

Emotional Foundations of Capability Development: An Exploration in an SME context

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Abstract:	<p>Research uncovering the behavioural and cognitive foundations of capability development has gained traction in recent years. However, the emotional foundations of capability development have not been adequately addressed. This is an important gap; if emotions impact on decisions and actions of key organisational actors, this suggests an influence on capability development processes in organisations, with implications for their survival and evolution. In this paper we therefore explore 'how do the emotions of key strategists enable and/ or hinder capability development?' Our in-depth qualitative research, based in five small- and medium-sized enterprises (SMEs), shows that emotions of key strategists, including emotional tensions and ambivalence, have multi-faceted effects on capability development depending on the activation level of pleasant and unpleasant emotions experienced. This adds to extant understanding of idiosyncratic foundations of capability development and extends conversations regarding the internal dynamics behind organisational survival and evolution.</p>

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FEEDBACK FROM REVIEWER 1**Reviewer Comments**

Thank you for the improved manuscript. I can see that the author(s) put considerable effort on improving the paper. The introduction part clarify the goals of the paper, position it much better, and give the reader a clear understanding concerning the goals of the paper.

The literature review section defines conceptual relations and covers the theoretical frame much better than in the previous version. It provides the reader with necessary means to evaluate the goal setting as well as the methodological part of the study.

In methodological issues this version is much more transparent and argued and hence gives the reader more tools in assessing the results. The discussion section has also been improved by adding more reflection based on the results and give opinion for future researches.

Authors' Response

We are very pleased to hear that the revised version we submitted satisfied your expectations. We thank you for your positive comment and careful review, which helped improve the manuscript.

FEEDBACK FROM REVIEWER 2**Reviewer Comments**

While the authors attempt to introduce dynamic capabilities it fails to appreciate that there are multiple perspectives on dynamic capabilities. These different perspectives receive no attention within the paper. Could you include in the literature review a critical evaluation of these perspectives. Which DC perspective is your preferred choice for this paper? I assume Teece but more is needed to build this rationale.

In a developmental spirit, when opening the section on micro-foundations of capability development could you more broadly introduce

Authors' Response

We thank you for your careful reading of the manuscript and this constructive remark. We have taken the comments on board to improve and clarify the construct of dynamic capabilities. We have added a new paragraph to Page 5 where we briefly review different conceptualisations of dynamic capabilities in the literature with reference to prominent scholars. This paragraph also makes our conceptual/theoretical choices more explicit and more easily understandable for those readers who are not as discerning as the reviewer who correctly guessed our Teece leanings. Our Teece perspective coheres with our focus on managerial agency and its micro-foundational role in capabilities.

Thank you for this suggestion. We agree that the manuscript would benefit from a brief discussion of the microfoundations literature.

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3 the micro-foundations literature. Can you please
4 clarify and define micro-foundations.
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We have now expanded the paragraph on
microfoundations on Page 6. Given the
constraints we have on space we tried our best to
define the focus of the microfoundational
approach for readers who are not familiar with
it. We provide a definition of micro-foundations
and also cite prominent papers within the
microfoundations literature.
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For Review Only

Emotional Foundations of Capability Development: An Exploration in the SME context

Abstract

Research uncovering the behavioural and cognitive foundations of capability development has gained traction in recent years. However, the emotional foundations of capability development have not been adequately addressed. This is an important gap; if emotions impact on decisions and actions of key organisational actors, this suggests an influence on capability development processes in organisations, with implications for their survival and evolution. In this paper we therefore explore ‘how do the emotions of key strategists enable and/ or hinder capability development?’ Our in-depth qualitative research, based in five small- and medium-sized enterprises (SMEs), shows that emotions of key strategists, including emotional tensions and ambivalence, have multi-faceted effects on capability development depending on the activation level of pleasant and unpleasant emotions experienced. This adds to extant understanding of idiosyncratic foundations of capability development and extends conversations regarding the internal dynamics behind organisational survival and evolution.

1. Introduction

More than a decade ago, Felin and Foss (2005) proclaimed their frustration with capabilities research for failing to attribute the individuals supporting such capabilities. This lack of focus on the individual represents a broader problem encompassing strategy research (Powell, 2014). The antidote, they argued, is microfoundations research that seeks to understand individual-level factors underpinning organisational capabilities.

Whilst important advances are being made to understand microfoundations, the role of individuals' emotions received little attention in either capabilities research or strategy research more generally (Hodgkinson & Healey, 2011; Huy, 2012). This lack of attention is surprising, since organisational life gives rise to a range of emotions. Furthermore, wider organisation studies and psychology literatures have long recognised the impact of emotions on individuals' decisions and actions. Addressing this gap promises new insights into understanding the role emotions play in organisational adaptation through capability development.

This paper therefore responds to calls for more emotions research within strategy (Huy, 2012) and capabilities studies (MacLean, MacIntosh & Seidl, 2015), by utilising in-depth empirical research into how emotions of key strategists enable or hinder capability development. We begin by drawing on extant literature to theorise the impact of emotions on capability development. The research approach is then described before moving onto the findings which demonstrate that key strategists' emotions can have multi-faceted and crucial effects on capability development. The paper concludes with a discussion of theoretical and practical implications.

2. Theoretical Background

2.1 Microfoundations of Capability Development

Heterogeneity in firm performance has been recognised since the seminal paper of Nelson (1991). Contemporary research on this issue underscores the importance of dynamic capabilities, which enable organisational adaptation through renewal, redeployment, recombination or reconfiguration of firms' resources and capabilities (Helfat et al. 2007; Teece, 2007). Such capabilities have a change-oriented purpose, leading to repeatable change that is strategically and economically important for the organisation (Helfat et al., 2007; Helfat and Winter, 2011; Teece, 2007). They allow firms to sense and seize opportunities quickly and proficiently (Teece, 2007) when enacted to achieve congruence with the changing environmental conditions internally and externally (Kor & Mesko, 2013). The degree to which these dynamic capabilities are routine in nature has engendered debate amongst scholars, with Winter (2003) advocating a highly routine conceptualisation and Teece (2012) arguing that such capabilities have both routine and non-routine elements. In this paper, our focus is the key strategists and their agency in developing and enacting capabilities. By prioritising the enactment of capabilities (over their mere possession) we align with Teece (2012) in this debate, since enacted routines invariably involve some non-routine behaviours (Feldman and Pentland, 2003). Such a focus helps understand the idiosyncrasy of capabilities as argued by scholars like Teece, Pisano & Shuen (1997) and Helfat et al. (2007), rather than focussing on dynamic capabilities as best practices as proposed by Eisenhardt and Martin (2000).

