
<i>F</i>	5.340	5.350	4.440	4.140	5.970
Prob> chi2	0.004	0.002	0.004	0.005	0.001
Observations	132	132	132	132	132

* p<0.1, **p<0.05, *** p<0.01

Table 18: Environment Score T+1 Regression. Source: Refinitiv, DICTION & Authors calculations

	Model 1	Model 2	Model 3	Model 4	Model 5
Dependent Variable	Society Score + 1	Society Score + 1	Society Score + 1	Society Score + 1	Society Score + 1
	Coefficients	Coefficients	Coefficients	Coefficients	Coefficients
	Std.Error	Std.Error	Std.Error	Std.Error	Std.Error
Constant	16.872	18.459	15.587	16.111	16.659
	29.360	27.665	28.400	29.501	30.125
Control Variables					
Firm Size (log_TotalAssets)	4.357	4.197	4.525	4.310	4.203
	3.588	3.383	3.465	3.638	3.756
Return on Equity	0.046	0.047	0.049	0.051	0.050
	0.021*	0.020*	0.021*	0.022*	0.022*
Return on Assets	0.016	0.019	0.015	0.001	0.005
	0.070	0.070	0.069	0.074	0.077
Market to Value Ratio	-0.205	-0.220	-0.237	-0.229	-0.241
	0.291	0.262	0.269	0.284	0.286
Independent Variables					
CoB		1.665	1.626	1.521	1.502
		1.273	1.304	1.217	1.217
CEO Gender			4.447	3.441	3.395
			1.322**	2.746	2.744
Executive Gender Diversity				2.130	1.939
				3.617	3.507
Board Gender Diversity					1.069
					1.847
<i>F</i>	1.900	7.220	9.840	6.160	6.080
Prob> chi2	0.1480	0.0005	0.0000	0.0005	0.0004
Observations	132	132	132	132	132

* p<0.1, **p<0.05, *** p<0.01

Table 19: Society Score T+1 Regression. Source: Refinitiv, DICTION & Authors calculations

	Model 1	Model 2	Model 3	Model 4	Model 5
Dependent Variable	Governance Score +1	Governance Score +1	Governance Score +1	Governance Score +1	Governance Score +1
	Coefficients	Coefficients	Coefficients	Coefficients	Coefficients
	Std.Error	Std.Error	Std.Error	Std.Error	Std.Error
Constant	24.417	25.024	17.547	18.729	20.389
	59.638	60.775	61.896	64.597	65.510
Control Variables					
Firm Size (log_TotalAssets)	4.455	4.394	5.247	4.763	4.438
	7.285	7.412	7.534	7.960	8.070
Return on Equity	-0.015	-0.015	-0.010	-0.006	-0.007
	0.023	0.023	0.021	0.020	0.021
Return on Assets	0.196	0.197	0.186	0.153	0.168
	0.098 [^]	0.098 [^]	0.097 [^]	0.098	0.098
Market to Value Ratio	0.167	0.161	0.118	0.136	0.100
	0.500	0.502	0.470	0.415	0.425
Independent Variables					
CoB		0.637	0.534	0.297	0.240
		1.576	1.618	1.441	1.481
CEO Gender			11.580	9.308	9.168
			2.692 ^{***}	4.845 [*]	4.595 [*]
Executive Gender Diversity				4.809	4.232
				4.719	5.076
Board Gender Diversity					3.238
					4.761
<i>F</i>	3.680	3.020	42.600	7.880	9.160
Prob> chi2	0.0200	0.0329	0.0000	0.0001	0.0000
Observations	132	132	132	132	132

* p<0.1, **p<0.05, *** p<0.01

Table 20: Governance Score T+1 Regression. Source: Refinitiv, DICTION & Authors calculations

