Empathy and Narrative Transportation:
Fiction's Relationship to Empathy in Leaders

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A research project submitted as part of a research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

6 November 2017
Abstract

Empathy is an essential competence of ethical leadership. However, business leaders are more likely to display and value traits like narcissism than empathy at work. This has prompted a need to explore empathy in leadership, specifically through its relationship to aesthetics as a potential source thereof. Previous research has shown that those more easily transported into aesthetic mediums like fictional narratives display higher degrees of cognitive empathy. Here, we extend this research into a business context, exploring the relationship between leader narrative transportation ability and cognitive empathy, using both self-reported and task-based measures (statistically controlling for gender, cultural background and English as first language). Leader narrative transportation ability positively predicted measures of task-based cognitive empathy but did not predict self-reported measures of cognitive empathy. These results suggest that leaders that share a positive relationship with fiction may be more adept at cognitive empathy, providing some justification for the role of aesthetics in business. Furthermore, self-reported cognitive empathy at work may be influenced by bias or misperception.

Key Words

Aesthetics; Cognitive Empathy; Ethics; Perspective Taking; Narrative Transportation.
Declaration

I declare that this journal article and attached supplement is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Petrus Roelof Engelbrecht
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1 Journal Article
Empathy and Narrative Transportation: Fiction’s Relationship to Empathy in Leaders.

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Abstract

Empathy is an essential competence of ethical leadership. However, business leaders are more likely to display and value traits like narcissism than empathy at work. This has prompted a need to explore empathy in leadership, specifically through its relationship to aesthetics as a potential source thereof. Previous research has shown that those more easily transported into aesthetic mediums like fictional narratives display higher degrees of cognitive empathy (Mar et al., 2006; 2009). Here, we extend this research into a business context, exploring the relationship between leader narrative transportation ability and cognitive empathy in leaders, using both self-reported and task-based measures (statistically controlling for gender, cultural background and English as first language). Leader narrative transportation ability positively predicted measures of task-based cognitive empathy but did not predict self-reported measures of cognitive empathy. These results suggest that leaders that share a positive relationship with fiction may be more adept at cognitive empathy, providing some justification for the role of aesthetics in business. Furthermore, self-reported cognitive empathy at work may be influenced by bias or misperception.
Introduction

Despite being considered an essential competence of 21st century leadership, empathy is found wanting in many leaders that still subscribe to the idea that narcissistic behaviour makes for good leadership (Holt and Marques, 2012). Empathy enables leaders to perceive, share and sympathise with the emotions of their stakeholders (Pohling et al., 2016), while a lack of empathy has been shown to predict unethical behaviour (Brown et al., 2010). While the benefits of empathy in leadership are evident, it is still regarded as a sub-par “soft” skill by those that celebrate narcissism and self-interest as leadership competencies (Holt and Marques, 2012). Considering the unethical disasters that have stemmed from this line of thinking, leaders must learn to transcend the paradigm of the previous century and act in a way that takes into account the emotional repercussion of their actions on their stakeholders (Pohling et al., 2016).

This has led to the question of how empathy can be fostered in 21st century leaders. One answer may come from the realm of aesthetics. Aesthetics can illuminate the nature of business (Czarniawska-Joerges and De Monthoux, 1994; Michaelson, 2014), enforce ethics (Freeman et al., 2015; Koehn and Elm, 2014; Ladkin, 2015) and foster empathy (Nussbaum, 1995). In recent years a handful of empirical studies have come to the fore indicating a relationship between empathy and aesthetically rich mediums like literary fiction (Johnson, 2012; Kidd and Castano, 2013; Mar et al., 2006). These studies suggest that literary fiction provides a form of abstraction and transportation into alternate realities (Mar and Oatley, 2008) where readers can assume the roles of different characters and learn what it would be like to think, feel and act as they do. Therefore, when leaders engage with fiction they can
gain an intimate understanding of a character’s emotions, as opposed to the real world, where emotional displays are often regulated through social norms, particularly in the workplace (Kelly and Barsade, 2001). It is thus suggested that reading fiction might allow leaders to better perceive the emotional realities of their stakeholders, while at the same time gain insight into how their actions and emotions could affect those around them. Engaging with aesthetics through fiction might therefore benefit leaders by fostering greater empathy for others. This in turn may result in leaders becoming more adept at managing stakeholder emotions, as well as making ethical decisions related to stakeholder outcomes that take into account the emotional impact of their actions within their organisations and beyond.

Aesthetics relationship to the realm of ethics lack empirical grounding (Ladkin, 2015) as does its relationship with empathy, which is mostly theoretical. In the case of aesthetics and empathy, empirical studies are in their infancy and have yet to be tested in a leadership context. This has led to calls for further research to be conducted to explore the relationship between the two (Panero et al., 2016). Thus, the present study seeks to test the relationship between aesthetics and empathy in leaders as a potential means towards promoting greater ethical competence.

**Literature Review**

**Empathy as a leadership competence**

Humans are social beings that use emotional displays to communicate, coordinate collective efforts, create group cohesion, foster interpersonal bonds (Spoor and Kelly, 2004) and promote prosocial behaviour (Singer and Klimecki, 2014). This is no different in the workplace where emotions play a role in governing interpersonal interactions as well as the emotional climate of the organisation (Ashkanasy and Dorris, 2017; Elfenbein, 2007). Leaders act as managers of emotions (Humphrey et al., 2008; Pescosolido, 2002) and use empathy to identify the emotional states of their followers (Kaplan et al., 2014; Mayer and
Salovey, 1997). Emotions can have both positive and negative effects in business and should therefore be managed the same as any other important business function (Little et al., 2016). Kaplan et al. (2014) lists empathy as an important leadership skill in managing workplace emotions. Transformational leaders, for example, use their ability to perceive follower emotions to manage and motivate performance (Rubin et al., 2005), a notion that is in line with the emotional intelligence literature that has long argued for empathy as a leadership competence (Mayer and Salovey, 1997). However, where emotional intelligence has, for the most part, viewed empathy as a trait, Kaplan et al. (2014) suggest that empathy can be taught and developed like any other management skill.

Empathy has come to be understood as a multifaceted construct comprised of distinct components tied to different neural systems (Davis, 1983; Shamay-Tsoory, 2011; Zaki and Ochsner, 2012). Affective empathy, or empathic concern, refers to feelings of compassion or concern for other beings. When displaying affective empathy, there is a distinction between one’s own emotions and the emotions of another. Therefore, affective empathy makes it possible to experience compassion and concern for someone without taking on their emotions as one’s own (Singer and Klimecki, 2014). When this self-other distinction becomes blurred we refer to the empathic state as emotional contagion, or experience sharing, which describes the tendency to take on and share the emotions of another as if they were one’s own. Thus, through emotional contagion, organisational members have the opportunity to affectively shape (or be shaped by) the emotional displays of those around them (Elfenbein, 2007). Lastly, cognitive empathy, which is also referred to as perspective taking (Davis, 1980; Mead, 1934), mentalising or theory of mind (Frith and Frith, 2005), describes a cognitive process whereby one perceives and identifies the emotional state of another without experiencing an emotional response. It is important to note that although these components are treated as
different constructs, they are often used in conjunction by leveraging off one another depending on the context of the situation (Cojuharenco and Sguera, 2015).

Studies have indicated that cognitive empathy is related to greater pro-social orientation (Declerck and Bogaert, 2008), group ability to perform a variety of tasks (Woolley et al., 2010) and for understanding the ethical intentions of others (Frith and Singer, 2008). Those with high degrees of cognitive empathy have been shown to share a greater likelihood of becoming emergent leaders within groups, especially within emotionally charged environments (Kellett et al., 2002; Pescosolido, 2002; Walter et al., 2012). Furthermore, cognitive empathy has been shown to improve intergroup relationships, specifically between in-group and out-group members that occur as a result of shared or conflicting member characteristics. For example, Batson et al., (1997) presented participants with a video of a woman describing her struggles living with HIV. Half of the group were given specific instruction to pay attention to her emotions, while the other half were instructed to remain objective. Afterwards, those who were instructed to perceive the woman’s feelings showed more positive associations to HIV-sufferers than those that were asked to remain objective. Similar studies have reported congruent findings with regards to race (Dovidio et al., 2004) and the employee-supplier relationship dynamic, where it has been demonstrated that employees that participated in supplier perspective taking were more helpful towards suppliers (Parker and Axtell, 2001).

On an interpersonal level, evidence suggests that greater cognitive empathy might foster better relationships between leaders and followers through the use of interpersonal emotion management strategies. Little et al. (2012) demonstrated the existence of a relationship between perspective taking and the emotion management strategies used by leaders to regulate follower emotions. Positive and negative emotions that occur in individuals are expressed through verbal and non-verbal cues (Elfenbein, 2007). In the case
of the follower experiencing a negative emotion, the leader has the opportunity to intervene and regulate said emotion through an emotion management strategy, for example: demonstrating consideration and support, managing emotional interactions and relationships among co-workers and interacting and communicating in an interpersonally tactful manner (Kaplan et al., 2014). What is important to note is how cognitive empathy, i.e. the ability to perceive a follower’s emotional display, acts as an initial catalyst for interpersonal emotion management strategies. Without first being able to perceive and imagine the emotions of their followers, leaders run the risk of ignoring the affect or applying an ineffective emotion management strategy, thereby aggravating the situation (Elfenbein, 2007; Kaplan et al., 2014).

With regards to business ethics, cognitive empathy has also been studied in the context of ethical decision-making. Cojuharenco and Sguera (2015) found that cognitive empathy might contribute to the ethical decision-making process in time-starved situations. Their findings suggest that higher degrees of cognitive empathy reduce the likelihood that an organisational member would lie on behalf of their company provided they had enough time to contemplate their actions. Thus, cognitive empathy might play a role in making ethical judgements.

It is clear from the above findings that empathy holds many benefits to business, from fostering pro-social behaviour, predicting leadership emergence, managing stakeholder relations and enforcing ethical decision-making. However, empathy as a whole remains undervalued as a leadership skill, especially within the business environment. Holt and Marques (2012) found that business students rated empathy the least important leadership skill among a list of options including intelligence, charisma, authenticity, courage and service. Having said that, it is interesting to note that business students (as well as student of law and economics) were more likely to show degrees of narcissism, Machiavellianism and
psychopathy than students studying degrees in the humanities (Vedel and Thomsen, 2017) – the threat being that they would later carry these beliefs with them into practice. Considering the benefits of empathy and leadership’s lack thereof, there is a clear need to create more empathy in leaders. The next section will review how this might be achieved through aesthetics in the form of literary fiction.

**Aesthetics as a source of empathy**

Many academics have contemplated aesthetics’ role in business (Czarniawska-Joerges and De Monthoux, 2005; Koehn and Elm, 2014; Ladkin, 2015). Aesthetics deals with the question of beauty and artistic taste. Conceptually, aesthetics can be traced back to the Greek word *'Aisthisis'* used to describe the sensory experience of perception (Buck-Morss, 1992). Therefore, aesthetics may be expressed through different art forms with the ability to evoke an emotional response. One such a medium is literary fiction. Some have proposed that literary fiction may serve as a way to understand ethics (Duska, 2014; Gerde and Foster, 2008; Michaelson, 2005) and to create empathy (Nussbaum, 1995; Oatley, 2011). In support of the latter, initial empirical evidence have come to the fore indicating that those who read aesthetically rich literary fiction tend to display more empathy than non-readers (Black and Barnes, 2015b; Mar et al., 2006; Vezzali et al., 2015). One such a study was conducted by Kidd and Castano (2013) who found evidence that reading literary fiction, as opposed to fact-based literature and non-literary fiction, improves perspective taking after exposure. Further studies have built on this research indicating similar results in other mediums like television (Black and Barnes, 2015a).

In support of the theory, research in neuroscience has revealed that there exists a relationship between emotions experienced in real life and those experienced through aesthetics. Reading fiction and social cognition both make use of the brain’s default network, which simulates hypothetical scenes, spaces and mental states (Tamir et al., 2015). In
addition to this, it has been found that reading about an action and performing an action activate the same parts of the brain (Speer et al., 2009), while engaging with fictional characters have been shown to evoke similar cognitive associations as engaging with people during real life interactions (Vezzali et al., 2015). These findings suggest that the simulation of social content in fiction may play a role in the neural cognition of readers. A possible explanation for this phenomenon could be attributed to mirror neurons, a type of brain cell that elicits neurological responses when primates perform actions or perceive others performing similar tasks (Rizzolatti and Craighero, 2004).

At its core, literary fiction is a storytelling medium for storytelling animals (Gottschall, 2012). Humans use narratives to create group connections and a sense of belonging (Gabriel and Young, 2011) as well as to share information and social knowledge (Mar and Oatley, 2008). Stories speak to the heart of humanity’s social fabric. They teach us about each other (Stephens and Kanov, 2016) as well as ourselves (Hakemulder, 2000). Mar and Oatley (2008) contend that this phenomenon occurs through a process of abstraction, whereby the narrative comes to serve as a proverbial flight simulator for social experiences (Djikic et al., 2013; Mar et al., 2006). Great storytellers have the ability to tap into the fundamental parts of the human psyche and create narratives that address the human condition. Engaging with literary fiction offer readers the opportunity to step into the shoes of characters that share different motivations, intentions and beliefs than themselves (Nussbaum, 1995). In effect, by being transported into a narrative, a reader has the ability to perceive as many realities and viewpoints as there are characters in stories (James, 2013; Kaufman and Libby, 2012). The literary world thus serves as a moral laboratory (Hakemulder, 2000); a safe spaces to consider one’s actions and responses to imagined situations. Mar and Oatley (2008) counts three components that assist in the creation of empathy while reading: Identification with the character, transportation into the narrative and
‘Rasas’, an Indian concept that carries a similar meaning to ‘aisthisis’; which is, the experience of emotions through aesthetics.