Dynamic capabilities were originally conceptualised as an aggregate and collective phenomenon operating at the organisational level (e.g. Eisenhardt & Martin, 2000; Helfat et al., 2007; Teece et al., 1997). However, this conceptualisation left it unclear how the knowledge, competencies, actions, and decisions of individuals underpinning a capability were aggregated

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3 up to the organisational level (Barney & Felin, 2013). In response to this, over the last decade,
4 dynamic capabilities research has shifted towards disaggregating these organisational level
5 phenomena to understand their lower-level (micro)foundations (Felin, Foss, Heimeriks &
6 Madsen, 2012). Felin et al. (2012: 1352) summarise the focus of microfoundations research as
7 considering how 'lower-level entities, such as individuals or processes in organisations, and
8 their interactions' explain collective phenomena, such as dynamic capabilities. This change in
9 focus is crucial to understand how specific actors and their agency (Barney & Felin, 2013)
10 influence dynamic capabilities and which individual characteristics and behaviours make the
11 development and enactment of these capabilities possible (Foss, 2011).
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25 Microfoundations research has so far revealed that management cognition can be an important
26 source of capability development (Eggers & Kaplan, 2009; Gavetti, 2005). The implication is
27 that firms may respond to the same exogenous change differently due to subjectivism in
28 managerial perceptions, expectations, preferences (Kor, Mahoney & Michael, 2007) or due to
29 differences in managerial alertness, responsiveness and learning (Cohen & Levinthal, 1990).
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37 Eggers and Kaplan (2013), in their model of capability development, integrate key strategists'
38 understanding and interpretations of firm's capabilities, of the environment that necessitates the
39 development of these capabilities, and of the potential value of resulting capabilities after this
40 process of development. This then shapes how they will deploy firm's resources for the
41 development and maintenance of capabilities. Martin and Bachrach (2018) show how key
42 strategists' cognition interact with social and relational factors. In an attempt to aggregate
43 microfoundational managerial dynamic capabilities with macro-level dynamic capabilities,
44 they show how managers combine their knowledge structures, mental processes and cognitive
45 capacities (i.e., managerial cognition) with the perceptions of others in their networks of formal
46 and informal relationships (i.e., social capital) to generate a set of activities and routines to
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collectively sense and seize opportunities (i.e., networking capability) to reconfigure their individual responses.

Even though such research on cognitive underpinnings of capability development is advancing, its emotional foundations remain largely unexplored (Hodgkinson & Healey, 2011). This is perhaps due to the economic foundations of the concept of capabilities in the resource-based view, which has marginalised psychological and sociological explanations (Foss and Hallberg, 2017). Given the well-established link between cognition and emotion (e.g. Elfenbein, 2007; Russell, 2003), this is an important gap limiting scholarly understanding of heterogeneity in organisations' strategic responses to environmental conditions. To address this gap, our research focuses on how key strategists' emotions¹ impact development of capabilities to support organisational adaptation and change.

2.2 Emotions and Capability Development

We know that cognition is a well-established microfoundation of capability development and that emotions influence cognition. As such, we now consider extant research into the effect that emotions have on cognition, by reviewing the literature on emotions-driven cognition, to start developing an understanding of the potential links between emotions and capability development.

¹ In terms of emotions, psychology scholars typically distinguish between emotion and core affect. Emotion is viewed as an act of sense-making (Maitlis, Vogus & Lawrence, 2013) where individuals register a specific event or object based on certain dimensions such as prominence, noteworthiness and pleasantness (Frijda, 1986). Emotions are typically reactions to short-term experiences (Russell, 2003). Core affect, on the other hand, is longer lasting than an emotion, remaining salient even after emotions caused by an initial antecedent episode fade (Forgas, 1995). This is why core affect is often conceptualised as object-less, in that it is difficult to determine the causal events that accumulated into it (Russell and Feldman-Barrett, 1999; Russell, 2003). Following Huy (2002) the present paper uses the term emotion. This is because capability development is intentional (Eggers and Kaplan, 2013) which will in turn direct affective states toward a specific object which would categorically distinguish them from core affect and from more generalised moods and affective traits.

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3 Elfenbein (2007) argued that strong emotions occupy cognitive capacity, and consequently
4 distort individuals' evaluations of consequences of decisions. Even strong positive emotions
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8 can cause distortion because these individuals become less critical and dismiss certain signals
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10 to protect their positive moods and avoid unpleasant thoughts (George & Zhou, 2002). The
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12 affect-as-information perspective (Schwarz, 2011) would support these views, arguing that
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14 emotions underlie the meaning structures of individuals, thus shaping how real-life events are
15
16 perceived and evaluated. For example, individuals experiencing anxiety are likely to interpret
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18 events as signalling uncertainty and lack of control (Raghunathan & Pham, 1999), while
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20 positive emotions lead people to more positive evaluative judgements (Zelenski & Larsen,
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22 2002) shaping decision-making on which opportunities will be exploited (Welppe, Spörrle,
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24 Grichnik, Michl & Audretsch, 2012). Negative emotions experienced by top managers might
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26 also limit the scope of options and information being considered (Hutzschenreuter &
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28 Kleindienst, 2013). By distorting cognitive processing, emotions may affect strategists'
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30 consideration of signals in the external environment, consideration of opportunities, and their
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32 decision-making on which opportunities to exploit. These factors are all components of the
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34 sensing and seizing of opportunities that are central to capability development (Teece, 2007).
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40 The influence of emotions is not necessarily a distortive process interrupting cognition, though.
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42 Other scholars suggested that emotions can serve cognition by benefitting cognitive processing
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44 of the relevance of an affective event to one's goal as well as its antecedents and future
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46 prospects (Russell, 2003). Emotion directs attention to solving problems and to information
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48 relevant to that end and provides the motivation to pursue those solutions (Loewenstein &
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50 Lerner, 2003). These findings can be explained through discrepancy theory. Discrepancy theory
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52 suggests that, for example, when a person compares the perceived reality with their prior
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54 expectations and finds a negative mismatch, this arouses dissatisfaction with the current state
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56 (Higgins, 1987). This negative emotion, in turn, stimulates learning and change (Hochschild,
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3 1983). In an organisational setting this may trigger and influence capability development by
4 encouraging opportunity recognition (Baron, 2008), issue recognition (Hutzschenreuter &
5 Kleindienst, 2013), idea generation (Hayton & Cholakova, 2012), and opportunity exploitation
6 (Welpé et al., 2012).
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13 This literature sheds light on the possible links between emotions and capability development,
14 however, only through inferences on how emotions affect cognition. As such, these studies give
15 little direct insight into the ways in which emotions influence capability development (i.e. as a
16 barrier or an enabler). Furthermore, the evidence above is inconclusive, with emotions being
17 found to both interrupt and distort (e.g. Forgas, 2003; George & Zhou, 2002) or stimulate and
18 benefit (e.g. Higgins, 1987; Russell, 2003) cognition. This highlights the complexities
19 associated with emotions, suggesting that the impact emotions have are neither linear nor
20 straightforward. Instead of extrapolating conclusions from another stream of research, studies
21 into the link between emotions and capability development to further understand the associated
22 nuances and complexities are needed. Illuminating this complexity calls for in-depth qualitative
23 research.
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39 Extant research that more specifically focusses on the links between emotions and capabilities
40 tends to focus on the role of emotional intelligence and how managers can manage their own
41 and others' emotions to facilitate organisational development. For example, studies show how
42 emotionally intelligent managers show an ability to adapt to changing demands and an
43 increased willingness to consider strategic change and organisational development to address
44 these (Sinclair, Ashkanasy & Chattopadhyay, 2010; George, 2000). These managers are found
45 to be better at initiating capability development by using more expansive modes of thinking
46 (Sinclair et al., 2010) and better at driving employee adaptation once capability development
47 initiatives are introduced. They can perceive and manage emotions of others and assist others
48 to respond positively to new initiatives (Scott-Ladd & Chan, 2004), induce others to re-evaluate
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3 their current negative feelings, regulate cynicism (Ferres & Connell, 2004), generate
4 excitement, enthusiasm, and optimism (George, 2000). They can mobilise concrete actions and
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6 resources to support new routines underpinning new capabilities (Huy, 1999).
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11 Whilst this literature is insightful, the focus emotional intelligence and emotion management
12 largely ignores the effect of key strategists' naturally occurring emotions on capability
13 development – instead look into how those emotions are managed once they emerge.
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15 Furthermore, these studies generally do not consider the full range of emotions or the level of
16 intensity at which these emotions are experienced, which leads to only partial insights. Since
17 organisations are hotbeds of emotions experienced at different intensities, it is crucial to
18 understand how the full spectrum of emotions can impact capability development which is
19 important to organisational performance. As such, we answer Sinclair et al. (2010)'s call for
20 more research acknowledging the independent effects of positive and negative emotions and
21 the intensity at which they are experienced on decision-making. We do so by focussing on
22 decision-making related to capability development.
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37 Specifically, we investigate how key strategists' emotions enable and/ or hinder capability
38 development. This focus is important given the critical role these individuals play in capability
39 development initiatives (Adner & Helfat, 2003) and in actions triggering variation, selection
40 and retention of capabilities (O'Shannassy, 2014). We address this question in the context of
41 small- and medium-sized enterprises (SMEs) since the cognitive and behavioural outcomes of
42 key strategists' emotions have especially pronounced effects on organisational development of
43 SMEs. The SME context is important for two reasons. First, as noted by Galvin, Rice and Liao
44 (2014), SMEs are unlikely to have any significant resources that are valuable, rare, inimitable
45 and non-substitutable to set them apart from other competitors, hence they are more likely to
46 engage in a continual re-evaluation of capabilities in both their internal operations and market
47 offerings. This makes SMEs an appropriate context to capture as many capability development
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3 initiatives as possible in the duration of the research. Secondly, the capability development
4 initiatives in SMEs are likely to be influenced and controlled by the owner-managers and the
5 management team (Kelliher & Reinl, 2009) making them an appropriate context to study the
6 role of key strategists' emotions.
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11 12 13 **3. Methodology** 14