	Model 1	Model 2	Model 3	Model 4	Model 5
Dependent Variable	ESG Score + 1	ESG Score + 1	ESG Score + 1	ESG Score + 1	ESG Score + 1
	Coefficients	Coefficients	Coefficients	Coefficients	Coefficients
	Std.Error	Std.Error	Std.Error	Std.Error	Std.Error
Constant	26.724	28.608	23.990	24.460	24.346
	30.887	30.480	31.460	32.927	33.288
Control Variables					
Firm Size (log_TotalAssets)	2.628	2.438	2.965	2.773	2.795
	3.773	3.721	3.833	4.039	4.100
Return on Equity	0.027	0.029	0.032	0.034	0.034
	0.011*	0.010*	0.010**	0.009**	0.009**
Return on Assets	0.031	0.035	0.028	0.015	0.014
	0.057	0.056	0.055	0.055	0.057
Market to Value Ratio	0.026	0.007	-0.018	-0.011	-0.009
	0.272	0.263	0.255	0.245	0.248
Independent Variables					
CoB		1.979	1.915	1.821	1.825
		1.046*	1.069*	.999*	1.009*
CEO Gender			7.151	6.250	6.259
			2.539*	3.579*	3.626*
Executive Gender Diversity				1.908	1.947
				2.672	2.759
Board Gender Diversity					-0.221
					1.354
<i>F</i>	2.370	4.920	10.060	11.050	11.060
Prob> chi2	0.0855	0.0039	0.0000	0.0000	0.0000
Observations	132	132	132	132	132

* p<0.1, **p<0.05, *** p<0.01

Table 21: ESG Score T+1 Regression. Source: Refinitiv, DICTION & Authors calculations

	Model 1	Model 2	Model 3	Model 4	Model 5
Dependent Variable	ESGControversy + 1	ESGControversy + 1	ESGControversy + 1	ESGControversy + 1	ESGControversy + + 1
	Coefficients	Coefficients	Coefficients	Coefficients	Coefficients
	Std.Error	Std.Error	Std.Error	Std.Error	Std.Error
Constant	120.508	122.273	100.690	100.943	103.843
	30.268	32.106	22.828	23.326	25.910
Control Variables					
Firm Size (log_TotalAssets)	-3.962	-4.140	-1.678	-1.781	-2.349
	3.733	3.941	2.788	2.789	3.322
Return on Equity	-0.023	-0.022	-0.006	-0.005	-0.009
	0.024	0.024	0.015	0.014	0.015
Return on Assets	-0.106	-0.102	-0.135	-0.142	-0.115
	0.069	0.073	0.060*	0.070*	0.092
Market to Value Ratio	0.741	0.723	0.601	0.605	0.542
	0.622	0.634	0.525	0.511	0.457
Independent Variables					
CoB		1.853	1.556	1.506	1.407
		1.915	1.925	1.962	1.852
CEO Gender			33.425	32.939	32.695
			4.789***	4.533***	5.115***
Executive Gender Diversity				1.028	0.020
				2.068	2.722
Board Gender Diversity					5.657
					7.782
<i>F</i>	1.780	1.480	25.860	30.660	18.410
Prob> chi2	0.1703	0.2380	0.0000	0.0000	0.0000

Observations	132	132	132	132	132
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* p<0.1, **p<0.05, *** p<0.01

Table 22: ESG Controversy Score T+1 Regression. Source: Refinitiv, DICTION & Authors calculations

6. Discussion

The purpose of this final section is to provide a summary of the results and the implications of this study on resources firms.

Hypotheses	Findings
H1: Sense of belonging scores for firms with a female CEO will be statistically higher than those with a male CEO.	Not supported
H2: Firms with one or more female executives will have higher levels of culture of belonging than male only top management teams.	Supported
H3: Firms where there are 2 or more female board members will have higher levels of sense of belonging than firms with only one or no female board members.	Supported
H4: Firms with lower culture of belonging will have more ESG Controversy than firms with high sense of belonging in both the current and following year.	Not supported
H5: Culture of belonging (PCA) will be positively correlated with a firm's future (T+1) ESG metrics, meaning that higher culture of belonging scores will correspond with higher ESG metrics.	Partially Supported (Environment Score)

Table 23: Summary of results

6.1 Discussion of Findings

H1: Sense of belonging scores for firms with a female CEO will be statistically higher than those with a male CEO.
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Previous research indicates that male and female leaders who hold the same leadership position, behave very differently (Eagly & Johansen-Schmidt 2001) and this was expected to be evident in the culture of belonging scores for male and female CEOs. As the final sample, contained so few female CEOs, after removing firms that did not contain a CEO letter for the entire period, there was no statistically significant difference between the means of female and male CEOs despite female CEO's having the higher mean score.