Humans engage with narratives through characters, most often protagonists (Zillmann, 1995). When a reader comes to identify with a character, a form of perspective taking occurs. Theory suggests that the narrative components of a text allow for the reader’s personality system to become temporarily unfrozen and substituted by the character’s (Djikic and Oatley, 2014). This grants the reader the opportunity to take on the role of the character and become more like the character in turn (Mar and Oatley, 2008). Kaufman and Libby (2012) refer to this transition as experience-taking whereby a character’s thoughts, emotions, goals, traits and actions are temporarily adopted. After having experienced the role of the character, the reader can come to identify and empathise with the character’s point of view. This newly created empathy can then be applied to similar characters and situations, both inside and outside the narrative – including within organisations.

In order for a narrative to create empathy in its reader, Mar and Oatley (2008) suggest that it must also be of an aesthetic quality, a claim that has been backed up by some empirical evidence (Kidd and Castano, 2013). What sets aesthetically rich literary fiction apart from popular literature is that it does not provide the reader with readymade answers (Djikic and Oatley, 2014). When readers know that they are engaging in a literary text, they respond differently to it as opposed to reading a factual text, like a newspaper article (Halász et al., 2002). Aesthetics allows for indirect communication, which leave readers to contemplate the subtext and fill in the blanks on an emotional level. This is partly achieved through foregrounding (Koopman, 2016), or the writer’s ability to highlight phrases in a text in order to make it more emotionally moving (Miall and Kuiken, 1994).

The third aspect that plays a role in creating empathy in readers is transportation (Green and Brock, 2000). Johnson (2012) refers to this process as the level to which a reader
is mentally transported into a fictional world. Oatley (1999) goes further to define transportation as a form of cognitive simulation of the events and characters in a narrative, through which an empathic response occurs. Transportation is thus reliant on both the narrative as well as the reader. In the case of the former, transportation is enforced by the story’s aesthetic qualities, including its themes (Green, 2004) and foregrounding (Koopman, 2016). However, transportation is also reliant on the reader’s ability to become emotionally engaged in the story. For example, narrative transportation is more likely to occur when the reader comes to identify with its characters (Green, 2004).

Evidence suggests that people differ in their ability to become emotionally transported into the feelings and actions of fictional characters (Davis, 1983; Mar et al., 2006; 2009). Therefore, it is not just the aesthetic components of that text that come into play to facilitate narrative transportation but also the reader’s personal tendency or ability to be transported into the story world. Davis (1983), who was one of the first to offer a multidimensional view of empathy, called this phenomenon *fantasy empathy*. His findings suggest that fantasy empathy is a unique construct in addition to cognitive empathy, affective empathy and emotional contagion. Mar et al. (2006) argued that fantasy empathy could also be considered a form of narrative transportation ability. They found that fantasy empathy (or narrative transportation ability) predicted higher degrees of task-based and self-reported measures of cognitive empathy. However, the study relied on a sample of psychology students, which have been shown to share more positive emotional qualities than their business counterparts (Vedel and Thomsen, 2017). The question arises then as to whether the same results could be expected in a business context where a disregard for empathy remains the leading paradigm (Holt and Marques, 2012).

**H1:** Narrative transportation ability in business leaders shares a significant relationship with *task-based* cognitive empathy.
H2: Narrative transportation ability in business leaders shares a significant relationship with self-reported cognitive empathy.

The present study

The aim of the present study is to test the relationship between narrative transportation ability (as measured through fantasy empathy) and cognitive empathy (as measured through theory of mind and perspective taking) in leaders. Since evidence suggests that empathy is created when narrative transportation occurs (Johnson, 2012), the present study seeks to determine whether narrative transportation ability can predict both task-based and self-reported cognitive empathy in individuals at work. Thus, the goal of the study is to explore a potential avenue leaders can exploit to become more empathetic and, ultimately, ethical members of their organisations.

Method

Sampling

Data was obtained through an electronic survey distributed through an email database of contacts within the South African mining industry. The present study focused on respondents that share a direct or indirect relationship with the mining industry, either as employees or as suppliers. The mining industry tends to attract individuals from a business and engineering sector. This allowed for the findings to be contrasted against those of Mar et al. (2006) whose sample was made up of primarily psychology students, a group that’s been shown to be less narcissistic than those attracted to business (Vedel and Thomsen, 2017). Mining also makes up a significant portion of the South African economy, which allowed for the practical application of the findings.

Access to the database was obtained through the payment of 50 South African Rand per response (roughly $3.70, at the time of writing). This was funded independently by the researchers. Respondents were not compensated for completing the survey, but were given
the opportunity to view their task-based cognitive empathy scores after completion. A brief explanation of the study was provided to participants prior to granting their informed consent to participate in the study. No names, contact details, dates of birth, identity numbers or other personal details were recorded. Participants were given the opportunity to withdraw from the study by emailing the researcher the time at which they submitted their response as an identifier. Neither researcher identified as sharing ties with the mining industry. Thus there was no conflict of interest between researchers, participating individuals or participating organisations.

**Participants**

The sample included 227 respondents, excluding 45 respondents, which formed part of an initial pilot study. The sample was made up of 157 men and 70 women from South Africa (69.16% = male, 30.84% = female). The average ages were: male, $M_{age} = 46.8$ and female, $M_{age} = 40.7$. Of the respondents, 172 identified as working in the mining industry while the remaining 55 were grouped as working in industries related to mining e.g. consulting or logistics (75.77% = mining, 24.23% = non-mining). Furthermore, 187 respondents identified as managers of teams while 40 did not share any management responsibilities (82.38% = manager, 17.62% = non-manager). 88 respondents listed English as their first language with 139 second language English speakers (38.77% = English first language, 61.23% = English second language). The average years of English fluency was 33.7 years. 196 Respondents reported some tertiary education (86.34% = tertiary education, 13.66% = non-tertiary education). Racial demographics were as follows: white = 161, black = 45, other = 21 (70.93% = white, 19.82% = black, 9.25% = other).
Materials

The “Reading the Mind in the Eyes” test

The “Reading the Mind in the Eyes” test (RMET) was used to measure task-based cognitive empathy ($DV_1$). The RMET is an advanced cognitive empathy or theory of mind test where respondents are presented with 36 still photographs of the eye regions of different actors (Baron-Cohen et al., 2001). Respondents are tasked to identify the mental state of an actor using four possible descriptors. The test has been used extensively as a measure of empathy and social cognition (Black and Barnes, 2015a; Kidd and Castano, 2013; Mar et al., 2006; Mar et al., 2009). Thus, the RMET is an objective task-based measure of cognitive empathy as opposed to the IRI-PT, which relies on self-reports and is therefore vulnerable to the social desirability bias inherent in self-reported measures. RMET scores have also been positively correlated to exposure to literary fiction in other empirical studies (Kidd and Castano, 2013; Mar et al., 2006; 2009).

The Interpersonal Reactivity Index

The Interpersonal Reactivity Index is a self-reported measure of multi-dimensional empathy (Davis, 1980; 1983) and was used to measure self-reported cognitive empathy ($DV_2$) and narrative transportation ability ($IV_1$). The index contains four subscales: perspective taking (cognitive empathy), empathic concern (affective empathy), personal distress (emotional contagion) and fantasy (narrative transportation ability). Each subscale contains seven statements. Examples of statements include “I sometimes try to understand my friends better by imagining how things look from their perspective” (perspective taking); “I often have tender, concerned feelings for people less fortunate than me” (empathic concern); “I sometimes feel helpless when I am in the middle of a very emotional situation” (personal distress); and “When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me” (fantasy). The respondents indicated the degree
to which they agreed with the statements on a five-point Likert scale. The present study focused on the perspective taking subscale (IRI-PT) as $DV_2$ measuring self-reported cognitive empathy and the fantasy empathy subscale (IRI-FS) as $IV_1$ measuring the independent variable of narrative transportation ability (Hall and Bracken, 2011; Mar et al., 2006, 2009).

Statements within the IRI-PT were modified from the original to express work related statements that take into account the hierarchical and dyadic nature of workplace relationships (Liden et al., 2015), e.g. “I sometimes try to understand my friends better by imagining how things look from their perspective” to “I sometimes try to understand my team members better by imagining how things look from their perspective”.

Six out of the seven statements listed in the IRI-FS directly describe the participant’s ability to be transported into a fictional narrative except for: “I daydream and fantasize, with some regularity, about things that might happen to me”. As a result the question was omitted leaving the remaining six questions as the measure of narrative transportation ability.

**Control variables**

The scales selected operate best when certain variables are controlled for. Females tend to outperform males on the RMET, IRI-PT and IRI-FS (Baron-Cohen et al., 2001; Davis, 1980), therefore gender was statistically removed from the analysis. Cultural differences also play a role on RMET scores as the original English version of the RMET only makes use of Caucasian actors impacting on the consistency of results when measured across cultures (Adams et al., 2010). Lastly, language was controlled for with regards to whether the participant was a first or second language English speaker. Non-native English speakers tend to perform worse on the English version of the RMET than those that speak English at home (Prevost et al., 2014).
Statistical analysis

Two hierarchical multiple regressions were conducted to measure the relationship between the independent variable (IRI-FS) and the two dependent variables (IRI-PT and RMET), while controlling statistically for variables that could influence results (race, first or second language English, gender). Preliminary analyses were conducted to ensure that normality, linearity, multicollinearity and homoscedasticity were maintained. Seven outliers were identified, one of which was marked extreme. Due to the size of the sample ($n = 227$) some outliers could be expected. However, in order to maintain the integrity of the analysis the one extreme case was removed (Tabachnick et al., 2012) leaving a final sample size of $n = 226$.

Procedure

The respondents completed a 15-minute long online survey on “empathy at work”. The survey included the Interpersonal Reactivity Index fantasy subscale (IRI-FS) to measure narrative transportation ability (Davis, 1980; 1983), the Interpersonal Reactivity Index perspective taking subscale (IRI-PT) to measure self-reported cognitive empathy, and the Reading the Mind in the Eyes test (RMET), an advanced theory of mind test to measure task-based cognitive empathy (Baron-Cohen et al., 1997; 2001). The survey concluded with self-reported questions related to the respondent’s demographic information, language familiarity, education, industry and position at work.

Results

Scale reliabilities

Table 1 presents descriptive statistics, reliability measures and internal consistencies for each of the three scales. Results were obtained through SPSS version 24.
Table 1

Descriptive Statistics and Inter-Scale Correlations of the RMET, IRI-PT and IRI-FS in a Sample of Organisational Members.

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. RMET (task-based cognitive empathy)</td>
<td>24.33</td>
<td>4.53</td>
<td>(0.65)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. IRI-PT (self-reported cognitive empathy)</td>
<td>19.14</td>
<td>4.22</td>
<td>-0.44</td>
<td>(0.70)</td>
<td></td>
</tr>
<tr>
<td>3. IRI-FS (narrative transportation ability)</td>
<td>14.13</td>
<td>5.20</td>
<td>0.171*</td>
<td>0.05</td>
<td>(0.81)</td>
</tr>
</tbody>
</table>

Note: N = 226. The IRI subscales ranged from one (does not describe me well) to five (describes me very well). The modified IRI-FS included six questions (scored between 0 – 24), as opposed to the original scale’s seven questions (scored between 0 – 28). In comparison, the modified IRI-PT is made up of seven questions (scored between 0 – 28). Reliabilities are presented on the diagonal of the correlation matrix and bivariate correlations are presented in the lower triangle. *p < .01

The internal consistency of the RMET is modest (α = .65), an acceptable measure considering the limits of the internal consistency found in the original test as well as the variability of RMET scores across populations (Prevost et al., 2014). Internal consistency for the original IRI-PT ranged between .71 and .75, depending on gender (Davis, 1980). Reliabilities of the modified version was α = .70 and remains in line with the original version. The modified IRI-FS revealed an internal consistency α = .81 in the present study. This measure is slightly higher than the original with measures ranging from .78 to .79, depending on gender (Davis, 1980).

Raw correlations

Scores of the RMET and IRI-PT scales were not correlated, indicating a difference between task-based cognitive empathy ability and self-reported cognitive empathy in the workplace. Self-reported narrative transportation ability, as measured through the modified IRI-FS, correlated with the RMET, p < .01 indicating a relationship between measures.
However, the modified IRI-FS did not correlate with the work-based IRI-PT. This finding is dissimilar to Davis (1983) who reported a significant, albeit small, correlation between the two original scales.

**Regression**

After testing for measures of reliability and raw correlations, two hierarchal multiple regressions were run to determine whether a relationship exists between narrative transportation ability (IRI-FS) and task-based cognitive empathy (RMET), as well whether a relationship exists between narrative transportation ability (IRI-FS) and self-reported cognitive empathy in a work context (IRI-PT). Both tests statistically controlled for the following variables based on previously mentioned theoretical assumptions: race, first or second language English and gender. The sample tested was \( n = 226 \).

H1. Transportation (IRI-FS) and task-based empathy (RMET)

Results of the hierarchal multiple regression are reported in Table 2.

Table 2

*Hierarchal Multiple Regression Analyses Predicting Task-Based Empathy (RMET) From Narrative Transportation Ability (IRI-FS)*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Source of Task-Based Cognitive Empathy</th>
<th>( \Delta R^2 )</th>
<th>( \beta )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td>14**</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td>30**</td>
<td></td>
</tr>
<tr>
<td>Fist / second language English</td>
<td></td>
<td>23*</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td>16*</td>
<td>0.18</td>
</tr>
<tr>
<td>Narrative transportation ability</td>
<td></td>
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</table>
Race, First or second language English and Gender were entered at Step 1, explaining 14.7% of variance in task-based cognitive empathy (RMET). After entry of narrative transportation (IRI-FS) at Step 2, the total variance explained by the model was 17.9% $F (4, 221) = 12.058, p < .001$. Together, the four variables explained an additional 3% of the variance in task-based cognitive empathy, $R^2$ change .03, $F$ change (1, 221) = 8,590, $p = .004$. Three measures were statistically significant in the final model: Race, first or second language English and narrative transportation ability with race recording the highest beta value ($beta = .30, p < .001$) followed by English as a first or second language ($beta = .23, p < .001$) and narrative transportation ability ($beta = .18, p = .004$)

**H2. Transportation (IRI-FS) and self-reported empathy (IRI-PT)**

The same test was run substituting the RMET for the IRI-PT, controlling for the same variables as before (race, first or second language English and gender). Race, first or second language English and gender were entered at Step 1, explaining 1.4% of variance in self-reported cognitive empathy (IRI-PT). After entry of narrative transportation ability (IRI-FS) at Step 2, the total variance explained by the model as a whole was 1.17% $F (4, 221) = .952$, $p = .435$. Thus, the model failed to reject the null hypothesis.