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16 This paper draws on data collected from broader studies of capability development in the United
17 Kingdom and Turkey. As the two authors shared observations and insights, the data revealed
18 that the emotions of the key strategists interviewed had a noticeable impact on their
19 organisations' capability configuration and the journey leading to that. It was this grounded
20 approach to theorising (Charmaz, 2006) that set the focus for further data analysis and theory
21 development to capabilities from the lens of emotions.
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31 For this paper, we isolated five organisations from the broader studies. The reason for using a
32 sub-set of data collected is to extract and elaborate on intense, data-rich descriptions while
33 maintaining enough diversity to allow for theoretical elaborations (De Vaus, 2001) and a
34 replication logic (Eisenhardt and Graebner, 2007). Information about the organisations covered
35 in this paper is shown in Table 1.
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53 The organisations operate in a variety of industries and range from micro- to medium-sized
54 enterprises. A diverse sample is used enabled findings to be relevant to a broader range of
55 organisations (Hendry, Kiel & Nicholson, 2010) increasing the transferability of findings – a
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3 key criterion for quality research (Lincoln & Guba, 1985). Furthermore, since we took an
4 exploratory and inductive approach, it was important to avoid restricting the range of insights
5 that could emerge by narrowing the sample. A varied sample could enable broadly informed
6 insights that could form the basis for future deductive research in more specific settings
7 (Eisenhardt & Graebner, 2007), again increasing the scope for transferability (Lincoln & Guba,
8 1985).

17 **3.1. Data Collection**

19 Data was collected through a range of qualitative methods, with interviews being the main
20 source. In total 21 interviews were conducted with 9 owner-managers, and other family and
21 non-family members in the management teams. All were key strategists in their organisations.
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INSERT TABLE 2 HERE

Interventions focussed, amongst other things, on the development and renewal of the organisations and the opportunities and challenges faced. Insights about emotions emerged naturally and subtly during the interviews and was driven by the interviewee in the first instance. This inductive approach meant that salient emotions surfaced from the data. This was important as it meant we did not limit the study to set of pre-identified emotions to be researched and it helped to gain a fuller and richer picture of the complex interactions between a range of different emotions and capability development.

Interventions were audio recorded and transcribed and, where required, personal notes were made by the interviewer, including informal observations and discussions not recorded as part of the

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3 interviews. In addition, some informal interviews with employees and other managers were
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5 also conducted, often taking place between formal interviews. Observations of daily
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7 interactions were also undertaken through qualitative shadowing. Additional data was also
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9 collected via follow-up emails and short telephone conversations. In total over 24 interview
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11 hours and 34 hours of observation data was collected. An overview of the data collection
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13 undertaken is shown in Table 2.
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16 17 18 **3.2. Data Analysis** 19

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21 Data analysis combined established methodologies for analysing qualitative data (Miles &
22
23 Huberman, 1984) consisting two opposing strands of activity – fragmenting and connecting.
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25 The process of fragmenting involved coding pieces out of the interview data, as explained in
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27 Phase 1 below. The process of connecting involved capturing commonalities and differences
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29 to identify and relate variation in emotions and its implications through the constant
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31 comparative method (Corbin & Strauss, 1990) and associative analysis (Ritchie, Spencer &
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33 O'Connor, 2003). This is detailed in Phase 2 below.
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38 39 **3.2.1. Phase 1. Extracting capability development initiatives and coding emotions** 40

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42 Data analysis began by extracting capability development initiatives from the interviews. These
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44 were interviewees' accounts, or rather discursive descriptions, that explain and interpret
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46 capability development in areas such as product and service offerings, technology, marketing,
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48 and human resources.
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52 Emotions were coded using the circumplex model (Russell & Feldman-Barrett, 1999; Russell,
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54 2003), which has been highly influential in studying organisational settings (e.g. Huy 2002; Lui
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56 & Maitlis, 2014). The model (Figure 1) arranges emotions in a circumplex sharing two
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58 independent dimensions (Russell & Feldman-Barrett, 1999). The first dimension reflects the
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3 hedonic valence (pleasantness–unpleasantness), ranging from positive emotions, such as happy
4 and pleased, to negative emotions, such as sad and depressed. The second dimension refers to
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6 the intensity of arousal caused (high activation–low activation), which suggests the extent of
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8 mobilisation and action readiness.
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23 The two authors coded the transcribed interview data according to the four categories in the
24 circumplex model. To ensure consistency, the emotion words provided by Scherer (2005) were
25 used to label specific emotions within each of the four categories. Following similar studies
26 using interview data (e.g., Heaphy, 2017; Maitlis & Ozcelik, 2004; O’Neill & Rothbard, 2017),
27 emotions were identified in keywords and expressions that were highly emotive. Inspiration
28 was taken from Baldwin and Bengtsson (2004) who highlight the importance of language in
29 personal self-reports and associated discursive representations as the bearer of emotive
30 evaluations about a particular phenomenon.
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42 Some researchers urge caution in using emotion words to study emotion, acknowledging that
43 emotional tone can also be expressed through metaphors and intonations and other means not
44 directly related to emotion words (Pennebaker, Francis & Booth, 2001). The coding for this
45 study, therefore, was not only limited to identifying keywords that would communicate
46 explicitly the interviewee’s emotions – for example, identifying irritation, through words such
47 as, ‘upset’, ‘dislike’, ‘frustrated’, ‘dismayed’, ‘overwhelmed’. Instead, a more nuanced
48 approach was taken by looking at how words were used in context, even if keywords were not
49 present. Therefore, emotion was coded through paying attention to the linguistic environment
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3 holistically (Krippendorff, 2004) through the tone of expression and what the interviewee was
4 saying in the entirety. For example, while no word in the following sentence communicates
5 irritation, a review of the tone and content of the comment led to it being coded as irritation:
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11 ‘...but no one asks, “Why are we using 25,000, can we decrease our tip consumption to
12 12,000 units?” There is no questioning because there is no knowledge. This requires
13 good, advanced technical knowledge. I mean, if you don’t know these, you CAN’T ask
14 these questions; if you can’t ask such questions, you CAN’T improve your production
15 capability.’
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23 To establish a trustworthy and credible account we paid particular attention to achieving intra-
24 and inter-coder reliability (Krippendorff, 2004). Intra-coder reliability was achieved through
25 prolonged engagement with and persistent observation of the data (Lincoln & Guba, 1985)
26 which yielded stable results when segments of data were coded and recoded (Krippendorff,
27 2004). To achieve inter-coder reliability, we began with both authors coding the same two
28 interviews with codes being compared and differences being discussed and resolved (Ahn, Dik
29 & Hornback, 2017). During these discussions, it was found that the author who had conducted
30 the interview would have a deeper understanding of the interviewee, the organisation, and the
31 matter discussed in that segment of the interview, which would help to resolve the discrepancies
32 in coding. After some practice and calibration, the two authors proceeded to code the interviews
33 they had conducted originally.
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50 ***3.2.2. Phase 2. Analysing the interplay between emotion and capability development*** 51 ***initiatives*** 52 53 54

