**It’s personal: The emotional dimension of psychic distance perception in intercultural knowledge transfer.**

**Abstract:**

Psychic distance (PD) is a perceived obstacle to information flows in knowledge transfer between individuals in different national markets. However, the impact of individuals’ subjective perceptions of macro-level distance factors disrupting these flows has been undertheorized. Prior research has conceptualized PD as a geospatial concept – symmetric, continuous and stable over time. Using appraisal theory and a qualitative study of a Chinese multinational, we analyse individual-level psychic distance stimuli. We examine how perceived psychic distance is impacted in the appraisal of personal concerns, triggering salient emotions in the process of individual’s cross-border interactions. Our key contribution is to trace and explain how individual-level psychic distance is created in intercultural knowledge transfer. We theorize that it is created by a psychological mechanism involving emotionally charged processes of individuals coping with concerns arising from emotional encounter. We find that conventional macro-level psychic distance is moderated by the emotions of individuals.

**Keywords:** Psychic distance ∙ Emotion ∙ Intercultural knowledge transfer ∙ Chinese MNE ∙ Managerial and employee perceptions

**1. Introduction**

Psychic distance (PD) is a central concept used to describe how country differences influence firm’s internationalization process (Zaheer et al., 2012). Its relevance stems from the proposition that high PD increases perceived risks of international expansions, attributable to high information asymmetries in understanding foreign market operation (Maseland et al., 2018). However, the predominant conceptualization of PD follows a geometric model, mainly focusing on the ‘distance’ aspects of the concept. This rests on the problematic assumption that the perceived dissimilarity between country pairs is symmetric, continuous and stable over time - like geographic distance (Beugelsdijk et al., 2018; Shenkar, 2001). This geometric approach constrains a more precise theorization of the link between external country differences and uncertainties about these differences experienced by the individuals (Shenkar et al., 2008).

IB scholars increasingly call for ‘putting the “psychic” back in the psychic distance’ (Nebus & Chai, 2014, p. 8). Through this lens, PD materializes as a person’s sensitivity and unique knowledge about foreign markets, which is inherently subjective (Puthusserry et al., 2014), asymmetric (Yildiz & Fey, 2016) and contingent (Prime et al., 2009). Hence, a stream of research has arisen to examine how individual-level heterogeneity influences subjective perception of exogenous distance stimuli (Dow et al., 2020). Common to these studies is the assumption that PD is primarily a cognitive concept: information about the host country is collected and analysed by boundedly rational decision-makers who are subject to perceptual bias or errors (Maitland & Sammaritino, 2015). Consequently, decision-makers tend to over- or under- estimate actual differences between countries, leading to poor investment decisions (Azar & Drogendijk, 2019). Once these cognitive limitations are compensated for by optimal information processing configurations, the detrimental impact of PD is minimized, as the perception of distance more accurately reflects the firm’s actual environment (Weber et al., 2020).

We argue that the rationalist approach with exclusive focus on cognitive pattern of information processing is insufficient to theorize PD. For example, in their influential study on ‘psychic distance paradox’, O’Grady and Lane (1996) point out that the Canadian retailers’ knowledge about the United States became their ‘learned incompetence’ to develop more accurate country assessments. Baack et al. (2015) further suggest that managers may struggle to revise country distance perception even when they acknowledge the need to do so. However, the exact explanation for why such cognitive inertia happens to PD is still lacking. Basic psychological experiments (Frijda, 2006) demonstrate that emotion facilitates cognition by influencing attentional selection, perceptual capability and decision-making style. Early PD literature considered individuals “to have a feeling” about opportunities in foreign markets (Johanson & Vahlne, 1977, p.28) or to view “the degree of cultural affinity” (Hallén & Wiedersheim-Paul, 1984, p.18) as an important component of PD. An emerging stream of literature on cross-border M&A suggests that emotion acts as critical intermediary linking social-cultural difference and individual attitudes or behaviours that ultimately determine firm-level acquisition performance (Sinkovics et al., 2011). Given that felt emotion suggests an urge to act/react by seeking control over planned behaviour (Frijda, 2006), it is not theoretically or practically sound to assume that managers can reach ‘impersonal’ assessment of distance by exclusively sticking to objective, cognitive calculation of country information (Buckley et al., 2007). Ambos et al. (2019, p. 668) speculate that the PD construct “most likely has a two-dimensional structure” containing both cognitive elements (i.e., what a person knows about country distance) and emotional elements (i.e., what a person feels about country distance) although the underlying mechanism of cognition-emotion interaction remains unspecified.