**Discussion**

This paper explored the relationship between narrative transportation ability (IRI-FS) and cognitive empathy in leaders using both self-reported (IRI-PT) and task-based (RMET) measures. A link between narrative transportation ability and cognitive empathy had already been established in previously (Mar et al., 2006; 2009). However, previous studies were
conducted outside of a business context with a sample that may have skewed results. The present findings contribute to our broader understanding of the relationship between narrative transportation and empathy in business, an environment that has called for more efforts to foster empathy in leaders (Holt and Marques, 2012). In additional to this, the present study has also provided a potential practical application of aesthetics in business (Ladkin, 2015). The findings have implications for our understanding of empathy and aesthetics and offer a platform from which to conduct further studies of the intersect of these constructs with regards to business and business ethics.

The results indicate a relationship between narrative transportation ability and task-based cognitive empathy (RMET) but not between narrative transportation ability and self-reported cognitive empathy in leaders in a work context (IRI-PT). Measures were controlled for statistically to account for variables that could impact on results. In terms of task-based empathy, race was the biggest predictor accounting for 30% of variance. This, together with the finding that those who spoke English as a first language performed better on the test, has again pointed out some of the shortcomings of using the original English version of the RMET across cultures (Adams et al., 2010; Prevost et al., 2014). As expected, gender differences were recorded with females displaying higher degrees of task-based cognitive empathy than males (female $M_{RMET} = 25.3$, male $M_{RMET} = 23.9$) as well as greater levels of narrative transportation ability (female $M_{IRI-FS} = 15.8$, male $M_{IRI-FS} = 13.4$). What is interesting is that only a small difference was recorded between self-reported cognitive empathy at work between genders (male $M_{IRI-PT} = 19.31$, female $M_{IRI-PT} = 18.77$). As per Prevost et al., (2014), English as a first or second language was a statistically significant predictor of task-based cognitive empathy (RMET).

It is worth reiterating that a relationship between narrative transportation was only established with task-based measures of cognitive empathy that used theory of mind as the
construct. Self-reported cognitive empathy that used the adapted work-centric perspective taking subscale did not predict narrative transportation ability, a marked difference to the study by Mar et al., (2006). In addition, results from the present study conflicted with Davis's, (1983) original work that found a small but significant correlation between the unaltered IRI-FS and IRI-PT subscales. The finding is noteworthy on two fronts. First of all it reiterates the notion that the fantasy subscale is measuring something different to perspective taking (Davis, 1983). One could argue that fantasy, or narrative transportation ability, are both based on cognitive mechanisms. However, the present results indicate that these constructs differ and confirm a base assumption of the study, that fantasy (or narrative transportation) is an independent trait. Second, the results call into question the effects of social desirability bias on self-reported empathy in the workplace. The survey made no secret that the research was related to the participant’s empathy at work, which could have prompted participants to answer more favourably to their perceived advantage. Alternatively, the difference in cognitive empathy recorded between the self-reported and task-based measures could also mean that participants’ self-perception as empathic leaders could be disassociated from reality. In order to gain deeper understanding on this point, future studies could compare self-reported measures and task-based measures to external perceptions of empathy like the participant’s level of empathy viewed by his or her co-workers. Similarly, a comparison could be drawn between narrative transportation ability and perceived empathy to see if the findings would manifest in practice.

The literature makes the case that business can benefit from greater empathy in leaders, both from a management competence as well as an ethical standpoint. The evidence from the present study suggests that those who share a greater affinity for fiction through narrative transportation appear to be more empathetic, albeit using task-based measures. All things being equal, greater leadership empathy may also translate into leaders behaving more
ethically (Pohling et al., 2016). However, the relationship between empathy and aesthetics may have further implications beyond the present study. For example, evidence by Kidd and Castano (2013) suggest that reading literary fiction could increase a respondent’s empathy directly after exposure. Thus, cognitive changes in empathy could also be brought about by the narrative transportation facilitated by the text in addition to the individual’s narrative transportation ability.

Also worth exploring are the effects of organisational stories on leader empathy. For example, Stephens and Kanov (2016) suggest that art and stories may provide unique insights into the subtle complexities and socio-emotional realities of work. Their point holds particular relevance to the stories of out-group members who are often overlooked within fact-based literature that shape the business narrative (Duncan, 2014). Literary fiction may offer leaders a means to improve intergroup empathy between stakeholders through simulated contact. It has been shown that an effective way to strengthen group relations through empathy is by creating contact between in-group and out-group members, which allows different stakeholders the opportunity to perceive the realities of each other (Hodson and Hewstone, 2013; Pettigrew et al., 2011). Since real world interventions such as these are not always practical, simulated contact through fiction may provide a more accessible avenue to achieve the same results (Vezzali et al., 2015).

**Limitations**

The present study is of course not without limitations. First of all, not all components of empathy were tested in the study. Affective empathy and emotional contagion were omitted to focus on cognitive empathy exclusively. The reason being that cognitive empathy serves as a catalyst for emotion management strategies and is therefore more immediately applicable within a work environment (Kaplan et al., 2014). Without first being able to perceive someone’s emotions, it would be difficult to develop an affective empathic
response. The second limitation involves the sample, which was predominantly made up of organisational members in the mining industry. The heterogeneity of the sample should caution one to infer that the same results would hold true in all samples and industries. Therefore, future research should consider whether the results could be replicated in other work environments.

Conclusion

Empathy is an important aspect of 21st century leadership, one that could translate to more ethical behaviour (Cojuharenco and Sguera, 2015; Pohling et al., 2016). The evidence of the present study suggests that there is a positive relationship between narrative transportation ability and task-based cognitive empathy in leaders. The literature has long theorised the role of aesthetics in business as its association with empathy. The empirical findings of the present study provide some evidence for these assertions. In addition to this, the study provides an empirical basis from which to further explore the role of aesthetics in business ethics, using empathy as a starting point. Considering the importance of empathy as a leadership skill, we must continue to explore new ways to generate empathy in leaders, even those that originate outside the traditional business narrative.

Ethical approval:

All procedures performed in the study involving human participants were in accordance with the ethical standards of the Gordon Institute of Business Science and with the 1964 Helsinki declaration and its later amendments (or comparable ethical standards).

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2 Expanded Literature Review

“The power of fiction is to create empathy. It lifts you away from your chair and stuffs you gently down inside someone else’s point of view. A newspaper could tell you that one hundred people, say, in an airplane, or in Israel, or in Iraq, have died today. And you can think to yourself, “How very sad,” then turn the page and see how the Wildcats fared. But a novel could take just one of those hundred lives and show you exactly how it felt to be that person rising from bed in the morning, watching the desert light on the tile of her doorway and on the curve of her daughter’s cheek. You could taste that person’s breakfast, and love her family, and sort through her worries as your own, and know that a death in that household will be the end of the only life that someone will ever have. As important as yours. As important as mine.” (Kingsolver, 2011)

2.1 The state of empathy in leadership.

Despite being considered an essential competence of 21st century leadership, empathy is found wanting in many that still subscribe to the idea that narcissism makes for good leaders (Holt & Marques, 2012). Empathy enables leaders to perceive, share and sympathise with the emotions of their stakeholders (Pohling, Bzdok, Eigenstetter, Stumpf, & Strobel, 2016), while a lack thereof has been shown to predict unethical behaviour (Brown, Sautter, Littvay, Sautter, & Bearnes, 2010). Considering the disasters that have stemmed from leaders behaving unethically in a way that disregards the emotional repercussions of their actions, leaders must learn to transcend the paradigm of the previous century, and act in a way that creates sustainable value for all stakeholders (Pohling et al., 2016).

When taking into account the importance of empathy in the workplace, it is strange that emotional competencies are still seen as second-rate skills within the business environment. Holt and Marques (2012) state that the so-called “softer” or emotionally driven skills come up short in the list of skills attributed to good leadership. During a three-year study, the researchers conducted a survey which asked business school students to rank the attributes most fitting of leadership. Of those listed, empathy, the only emotional driver on the list, scored the lowest among attributes including: intelligence; charisma; responsibility/commitment; vision; authenticity/integrity; courage; competence/experience and service.
What’s more, Vedel and Thomsen (2017) revealed that those attracted to management as a career shared a disproportionate affiliation for dark triad traits (narcissism, psychopathy, and Machiavellianism), which stand as an antithesis to empathy. The authors discovered that business students had a higher than average tendency to adopt these traits, and carry them into practice. If the tendency for leaders is to gravitate towards the dark triad as opposed to positive emotional competencies then there is a resounding need for the development of empathy in leaders.

A local example of the breakdown of leader follower empathy is the 2012 Marikana Massacre. In 2012 South Africa experienced the highest amount of strikes in the country’s history since the end of apartheid (McClenaghan, 2012). This breakdown in labour relations reached a bitter climax during a wage dispute between mine workers and the British multinational mining company Lonmin PLC in the mining town of Marikana. On the 16th August 2012, with the support of the mines, members of the South African Police Service opened fire and killed 34 mine workers and injuring 78 others adding to a total death toll of 44 people including security guards and policemen that lost their lives during the ordeal (Farlam, Tokota, & Hemraj, 2015).

During the Marikana incident the case of mine the workers had little representation within the media as news reports were largely shaped by a business narrative, which failed to empathise with the side of the striking labour force. Duncan (2014) found that business and mine management collectively accounted for 41% of quotes used in the news media during the incident. The main narrative represented in the media at the time depicted the protestors as sabotaging the economy through illegal strikes demanding unrealistic wages (Duncan, 2014). Quotes from individual mine workers sharing their sides of the story amounted to only 3% of those used in the media. This resulted in stories surrounding the incident maintaining a business bias that displayed little empathy for the plight of individual workers. For example, simple questions to the mineworkers like “what happened?” were ignored by the media. Instead, after the shooting had occurred, journalists focused their attention on a story alleging that mine workers had covered their bodies in “Muti” to protect themselves from gunfire before charging at the police. An alternative and unstated view was that miners had been conducting rituals as a means of attaining mental strength, showing how the media had shifted the narrative to a single story (Adichie, 2009) that silenced workers through “symbolic annihilation” (Duncan, 2014).

During the Marikana incident the media had the opportunity to educate leaders on the realities of their followers but the makeup of the industry meant that news reports
became an echo chamber, further enforcing the pro-business bias of the time (Duncan, 2014) without taking into account the plight all stakeholders. The legacy of apartheid had resulted in leaders and followers coming from very different worlds, with different stories, values and lived realities. White males from upper income brackets share a disproportionate amount of economic power in the South African mining industry (Department of Labour Republic of South Africa, 2016) and remain a coveted market segment by the media with many dedicated newspaper titles competing for their attention (Duncan, 2014). The imbalances in the media are reflective of the demographic makeup of South African business, particularly within the mining sector.

The stories told by newspapers during the Marikana incident reflect the disconnect between narratives representing the realities of white managers and black workers. By targeting a white-male readership, journalist had failed to bring the stories of the black working class mine workers to light. This made it difficult for business leaders to understand and empathise with workers from their perspective. Without a medium that offered leaders the opportunity to accurately recognise, identify and perceive the emotions of their alien stakeholders, leaders were unable to manage follower emotions from a negative to positive state. One can only imagine how things may have turned out if leaders were able to recognise and perceive the emotions of mine workers, and apply the correct emotion management strategy (Little, Gooty, & Williams, 2016).

Institutionally, not much has changed since the incident five years ago with South African labour-employer relations still ranked as being the worst in the word (Schwab & Sala-i-Martin, 2017). The same need for empathy and understanding between leaders and followers that existed in 2012 remain today. However, in order to foster greater empathy between parties through the media it would require leaders to be exposed to the stories and realities of their followers through an unbiased medium.

2.2 The multifaceted definition of empathy

Empathy has come to be understood as a multifaceted construct comprised of distinct components tied to different neural systems (Davis, 1983; Shamay-Tsoory, 2011; Zaki and Ochsner, 2012). Affective empathy, or empathic concern, refers to feelings of compassion or concern for other beings. When displaying affective empathy, there is a distinction between one’s own emotions and the emotions of another. Therefore affective empathy makes it possible to experience compassion and concern for someone without taking on their emotions as one’s own (Singer & Klimecki, 2014). When this self-other distinction becomes blurred we refer to the empathic state as
emotional contagion, or experience sharing, which describes the tendency to take on and share the emotions of another as if they were one’s own. Thus, through emotional contagion, organisational members have the opportunity to affectively shape (or be shaped by) the emotional displays of those around them (Elfenbein, 2007). Lastly, cognitive empathy, which is also referred to as perspective taking (Davis, 1980; Mead, 1934), metalising and theory of mind (Frith & Frith, 2005), describes a cognitive process whereby one perceives and identifies the emotional state of another without experiencing an emotional response. Simply put cognitive empathy refers to the ability to put oneself in another person’s shoes. Although there are some slight semantic differences between perspective taking and theory of mind (and how they are tested), these constructs can for the most part be treated as synonyms (Singer & Klimecki, 2014).