55 Following the multiple case study method, case narratives for each organisation were written
56 (totalling 56 pages across the 5 cases). The case narratives provided rich and detailed
57 descriptions of the contexts – the prime criterion for ensuring transferability and dependability
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3 of emerging results as they, when engaged seriously and deeply, sensitised us to the
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5 circumstances that affect the validity of emerging theorising (Lincoln & Guba, 1985).
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9 The interaction between the emotion and capability development initiatives were analysed
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11 using these case narratives, in-depth, noting the links between the two. The analysis process
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13 then moved onto iteratively reviewing the data, looking for patterns and differences through a
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15 process of constant comparison (Miles & Huberman, 1984) across the five cases. We paid
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17 particular attention to the rival cases to scrutinise the dependability of emerging theorising of
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19 the interplay between emotions and capability development. By the end of this stage, a
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21 prototypical pattern was identified that captured different emotions and associated outcomes
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23 with regards to capability development. At this stage, these relationships were captured in a
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25 conceptual model.
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31 To finalise the data analysis, the two authors next met in person and reviewed the case narratives
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33 again, over the course of three days, to check and make final refinements to the conceptual
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35 model. This allowed us to further improve the credibility, dependability and confirmability by
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37 creating a space to engage in a reflexive dialogue, audit decisions made, and bracket out the
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39 predispositions and interpretations of each author explicitly. The measures we put in place to
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41 ensure quality, inspired by Lincoln & Guba's (1985) work on quality assessment criteria, is
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43 presented in Table 3 below.
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4. Findings

The data analysis established two themes, each discussed in turn below. As the data analysis progressed, more depth and complexity was uncovered. This complexity is captured in the following sub-sections.

4.1. *The Impact of Emotions on Capability Development*

The data illuminates a complex and nuanced relationship between key strategists' emotions and capability development. These relationships are mapped onto the circumplex model in Figure 2.

INSERT FIGURE 2 HERE

It was found pleasant emotions, depending on the level of activation, can support or hinder capability development. High activation pleasant emotions (upper right quadrant of Figure 2) enable capability development, but low activation pleasant emotions, for example contentment, are a barrier to capability development (lower right quadrant).

High activation pleasant emotions triggered a more proactive stance to capability development in all five organisations. For example, interest and enthusiasm enabled sales channel development capability in Oil Co. Oil Co is not only alert towards competitor activities, rival products, and customer trends but also demonstrates zeal in developing new channels to open up its products to wider markets and alters the packaging and pricing strategies to tap into those markets:

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3 ‘...if I have three merch teams in Bodrum [a holiday town in Western Turkey] during
4
5 summer and if I need only one during winter, I open up new markets for those two
6
7 merch teams. I ask them to go and show their face in new towns. This forces me to
8
9 grow – because next summer I will then need two new merch teams in Bodrum and so
10
11 it goes... And I know that this will sound very unsystematic, but it is something we do
12
13 routinely for channel development: when me, my brothers, my team visit new places
14
15 we note down prospective sales points We are continuously scanning, can we put our
16
17 oil in a ceramic bottle in this restaurant, shall I send a merch team to this deli shop.’ **(Oil**
18
19
20
21 **Co Marketing and Communications Director)**

22
23
24
25 In IT Co the interest and enthusiasm of the technical director in new technologies enabled
26
27 service development:

28
29
30 ‘he’s [the technical director] got this passion like I used to have at that age for new stuff
31
32 and for keeping up with technology...he’s very very focused, you know, in this field,
33
34 so I’m letting him run with that and all I’m doing I’m just saying ‘right well OK that
35
36 looks like a good area’...he’s the one who’s investigating and coming up with the ideas’
37
38
39 **(IT Co Owner-Manager)**

40
41
42
43 ‘I’ve always been interested; the good thing is technology changes all the time there’s
44
45 enough there to keep you interested forever’ **(IT Co Technical Director)**

46
47
48 However, the relation between pleasant emotions and capability development is observed to be
49
50 complex as these emotions only catalyse capability development if accompanied with high
51
52 activation. Evidence from both IT Co and Merchandising Co shows that when organisational
53
54 actors experience low activation pleasant emotions this constrains capability development
55
56 (lower right quadrant). For example, Merchandising Co’s owner-managers’ contentment at
57
58 remaining a small business impeded capability development in the past:
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3 ‘We certainly could have been more dynamic if we hadn’t sort of to a degree been happy
4
5 to remain a small business’ **(Merchandising Co Owner-Manager)**
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9 The influence of unpleasant emotions on capability development is also complex, not affording
10
11 linear explanations. Whilst in Rubber Co unpleasant emotions only hindered capability
12
13 development, their influence was more complex in Merchandising Co, Brakes Co, and IT Co,
14
15 where they were both a hindrance and an enabler. Low activation unpleasant emotions (lower
16
17 left quadrant) always hindered capability development. High activation unpleasant emotions
18
19 (upper left quadrant), however, could hinder or enable capability development. In IT Co, for
20
21 example, the owner-manager’s apprehension at times constrained him taking risks associated
22
23 with implementing strategy to develop capabilities. This was fuelled by worry (upper left
24
25 quadrant) about being able to sustain his employees’ livelihoods.
26
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28

29
30 ‘you’ve got to have the bottle to do it and right at this moment in time I could do with a
31
32 kick up the arse and somebody helping me do that, you know, easy to know it very very
33
34 very difficult to do it because it’s not just my business and my livelihood, it’s everybody
35
36 who I’ve got here as well’ **(IT Co Owner-Manager)**
37
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39

40
41 Yet this same emotion, on another occasion, triggered strategic change at IT Co when the firm
42
43 developed process capabilities to become a managed service provider which improved the
44
45 organisation’s cash flow.
46
47