On commencing the study it was not be to known that female CEO's would be as underrepresented as they were. While the primary focus of this study was to understand the impact of a culture of belonging on ESG performance, it was hoped that the study would be able to demonstrate that the gender of the CEO matters when it comes to a culture of belonging and ultimately advance the literature on female leadership. Despite the focus on increasing the gender diversity at the executive level, there still remains a dominance of male CEOs, which implies an implicit gender bias in leadership and culture research, particularly to white men in the US (Ayman & Korabik 2010; (Ho et al 2015). This underscores the limitations for understanding the value that women bring to organizations (Hoobler et al. (2016), given the existing research does generally demonstrate the positive performance benefits of female CEOs.

H2: Firms with one or more female executives will have higher sense of belonging scores than male only top management teams.
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this study supports Eagly & Johansen-Schmidt's (2001) research demonstrating the difference in behavior between genders occupying the same position, as well as the previous findings of Brown et al (2005) and Pham & Lo (2023); that demonstrated the tangible benefits to firm performance from having female executives as part of the TMT.

While the sample contained limited observations of letters written by female CEO's, the impact of female executives on the TMT was positive ein the ANOVA results both when it focused on the

influence of TMT gender diversity on letters written by male and female CEO's as well as the CEO letter regardless of the CEO's gender. The ANOVA results from this study clearly demonstrate that the presence of just one female on the TMT has a positive influence on a culture of belonging and provides evidence supporting the value of firm efforts to increase diversity at all levels of the firm. With the resources sector primarily dominated by male employees, this is significant.

H3: Firms where there are 2 or more female board members will have higher sense of belonging scores than firms with only one or no female board members.

Analysis of variance demonstrated that the influence of two or more female board members had a significantly positive effect on the culture of belonging score in firms lead by male CEO's, despite the small sample size of female CEO's. To properly test this hypothesis, the CEO gender control variable was removed in the final ANOVA, as it was in hypothesis 2, confirming that the gender diversity of the board has a positive impact on the culture of belonging regardless of the CEO's gender.

While the impact of gender diversity at TMT and board level is assessed further in hypothesis 4 and 5, the influence of board gender diversity on culture of belonging in this study contributes to previous research completed by Adams & Ferreira (2009), Saeed & Sameer 2017), Owen & Temesvary (2018) Chen et al. (2019) that demonstrates that boards are better with female representation.

H4: Firms with lower sense of belonging scores will have more ESG Controversy than firms with high sense of belonging scores in both the current and following year.

It was anticipated that firms with the highest culture of belonging would have the highest ESG Controversy score out of 100, however the ANOVA results contradicted the hypothesis showing that firms with moderate to high ESG controversy had higher culture of belonging scores. This is very interesting and supports Greenwoods (2007) assertion that saying one is socially responsible doesn't actually make one responsible. While the likes of Kim & Lyon (2015) refer to greenwashing, perhaps this

is more closely related to what Neilsen & Villadsen (2023) refer to as ESG washing. There are of course other variables that could influence the CEO to emphasize a culture of belonging in their letter which could only be accounted for by close scrutinization at a firm level.

It is important to note that the ESG Controversy score is calculated on the global media coverage that firms receive for ESG controversies. As a consequence, larger firms were expected to receive greater media scrutiny and interest than smaller firms as proposed by Chatterji et al (2016). Firm size was controlled for in the regression but interestingly failed to influence culture of belonging's impact on ESG Controversy scores which further brings into question the value of the ESG Controversy score as a metric and supports Utz's (2019, p483) statement that ESG metrics as "useless when it comes to predicting corporate scandals".