This paper aims to enhance the theorization of PD by exploring the emotional dimension of distance perception. We draw on appraisal theory’s assertion that emotions arise in response to stimuli relevant to individual well-being, and require cognitive processes in the form of appraisal (Frijda, 2006; Larazus, 1991). Different from ‘cold’ or detached information processing, appraisal is ‘hot’ or personal significance of what is objectively known about country differences (Lazarus, 1991), and thus it brings us closer to what effectively galvanize individual’s attention towards certain PD stimuli not others (Vahlne & Schweizer, 2022). Studies further demonstrate that different appraisal patterns lead to discrete emotional experiences, which provide distinctive information and motive for further thinking, attitudes and behaviours (Moors et al., 2013). Thus, appraisal theory provides a coherent framework to examine the cognition-emotion chain involved in an individual’s awareness, perception and understanding of distance (Nebus & Chai, 2014).

One area of MNEs’ operations that is susceptible to impact from PD is intercultural knowledge transfer. Such transfers are intrinsic to a multinational’s competitive advantage (Kogut & Zander, 1993), and offer an appropriate context to explore the emotionality of PD. Consistent with the original concept of PD as perceived obstacles to information flow (Vahlne & Wiedersheim-Paul, 1975), prior studies demonstrate that country differences affect the overall effectiveness of firm’s knowledge coordination (Michailova & Mustaffa, 2012). MNE knowledge processes are largely driven by individuals who are “carriers of the tension between home and abroad” (Foss & Pedersen, 2019, p.1617). Hence, we argue that the interactive nature of MNE knowledge transfer represents a natural experiment to explore the emotionality of PD via individual (inter)-actions, which is the fundamental driver of distance perception (Shenkar et al., 2020). Against this background, our research question is: What role do individual emotions linked with PD perception play within the MNE knowledge transfer process?

We conducted a single case study analysis to fit the exploratory nature of our research question. An exploratory single case study research enabled a rich and contextualized illustration of how the emotionality of PD as an understudied issue in IB literature actually plays out (Siggelkow, 2007; Welch et al., 2010). The empirical setting of this research is a Chinese I.T. service company’s acquisition in advanced economies to seek international know-how. As a typical case of Chinese MNE in its early stage, lack of formal knowledge integration pushed down knowledge development activities to specific boundary spanners, mostly skilled staff from the acquired units (Liu & Meyer, 2020). Individual characteristics such as cross-cultural competence and willingness to collaborate become paramount in overcoming unbalanced power relationship between emergent, knowledge-deficit headquarters and technologically advanced subsidiaries, in addition to cognitive barriers of knowledge distance (He et al., 2018). IB scholars (Buckley et al., 2023; Zhao et al., 2022) call for more research on tension experienced by various knowledge brokers in Chinese overseas acquisition, which is amenable to our interpretation of PD using appraisal theory of emotions.

We examined the company’s service of international software development that required intense knowledge transfer between the Chinese headquarters and its subsidiaries in US, Australia and Europe. Building on the self-generated, context specific categorization of distance factors by MNE staff (Buckley & Chapman, 1997), we observe that PD is impacted in the primary appraisal of personal concerns about country differences, triggering salient emotional awareness. With further appraisal of individual’s international orientation and situational efficacy, the emotional awareness produces path-dependent influences on emotional experiences and emotion-consistent attitude and behaviours towards PD. We then develop a process model explaining when and why emotions influence the distinctive way that individual perceives or copes with PD. The model particularly highlights the critical affective events where perceived distance creates a path-dependent emotional trajectory, influencing the purpose, pattern and efficacy of individual interactions with foreign others.