48 ‘I worry sometimes, I mean, I’ve been in the situation where I’ve no money in the
49
50 company, people aren’t paying me, you know, I might be owed thirty thousand pounds
51
52 but I’ve got, you know, negative in the bank because the companies just aren’t paying
53
54 me and I’ve been in that situation more than once and I’ve paid the employees and not
55
56 paid myself...we turned it round and we try and get the work where they’re paying on
57
58 a monthly basis so we get MRR, monthly recurring revenue, so that’s what I’m more
59
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1
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3 into and that's why we've turned the way the business works and what we do and, you
4
5 know, go in as an MSP [managed service provider]' **(IT Co Owner-Manager)**
6
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8
9 In Brakes Co high activation negative emotions (upper left quadrant) only enabled capability
10
11 development. In the following interview extract, for example, it is seen how the dissatisfaction
12
13 and irritation of the production director with the knowledge base of the organisation drives
14
15 human resources capability development and the process capability development. Here the
16
17 production director is responding to the interviewer's question about who determines
18
19 opportunities for process capability development:
20
21

22
23 'Of course, they are all things that I do. I mean, data are collected but not analysed. For
24
25 example, they know that they use 25,000 tips a year to process brake drums, but no one
26
27 asks, 'Why are we using 25,000, can we decrease our tip consumption to 12,000 units?'
28
29 There is no questioning because there is no knowledge ... Here we're working with
30
31 inexperienced colleagues. In firms applying Six Sigma, for example, operators initiate
32
33 projects and engineers work as supervisors. Here, operators don't have such technical
34
35 backgrounds; they cannot think, let alone do something about it ... I am seeing a severe
36
37 technical inadequacy in terms of the knowledge base, the skills base here.' **(Brakes Co**
38
39
40
41
42 **Production Director)**
43
44

45 This dissatisfaction with the current technical knowledge base is driving Brakes Co's human
46
47 resources capability development to remove the source of unpleasant emotions:
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49

50
51 'We are slowly building up our technical knowledge infrastructure. Our engineering
52
53 team has built significant expertise in recent years. And slowly we have started to bring
54
55 them to the fore. They aren't really in a position to solve process problems fully yet, but
56
57 they're slowly getting there.' **(Brakes Co Production Director)**
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2
3 In IT Co and Rubber Co low activation unpleasant emotions (lower left quadrant in Figure 2)
4 have stalled strategic growth and associated capability development. For example, in Rubber
5 Co, the marketing and sales director's hopelessness about the prospects of the national market
6 limited the development of marketing capabilities:
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13 'National market is really, you know, impossible... We are trying to hang on to our
14 existing customers.... What I want to say is, for example we have no prior relationship
15 with [NAMES THE ORGANISATION DIRECTLY], starting to work for them is very
16 difficult ... Because everybody has their suppliers sorted and they even have a list of
17 alternative suppliers. They aren't very sympathetic towards taking new suppliers on
18 board. And even if they were, there are many others in the same position ready to jump
19 on.'
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26
27 **on.'** (Rubber Co Marketing and Sales Director)
28
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30 Overall, low activation emotions constrain capability development regardless of the
31 pleasantness of emotions experienced. Here actors will not experience the sense of mobilisation
32 and action readiness to undertake necessary capability development. High activation emotions
33 have a more complex, less linear influence. When accompanied by pleasant emotions (e.g.
34 enthusiasm, excitement, zeal) high activation is always an enabler of capability development.
35 However, when accompanied by unpleasant emotions (e.g. frustration, anxiety, worry), high
36 activation has a less linear influence. Evidence from three case organisations suggests that
37 dissatisfaction with the current situation catalyses capability development. However, anxiety
38 and worry, which are again high activation unpleasant emotions, do not afford a definitive
39 pattern; and can act both as an enabler and barrier even within the same organisation. This
40 yields paradoxes, underscoring complexities of organisations. The complex relationship
41 between key strategists' emotions and capability development, we unravelled, outlines a
42 definitive pattern between the two constructs, and challenges simplistic rendering of capability
43 development process.
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4.2. *Emotional Tensions: Inside the Organisation and Inside the Individual*

The interplay between emotion and capability development take on additional layer of complexity when considering emotional tensions. Emotional tensions between different organisational actors were identified within two case organisations (IT Co and Merchandising Co). In IT Co there was also tension in the form of emotional ambivalence within the owner-manager himself. Both types of tension influenced capability development.

In IT Co the interest and enthusiasm (upper right quadrant of Figure 2) of the technical director, which drives capability development, met the owner-manager's apprehension (upper left quadrant), which can constrain capability development. In Merchandising Co a somewhat similar tension can be observed in that the owner-manager displays predominantly high activation pleasant emotions such as hope and confidence, which contrasts with his partner's (who is also his wife) high activation unpleasant emotion, in the form of discomfort. This tension can influence capability development:

‘I think we're almost at the stage where I could write a business plan for major growth and either take on a loan, a re-mortgage, or something like that and go for premises and do a major period of growth. I'm confident I could do the marketing and the sales... And I'm not sure how comfortable that, being sort of only maybe like ten years away from retirement anyway, that my wife would be with taking on a major change at this stage’ **(Merchandising Co Owner-Manager)**

Evidence from IT Co showed that emotional ambivalence within the owner-manager also influences capability development. For example, the owner-manager recognises that stepping away from the day-to-day work of the organisation is important for identifying and moving in new strategic directions, and therefore for capability development. Nevertheless, he has been struggling to step away which creates disappointment and frustration with himself:

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2
3 'You need to be able to step back to think. You can't think while you're in it [the
4 organisation]. I don't have the time. I haven't got the energy. I need to pull, and the
5 trouble is I know this, I've done it, I know it works, but for some reason I just can't
6 seem to be able to do it again and it's because I'm sucked back into the job and I'm
7 finding it so difficult to leave the desk and working on the job to leave it and work on
8 the business itself' **(IT Co Owner-Manager)**
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18 This disappointment and frustration (high activation unpleasant emotion) is at odds with the
19 contentment and comfort (low activation pleasant emotion) he experiences with his day-to-day
20 involvement in the organisation. This, he believes, impacts his ability to step out, which in turn
21 hinders capability development:
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28 'The pressures of staffing levels and business it's meant I've had to jump back into the
29 business. Now that's OK, I find it easy to jump back in, but I find it so so difficult to
30 come back out of it again because it's what I know, it's what I understand, I'm
31 comfortable with it' **(IT Co Owner-Manager)**
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38 Emotional ambivalence is further reflected in his interest and enthusiasm towards developing
39 and growing IT Co and his simultaneous apprehension and weariness in committing to
40 capability development to implement this:
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45

46 'I'd love nothing more now than to have sort of like that one-to-one mentoring again,
47 where I could sit with somebody who can just talk around the issues and the problems
48 and where we need to fit and go so I can develop this business, you know, and get more
49 staffing levels, put more employment out there, you know, that's what I want to do. But
50 it's so difficult, it's such a risk...it's getting that gut feeling and, I don't know, balls to
51 do it. You've got to be able to do it and I'm at that stage now I need this, but I'm tired,
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3 and basically, I need help to be able to get that energy back, that spark back, to do it
4
5 again. I know all this but doing it is different' (IT Co Owner-Manager)
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9 The inter- and intra-individual emotional tensions highlighted above represent an emotional
10
11 battle – either between individuals or within a single individual – in which the fate of particular
12
13 capability development initiatives hang in the balance. This suggests that how actors respond
14
15 to these tensions will determine capability development outcomes, or the lack thereof.
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20 21 22 **5. Discussion**