From Davis's (1983) point of view it is important to draw a distinction between cognitive empathy and the other dimensions of empathy. Where affective empathy includes a person’s ability to share feelings of sympathy or concern for others, cognitive empathy only includes the ability to perceive those feelings in others, not necessarily to respond empathically towards them. Thus, cognitive empathy skills can be used both as a way to genuinely empathise with someone or to pretend to empathise with someone as a form of manipulation. Thus, cognitive empathy could already be inherent in business leaders who already share a high degree of Machiavellianism. Irrespective of its usage, perspective taking remains a critical component within the empathic skillset. Without proper perspective taking it would be difficult to interpret how others are feeling and empathise with them. It is no surprise then that a great deal of the literature that deals with the concept of perspective taking and theory of mind was found relating to children with autism that lack the ability to empathise with others on a cognitive level (Slaughter, Imuta, Peterson, & Henry, 2015). What’s more, it is important to note that although multidimensional components of empathy are treated as different constructs they are often used in conjunction, leveraging off one another (Cojuharenco & Sguera, 2015).

2.3 Empathy in organisations

Many believe that when it comes to work, emotions are better left at home. The classical schools of economics teach us that individuals are rational actors. It comes as no surprise that leaders who subscribe to these theories will believe that the workplace should follow suit (McCabe, 2016). While there are those who believe that work is no place for irrational displays of grief, anger and excessive outbursts of joy, organisations remain full of emotions (Ashkanasy & Dorris, 2017; Barsade, 2002; Elfenbein, 2007;
Fineman, 1996). Organisations, by definition, are made up of groups of *people* that share a specific *purpose*. However, it is too often that the focus in an organisation is placed on its purpose and not the people who work there.

Humans are social beings that use emotional displays to communicate (Parkinson, 2005), coordinate collective efforts, create group cohesion, foster interpersonal bonds (Spoor & Kelly, 2004) and promote prosocial behaviour (Singer & Klimecki, 2014). This is no different in the workplace where emotions play a role in governing interpersonal interactions as well as the emotional climate of the organisation (Ashkanasy & Dorris, 2017; Elfenbein, 2007). Without emotion, workers in an organisation would simply not be able to function.

Leaders act as managers of emotions (Humphrey, Pollack, & Hawver, 2008; Pescosolido, 2002) and use empathy to identify the emotional states of their followers (Kaplan, Cortina, Ruark, LaPort, & Nicolaides, 2014; Mayer & Salovey, 1997). Like in any relationship, emotions play an important role in labour-employer relations (i.e. leader follower relations) (Ashkanasy & Dorris, 2017). By oversubscribing to rational views of organisations, leaders run the risk of neglecting the very stakeholders that drive the organisation’s purpose. Both the people and the purpose of an organisation should be taken into account, as one cannot survive without the other. Thus, the survival of an organisation is dependent on the emotions of those who work there. By better understanding the roles emotions play in organisations, leaders can learn not just to create better relationships by empathising with their followers, but also how this can be used to create better businesses too (Ashkanasy & Dorris, 2017; Farh, Seo, & Tesluk, 2012; Kaplan et al., 2014; Lindebaum & Jordan, 2014; Little et al., 2016). A leader’s ability to empathise and identify with the emotions of followers is therefore an important business skill to have (Kaplan et al., 2014).

2.4 The five level model of emotions in organisations

Emotions can be found in all parts of an organisation. Emotions are experienced by individuals and can have both positive and negative impacts on their work (Cropanzano, Dasborough, & Weiss, 2017). Emotions regulate relationships with customers, managers and peers (Goleman, Boyatzis, & McKee, 2013; Little et al., 2016). What’s more, emotions also occur within teams and help to determine group effectiveness (Farh et al., 2012). There are even emotions that are felt throughout an organisation that determine a company’s climate and culture (Ashkanasy & Härtel, 2014).
It’s clear to see how emotions can play a role in all parts of an organisation. However, this has also prompted different theories to be developed around individual areas where emotions may play a role. Ashkanasy and Dorris (2017) provided a summary of these theories, and how they relate to each other, through a multilevel model called *The Five Level Model of Emotions in Organisations*. Each level of the model relates to a different dimension of workplace emotions, from those that occur within people to the organisation-wide emotions that sit at the top of the pyramid and permeate throughout the company.

![Five Level Model of Emotions in Organisations](figure1.png)

*Figure 1. The Five Level Model of Emotions in Organisations (Ashkanasy & Dorris, 2017)*

**2.4.1 Level one. Within person**

At the base, the model starts with the affect or intra-personal emotions that occur within workers. Affect is a blanket term that includes both moods and emotions. Although these two concepts are related, emotions are considered to be fleeting responses while moods are more subtle and can persist over longer periods of time (Cropanzano et al., 2017).

The study of affect in the workplace is best described through active events theory (AET). First proposed by Weiss & Cropanzano (1996) AET characterises emotional states in the workplace as “*discrete reactions precipitated by specific events*” (p. 41). With AET the behaviour and performance of people at work are to a large extent determined by the affect experienced in reaction to events that can occur in the work environment at any given moment.
Affect is also derived from interactions occurring outside of the workplace (Kaplan et al., 2014). For example, if a worker was to experience an event that triggered a mood at home before coming to work, it is likely that that mood or emotion would persist by the time the worker clocked in. Even if this mood or emotion had nothing to do with work, it can still impact on the worker’s performance. It is therefore important for leadership to be able to identify and empathise with the moods and emotions of workers and respond to them appropriately. If mismanaged an employee’s emotions can have a resounding effect on personal, team-based as well as organisational performance (Ashkanasy & Dorris, 2017).

2.4.2 Level two. Between persons

The next level explores the differences in traits that govern emotions that occur between people in the workplace. Ashkanasy and Dorris (2017) proposed Emotional Intelligence (EI) as the dominant theory that relates best to this part of the model. Salovey and Mayer (1990) defined EI as “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them, and to use this information to guide one’s thinking and actions” (p. 189). Thus, EI relates to personal traits or competencies in dealing with the emotions of oneself or the emotions of others.

According to Goleman (2004) there are five traits that make up EI within a business context. The first is self-awareness or the ability to recognise and understand one’s own moods and emotions and how they can affect others. The next is self-regulation, or the ability to control one’s moods and emotions appropriately. This is followed by motivation, or having a passion for work that includes pursuing individual goals with energy and persistence. The fourth competency includes social skills like managing relationships, building networks, finding common ground with others and creating rapport. The final competency is empathy or the ability to understand and react appropriately to the emotions of others.

Although Goleman's (1995, 2004) contributions were instrumental in popularising EI, some of his more exorbitant claims were not without controversy. These caused EI to come under heavy criticism by the academic community (Ashkanasy & Dorris, 2017). However, EI persisted with author's like Ashkanasy and Daus (2005) who posited that EI is simply a valid individual difference like physical strength or cognitive ability. Their views were later validated through studies confirming EI's relationship to job performance (O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011) as well as determining positive outcomes in the work environment (Rezvani et al., 2016).
EI touches on a simple concept that it is not just rational cognitive abilities that play a role in management’s success but also emotional abilities. Leaders with high EI will have the potential to better manage their own emotions and that of their followers. However, having the potential to do something does not mean that it would necessarily translate into action. On this point EI falls short as a set of passive traits and leaves open a view advocating for emotional competencies to become more active through their execution (Kaplan et al., 2014). In other words, leaders should not just strive to become more emotionally intelligent but also more emotionally competent through their actions. This includes the ability to first perceive and empathise with the moods and emotions of their followers and then to act upon them through the correct emotional management strategy (Little et al., 2016).

2.4.3 Level three. Interpersonal interactions

Level three encompasses the interpersonal interactions between organisational members. Specifically, this level refers to how emotions are perceived and communicated between members through dyadic interactions. Based on theories like AET, Elfenbein (2007) provided a framework of how workplace emotions first occur within individuals and then extend to different organisational members.

The process begins on an interpersonal level when an individual worker is exposed to a stimulus that will elicit an emotional response. The worker then registers the meaning of the stimulus and experiences a state of feeling and psychological change. This feeling and shift in psychology then moves downstream to evoke changes in the worker’s attitude, behaviour, cognition, facial expression and other emotionally expressed cues.

Emotional responses that manifest as cues within individual workers then, in turn, serve as stimuli that evoke emotional responses in other organisational members with whom they come into contact with, effectively repeating the process. However, during each stage of the process emotional control responses can come into play including during stimulus introduction, registration, experience, expression and manifestation as emotional cues. These control responses could take the form of individual or group norms, as well as responses from co-workers and leaders that registered the worker’s emotional response. Leader responses can take the form of interpersonal emotional management strategies (IEMS) (Little et al., 2016).
Figure 2. Integrated Interpersonal Process Framework for Emotion in Organizations. (Elfenbein, 2007)

This model (figure 2) illustrates how emotions can spread between organisational members through interpersonal interactions. Furthermore it illustrates leadership’s ability to identify and regulate the emotions of workers through appropriate interventions. When leaders are able to empathise with their followers, and perceive how they feel, they then have the opportunity to control the follower’s emotional response and stop negative affects from spreading. Leaders can also use this an opportunity to create positive emotions in their followers by introducing positive cues into the system. Again, empathy becomes a crucial skill in the process. Without the
ability to perceive the emotions of their followers it would be difficult to manage them appropriately, if at all.

2.4.4 Level four. Interpersonal relations and groups

The way in which dyadic relationships occur and impact within a group is explored in level four of the five level model of emotions in organisations. Since organisations are structured around groups that contain leaders and followers, this level holds particular significance with regards to the relationships that occur between these parties. Leaders, through their agency, are placed in the unique position to regulate the emotions of workers within their teams. As previously shown, negative emotions that are not acted upon run the risk of spreading throughout the workforce. For example, if an employee were to become upset about a topic (AET), and this emotion was left unrecognised (EI) and unchecked (EIMS) by leadership, the employee’s frustration could spread by becoming emotional stimuli to different members in the workforce (Elfenbein, 2007). It is therefore important that leaders learn how to identify and manage the emotions of their followers (Little et al., 2016), which are at risk of spiraling out of control, as is sometimes the case in labour disputes.

Leader-Member Exchange (LMX) is a theory that seeks to explain the interpersonal relationships that occur between leaders and followers (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012). LMX maintains that leaders develop relationships with each of their followers through a series of quid pro quo social exchanges. The nature of these exchanges are characterised by shared characteristics, for example: perceived similarities, liking, trust and mutual obligation (Thomas, Martin, Epitropaki, Guillaume, & Lee, 2013).

After an LMX relationship has been formed, leaders then place followers within in-groups or out-groups based on the nature of their relationship. In-group members tend to receive special privileges and more of the leader’s attention as opposed to out-group members. Relationships with in-group members would therefore be of a higher quality, containing a greater sense of mutual obligation and reciprocation whereas out-group relationships would be of a lower quality, and transactional by nature. This will result in higher job satisfaction and organisational commitment for in-group members, with the converse being true of out-group members (Dulebohn et al., 2012).

Although LMX provides a sound theoretical framework from which to approach interpersonal relations in the workplace, the theory is not without criticism. Thomas et al. (2013) argued that within the LMX discourse the word “relationship” has been ill
defined and is contextualised simply as the terms of the relationships that exist between leaders and followers. LMX assumes that the terms governing a dyadic relationship are only transactional. This corresponds with the rational view of the workplace that would seek to frame relationships through economic terms like supply and demand. The LMX literature holds the potential to incorporate other theoretical concepts and methodologies concerned with relationships to provide new insights to the field (Thomas et al., 2013).

One such contribution was that of Little et al. (2016) who contended that emotion plays an important role in LMX exchanges, which, by their very nature, are ripe with emotion and emotionally-driven information. The authors stated that emotional expression and regulation through empathy are key building blocks for the development and maintenance of interpersonal relationships. Furthermore, because emotions are rich with communicative information, emotional expression can enhance communication and promote positive relationship exchanges.

2.4.5 Level five. Organisation wide.

The fifth and final level of emotions in organisations acts as an umbrella encompassing all areas of emotions in the workplace and is used to determine the organisation’s emotional climate. Ashkanasy & Härtel (2014) posit that positive emotions contribute to a healthy organisational climate that are created and sustained throughout the organisation. Individual emotions (AET), emotional competencies (EI), emotional exchange between members (Elfenbein, 2007) and group affect (LMX) can all impact and be modified by the emotional climate of the organisation. Simply put, if the majority of people are happy at work, this will translate into a positive organisational climate, with the adverse being true if the majority of people were angry and frustrated.

Therefore, leaders must not just be able to monitor and regulate their own emotions and the emotions of their team members, they must also be able to tap into the emotional climate of the entire organisation. This task cannot be done in isolation and requires leaders to apply emotional competencies on all five levels of the model, to become more empathically aware of the organisation throughout.

2.4.6 A cross sectional view of the five level model

There’s no denying the elegance of Ashkanasy and Dorris’s (2017) model, but emotions do not occur in a linear fashion. Henceforth, it would be too simplistic to conclude that an organisation’s emotions only move in a single directional line. The
authors agreed with this point and offered a cross-level view of the model to illustrate how each level is interconnected and can impact on multiple areas in an organisation.

Figure 3. A cross-level view of emotions at five levels of analysis (Ashkanasy & Dorris, 2017)

For example, when an emotional response changes within one area of an organisation, like a worker’s mood (level 1), and this was left unregulated (level 2) it could impact on the worker’s behaviour, job satisfaction and workplace relationships (level 3). This could then spread and impact on the moods, behaviours, and relationships of other workers to affect the group (level 4) and the emotional climate of the organisation (level 5). Alternatively, it’s been found that empathy for individual group members (level 2 & 3) could translate to the group as a whole (level 4 & 5) (Batson et al., 1997). Similarly, if leaders and followers remained emotionally distant and disconnected from each other (level 2, 3 & 4), it would feed back and impact on the follower’s emotional experience and performance at work (level 1) (Kaplan et al., 2014).

In short, while emotions span all levels of an organisation, from within people to the organisation as a whole, they remain interconnected. It is therefore possible to focus on one area of the Five Level Model of Emotions in Organisations (like the emotional relationship between leaders and followers) to create improvements in other areas too. As a result, leaders in particular have an important role to play in managing the emotions of followers in the workplace, since it can impact not just on follower affect and performance but the organisation as a whole. A leader with emotional intelligence, and the ability to empathise, could register a change in a follower’s behaviour that
resulted from an emotional response. Once registered the leader could step in and regulate the follower’s emotions through an appropriate interpersonal emotional management strategy (Little et al., 2016). As previously mentioned, this would also impact on the emotional wellbeing of the rest of the organisation.