This study is organized as follows: First, we critically review the extant literature on PD, identifying research gaps in emotional dimension and context focus. Then, we elaborate on our qualitative research design and empirical findings. We end with theoretical and managerial implications, limitations of our work and suggestions for further research.

**2. Theoretical foundations**

**2.1. Individual perception of psychic distance**

Psychic distance is a sum of individual perceptions of factors “preventing or disturbing the flow of information between firm and market” (Vahlne & Wiedersheim-Paul, 1975, p. 308). It is experienced from, and through, national differences in terms of language, education, business practice and culture (Evans & Mavondo, 2002). The PD construct is linked to the principle of human perception development. Perception refers to the mental representation individuals use to understand the external environment and to guide their behaviours. Rather than a passive registration, perception is an active, sense-making process driven by schemas that individuals acquire over their lifetime (Weick, 1995). These schemas act as knowledge and filter for screening relevant stimuli, by organizing them into comprehensive patterns, and enabling the individual to generate meaningful interpretations (Maitland & Sammartino, 2015). Following this perceptual characteristic, PD is considered to be a knowledge gap that may disadvantage the firm because decision-makers are unaware of, misinterpret or fail to act on the information of the relevant differences (Hkanson & Ambos, 2010: Nebus & Chai, 2014).

An emerging stream of research explores individuals’ cognitive attributes or biases that shape their knowledge about foreign nations such as existing belief, nationality, and decision-making style (Nebus & Celo, 2020). It assumes PD development is a primarily cognitive process through which information about country differences is scanned and compared by boundedly rational decision-makers. For instance, Baack et al. (2015) discovered that managers tend to exaggerate (or overlook) distance with respect to the host country when the information is consistent (or contradictory) with an ex-ante belief in significant dissimilarity. Similarly, Williams and Grégoire (2015) observe that seeking commonalities is a dominant consideration for the executives’ decision of where and when to internationalize (i.e., maximizing a firm’s potential in a foreign country), whereas avoiding differences is more influential for the decision of how to internationalize (i.e., guarding against potential risks). Weber et al. (2020) provide additional evidence that once the available information about host countries becomes too little or too complicated, managers tend to sacrifice an informed assessment for the error-prone heuristics instead. By implication, country differences, often pre-determined by researchers or an independent panel of experts, are employed as the benchmark for practicing managers to calculate distance ‘objectively’ and ‘rationally’ (Prime et al., 2009).

**2.2. The emotional dimension of psychic distance perception**

We argue that the computational cognitive approach is limited to theorize the subjective, context-specific nature of PD without considering the spontaneous emotional reactions towards foreignness (Leung et al., 2005; Zaheer et al., 2012). From an evolutionary perspective, emotions such as ‘wariness’ or ‘fear’ are prewired in human brain as adaptive responses to survive in unfamiliar situations (Cosmides & Tooby, 2000). Cognitive psychology shows that emotional response modulates cognitive processes by prioritizing attentional deployment, augmenting recollection of relevant memory, and offering necessary motive to reach final decisions (Elfeibein, 2007).