This study attempted to shed light on whether ESG controversies could be predicted using culture of belonging scores, helping to avoid significant disasters and impacts on the environment. While this study failed to do this, there is obvious merit in future research continuing to investigate the link between internal culture and ESG Controversies. Where there is a difference between firm size, perhaps there is a goldilocks zone where culture of belonging is 'just right' for ESG performance before too high a score becomes associated with ESG Controversy.

H5: Culture of Belonging (PCA) will be positively correlated with a firm's future (T+1) ESG metrics, meaning that higher culture of belonging scores will correspond with higher ESG metrics.

The positive impact that culture of belonging had on future environment and ESG performance provides a significant contribution to the understanding and value of ESG metrics and is particularly instructive for the resources sector in Australia. While it is a proxy measure for a CEO's intent to create a culture of belonging, it is not the first piece of research to demonstrate the value of the content contained within the CEO letter. As the first study to link a culture of belonging with future ESG

performance, the methodology developed in this study provides an opportunity to analyze a firm's strategy and intent to create a culture of belonging by internal and external observers.

Where it has been highlighted above that an oversignalling of sense of belonging through the CEO letter could be an analogue of greenwashing, the culture of belonging measurement could be viewed as a leading indicator both internally within firms and externally by parties who are scrutinizing firm strategy and performance.

Focusing on developing a culture of belonging provides a path forward for leaders of firms. As heavy emitters of emissions, the scrutiny on resources firms by government, investors and the public to improve their ESG performance and reduce their emissions, is only going to increase in the future so creating the right conditions internally will be critical.

The lack of culture of belonging's influence on the Society and Governance indicator is interesting given one would anticipate a closer relationship, given they are largely focused on social and policy performance. It could be argued however that compared to the Environment score, the Society, Governance and ESG Controversy scores are more subjective, difficult to verify and not truly reflective of actual performance.

The regression results for the ESG metric shows significance for ROE, which as a financial metric informs efficiency for generating profits, provides some evidence that it could be related to improved ESG performance. Similarly, Orlitzky et al. (2003) meta-analysis of corporate social (CSP) and financial performance (CFP) found that a virtuous cycle exists whereby the benefits were bi-directional, in that financially successful companies can afford to be more socially responsible, while being socially responsible can help a firm to be more financially successful. As the ANOVA results for gender diversity at CEO, TMT and board level were promising, it was expected that they would have a strong influence when tested using fixed effects regression, however they didn't contribute as strongly to performance as did the the culture of belonging independent variable.

6.2 Theoretical Contributions

The theoretical model conceptualized from the literature review, for how a firm can influence future environment and ESG performance through developing a culture of belonging has been supported by the analysis. The practical implications of this result for the resources sector will be discussed as will the specific contributions to the literature.

To summarize, the results contribute to the existing literature in a number of ways. Firstly, the psychology literature which advises that a sense of belonging can motivate positive actions and a lack of belonging can result in short term decisions which benefit the individual, not the group. It can also be argued that the results support the emphasis on autonomy, competence and relatedness as the method of creating a culture of belonging. Secondly, the strategic management literature focused on RBV, which formed the hypothesis that a sense of belonging is a valuable, but intangible asset, that has a tangible impact on future environment performance. Thirdly, the stakeholder literature which provides that when firms incorporate and value employees as important stakeholders, employees can make a significant, positive impact on the execution of the firms strategy, providing further support to Sisodia’s et al. (2014, p61) assertion shared above that *“employees either benefit or burden every dimension of a company’s existence.”*

Theoretical Contribution	This studies contribution to the literature
Sense of belonging	<ol style="list-style-type: none"> <li data-bbox="506 1671 1433 1759">1. Theoretical model for firms looking to improve employee sense of belonging and create a culture of belonging <li data-bbox="506 1780 1433 1869">2. Theoretical model for communicating a culture of belonging that improves Environmental performance