2.5 Leaders as managers of emotions

Emotions can have both positive and negative effects in business and should therefore be managed the same as any other important business function (Little et al., 2016). Kaplan et al. (2014) lists empathy as an important leadership skill in managing workplace emotions. Transformational leaders, for example, use their ability to perceive follower emotions to manage and motivate performance (Rubin et al., 2005), an assertion that is in line with the emotional intelligence literature that has long argued for empathy as a leadership competence (Mayer and Salovey, 1997). However, where emotional intelligence has, for the most part, viewed empathy as a trait, Kaplan et al. (2014) suggest that empathy can be taught and developed like any other management skill.

The previous section explored how emotions relate to different parts of an organisation and how these are interconnected. Improving emotions in one area of an organisation can lead to improvements in another (Ashkanasy & Dorris, 2017). This section will focus on the role of leadership in managing emotions in the workplace. It will explore how leaders can use emotional knowledge and skills to foster positive outcomes in their followers through interpersonal emotion management strategies (IEMS).

Leaders exist through dyadic relationships with their followers. By virtue of their position, a leader’s first point of call in managing emotions in an organisation must begin with managing the emotions for their followers. However, in order to do so, leaders require certain knowledge and skills to manage emotions effectively. Employing the incorrect emotion management strategy risks harming the relationships with their followers (Little et al., 2016). Like a doctor, a leader must first learn how to diagnose a follower’s emotions before attempting a treatment. Therefore, a leader’s ability to identify a follower’s emotions, using cognitive empathy as a vehicle, forms the first step in applying the correct emotion management strategy.

2.5.1 Knowledge, skills, behaviours and outcomes in emotion management.

Emotions are core to many of the functions of leadership. Leaders are required to inspire followers, build and maintain interpersonal relationships, as well as develop and
regulate the emotional wellbeing of their teams and organisations. Kaplan et al. (2014) call this function leader emotion management, which they define as: “the processes and behaviours involved in assisting employees in regulating their emotional experiences so as to facilitate the attainment of organisational objectives.” Thus, leaders aren’t just managers of people, they are also managers of their emotions (Little et al., 2016).

Managing emotions require leaders to attain certain knowledge and skills that will help them with managing their own emotions as well as the emotions of their followers. To illustrate this point, Kaplan et al. (2014) developed the *Theoretical Model of Employee Emotion Management*, which depicts the transfer of emotional knowledge and skills into behaviours leading to positive organisational outcomes.

**Figure 4. Theoretical model for employee emotional management (Kaplan et al., 2014)**

Employee emotion management starts with the knowledge and skills possessed by the leader. This view is also consistent with the EI literature (Ashkanasy & Dorris, 2017; Goleman, 2004). However, Kaplan et al. (2014) argue that EI only relates to emotional knowledge and propose a more skills-based approach to managing emotions at work. Thus, leaders require both knowledge and skills in becoming emotionally competent managers. The skills listed in the model follow a chronological hierarchy of the emotion management strategy. First the leader recognises the follower’s emotion. Next the leader uses perspective taking or cognitive empathy to perceive the follower’s emotions from the follower’s point of view. Accurate perspective taking will allow the leader to identify the correct emotion that the follower is experiencing. However,
without proper cognitive empathy the leader runs the risk of perceiving the wrong emotion that the follower is experiencing (or no emotion at all), which may cause the leader to use the wrong emotion management strategy and hurt their relationship. For example, if a follower were to become upset about a workplace incident, and the leader were to perceive this emotion as anger instead of disappointment, it may cause the leader to scold instead of comfort the follower – further aggravating the issue. Once an emotion has been perceived a leader must therefore also be able to offer emotional support, while clearly presenting and communicating their responses to follower emotions.

Leaders use the knowledge and skills of emotions to drive effective emotion management behaviours (Kaplan et al., 2014). Little et al., (2016) elaborate by categorising emotion management strategies under situation modification, cognitive change, attention deployment and modulating an emotional response. Emotion management thus functions as an intervention in redirecting a follower’s emotions towards a more positive outcome (Elfenbein, 2007).

It’s important to reiterate that the potency of a leader’s emotion management behaviours will be predicted by the various knowledge and skill factors described earlier (Kaplan et al., 2014). In addition, contextual factors could also play a role like the situation, as well as the emotional attributes of followers and the leader’s own ability to manage his or her own intrapersonal emotions (Elfenbein, 2007; Kaplan et al., 2014).

Once an emotion management behaviour has been successfully employed by a leader, it can result in positive outcomes for both leader and follower (Kaplan et al., 2014). The first set of benefits include proximal outcomes that have an immediate impact to the follower’s affect as well as the relationship between leader and follower. In addition, apart from the more immediate proximate outcomes that can occur when an effective emotion management strategy has been employed, it can also lead to ultimate outcomes that can have a lasting positive emotional impact on the organisation.

The model illustrates how emotional knowledge and skills possessed by leaders can be properly used to create positive outcomes for followers and the organisation as a whole. This supports the view of Ashkanasy & Dorris (2017) that effective management of emotions can impact on many areas of an organisation. The model also supports that of Elfenbein, (2007) who suggested that a leader’s response can act as an intervention in regulating a follower’s emotion. However, by incorrectly perceiving the
follower’s emotion the leader runs the risk of applying the wrong emotion management strategy, which may lead to a breakdown instead of the betterment of their relationship (Little et al., 2016). Empathy (specifically cognitive empathy) is therefore a critical skill in managing follower emotions. Without the ability to identify with the emotional states of their followers leaders will be unable to employ the correct emotion management strategies. This paper therefore argues for greater empathy in leaders in order to better their relationships with followers.

2.6 Cognitive empathy as a leadership competence

Studies have indicated that cognitive empathy is related to greater pro-social behaviour (Declerck & Bogaert, 2008), group ability to perform a variety of tasks (Woolley, Chabris, Pentland, Hashmi, & Malone, 2010) and for understanding the ethical beliefs and intentions of others (Frith & Singer, 2008). Those with high degrees cognitive empathy have been shown to share a greater likelihood of becoming emergent leaders within groups, especially within emotionally charged environments (Kellett et al., 2002; Pescosolido, 2002; Walter et al., 2012). Furthermore, it has been found that leaders that display more cognitive empathy are more adept at building high-quality emotional relationships with their followers and peers (Cropanzano et al., 2017). In support of this, cognitive empathy has been shown to improve intergroup relationships, specifically between in-group and out-group members that occur as a result of shared or conflicting member characteristics. For example, Batson et al., (1997) presented participants with a video of a woman describing her struggles living with HIV. Half of the group was given specific instruction to pay attention to her emotions, while the other half were instructed to remain objective. Afterwards, those who were instructed to perceive the woman’s feelings showed more positive associations to HIV-sufferers than those that were asked to remain objective. Similar studies have reported congruent findings with regards to race (Dovidio et al., 2004) and the employee-supplier relationship dynamic, where it has been demonstrated that employees that partake in supplier perspective taking are more helpful towards suppliers (Parker & Axtell, 2001).

On an interpersonal level, evidence suggests that greater cognitive empathy may foster better relationships between leaders and followers through the use of interpersonal emotion management strategies. Little et al. (2012) demonstrated the existence of a relationship between perspective taking and the emotion management strategies used by leaders to regulate follower emotions. Positive and negative emotions that occur in individuals are expressed through verbal and non-verbal cues
In the case of the follower experiencing a negative emotion, the leader has the opportunity to intervene and regulate said emotion through an emotion management strategy, for example: demonstrating consideration and support, managing emotional interactions and relationships among co-workers, and interacting and communicating in an interpersonally tactful manner (Kaplan et al., 2014). What’s important to note is how cognitive empathy, i.e. the ability to perceive the follower’s emotional display, acts as an initial catalyst for interpersonal emotion management strategies.

With regards to business ethics, cognitive empathy has also been studied in context of ethical decision-making. Cojuharenco and Sguera (2015) found that cognitive empathy might contribute to ethical decision-making in time-starved situations. Their findings suggest that higher degrees of cognitive empathy reduce the likelihood that an organisational member would lie on behalf of their company provided they had enough time to contemplate their actions. Thus cognitive empathy may also play a role in making ethical judgments.

It is clear from the above findings that cognitive empathy holds many benefits to business from fostering pro-social behaviour, predicting leadership emergence, managing stakeholder relations and enforcing ethical decision-making. However, empathy as a whole remains undervalued as a leadership skill, especially within business. Considering the benefits of empathy and leadership’s lack thereof, there is a clear need to create more cognitive empathy in leaders. The next section will review how this may be achieved through aesthetics in the form of literary fiction.

### 2.7 Aesthetics as a source of organizational knowledge

“Perhaps one of the most important lessons about management that we might learn from novels is how these everyday ways of thinking and talking – of defining our identity as persons, of locating ourselves in a moral economy, of moving between a home life and office life, of being seen as rational – is historically bound in and contingent. Through reading good fiction we can open ourselves to view the origins of these familiar realities, and can also open ourselves to the possibility of changing them.” – (Boland, 1994)

A potential method through which empathy could be fostered in leaders may come from the realm of aesthetics. In 2010 a session was hosted at the World Economic Forum in an effort to understand the narratives that shape the values of leaders.
(Michaelson, 2015). Underlying this question is the base assumption that literature has the ability to shape the values of organisational members residing in the upper echelons of both private and public institutions.

There are some examples of literature having an impact on business leaders. For example, Geert Hofstede (Czarniawska-Joerges & De Monthoux, 1994) claimed to have gained insight by reading Multatuli’s (1860) *Max Havelaar* a novel describing the hierarchy structures of administrations in the Dutch East Indies, while Sherron Watkins’ analogy of the fall Enron to “the Emperor’s New Clothes” served as a method of understanding the events that transpired during the organisation’s downfall (Michaelson, 2005). Further examples include a speech by Australian Prime Minister Kevin Rudd (2008) that referred to the bankers of the 2008 financial crisis as “The Children of Gordon Gekko” a character from the Hollywood film *Wall Street* (Stone & Pressman, 1987); as well as *The Goal* by Eli Goldratt (2004), a novel that acts as a means of communicating the operations management theory of constraints.

Notwithstanding these examples, literary fiction isn't often paired with business. A simple trip to the bookstore will reveal a clear separation between the two areas. However, there is a school of theory that challenge the idea that reading novels and understanding organisations are mutually exclusive activities. For example, aesthetic mediums like literature have been shown to illuminate the nature of business (Czarniawska-Joerges & De Monthoux, 1994; Michaelson, 2014), enforce ethics (Freeman, Dunham, Fairchild, & Parmar, 2015; Koehn & Elm, 2014; Ladkin, 2015) and foster empathy (Nussbaum, 1995; Oatley, 2011).

In their book *Good Novels, Better Management: Reading Organizational Realities in Fiction* Czarniawska-Joerges & De Monthoux (1994) attempted to demonstrate how: “good novels can educate better managers”. They made the case that instead of seeking management knowledge from seminars, good novels through the use of reflection, interpretation and reality creation, can provide valuable insight into management and organisations. The book sought to reconcile the often-conflicting views of literature and business. Instead they aimed to find the shared meanings from joining these different realities together. The book also addressed the academic audience, who Czarniawska-Joerges & De Monthoux (1994) believed would be sceptical about finding value in fiction. They argued that novels could complement the knowledge claims made by more scientific research methodologies within the classroom. An example used was the case study method, but Czarniawska-Joerges & De Monthoux (1994) also went on further to state that novels, unlike case studies, offer
better understanding of social, economic and political processes at an abstract level, and thus can offer new sources of learning to readers (Domagalski & Jermier, 1997).

Randels (1998) proposed that our worldview narrative shape our accounts of business. The author segmented these worldview narratives according to genres applicable to business, specifically Homo Economicus (the narrative most commonly associated with business, sometimes called social Darwinism), libertarian, conservative, liberal, and religio-philosophical. Though he focussed mostly on the macro level, or the meta story shaping the business discourse, he contested that these have ramifications both for our understanding of business as well as providing a normative function.

De Cock (2000) discussed the discourse within the organisational literature that challenged the myth that reading novels and gaining an understanding of organisations are mutually exclusive. The author also made reference to Czarniawska-Joerges & De Monthoux (1994) whom suggest that the professional-scientific way of studying organisations provide a narrow perspective that creates a trained incapacity to see certain parts within the organisation. He offered fiction as an alternative to provide insight into these failings. Irrespective of discipline, be it researcher or scholar, the academic is first and foremost a writer, using literal devices to convey a message. Therefore, de Cock (2000) argued that there is no difference between narrative knowledge (stories) and scientific knowledge (facts) as both can only be represented through the narrative form. All scientific knowledge is therefore essentially bound by language. De Cock (2000) used the example of the business strategist as corporate storyteller, gaining organisational buy-in through the use of archetypes to describe a process of transformation. Rather than using processes, actions and effects the strategist must first craft a vision (a fiction of what could be) that must be delivered through narrative form. These organisational narratives include four story structures: epic, romantic, tragic and ironic in telling organisation stories. However, as the strategist shape his stories, what then of the organisation’s actors? Without attaining buy-in of the strategist (or narrator’s) new vision and values, actors will remain disconnected from the new narrative. It’s only through the acceptance of the story that change can happen. Does it matter then whether the story is delivered through a novel or PowerPoint Presentation when the adoption or rejection of values in both instances remains the outcome?

Stephens and Kanov (2016) argued for organisations and their members as sources of aesthetic narratives. The author’s stated that those working within organisations have a lot to learn from the stories of their peers. They compared these aesthetic narratives to
the ad-hoc training style stories that are often used in organisational storytelling. The authors contended that by treating the stories of organisational members with a sense of dignity that they can become an important resource for organisations to understand the feelings and experiences of their members. The authors argued that the stories that emanate from within an organisation should remain true to their source to maintain their aesthetic integrity. However, the problem was the way in which their stories were told, often coming across as disjointed and confusing. To solve this, organisational stories written by writers, they maintained, could safeguard the authenticity of the story while also imparting it with the aesthetic qualities that make for a truly impactful narrative. Literary fiction can provide the tool to strike this balance: telling stories about organisations, for organisation members, while at the same time maintaining the aesthetic qualities of the story.