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25 Empirical and conceptual work is beginning to show the importance of emotions for strategic
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27 choice (Vuori & Huy, 2015), organisational change (Huy, 2002; Maitlis & Sonenshein, 2010),
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29 innovation (Akgün, Keskin & Byrne, 2009), entrepreneurial action (Baron, Tang & Hmieleski,
30
31 2011; Cardon, Wincent, Singh, Drnovsek, 2009) and organisational learning (Scherer & Tran,
32
33 2003). This paper extends this work by exploring the role emotion plays in capabilities and how
34
35 they are developed to effect strategic change. It does so by explicitly focussing on a range of
36
37 emotional states, in contrast to some of the leading papers in the field (e.g. Huy, 2002; Vuori &
38
39 Huy, 2015). The findings suggest key strategists' emotions influence capability development
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41 in too complex a way to afford straightforward solutions, with no single emotion category being
42
43 uniformly beneficial or detrimental.
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49
50 A large body of psychology, human resource management and strategic management research
51
52 has associated pleasant emotions with benefits including energy, enhanced cognitive flexibility,
53
54 increased innovation, and adoption of more challenging goals (e.g. Cardon et al., 2009; Huy,
55
56 2002; Lyubomirsky, King & Diener, 2005). In line with these studies it is found that in all five
57
58 organisations pleasant emotions can act as an enabler of capability development. However, the
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3 link is not as straightforward as suggested in the extant literature. Our findings suggest that this
4
5 is only so when pleasant emotions are accompanied by high activation, which drives a pursuit
6
7 of accomplishment in organisational actors (Faria, 2011).
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11 The study also finds that pleasant emotions are not always beneficial, which further highlights
12
13 the complexity of the relationship between emotions and capability development. Some
14
15 scholars have found that positive emotions, such as feeling content, can signal objectives are
16
17 already achieved and this signal can make people less perceptive and less critical acting as a
18
19 barrier to organisational development (George & Zhou, 2002). These findings were conflicting
20
21 with most empirical work arguing for the inherent goodness of positive emotions. In this paper,
22
23 having distinguished emotional states on two separate dimensions (i.e., pleasant vs. unpleasant,
24
25 high vs. low activation), we are able to achieve a more nuanced analysis of different types of
26
27 pleasant emotions and their distinct influences on capability development. The paper shows
28
29 that in order to understand the implications on capability development we should not only
30
31 consider the pleasantness of the emotions but also the level of activation at which they are
32
33 experienced. Accounting for pleasantness and activation we unearth a more complex, yet much
34
35 richer relationship between emotions and capability development.
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42 The influence of unpleasant emotions is also a contested issue in extant research. While some
43
44 authors argue unpleasant emotions motivate behaviour by driving individuals to address a
45
46 discrepancy between current and desired states (e.g., Hochschild, 1983), insights from the
47
48 management literature suggest people experiencing unpleasant emotions will seek continuity
49
50 and security which can cause myopic decision-making (e.g., Dane & George, 2014; Vuori &
51
52 Huy, 2015). The present study's use of the circumplex model allows to draw differences
53
54 between different types of unpleasant emotions and nuanced implications for capability
55
56 development.
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3 Aligning with insights from psychology literature, Merchandising Co, Brakes Co and IT Co
4 suggest high activation unpleasant emotions, in the form of disappointment, dissatisfaction and
5 irritation with the current state, can trigger problem-solving to drive capability development
6 aimed at improving the current strategic position. This led to a range of productivity
7 improvement projects at Brakes Co and a commitment to improve service desking at IT Co to
8 resolve the problems causing unpleasant emotions. Models of aspiration performance help
9 explain this; performance below aspiration levels influences managerial decision-making and
10 actions (Greve, 2003) to undo unsatisfactory performance (Zhou & George, 2001).
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22 However, evidence from the study suggests unpleasant emotions can also hinder capability
23 development when actors experience low activation unpleasant emotions. This is observed in
24 the form of hopelessness at Rubber Co and weariness at IT Co, characterised by lacking
25 motivation to act. Unpleasant emotions, even when they are accompanied by high activation,
26 can also be a barrier to capability development, as observed in IT Co and Merchandising Co
27 where strategists' anxiety, tension and discomfort with certain investments stalled capability
28 development. This observation aligns with studies which identified anxiety as a potential
29 barrier reducing the array of thoughts and actions of organisational members (Fredrickson &
30 Branigan, 2005; McCracken, 2005). The fact that high activation unpleasant emotions can both
31 enable and hinder capability development further supports our argument that emotions'
32 influence on capability development is too complex to afford straightforward explanations.
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48 When unpleasant emotions hinder capability development this is not always necessarily bad.
49 Indeed, dual-tuning theory (George & Zhou, 2007) predicts that such emotions are beneficial
50 to offset impulsiveness (De Young, 2010) and escalation of commitment (Forges & George,
51 2011). In Merchandising Co and IT Co, there are emotional tensions within the management
52 team, with one strategist displaying predominantly high activation pleasant emotions about
53 certain capability development initiatives and the other displaying predominantly high
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1
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3 activation unpleasant emotions. Within this dynamic the apprehensiveness and tension
4
5 experienced by one strategist constrain overenthusiasm and overconfidence of the other, thus
6
7 resulting in careful consideration of ideas, underlying assumptions, and supporting and
8
9 conflicting information related to the capability development initiatives.
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11