<p>The CEO Letter & Influence of the TMT</p>	<ol style="list-style-type: none"> 1. Novel methodology for analyzing CEO letter for strategy to create a culture of belonging 2. Results support a unique and individual approach to firm strategy and communication. 3. Results support the analysis of the CEO letter as a representation of the firms strategy and approach to employees as stakeholders.
<p>Resource Based View of the Firm</p>	<ol style="list-style-type: none"> 1. A culture of belonging, when treated as an asset, has a positive impact on future environmental performance. 2. A culture of belonging, as an asset, is rare, valuable inimitable, intangible and difficult to transfer
<p>ESG Performance</p>	<ol style="list-style-type: none"> 1. A culture of belonging is related to increased environmental performance 2. The methodology created for analyzing firms strategy to create a culture of belonging could be used as a leading indicator to predict future performance and understand areas for improvement 3. Overt use of culture of belonging words in CEO letter could represent internal issues that should concern scrutinizers

Table 24: Summary of Theoretical Implications. Source: Author

6.3 Management and Governance Implications

6.3.1. A sense of belonging

A sense of belonging is a sense. By its nature, it is intangible, however this investigation reveals that there is a tangible impact, and an important contribution to the literature. The sense of belonging dictionary and methodology as a proxy supports the proposal that the CEO letter is representative of the firms strategy, in that they recognize employees as valuable stakeholders and are intent on building a culture of belonging as an asset. From a communications and stakeholder theory perspective, it provides an indication of which firms listen to stakeholders, or just talk to them (Freeman et al. 2018). The results support the positive relationship between the sense of belonging, that is the emphasis on autonomy, competence and relatedness, communicated in the CEO letter to future environmental and ESG performance which is instructive both for firms looking to improve their environmental performance,

but also to external observers scrutinizing firms looking for additional information to understand a firms strategy as well anticipate future performance.

6.3.2 The CEO Letter

This study provides further evidence to support the existing literature provided by Craig & Amernic (2011), Sisodia et al. (2014), Amernic & Craig (2017) and Craig & Amernic (2018) that the information value of the CEO letter is highly valuable, in that it provides a representation of the firms strategy and approach. It is understood that this is the first review of Australian CEO letters, with previous studies focusing on US or European CEO's, and definitely the first to analyze for sense of belonging. The CEO letter is communicating the intent to create a sense of belonging to employees, but also communicating the breadth and extent of who the firm considers to be stakeholders, thereby articulating the strategy and vision of the firm. Within this, the reader can understand the extent to which the CEO and TMT considers employees to be critical stakeholders as well as the expanse of external stakeholders they consider important, thereby making a contribution to the stakeholder theory literature. While there was an expectation that the CEO letter would be written in a positive manner, as per Neilsen & Villadsen (2023), the results provide a clear distinction between firms and in some cases, the oversignalling of sense of belonging could be seen as analogous to greenwashing.

6.3.3 Resource Based View

The results and discussion above provide support for the hypothesis that a culture of belonging is both a cultural archetype and firm asset that is highly distinctive between firms. In addition, the intent to develop the asset through a greater focus on a culture of belonging shows that an intangible asset can have a tangible impact on future environmental performance. The results support the earlier work of Ruf et al. (2001) Sarkis et al. (2009), Alt et al (2015) that showed that environmental performance improved through the integration of employees as stakeholders. For the resources sector, this new

information is critical given the significant requirements for innovation from employees as the industry evolves to meet net zero expectations and lower carbon opportunities.

6.3.4 ESG Performance

Understanding not only the conditions that improve a culture of belonging but those that diminish it and the potential implications on individuals and their colleagues is significant. The literature review on belonging can be used as a ‘how to’ guide for CEO’s and TMT’s who are interested in developing a culture of belonging within their organization.

In understanding incidents, poor behavior or performance, why not also seek to understand their individual level of belonging? If these situations are occurring in a particular area or part of the business, maybe there is a lack of a culture of belonging that is influencing employees to make decisions that benefit them in the short term but detract from the organization in the long term. For organizations focused on the road to net zero and lower carbon operations, this study emphasizes the important influence that a focus on belonging can have on a firms ability to achieve these objectives.