2.8 The relationship between empathy and literature

In addition to acting as a source of organizational knowledge, some have proposed that literary fiction may serve as a way to understand ethics (Duska, 2014; Gerde & Foster, 2008; Michaelson, 2005) and to create empathy (Nussbaum, 1995; Oatley, 2011). In support of the latter, initial empirical evidence have come to the fore indicating that those who read aesthetically rich literary fiction tend to display more empathy than non-readers (Black & Barnes, 2015b; Mar, Oatley, Hirsh, dela Paz, & Peterson, 2006; Vezzali, Stathi, Giovannini, Capozza, & Trifiletti, 2015).

In recent years a handful of empirical studies have emerged indicating a relationship between empathy and aesthetically charged mediums like literary fiction (Johnson, 2012; Kidd & Castano, 2013; Mar et al., 2006). These studies suggest that literary fiction that is rich in aesthetics provides a form of abstraction and transportation into alternate realities (Johnson, 2012) where readers can assume the roles of different characters and learn what it would be like to think, feel and act as they do (Mar, Oatley, & Peterson, 2009). Therefore, when leaders engage with fiction they can gain an intimate understanding of a character’s emotions, as opposed to the real world, where emotional displays are often regulated through social norms, particularly within the workplace (Kelly & Barsade, 2001).

A study by Kidd and Castano (2013) published in Science, revealed a connection between reading literary fiction and improving a form of cognitive empathy called theory of mind. The study split volunteers into three groups: Literary-fiction readers, popular-fiction readers and non-readers. The group of literary-fiction readers were
assigned to read extracts from books honoured with the US National Book Award. The second group were asked to read extracts from a current bestsellers list while the third were assigned no books at all. The difference between the literature given to group one and two was the level of complexity of the characters. Each group was then assigned a series of theory of mind tests including the “Reading the Mind in the Eyes” test, an advanced theory of mind test that prompts the respondent to identify facially expressed emotions by only being presented with a picture of an actor’s eyes. Those in the group that had read the literary fiction showed a heightened ability to gauge facial expressions in the test, indicating higher levels of theory of mind (or cognitive empathy). The results were the same across all theory of mind tests conducted across the groups.

Similar studies by Bal and Veltkamp (2013) and Vezzali et al. (2015) also showed promising results in the connection between empathy and literary fiction. In a longitudinal study that included two different experiments Bal and Veltkamp (2013) found that transportation into fictional narratives influenced empathy over time whereas a lack of transportation was related to lower empathy scores. Vezzali et al. (2015) used readings from the popular book series Harry Potter as a means of creating empathy for out-group members in a study that ran in three groups including primary school, high school and university students. The theme of wizards as outsiders and the generational appeal of Harry Potter made the books a relevant choice for their study. As predicted, the study found that the students that read Harry Potter within the study showed greater empathy for out-group members including homosexuals, immigrants and people of different races.

In support of these studies, research in neuroscience has revealed that there exists a relationship between emotions experienced in real life and those experienced through aesthetics. Reading fiction and social cognition both make use of the brain’s default network, which simulates hypothetical scenes, spaces and mental states (Tamir, Bricker, Dodell-Feder, & Mitchell, 2015). In addition to this, it has been found that reading about an action and performing an action activate the same parts of the brain (Speer, Reynolds, Swallow, & Zacks, 2009), while engaging with fictional characters have been shown to evoke similar cognitive associations as engaging with people during real life interactions (Vezzali et al., 2015). These findings suggest that the simulation of social content in fiction may play a role in the neural cognition of readers. A possible explanation for this phenomenon could be attributed to mirror neurons, a type of brain cell that elicits neurological responses when primates perform actions or perceive others performing similar tasks (Rizzolatti & Craighero, 2004).
2.8.1 The role of aesthetics

Aesthetics deal with the question of beauty and artistic taste. Conceptually aesthetics can be traced back to the Greek word ‘Aisthesis’ used to describe the sensory experience of perception (Buck-Morss, 1992). Therefore, aesthetics can be expressed through different art forms with the ability to evoke an emotional response. One such a medium is literary fiction. At its core, literary fiction is a storytelling medium for storytelling animals (Gottschall, 2012). Humans use narratives to create connections and a sense of belonging (Gabriel & Young, 2011) as well as to share information and social knowledge (Mar & Oatley, 2008). Stories speak to the heart of humanity’s social fabric. They teach us about each other (Stephens & Kanov, 2016) as well as ourselves (Hakemulder, 2000). Mar and Oatley (2008) believe that this phenomenon occurs through a process of abstraction, whereby the narrative comes to serve as a proverbial flight simulator for social experiences (Djikic, Oatley, & Moldoveanu, 2013; Mar et al., 2006).

Great storytellers have the ability to tap into the fundamental parts of the human psyche and create narratives that address the human condition. Engaging with literary fiction offer readers the opportunity to step into the shoes of characters that share different motivations, intentions and beliefs than themselves (Nussbaum, 1995). In effect, when being transported into a narrative, a reader has the ability to perceive as many realities and viewpoints as there are characters in stories (James, 2013; Kaufman & Libby, 2012). The literary world thus serves as a moral laboratory (Hakemulder, 2000); a safe spaces to consider our actions and responses to imagined situations. Mar and Oatley (2008) counts three components that assist in the creation of empathy while reading: Identification with the character, transportation into the narrative and ‘Rasas’, an Indian concept that carries a similar meaning to ‘aisthesis’; which is, the experience of emotions through aesthetics.

2.8.2 Character identification

Humans engage with narratives through characters, most often protagonists (Özyürek & Trabasso, 1997; Zillmann, 1995). When a reader comes to identify with a character, a form of perspective taking occurs. Theory suggests that the narrative components of a text allow for the reader’s personality system to become temporarily unfrozen and substituted by the character’s (Djikic & Oatley, 2014). This grants the reader the opportunity to take on the role of the character and become more like the character in turn (Mar & Oatley, 2008). Kaufman and Libby (2012) refer to this transition as
experience taking whereby a character’s thoughts, emotions, goals, traits and actions are temporarily adopted. After having experienced the role of the character, the reader can come to identify and empathise with the character’s point of view. This newly created empathy can then be applied to similar characters and situations both inside and outside of the narrative – including within organisations.

2.8.3 Narrative Aesthetic Qualities

In order for a narrative to create empathy in its reader, Mar and Oatley (2008) suggest that it must also be of an aesthetic quality, a claim that has been backed up by some empirical evidence (Kidd & Castano, 2013). What sets aesthetically rich literary fiction apart from popular literature is that it does not provide the reader with readymade answers (Djikic & Oatley, 2014). When readers know that they are engaging in a literary text, they respond differently to it as opposed to reading a factual text, like a newspaper article (Halász, Short, & Varga, 2002). Aesthetics allow for indirect communication, which leave readers to contemplate the subtext and fill in the blanks on an emotional level. This is partly achieved through foregrounding, or the writer’s ability to highlight phrases in a text in order to make it more emotionally moving (Koopman, 2016; Miall & Kuiken, 1994).

2.8.4 Narrative Transportation

The third aspect that plays a role in creating empathy in readers is transportation (Green & Brock, 2000). Johnson (2012) refers to this process as the level to which a reader is mentally transported into a fictional world. Oatley (1999) goes further to define transportation as a form of cognitive simulation of the events and characters in a narrative, through which an empathic response occurs (Bal & Veltkamp, 2013). Transportation is thus reliant on both narrative and reader. In the case of the narrative, transportation is enforced by the story’s aesthetic qualities, including its themes, subtexts (Green, 2004) and foregrounding (Koopman, 2016). However, transportation is also reliant on the reader’s ability to become emotionally engaged in the story. For example, narrative transportation is more likely to occur when the reader comes to identify with its characters (Green, 2004).

Evidence suggests that people differ in their ability to become emotionally transported into the feelings and actions of fictional characters (Davis, 1983; Mar et al., 2006, 2009). Davis (1983), who was one of the first to offer a multidimensional view of empathy, called this phenomenon fantasy empathy. His findings suggest that fantasy empathy is a unique construct in addition to cognitive empathy, affective empathy and
emotional contagion. Mar et al. (2006) argued that fantasy empathy could also be considered a form of narrative transportation ability. Their study found that fantasy empathy (or narrative transportation ability) predicted higher degrees of task-based and self-reported measures of cognitive empathy. However, the study relied on a sample of psychology students, which, one could argue, would naturally be more inclined to display greater cognitive empathy. The question arises then as to whether the same results could be expected in a business environment where narcissism remains the leading paradigm (Holt & Marques, 2012).

2.9 The present study

The aforementioned studies have suggested that empathy may be improved by reading literary fiction (Kidd & Castano, 2013) outside of a business context. Literary fiction exposes readers to the inner thoughts and feelings of many types of characters, allowing them to perceive realities different from their own (Mar & Oatley, 2008). Thus, by better perceiving the realities of others, leaders could potentially learn how to better empathise with their followers and improve their shared relationships.

It is thus suggested that reading fiction can allow leaders to better perceive the emotional realities of their stakeholders, while at the same time gain insight into how own their actions and emotions could affect those around them. Engaging with aesthetics through fiction may therefore benefit business leaders by fostering greater empathy for others. This in turn may then lead to leaders becoming more adept at managing stakeholder emotions, as well as in ethical decision making related to stakeholder outcomes, taking into account the emotional impact of their actions within their organisation and beyond.

For the past five years South Africa has consistently ranked last place in cooperation in labour-employer relations (Schwab & Sala-i-Martin, 2013, 2014, 2015, 2016, 2017). Since the events that transpired at Marikana, this has made an impact on the country’s competitiveness pertaining to its labour market efficiency. As the country continues to struggle with labour-employer relations, the study hopes to provide a potential avenue to solving a business problem with significance to the country. Therefore, the study will be conducted within the mining industry where leader follower relations still remain a contentious issue in the wake of the events that transpired at Marikana.

Fiction’s role as a source of empathy still remains largely theoretical. Empirical studies are in their infancy and have yet to be tested in a leadership context. Thus, the present
study seeks to test the relationship between fiction and empathy in leaders as a means towards promoting greater ethical competence.
3 Expanded Methodology

3.1 Overview of research methodology

The aim of the present study was to test the relationship between narrative transportation ability and two theoretical constructs of cognitive empathy. Since the literature suggests that cognitive empathy is created in readers when narrative transportation occurs (Johnson, 2012), the present study set out to determine whether narrative transportation ability (IV₁) would predict cognitive empathy in leaders. Two measures of cognitive empathy were used in the study including a task-based measure of cognitive empathy (DV₁) that measured theory of mind, as well as a self-reported measure of cognitive empathy (DV₂) that measured perspective taking. These measures were adapted and made applicable to a leadership context (Liden, Wu, Cao, & Wayne, 2015). The goal of the study was to explore a potential avenue organisation members could exploit to become more empathetic leaders and, ultimately, ethical members of their organisations.

3.2 Research Design

In order to test the relationship between narrative transportation ability and cognitive empathy, a statistical test was conducted measuring these variables in organisation members within the mining industry. Thus the study relied on a positivist research philosophy that measured variables within controlled conditions (Saunders & Lewis, 2012). This included an experiment that collected data by means of an electronic survey that was later analysed through a hierarchal multiple regression (Tabachnick, Fidell, & Osterlind, 2012) to statistically control for variables which may have had an impact on results but could not be controlled for within the research design itself i.e. race, English as a first or second language and gender.

Two components of cognitive empathy discussed in the literature were tested including theory of mind (DV₁) (Baron-Cohen, Wheelwright, Hill, Raste, & Plumb, 2001) and perspective taking (DV₂) (Davis, 1980, 1983). Both tests were conducted using tried and tested methodologies which had already been validated within the academic literature, including the “Reading the Mind in the Eyes” test (Baron-Cohen et al., 2001), as well as the Interpersonal Relativity Index (Davis, 1980). Fantasy empathy (Davis, 1980) was used as a measure of narrative transportation ability (IV₁) in line with similar studies that used the same methodology in outside of a work context (Mar et al., 2006, 2009; Nomura & Akai, 2012). Affective empathy and emotional contagion were not
included within the research design as these constructs were under-represented in the literature as leadership functions.

For the sake of consistency, the methodologies were replicated as closely as possible in order to draw a proper comparison between the present study in the work environment and those conducted previously outside of work a context. The study also functioned as an answer to a call for further research of the phenomenon (Panero et al., 2016).

3.3 Population and unit of analysis

The population of the study included individuals working within and related to the South African mining industry either as employees or suppliers. Mining accounts for 8% of the South African GDP and employs over 490,000 people in the workforce (Lehohla, 2015). This, in conjunction with recent labour unrests between workers and management like the Marikana incident also allowed for practical application of the findings. Furthermore, as working individuals from engineering backgrounds the sample could be contrasted against (Mar et al., 2006) that used relied on psychology students as their core group. No distinction between sub-categories of mining was drawn.

3.4 Data gathering

Data was obtained through an electronic survey distributed through an email database of contacts within the South African mining industry. A request was put to mining companies within South Africa for access to their email databases in order to send the survey to relevant employees. After multiple attempts, none of the HR managers contacted within the industry provided access to their databases. This lack of responses prompted the purchase of an existing third-party database containing contact details of people working within the industry. Access to the database was obtained through the payment of 50 South African Rand per response (roughly $3.70, at the time of writing). This was funded independently by the researcher. The researcher did not share a relationship to the mining industry. Thus there was no conflict of interest between the researcher, participating individuals or participating organisations.