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13 The interpersonal emotional tensions identified in Merchandising Co and IT Co indicate
14
15 another contribution of the study – that conflicting emotional states within an organisation can
16
17 impact capability development. Studies exploring the relationship between emotion and
18
19 capabilities have tended to research emotion as an organisationally observed phenomena, such
20
21 as fear experienced by Nokia managers in Vuori and Huy (2015). However, we found that even
22
23 in very small organisations opposing emotional states can impact capability development. A
24
25 particularly interesting finding is the role of emotional ambivalence within one individual in
26
27 capability development in IT Co.
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32
33 Emotional ambivalence refers to individuals having mixed feelings about a target (Pratt &
34
35 Doucet, 2000). In the case of IT Co's owner-manager, there are two primary targets that elicit
36
37 emotional ambivalence – stepping back from the organisation, and capability development.
38
39 Firstly, the owner-manager's failure to step back from the day-to-day work of IT Co to focus
40
41 more on capability development elicits comfort and contentment, but at the same time
42
43 frustration and disappointment. Secondly, capability development itself elicits interest and
44
45 enthusiasm in concert with apprehension and weariness.
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50 The findings that emotional ambivalence can be involved in capability development are
51
52 important since 'incidences of unidimensional states, such as pure happiness or pure sadness,
53
54 are actually quite rare' (Fong, 2006, p. 1016). Emotional states are not experienced in a
55
56 straightforward manner; positive and negative states co-occur at varying levels of intensity
57
58 (Diener & Iran-Nejad, 1986). And as such, emotional ambivalence is likely to be common in
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2
3 organisations (Ashforth, Rogers, Pratt & Pradies, 2014); particularly in SMEs since their
4 strategists tend to operate in conditions of ambiguity and unpredictability (Podoyntsyna, Van
5 der Bij & Song, 2012).
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10
11 There has been an appreciation that emotional ambivalence can be observed when
12 organisational actors respond to strategic change decisions (Piderit, 2000; Sillince & Shipton,
13 2013). However, little attention is given to emotional ambivalence experienced by key
14 strategists when deciding for strategic change. A rare exception is Podoyntsyna et al. (2012)
15 who found that ambivalence can lead to higher risk perceptions by entrepreneurs. The present
16 paper contributes to this literature by highlighting that emotional ambivalence amongst key
17 strategists can influence capability development to effect strategic change. This theoretical
18 contribution is important since individuals' responses to emotional ambivalence will have
19 implications for capability development. Indeed, Ashforth et al. (2014) developed a typology
20 of potential responses to ambivalence within organisational contexts. Considering three of the
21 responses in their typology – avoidance, compromise and domination – can illustrate how
22 different responses by IT Co's owner-manager could have varying influences on capability
23 development. To illustrate this, let us consider owner-manager's ambivalence towards
24 capability development.
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44 If IT Co's owner-manager responded to his ambivalence by ignoring and not dealing with it
45 (Ashforth et al., 2014) this would likely lead to non-response (Pratt & Doucet, 2000).
46 Alternatively, compromise could be his response, which would involve him making
47 concessions to accommodate both the pleasant and unpleasant emotions (Ashforth et al., 2014).
48 This could result in cautious (or limited) capability development, thus accommodating his
49 interest and enthusiasm, at the same time as his anxiety, apprehension and weariness. Finally,
50 domination could be his response, meaning that he could either let his positive emotions
51 overwhelm his negative emotions or vice versa (Ashforth et al., 2014). If he pays more attention
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3 to his interest and enthusiasm for developing IT Co, this would result in capability development
4 going ahead in a strong form. If he focused more on his apprehension and weariness though,
5
6 this would overpower his interest and enthusiasm, likely meaning that capability development
7
8 would not go ahead. As such, three different types of response to his ambivalence could have
9
10 markedly different impacts on capability development in IT Co, with avoidance stalling
11
12 capability development, compromise leading to cautious capability development, and
13
14 domination leading to either strong capability development or no capability development. Such
15
16 implications showing how emotional ambivalence can impact capability development in varied
17
18 ways provides an insightful theoretical contribution of the study worthy of further research.
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28 **6. Conclusion**

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31 While capabilities are of fundamental importance to organisations, relatively little is known
32
33 about their emotional foundations. Even though recent conceptualisations of dynamic
34
35 capabilities have signalled the importance of emotion (e.g. Vuori & Huy, 2015), because it is
36
37 subsumed under cognition-based models it has not benefited from adequate empirical
38
39 treatment. This paper responds to the calls of Huy (2012), Hodgkinson and Healey (2011) and
40
41 MacLean et al. (2015) by providing in-depth empirical insights into the role of strategists'
42
43 emotions in capability development while distinguishing between positive and negative
44
45 emotions and accounting for the intensity at which they are experienced (Sinclair et al., 2010).
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51 Through inductive, in-depth research in five organisations we explored emotional foundations
52
53 of capability development and contributed insights into the multifaceted ways in which a range
54
55 of emotions, including emotional ambivalence, can enable and hinder capability development.
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57 This adds to extant understanding of the psychological foundations of capability development
58
59 (Hodgkinson & Healey, 2011) and simultaneously extends scholarly conversations regarding
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3 microfoundations of capabilities (Barney & Felin, 2013). Capability development can be a
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5 source of competitive advantage, and therefore, by furthering understanding of its emotional
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7 foundations the paper adds valuable knowledge towards a fuller and deeper conceptualisation
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9 of dynamic capabilities and their development.
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13 We suggest that emotions influence capability development in too complex a way to afford
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15 straightforward solutions, with no single emotion category being uniformly beneficial or
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17 detrimental. However, the multi-faceted impact emotions have on capability development
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19 shows the need for practicing managers to pay attention to their emotions and recognise how
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21 their emotions can act as an enabler or barrier to capability development.
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25 The rich descriptions of the emotional microfoundations of capabilities in five organisations
26
27 facing varying levels of environmental turbulence can help managers, beyond key strategists
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29 who have a role in capability development (Taylor & Helfat, 2009), in other industries and
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31 contexts. They can glean insights into the range of emotions that may help secure the success
32
33 of their capability development initiatives. With an improved awareness of the relationship
34
35 between emotions and capabilities, managers can start recognising how their emotions interact
36
37 with their decisions and actions regarding capability development. Such self-reflection and
38
39 emotional self-awareness will allow practicing managers to equip themselves with approaches
40
41 to generate emotions conducive to capability development. Neither emotions nor dynamic
42
43 capabilities are fixed, but rather they evolve and interact, and therefore, this reflective process
44
45 needs to be constantly revisited, to ensure that emotions, whether positive or negative, are
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47 utilised for productive purposes.
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54 This paper can also inform initiatives of institutions concerned with management learning and
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56 leadership development, to tailor their training offerings to equip managers with competencies
57
58 and mindsets to utilise emotions for productive purposes. Many governmental agencies and
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3 not-for-profit institutions (such as federations of small businesses) are increasing the supply of
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5 mentors to train members of the SME business community. The insights from our research can
6
7 feed into such initiatives by training mentors to help their mentees (managers) to reflect on their
8
9 own emotions and recognise how this may impact upon their organisations' capability
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11 configurations.
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15 For such benefits to be fully realised further research is needed into organisations of different
16
17 sizes operating in different industries. Case-based research can be difficult to generalise to other
18
19 populations (Grant & Verona, 2015) and, as such, a more voluminous dataset would be useful
20
21 to increase the transferability of our insights to differing organisational contexts. The influence
22
23 of emotion on capability development also merits further exploration through a longitudinal
24
25 study adapting a practice-/ process-based perspective. This would provide opportunities to
26
27 observe emotion 'in action' and capture more of the relational aspect of emotion at the inter-
28
29 individual level. A practice-/ process-based perspective might allow researchers to capture
30
31 multi-directional emotional dynamics at play in organisations. Some questions to guide further
32
33 research include: How can key strategists' emotions and actions be scaled up to generate an
34
35 organisational emotional climate conducive to capability development? Recognising emotional
36
37 contagion and emotional mimicry is also important to explore how the dominant organisational
38
39 emotional climate or the emotions of others in the management team shape the key strategists'
40
41 emotions and their decisions for capability development. When organisational emotional
42
43 ambivalence occurs within the management team how is this resolved, and which emotions
44
45 win? Future research can also investigate whether diversity of emotions within a management
46
47 team helps or hinders capability development.
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55 This paper is a further step away from the normative, predictive explanations of the concept of
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57 dynamic capabilities in the literature, acknowledging its open-ended nature emerging from the
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59 interaction of a multitude of organisational microfoundations. Engaging with the above listed
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3 questions will move the field towards a more context-based and variable understanding of
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5 dynamic capabilities.
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Table 1. Company Information