Also of significance for firm governance is the potential for the board of directors to use this tool to properly evaluate the level of belonging across the firm. Once a benchmark study is done, to understand culture of belonging levels within internal communication, they could use it to analyze the communication of the CEO and TMT across multiple communication channels, or even further down at a site level, to understand the culture of belonging being developed throughout the firm. Reviewing this over an extended timeframe, across sites and functions, would likely indicate the homogeneity or heterogeneity of belonging across the firm.

Area	Managerial & Governance Implications
Sense/Culture of belonging	1. This study provides a framework for leaders and organization on how to develop employee sense of belonging and promote a culture of belonging within their firm.

	<ol style="list-style-type: none"> 2. The methodology developed for digital analysis of language could be applied at a firm level across multiple leaders and departments as part of leadership assessment but also as an early warning system for the board.
The CEO Letter, Influence of the TMT and Board and external scrutiny	<ol style="list-style-type: none"> 1. Language matters; the CEO letter provides a window into the executive’s (and TMT’s) soul (Sisodia 2014). 2. A culture of belonging as represented by the language of the CEO, results in greater environmental performance
Resource Based View of the Firm	<ol style="list-style-type: none"> 1. For its impacts on a firms environment score, a culture of belonging is an asset worth investing in.
ESG Performance	<ol style="list-style-type: none"> 1. For resources firms looking to increase environmental performance, it is not how you pay people that matters, it is the culture of belonging that you set within the firm. 2. While not statistically significant due to the lack of observations, firms with a female CEO (8 observations) did not have a single ESG controversy.

Table 25: Summary of Managerial & Governance Implications. Source: Author

6.4 Research Limitations

This is the first study of its kind to assess an intent to create a culture of belonging through the CEO letter and as a result, has not been analyzed for robustness against other measures. Other similar studies that have looked to assess or measure culturally based constructs using digital text analysis have had the luxury of being able to access large US based datasets that provide culture or engagement data, or verifications, such as Great Place to Work. While Great Place to Work is in Australia, the number of resources firms available to analyze against ESG performance was not sufficient to build a suitable dataset.

Despite the Australian resources sector dominating the Australian economy and ASX, the lack of consistency in the provision of the CEO letter in the annual report meant that only 22 firms were able to be used in the study. As a sector, males are still dominant in the most senior role, the CEO, and within

this sample, that meant only 8 female observations out of 154 which was disappointing. While the fixed effects regression for ESG Controversy showed that the gender of the CEO was statistically significant, this was because out of these 8 observations, no female CEO's were linked with an ESG controversy rendering the result potentially irrelevant. If future researchers are interested in understanding the change in the nature of belonging in the firm due to gender, they would be best identifying a sample of firms lead by a female CEO and then compare with a sample of male CEO's.

In terms of future replication, this study used ESG metrics from Refinitiv and did not include other ratings platforms. As confirmed by Berg et al. (2022), there is not always consistency in measurement and reporting across ratings platforms. This means that while this study relied upon ESG metrics from Refinitiv, further investigation is required to understand whether the results would be transferrable across other ratings platforms.

6.5 Future Research

6.5.1 Further interrogation of the resources sector

The present study focused on the Australian resources sector, however, given the very global nature of the resources industry, the literature would benefit from a more globally focused study. There would be the potential to understand the nature of sense of belonging and its impact on ESG performance between countries and even different commodities. Resources companies face greater levels of scrutiny for their environmental and social performance as not only do they have to comply with the laws and expectations specific to the country of operation, but they also face scrutiny for how they operate from neighboring countries and countries that they might not even operate in. Zygildopoulos (2002) used the example of the decommissioning in the North Sea of the Brent Spar oil storage buoy by Shell, which initially had the approval of the British Government, only for Shell to succumb to public pressure lead by Greenpeace and governments across continental Europe, to reverse its decision.

6.5.2 Culture of belonging as an important leading indicator for firm performance

The literature shows that people want to work for firms that are environmentally responsible, so given the link between the culture of belonging communicated and the environmental performance has been identified, this could be further studied more deeply at an organizational level. For instance, once an internal sense of belonging benchmark score is understood, other communications from the CEO and TMT could be analyzed throughout the year. The decisions made by the CEO and TMT could be analyzed with greater scrutiny, on the basis that the decisions they make impacting the environment provide a further proxy for their understanding of how these decisions will be viewed internally by their workforce and externally by the broader community.