To the researchers knowledge, there is no concise sampling frame available for the population. However, estimates of the populations demographics do exist within the public record (Department of Labour Relations of South Africa, 2016). Yet, these only
related to upper management and would exclude some leaders from the sample. Therefore, self-selection sampling was used to select individuals operating in the industry (Saunders & Lewis, 2012) via emails sent to the named database. It is important to note that this sampling method came with self-selection bias that could have impacted on results.

After choosing to participate in the study, a brief explanation of the study was provided to each participant before granting his or her informed consent to participate in the study electronically. No names, contact details, dates of birth, identity numbers or other personal details were recorded. Respondents were not compensated for completing the survey, but were given the opportunity to view their task-based cognitive empathy score after completion (see Appendix). However, respondents were incentivised to partake by being given the opportunity to withdraw from the study by emailing the researcher the time at which they submitted their response as an identifier. No such requests were received.

After granting their permission to partake in the study, the respondent completed a 15-minute long online survey on “empathy at work”. The survey included an six statements measured on a five-point Likert scale from the adapted version of the Interpersonal Reactivity Index fantasy subscale (IRI-FS) to measure narrative transportation ability (Davis, 1980, 1983), seven statements from the Interpersonal Reactivity Index perspective taking subscale (IRI-PT) to measure self-reported cognitive empathy, and 36 questions from the Reading the Mind in the Eyes test (RMET), an advanced theory of mind test to measure task-based cognitive empathy (Baron-Cohen et al., 1997; Baron-Cohen et al., 2001). The survey concluded with self-reported questions related to aggregate data including: age, gender, race, qualification, industry, management level, size of team, country of origin and fluency in English. The respondents were not asked to provide their names, email addresses or ID numbers to maintain confidentiality. Since no participants chose to withdraw from the study, confidentiality of those who chose to participate was upheld.

Responses were coded as follows:

<table>
<thead>
<tr>
<th>Industry</th>
<th>Gender</th>
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<tbody>
<tr>
<td>Mining</td>
<td>Male</td>
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<tr>
<td>Non-mining</td>
<td>Female</td>
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<tr>
<td>Race</td>
<td>Other</td>
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<tr>
<td>Black</td>
<td>South Africa</td>
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<tr>
<td>White</td>
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</tr>
</tbody>
</table>
3.5 Participants

Before the final study took place a pilot study was conducted with 45 respondents to test for the validity of the constructs as well as to identify any errors within the survey instrument. The pilot study revealed some errors in the survey, i.e. spelling and grammar errors. These errors were subsequently corrected. Responses from the pilot study were removed from the final analysis.

The final sample included 227 respondents, excluding 45 responses, which formed part of an initial pilot study. The sample was made up of 157 men and 70 women from South Africa (69.16% = male, 30.84% = female). The average ages were: male, $M_{age} = 46.8$ and female, $M_{age} = 40.7$. Of the respondents, 172 identified as working in the mining industry while the remaining 55 were grouped as working in industries unrelated to mining e.g. consulting or logistics (75.77% = mining, 24.23% = non-mining). Furthermore, 187 respondents identified as managers of teams while 40 did not share any management responsibilities (82.38% = manager, 17.62% = non-managers). 88 respondents listed English as their first language with 139 second language speakers (38.77% = English first language, 61.23% = English second language). The average years of English fluency was 33.7 years. 196 Respondents reported some of tertiary education (86.34% = tertiary education, 13.66% = non-tertiary education). Racial demographics were as follows: white = 161, black = 45, other = 21 (70.93% = white, 19.82% = black, 9.25% = other).
3.6 Measurement

3.6.1 The “Reading the Mind in the Eyes” test

The “Reading the Mind in the Eyes” test (RMET) was used to measure task-based cognitive empathy ($DV_1$). The RMET is an advanced cognitive empathy or theory of mind test where respondents are presented with 36 still photographs of the eye regions of different actors (Baron-Cohen et al., 2001). During the test, respondents are tasked with identifying the mental state of an actor using four possible emotional descriptors. The test has been used extensively as a measure of empathy and social cognition (Black and Barnes, 2015a; Kidd and Castano, 2013; Mar et al, 2006; Mar et al., 2009). Thus, the RMET is an objective task based measure of cognitive empathy as opposed to the IRI-PT, which relies on self-reports and is therefore vulnerable to the social desirability bias inherent in self-reported measures. RMET scores have also been positively correlated to exposure to literary fiction in other empirical studies (Kidd and Castano, 2013; Mar et al., 2006, 2009).

3.6.2 The Interpersonal Reactivity Index

The Interpersonal Reactivity Index is a self-reported measure of the multi-dimensional components of empathy (Davis, 1980, 1983) and was used to measure self-reported cognitive empathy ($DV_2$) and narrative transportation ability ($IV_1$). The index contains four subscales: perspective taking (cognitive empathy), empathic concern (affective empathy), personal distress (emotional contagion) and fantasy (narrative transportation ability). Each subscale contains seven statements. Examples of statements include “I sometimes try to understand my friends better by imagining how things look from their perspective” (perspective taking); “I often have tender, concerned feelings for people less fortunate than me” (empathic concern); “I sometimes feel helpless when I am in the middle of a very emotional situation” (personal distress); and “When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me” (fantasy). The respondents indicated the degree to which they agreed with the statements on a five-point Likert scale. The present study focused on the perspective taking subscale (IRI-PT) as $DV_2$ measuring self-reported cognitive empathy and the fantasy empathy subscale (IRI-FS) as $IV_1$ measuring the independent variable of narrative transportation (Hall and Bracken, 2011; Mar et al., 2006, 2009).

Statements within the IRI-PT were modified from the original to express work related statements that take into account the hierarchical and dyadic nature of leader-follower workplace relationships (Liden et al., 2015), e.g. “I sometimes try to understand my
friends better by imagining how things look from their perspective” to “I sometimes try to understand my team members better by imagining how things look from their perspective”.

Six out of the seven statements listed in the IRI-FS directly describe the participant’s ability to be transported into a fictional narrative. These are presented in Table 1.

**Table 1. Items of the Interpersonal Reactivity Index Fantasy Subscale**

<table>
<thead>
<tr>
<th>Number</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I daydream and fantasize, with some regularity, about things that might happen to me.</td>
</tr>
<tr>
<td>2</td>
<td>I really get involved with the feelings of the characters in a novel.</td>
</tr>
<tr>
<td>3</td>
<td>I am usually objective when I watch a movie or play, and I don’t often get completely caught up in it.*</td>
</tr>
<tr>
<td>4</td>
<td>Becoming extremely involved in a good book or movie is somewhat rare for me.*</td>
</tr>
<tr>
<td>5</td>
<td>After seeing a play or movie, I have felt as though I were one of the characters.</td>
</tr>
<tr>
<td>6</td>
<td>When I watch a good movie, I can very easily put myself in the place of a leading character.</td>
</tr>
<tr>
<td>7</td>
<td>When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.</td>
</tr>
</tbody>
</table>

* Reverse coded. ^ Item 1 was removed from the analysis. (Mar et al., 2006, 2009)

All of the items, except for: “I daydream and fantasize, with some regularity, about things that might happen to me” relate to narrative transportation. As a result, statement was omitted leaving the remaining six questions as the measure of narrative transportation ability.

### 3.6.3 Statistical analysis

Two hierarchal multiple regressions were conducted to measure the relationship between $IV_1$ (IRI-FS) and $DV_{1,2}$ (IRI-PT and RMET), while controlling statistically for other independent variables that could impact on results (Race, English as a first or second language and Gender).

The hierarchal multiple regression (or sequential multiple regression) is a statistical test used to measure the relationship between a dependent variable and independent variables (Tabachnick et al., 2012). What sets the hierarchal multiple regression apart
from the standard multiple regression is its ability to statistically control for certain independent variables that could impact on the dependent variable. While conducting a hierarchal multiple regression, independent variables are entered into the equation in an order specified by the researcher based on theoretical considerations. This order sets the importance of how the variables will be treated within the equation, with variables of more importance entered at later steps. Lower tiered variables (like nuisance variables) are entered first as an initial dataset. Next, the major set including high-priority variables, is evaluated for what it adds to the prediction in addition to the lesser set (Tabachnick et al., 2012). This allows the researchers to measure the independent variable being studied while statistically controlling for other independent variables that may be adding noise to the results. It is important to note that since data can be manipulated through the hierarchal multiple regression, the control and importance of variables should be based on theoretical underpinnings.

Multiple regressions are vulnerable to certain practical issues. The test is sensitive to outliers so care must be taken to remove cases that may impact on results (Pallant, 2013; Tabachnick et al., 2012). Routine analysis procedures must also be used to check for basis assumptions like normality, linearity, and homoscedasticity. As a result preliminary analyses were conducted to ensure that normality, linearity, multicollinearity and homoscedasticity were maintained. Seven outliers were identified, one of which was marked as extreme. However, due to the size of the sample \( n = 227 \) some outliers could be expected within the sample. Only the extreme case was removed in order to maintain the integrity of the analysis the (Tabachnick et al., 2012) leaving a final sample size of \( n = 226 \).

3.6.4 Control variables

The IRI and the RMET operate best when certain variables are controlled for. Females tend to outperform males on the RMET, IRI-PT and IRI-FS (Baron-Cohen et al., 2001; Davis, 1980), therefore gender was statistically removed from the analysis. Cultural differences also play a role on RMET scores as the original English version of the RMET only makes use of Caucasian actors impacting on the consistency of results when measured across cultures (Adams et al., 2010). Lastly, language was controlled for with regards to whether the participant was a first or second language English speaker. Non-native English speakers tend to perform worse on the English version of the RMET than those that speak English at home (Prevost et al., 2014).
### 3.7 Limitations

The present study is of course not without limitations. First of all not all components of empathy were tested in the study. Affective empathy and emotional contagion were omitted to focus on cognitive empathy exclusively. The reason being that cognitive empathy serves as a catalyst for emotion management strategies and is therefore more immediately applicable within a work environment (Kaplan et al., 2014). Without first being able to perceive someone’s emotions it would be difficult to develop an affective empathic response. The second limitation involves the sample, which was predominantly made up of organisational members in the mining industry. The heterogeneity of the sample should caution one to infer that the same results would hold true in all industries. Thirdly, cognitive empathy forms only one aspect of empathy (Davis, 1980; Zaki & Ochsner, 2012). Even if the hypothesis is proven true it does not mean that literary fiction will necessarily convert into affective empathy or emotional contagion.
4 Expanded Results

4.1 Scale reliabilities

Table 2 presents descriptive statistics, reliability measures and internal consistencies for each of the three scales. Results were obtained through SPSS version 24.

Table 2

Descriptive Statistics and Inter-Scale Correlations of the RMET, IRI-PT and IRI-FS in a Sample of Organisational Members.

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. RMET (task-based cognitive empathy)</td>
<td>24.33</td>
<td>4.53</td>
<td>(0.65)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. IRI-PT (self-reported cognitive empathy)</td>
<td>19.14</td>
<td>4.22</td>
<td>-0.44</td>
<td>(0.70)</td>
<td></td>
</tr>
<tr>
<td>3. IRI-FS (narrative transportation ability)</td>
<td>14.13</td>
<td>5.20</td>
<td>0.171*</td>
<td>0.05</td>
<td>(0.81)</td>
</tr>
</tbody>
</table>

Note: N = 226. The IRI subscales ranged from one (does not describe me well) to five (describes me very well). The modified IRI-FS included six questions (scored between 0 – 24), as opposed to the original scale’s seven questions (scored between 0 – 28). In comparison, the modified IRI-PT is made up of seven questions (scored between 0 – 28). Reliabilities are presented on the diagonal of the correlation matrix and bivariate correlations are presented in the lower triangle. *p < .01 two-tailed

The internal consistency of the RMET is modest (α = .65), an acceptable measure considering the limits of the internal consistency found in the original test as well as the variability of RMET scores across populations (Prevost et al., 2014). Internal consistency for the original IRI-PT ranged between .71 and .75, depending on gender (Davis, 1980). Reliabilities of the modified version was α = .70 and remains in line with the original version. The modified IRI-FS revealed an internal consistency α = .81 in the present study. This measure is slightly higher than the original with measures ranging from .78 to .79, depending on gender (Davis, 1980).

4.2 Raw correlations

Scores of the RMET and IRI-PT scales were not correlated, indicating a difference between task-based cognitive empathy ability and self-reported cognitive empathy in the workplace. Self-reported narrative transportation ability, as measured by the modified IRI-FS, correlated with the RMET, p < .01 indicating a relationship between measures. However, the modified IRI-FS did not correlated with the IRI-PT. This
4.3 Regression

After testing for measures of reliability and raw correlations, two hierarchal multiple regressions were run to determine the relationship between narrative transportation abilities (IRI-FS) and task-based cognitive empathy (RMET) as well as narrative transportation (IRI-FS) and self-reported cognitive empathy at work (IRI-PT). Both tests statistically controlled for the following variables based on previously mentioned theoretical assumptions: race, English as a first or second language, and gender. The sample tested was $n = 226$.

4.3.1 H1. Transportation (IRI-FS) and task-based empathy (RMET)

Results of the hierarchal multiple regression are reported in Table 3.