Organisation	Area of Operation	Length of Operation*	Number of Owner-Managers*	Number of Employees*	Organisation Type
Merchandising Co	Sells a wide range of promotional items (e.g. pens, pencils, bags) to organisations	15 years	2	2	Micro
IT Co	Provides a variety of IT services e.g. disaster recovery and cloud services.	14 years	1	4	Micro
Oil Co	Produces and distributes olive oil and processed vegetables	22 years	3	~34	Small
Rubber Co	Produces rubber parts and discs as original equipment manufacturer for the automotive industry	48 years	3	~150	Medium
Brakes Co	Designs and manufactures brake drums and brake discs as original equipment manufacturer for the automotive industry	45 years	5	~200	Medium

*At the time of data collection

Table 2. Overview of data collected through interviews

Organisation	Interviewees	Total Number of Interviews	Combined Length of Interviews
Merchandising Co	Owner-Manager	5	4 hours, 30 minutes
IT Co	Owner-Manager Technical Director	4	5 hours, 55 minutes
Oil Co	Owner-Manager – General Manager Owner-Manager – Marketing and Communications Director	4	5 hours, 30 minutes
Rubber Co	Owner-Manager – Production Director Owner-Manager – Marketing & Sales Director	4	3 hours, 25 minutes
Brakes Co	Owner-Manager – General Manager & Chairman Owner-Manager – Purchasing Director Production Director	4	4 hours, 50 minutes

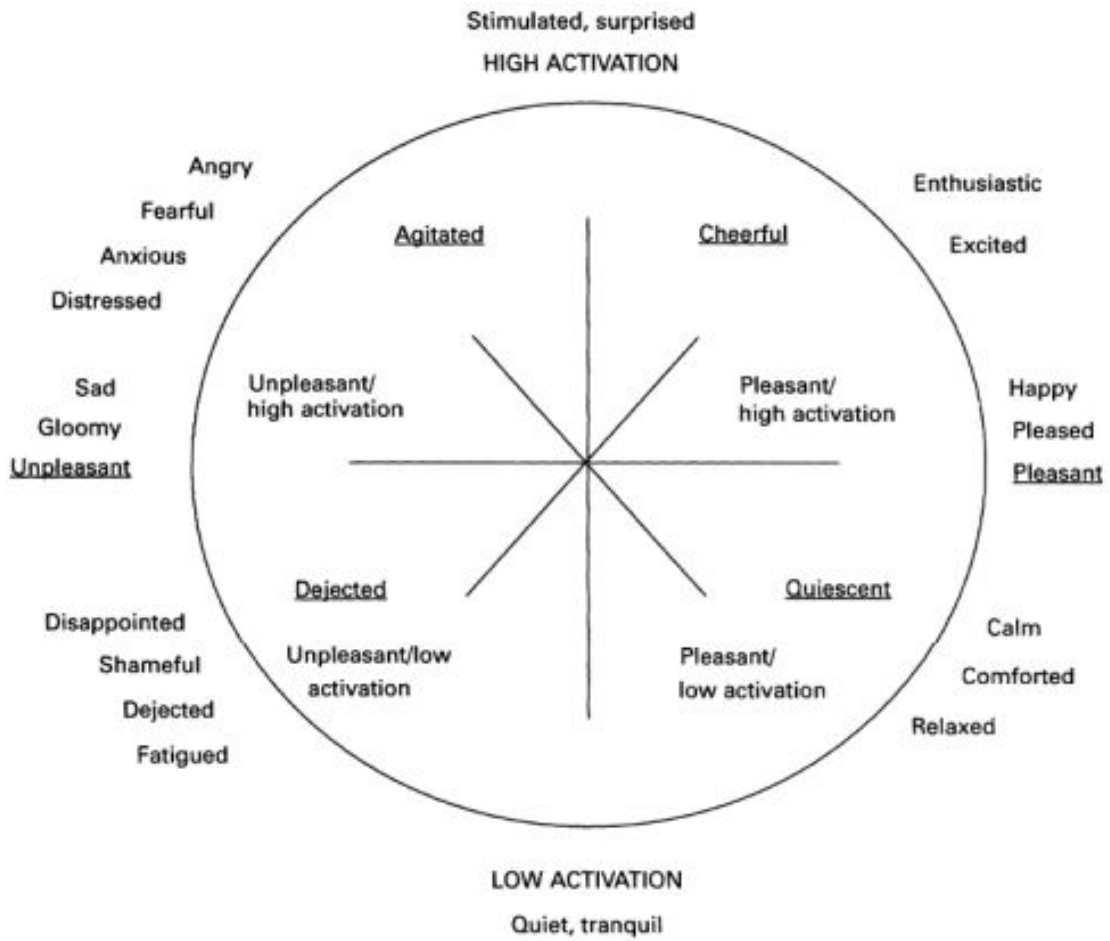
Table 3. Criteria for Assessing Research Quality and Techniques to Ensure Quality

Qualitative Research Quality Criteria (Lincoln & Guba, 1985)		
Criterion	Essence	Techniques utilised to ensure fulfilment of the criteria
<i>Credibility</i> <i>(replacement for quantitative concept of internal validity)</i>	Ensuring that the material presented is a trustworthy account of the phenomena as discussed by the interviewees	<ul style="list-style-type: none"> - Spending adequate time in the case organisations observing various aspects of the setting, speaking with a range of people, and developing rapport with them facilitates understanding and co-construction of meaning between researchers and participants - Observing the case organisations and the data collected persistently to identify characteristics and elements in the organisational setting that are most relevant to the issue being pursued - Subjecting the research material to peer scrutiny (discussions with colleagues, presentations at conferences) - Embracing rival cases in the analysis of the data to revise, broaden and confirm the patterns emerging
<i>Transferability</i> <i>(replacement for quantitative concept of external validity)</i>	Using previously developed theory as a template to compare the empirical results of multiple case studies leading to analytic/naturalistic generalisations	<ul style="list-style-type: none"> - Engaging with wider organisation studies and psychology literatures to identify and develop theoretical and conceptual frameworks relevant to the larger scholarly community - Designing a multiple-case research study to ensure the replicability of results - Securing a sample of participant organisations and interviewees that together present a range of perspectives and practices - Providing rich descriptions of the contexts (in case narratives and in the presentation of findings)
<i>Dependability</i> <i>(replacement for quantitative concept of reliability)</i>	Making explicit in what circumstances the argument is valid	<ul style="list-style-type: none"> - Providing rich descriptions of the contexts so that future researchers can make an informed judgement about the congruency (degree of fit) of our context and theirs - Embracing rival cases in the analysis of the data to revise, broaden and confirm the patterns emerging
<i>Confirmability</i> <i>(replacement for quantitative concept of objectivity)</i>	Exercising reflexivity about the research process to take into account the researcher's perspective to ensure that findings and interpretations are supported by the data	<ul style="list-style-type: none"> - Ensuring the stability and trackability of data and theory development in the study by keeping a detailed record of interview schedules, transcriptions, supplementary documents, field notes, coding and preliminary analyses notes - Recording, transcribing and storing data to provide referential benchmark against which later data analyses and data analyses could be compared for adequacy - Capturing emerging thoughts, impressions and feelings in a reflexive research journal - Involving multiple researchers to foster a reflexive dialogue between them - Auditing decisions and making predispositions and interpretations explicit throughout the research process (preliminary write-up of the analysis, discussions of analysis choices between researchers, write-up of the paper etc.)

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Figure 1. Circumplex model (Larsen and Diner,1992)



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3 **Figure 2.** Impact of individual level emotions on organisational capabilities using the
4 circumplex model (adapted from Larsen and Diner,1992)
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