While the results from this study showed a significant relationship with future environmental performance in the resources sector, perhaps future research could investigate whether this extrapolates across other industries. For instance, QANTAS faced a senate enquiry over alleged misleading and deceptive conduct in relation to a claim that they sold seats on flights that they had already cancelled (Mizen, 2023), adding hundreds of millions of dollars to their balance sheet in the process. Former employees of QANTAS spoke out in the wake of the departure of CEO Alan Joyce following the controversy describing him as someone who “worked tirelessly to crush the spirit of Qantas employees” (Mather, 2023). Thomson (2023) suggests that hubris could have been at play and that for investors, there were red flags that provided warnings about Alan Joyce.

6.5.3 Analyzing ESG controversies in greater depth

In Prasad and Mir's (2002) study of CEO letters to shareholders in the oil industry, they placed critical importance on understanding the context in which oil companies were operating at the time of analysis, Prasad and Mir (2002) argue that the CEO letter can only be interpreted by placing it within the context of the market that the letter was written. They conclude that the letter becomes a record of the operating environment in which it was produced. In viewing the change and increase in time of the sense

of belonging score, we can now visualize the development or recognition of culture of belonging over time. Following Fu et al. (2022) and the study of the BP CEO letters prior to the Deepwater Horizon disaster by Amernic & Craig (2017), the sense of belonging dictionary could be used to analyze the preceding existent conditions in firms before other more recent ESG controversies involving Rio Tinto, BHP, Boeing, Volkswagen and Qantas using an event study methodology. As an extension of stakeholder theory, the culture of belonging dictionary acts as a proxy to understand the inner thoughts and strategy of the CEO and TMT and whether they have a “shareholder primacy perspective which diverts attention away from the main function of the firm – the creation of value for all stakeholders” (Freeman et al. 2018). This could provide a critical new leading risk indicator about signaling, or lack of, in the lead up to a controversy. In other words, the ability to prevent an ESG controversy from occurring could save lives, reputational damage and billions of dollars.

While the analysis has supported previous studies showing that the ESG controversy metric is related to the size of the firm, on the basis that larger firms receive more media exposure, there are two other possibilities. First it could be that larger firms also operate in more locations, have larger workforces and potentially the opportunity for greater environmental impact. The second alternative could be that these results support Fu et al. (2022) who’s findings revealed that there is a certain point where an oversignalling of corporate social performance, ‘greenwashing’ to too broad a range of stakeholders becomes detrimental. There is opportunity for more research to evaluate the effectiveness of the ESG controversy measure, however in the meantime, it is recommended that observers pay closer attention to other metrics.

Other researchers, when analyzing the speeches or letters of the CEO, have focused specifically on individual CEO’s as opposed to a broader sample. In doing so, they have combined the use of Diction as well as manual reading and coding (Amernic & Craig 2017; Craig & Amernic 2021). This closer reading of the text has allowed for the identification of faint signals of hubris and narcissism, which Craig &

Amernic (2021) highlight as potential warning signs for the board. The methodology used in this study combined with closer reading could provide more insights.

6.5.4 Culture of belonging – pre and post - COVID

The time period for this study was set immediately before the onset of the Coronavirus pandemic. This was done intentionally because of a desire for the study to not just be “another COVID study”. However, during the pandemic resources companies in particular were able to continue to operate, such was their significance to government and the economy. This meant employees were required to spend long periods of time either away from home working on-site, in quarantine or working from home for large periods of time for social distancing purposes. These new conditions placed significant pressures on employees impacting wellbeing and mental health meaning that discussion and interest in sense of belonging in the workplace has continued. Researchers may want to replicate this study to look at the timeframe immediately preceding the pandemic, during and immediately after to explore what impact prior culture of belonging levels had on firm performance during and after the pandemic.