### Table 3

*Hierarchal Multiple Regression Analyses Predicting Task-Based Empathy (RMET) From Narrative Transportation Ability (IRI-FS)*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$\Delta R^2$</th>
<th>B</th>
<th>SE</th>
<th>$\beta$</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td>.14**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>-2.03</td>
<td>0.43</td>
<td>.29**</td>
<td>-4.70</td>
<td></td>
</tr>
<tr>
<td>English 1st/2nd language</td>
<td>1.99</td>
<td>0.58</td>
<td>.22*</td>
<td>-3.46</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>1.12</td>
<td>0.61</td>
<td>.12</td>
<td>1.85</td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td>.16*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>-2.10</td>
<td>0.43</td>
<td>.43**</td>
<td>-4.94</td>
<td></td>
</tr>
<tr>
<td>English 1st/2nd language</td>
<td>-2.13</td>
<td>0.57</td>
<td>.57*</td>
<td>-3.75</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.72</td>
<td>0.61</td>
<td>.61</td>
<td>1.17</td>
<td></td>
</tr>
<tr>
<td>Narrative Transportation Ability</td>
<td>.16</td>
<td>0.06</td>
<td>.06*</td>
<td>2.93</td>
<td></td>
</tr>
</tbody>
</table>
Race, English as a first or second language and Gender were entered at Step 1, explaining 14.7% of variance in task-based cognitive empathy (RMET). After entry of narrative transportation (IRI-FS) at Step 2, the total variance explained by the model was 17.9% $F(4, 221) = 12.058$, $p < .001$. Together, the four variables explained an additional 3% of the variance in task-based cognitive empathy, $R^2$ change .03, $F$ change $(1, 221) = 8.590$, $p = .004$. Three measures were statistically significant in the final model: Race, first or second language English and narrative transportation ability with race recording the highest beta value ($beta = .30$, $p < .001$) followed by English as a first or second language ($beta = .23$, $p < .001$) and narrative transportation ($beta = .18$, $p = .004$)

### 4.3.2 H2. Transportation (IRI-FS) and self-reported empathy (IRI-PT)

Results of the hierarchal multiple regression are reported in Table 4

**Table 4**

Hierarchical Multiple Regression Analyses Predicting Self-Reported Cognitive Empathy (IRIPT) From Narrative Transportation Ability (IRI-FS)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$\Delta R^2$</th>
<th>B</th>
<th>SE</th>
<th>$\beta$</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>.003</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td>0.37</td>
<td>0.43</td>
<td>0.58</td>
<td>0.86</td>
</tr>
<tr>
<td>English 1$^{st}$/2$^{nd}$ language</td>
<td></td>
<td>0.74</td>
<td>0.58</td>
<td>0.09</td>
<td>1.29</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td>-0.46</td>
<td>0.61</td>
<td>-0.05</td>
<td>-0.76</td>
</tr>
<tr>
<td>Step 2</td>
<td>.003</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td>0.35</td>
<td>0.43</td>
<td>0.054</td>
<td>0.80</td>
</tr>
<tr>
<td>English 1$^{st}$/2$^{nd}$ language</td>
<td></td>
<td>0.70</td>
<td>0.58</td>
<td>0.08</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>--------</td>
<td>------</td>
<td>-----</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.58</td>
<td>0.63</td>
<td>.06</td>
<td>-0.93</td>
<td></td>
</tr>
<tr>
<td>Narrative Transportation Ability</td>
<td>0.05</td>
<td>0.06</td>
<td>.06</td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td>Total $R^2$</td>
<td>.006</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$n$</td>
<td>226</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. * $p < 0.05$. ** $p < 0.001$.*

The hierarchal multiple regression was repeated substituting the RMET for IRI-PT, controlling for the same variables as before (race, first or second language English and gender). Race, first or second language English and gender were entered at Step 1, explaining 1.4% of variance in self-reported cognitive empathy (IRI-PT). After entry of narrative transportation ability (IRI-FS) at Step 2, the total variance explained by the model as a whole was 1.17% $F (4, 221) = .952, p = .435$. Thus the model failed to reject the null hypothesis.
5 References


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6 Appendix

6.1 Survey Instrument

Section 1: Consent

I am conducting research on empathy in business and whether a leader's ability to empathise in the workplace can be created through reading. You will be asked to complete an accompanying survey. This will help us understand empathy in the workplace, and should take no more than 20 minutes of your time. At the end of the survey your empathy score will be presented and how you compared to the global average. Your participation is voluntary and you can withdraw at any time without penalty. Participation is anonymous and all data will be kept confidential. By completing the survey, you indicate that you voluntarily participate in this research. If you have any concerns, please contact my supervisor or me. Our details are provided below.

Researcher name: Petrus Engelbrecht

Email: 04319052@mygibs.co.za

Phone: +27 83 603 1482

Research supervisor: Dr. Gavin Price

Email: priceg@gibs.co.za

Phone: +27 11 771 4000

Section 2: Instrument 1

*Interpersonal Reactivity Index (perspective taking sub-scale)* (Davis, 1980)

The following statements inquire about your thoughts and feelings in a variety of situations. For each item, please indicate how well it describes you by choosing the appropriate number from 1 (does not describe me well) to 5 (describes me very well). Read each item carefully before responding and answer as honestly as you can.
<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>I sometimes find it difficult to see things from the point of view of my team members.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td><strong>I try to look at everybody in my team's side of a disagreement before I make a decision.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><strong>I sometimes try to understand my team members better by imagining how things look from their perspective.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td><strong>If I'm sure I'm right about something, I don't waste much time listening to other arguments provided by people on my team.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td><strong>I believe that there are two sides to every question and try to look at them both.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td><strong>When I'm upset at someone in my team, I usually try to &quot;put myself in his/her shoes&quot; for a while.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td><strong>Before criticising a member of my team, I try to imagine how I would feel if I were in his/her place.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section 4: Instrument 2

*Reading the mind in the eyes test.* (Baron-Cohen et al., 2001)

In this section you will be presented with different pictures of people’s eyes. For each set of eyes, please choose which word best describes what the person is thinking or feeling. You may feel that more than one word is applicable but please choose just one word, the word you consider to be most suitable. Before making your choice, make sure that you have read all 4 words. You should try to do the task as quickly as possible but you will not be timed.

<table>
<thead>
<tr>
<th>Question 1:</th>
<th>Playful</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Comforting</td>
</tr>
<tr>
<td></td>
<td>Irritated</td>
</tr>
<tr>
<td></td>
<td>Bored</td>
</tr>
<tr>
<td><em>The correct answer is playful.</em></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 2:</th>
<th>Terrified</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Upset</td>
</tr>
<tr>
<td></td>
<td>Arrogant</td>
</tr>
<tr>
<td></td>
<td>Annoyed</td>
</tr>
<tr>
<td><em>The correct answer is upset.</em></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 3:</th>
<th>Joking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flustered</td>
</tr>
<tr>
<td></td>
<td>Desire</td>
</tr>
<tr>
<td></td>
<td>Convinced</td>
</tr>
<tr>
<td><em>The correct answer is desire.</em></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 4:</th>
<th></th>
</tr>
</thead>
</table>
**Question 5:**

<table>
<thead>
<tr>
<th>Joking</th>
<th>Amused</th>
<th>Relaxed</th>
<th>*The correct answer is insisting.</th>
</tr>
</thead>
</table>

**Question 6:**

<table>
<thead>
<tr>
<th>Irritated</th>
<th>Sarcastic</th>
<th>Worried</th>
<th>Friendly</th>
<th>*The correct answer is worried.</th>
</tr>
</thead>
</table>

**Question 7:**

<table>
<thead>
<tr>
<th>Aghast</th>
<th>Fantasising</th>
<th>Impatient</th>
<th>Alarmed</th>
<th>*The correct answer is fantasising.</th>
</tr>
</thead>
</table>

**Question 8:**

<table>
<thead>
<tr>
<th>Apologetic</th>
<th>Friendly</th>
<th>Uneasy</th>
<th>Dispirited</th>
<th>*The correct answer is uneasy.</th>
</tr>
</thead>
</table>
| Question 9: | Despondent  
Relieved  
Shy  
Excited  
*The correct answer is despondent. |
|---|---|
| Question 10: | Annoyed  
Hostile  
Horrified  
Preoccupied  
*The correct answer is preoccupied. |
| Question 11: | Cautious  
Insisting  
Bored  
Aghast  
*The correct answer is cautious. |
| Question 12: | Terrified  
Amused  
Regretful  
Flirtatious  
*The correct answer is regretful. |
| Question 13: | Decisive  
Anticipating  
Threatening  
Shy |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The correct answer is anticipating.</em></td>
<td></td>
</tr>
</tbody>
</table>

| Question 14: | Irritated  
Disappointed  
Depressed  
Accusing |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The correct answer is accusing.</em></td>
<td></td>
</tr>
</tbody>
</table>

| Question 15: | Contemplative  
Flustered  
Encouraging  
Amused |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The correct answer is contemplative.</em></td>
<td></td>
</tr>
</tbody>
</table>

| Question 16: | Indifferent  
Embarrassed  
Skeptical  
Dispirited |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The correct answer is skeptical.</em></td>
<td></td>
</tr>
<tr>
<td>Question 17:</td>
<td>Irritated</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------</td>
</tr>
<tr>
<td>*The correct answer is thoughtful.</td>
<td></td>
</tr>
<tr>
<td>Question 17:</td>
<td>Thoughtful</td>
</tr>
<tr>
<td>Encouraging</td>
<td></td>
</tr>
<tr>
<td>Sympathetic</td>
<td></td>
</tr>
<tr>
<td>Question 18:</td>
<td>Doubtful</td>
</tr>
<tr>
<td>Affectionate</td>
<td></td>
</tr>
<tr>
<td>Playful</td>
<td></td>
</tr>
<tr>
<td>Aghast</td>
<td></td>
</tr>
<tr>
<td>*The correct answer is doubtful.</td>
<td></td>
</tr>
<tr>
<td>Question 18:</td>
<td>Decisive</td>
</tr>
<tr>
<td>Amused</td>
<td></td>
</tr>
<tr>
<td>Aghast</td>
<td></td>
</tr>
<tr>
<td>Bored</td>
<td></td>
</tr>
<tr>
<td>*The correct answer is decisive.</td>
<td></td>
</tr>
<tr>
<td>Question 19:</td>
<td>Arrogant</td>
</tr>
<tr>
<td>Grateful</td>
<td></td>
</tr>
<tr>
<td>Sarcastic</td>
<td></td>
</tr>
<tr>
<td><strong>Tentative</strong></td>
<td></td>
</tr>
<tr>
<td>*The correct answer is tentative.</td>
<td></td>
</tr>
<tr>
<td>Question 20:</td>
<td>Dominant</td>
</tr>
<tr>
<td>Friendly</td>
<td></td>
</tr>
<tr>
<td>Guilty</td>
<td></td>
</tr>
<tr>
<td>Horrified</td>
<td></td>
</tr>
<tr>
<td>*The correct answer is friendly.</td>
<td></td>
</tr>
<tr>
<td>Question 21:</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
</tr>
</tbody>
</table>
| **Embarrassed**  
**Fantasising**  
Confused  
Panicked  
*The correct answer is fantasising.* |

<table>
<thead>
<tr>
<th>Question 22:</th>
</tr>
</thead>
</table>
| **Preoccupied**  
Grateful  
Insisting  
Imploring  
*The correct answer is preoccupied.* |

<table>
<thead>
<tr>
<th>Question 23:</th>
</tr>
</thead>
</table>
| **Contented**  
Apologetic  
**Defiant**  
Curious  
*The correct answer is defiant.* |

<table>
<thead>
<tr>
<th>Question 24:</th>
</tr>
</thead>
</table>
| **Pensive**  
Irritated  
Excited  
Hostile  
*The correct answer is pensive.* |

<table>
<thead>
<tr>
<th>Question 25:</th>
</tr>
</thead>
</table>
| Question 26: | Panicked  
Incredulous  
Despondent  
**Interested**  
*The correct answer is interested.* |
|---|---|
| Question 27: | Alarmed  
Shy  
**Hostile**  
Anxious  
*The correct answer is hostile.* |
| Question 28: | Joking  
**Cautious**  
Arrogant  
Reassuring  
*The correct answer is cautious.* |
| Question 29: | Impatient  
Aghast  
Irritated  
**Reflective**  
*The correct answer is reflective.* |
| Question 30: | Grateful  
| Flirtatious  
| Hostile  
| Disappointed  
| *The correct answer is flirtatious.* |
| Question 31: | Ashamed  
| Confident  
| Joking  
| Dispirited  
| *The correct answer is confident.* |
| Question 32: | Serious  
| Ashamed  
| Bewildered  
| Alarm  
| *The correct answer is serious.* |
| Question 33: | Embarrassed  
| Guilty  
| Fantasising  
| Concerned  
| *The correct answer is concerned.* |
| Question 34: |
Aghast
Baffled
Distrustful
Terrified
*The correct answer is distrustful.

Question 35:
Puzzled
Nervous
Insisting
Contemplative
*The correct answer is nervous.

Question 36:
Ashamed
Nervous
Suspicious
Indecisive
*The correct answer is suspicious.

Section 5: Demographics

1. Age (please tick the appropriate box): 18-30 | 31-40 | 41-50 | 51-60 | 61-70 | Above 70
2. Gender (please tick the appropriate box): Male | Female
3. Race (please tick the appropriate box): White | Black | Coloured | Asian | Mixed | Other
4. Please indicate your highest level of qualification (please tick the appropriate box): No Matric | Matric | Bachelors | Honours | Masters | Doctorate and higher
5. Industry (please select from the options provided): Mining | Other
6. Are you responsible for the management of people? Yes | No
7. Please indicate the size of your team that you're responsible for: 1-5 | 6-10 | 11-20 | 21-50 | 50-100 | 100+
8. **In which country do you mainly work today?** (please select from the options provided) South Africa | Other

9. **How long have you been fluent in English?** (input number)

---

**Section 6: Thank you.**

Thank you for your participation in the survey. Click here to download the results of your empathy at work score:

*<Personalised results>*

Should you wish to withdraw you can do so at any time by contacting the researcher.

Researcher name: Petrus Engelbrecht

Email: 04319052@mygibs.co.za

Phone: +27 83 603 1482

Research supervisor: Dr. Gavin Price

Email: priceg@gibs.co.za

Phone: +27 11 771 4000
6.2 Example of score results

Thank you for participating in the survey.

You picked 30 out of 36 “yes” correctly.

The average score of people that have taken this particular test is: 24.2

Please remember that your score is situation dependent and can be influenced by many factors. The results of this test are useful when they are averaged across many people but they can be inaccurate when testing individuals. Other respondents may have also been given something to read beforehand which could explain a difference in results.

To share this survey and see how you compare with others, please use this link: http://na.og/Gibs-Research

Results are anonymous. However, should you wish to withdraw you can do so by emailing the date and time when you took the test to the researcher.

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Research supervisor: Dr. Gavin Price
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