7. Conclusion

The primary objective of this study was to understand the impact of leaders on a firm's culture of belonging and the resulting impact on ESG performance. While a proxy methodology was used, it still demonstrated a significant and positive relationship between firms that communicate an intent to create a culture of belonging and future environmental performance. In a time when the scrutiny on the resources industries impact on the environment is high, the resources industry should stop and take notice of the results of this study. The results will be of interest to external observers who evaluate ESG performance and look to hold resources firms accountable for their impact on the environment.

In addition, this study makes a number of other significant contributions to business and psychology literature. Firstly, the development of a new leading indicator for risk and environmental

performance, which with further study could be expanded across other forms of corporate communication and messaging throughout the firm during the year. Secondly, the development of a novel, proxy measure that can be utilized by external parties to understand the intent of the CEO and top management team to build a sense of belonging with their most critical stakeholder, their employees. Thirdly, the research undertaken to develop the proxy measure extends the understanding of how to develop a culture of belonging to enhance performance which provides guidance on how leaders can understand and potentially reduce impulsive, self-defeating, and negative behaviors within their firm. As an outcome of this study, it is hoped that leaders in the resources section will understand that to meet the challenges they face as an industry, it is not a matter of being the best, it is a matter of them being 'their best'.

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9. Appendix

Woodside	2013	2014	2015	2016	2017	2018	2019
Autonomy	14.14	7.82	5.44	6.34	5.65	13.48	17.07
Competence	9.62	11.1	6.44	7.65	6.25	7.26	18.07
Relatedness	16.94	21.07	13.38	22.14	17.15	13.33	34.39
Culture of Belonging	40.7	39.99	25.26	36.13	29.05	34.07	69.53
BHP	2013	2014	2015	2016	2017	2018	2019
Autonomy	6.47	13.29	9.59	5.46	7.15	3.5	5.27
Competence	6.92	8.27	7.86	2.5	3.91	4.9	8.82
Relatedness	26.78	28.07	22.81	28.87	36.04	31.42	37.68
Culture of Belonging	40.17	49.63	40.26	36.83	47.1	39.82	51.77
Rio Tinto	2013	2014	2015	2016	2017	2018	2019
Autonomy	5.52	4.26	5.81	4.44	6.1	10.62	2.62
Competence	5.68	6.15	8.39	4.44	8.46	11.22	3.12
Relatedness	23.82	25.04	24.81	13.06	38.84	18.11	20.99
Culture of Belonging	35.02	35.45	39.01	21.94	53.4	39.95	26.73
Newcrest	2013	2014	2015	2016	2017	2018	2019
Autonomy	2.5	7.24	5.56	4	9.48	7.34	10.31
Competence	1	3	4.98	3.75	5.7	11.17	5.28
Relatedness	2.75	9.61	17.28	18.1	24.31	25.93	23.21
Culture of Belonging	6.25	19.85	27.82	25.85	39.49	44.44	38.8
Lynas	2013	2014	2015	2016	2017	2018	2019
Autonomy	12.06	11.18	2.25	5.47	6.82	1.25	8.26
Competence	5.22	10.18	8.19	3.75	9.78	3.21	9.01
Relatedness	28.79	22.67	5.5	14.35	24.36	15.1	8.12
Culture of Belonging	46.07	44.03	15.94	23.57	40.96	19.56	25.39
Orica	2013	2014	2015	2016	2017	2018	2019
Autonomy	8.23	7.78	12.61	4.18	6.79	9.17	11.27
Competence	11.95	8.06	2.8	1.5	7.66	6.07	9.35
Relatedness	6.98	4.25	23.42	22.05	27.6	26.34	21.46
Culture of Belonging	27.16	20.09	38.83	27.73	42.05	41.58	42.08
MRL	2013	2014	2015	2016	2017	2018	2019
Autonomy	2.59	4.89	4.51	3.2	9.17	11.67	1.75
Competence	2.68	9.65	5.39	1.87	4.3	11.56	1.75
Relatedness	1.18	9.46	3.41	4.25	5.98	33.83	10.75
Culture of Belonging	6.45	24	13.31	9.32	19.45	57.06	14.25

Table 26: Sense of belonging scores per dimension relating to graphs provided. Source: Refinitiv, DICTION &

Authors calculations