IB research on cross-border M&As sheds some light on emotional impact of individual’s perception of foreign nations (Zahoor et al., 2022). As an important ‘base condition’ surrounding the members of merging firms, national distance factors are often experienced as friction among their partisan goals or concerns, triggering strong emotions with substantial consequences (Shenkar, 2020). Positive emotions, such as cultural attraction, relate positively to acquisition outcomes by directing more managerial attention towards the desirable host country (Li et al., 2017), stimulating identification with desirable country’s managers/employees (Yildiz & Fey, 2016) and enhancing trust in the counterpart’s potential to transform the difference into a source of synergies (Reuer & Ragozzino, 2014). Negative emotions, including national animosity, typically aggravate the stressful ‘merger syndrome’ via heightened attention to partners’ opportunistic behaviours (Arikan & Shenkar, 2013), magnified in-group versus out-group stereotypes (Sinkovics et al., 2011) and diminished commitment towards the pre-assessed benefits of operational integration (Hassett et al., 2018). An implication of this is that emotion acts as critical intermediary between perceived PD stimuli and individual attitudes or behaviours that ultimately contribute to the success or failure of cross-border acquisitions (Sinkovics et al., 2011).

However, the mechanism of emotional development related to PD is still undertheorized.

Quite often, the international M&A literature tends to focus on emotion-related concepts (e.g., identification) or global positive or negative sentiment (e.g., liking or hostility) towards home/host countries. There is little consideration of how and why individuals develop various emotions when interacting with their foreign partners, which is the fundamental driver of distance perception (Shenkar et al., 2020). For instance, Li et al. (2017, p. 952) rely on GLOBE’s cultural scores to measure overall “cultural attractiveness” despite such attraction being derived from the individual’s positive affective evaluation of specific attributes or behaviours displayed by others. This creates a significant gap, as among the greatest emotional impacts for organizations are those events related to working with other people (Elfenbein, 2007). Treating emotions as undifferentiated hedonic responses falls short of capturing rich personal meanings of emotional experience. Hence, we turn to appraisal theory for its power to explicate the nature and process of discrete emotions.

**2.3. Appraisal theory of emotion**

Prior research defines emotion as “the experience of a form of biological response to environmental stimulus, resulting in physical and psychological changes and subsequent readiness for action” (Ashkanasy & Dorris, 2017, p.68). This definition acknowledges that emotion is an episodic, relatively short-lived, coordinated response to situational demands (Scherer, 2009). It also emphasizes that emotion is not a stand-alone reaction but a coherent change involving evaluation, feeling and behaviour tendency for adaptation (Roseman, 2013). Accordingly, we distinguish emotion as multicomponent process from other affective phenomena.

Mood differs from emotion in that mood lacks a specific target, an identifiable pattern of change, and is often not realized by the perceiver (Frijda, 2006). Also, emotion is not an affective trait or disposition that generates a relatively fixed response across situations, to the point of pathological response as a result of persistent cognitive bias (Hertel & Mathews, 2011; Scherer, 2009). Whereas fear is an adaptive response to avoid an immediate threat, being always fearful (i.e., paranoia) is a sign of systematic misjudgements and maladaptation. Our research focuses on PD-related emotions with identifiable stimuli and reaction, not diffused or rigid affective responses.

The appraisal theory makes precise claims regarding when and how different components interact to produce emotion. The central premise of appraisal theory is that the elicitation of emotion requires cognition in the form of appraisal (Ellsworth & Scherer, 2003). Specifically, appraisal is subjective evaluation of particular events in relation to personal concerns. Events are changes in circumstance that demand adjustment (Weiss & Cropanzano, 1996). Concerns refer to what individuals strive for or what they seek to maintain including a set of needs, goals and values (Frijda, 2006). Hence, a short-lived emotion can be longer lasting when individual experienced the same emotion multiple times towards the same event, repeating the appraisal until the situation-specific concerns are addressed (Ellsworth & Scherer, 2003). MNE knowledge transfer represents a relevant work event for appraisal as IB research shows that PD stimuli create significant challenge for MNE staff to learn from and with their foreign colleagues. Although cognitive activities, such as attention or memory, are required to process a stimuli, appraisal entails the personal significance of what is known about difference, and thus represents a more spontaneous, personal or ‘hot’ cognition (Moors et al., 2013). We propose the notion of appraisal as ‘personal relevance detector’ as it can better explain why a certain PD stimulus triggers more or less individual sensitivity (Dow & Karunaratna, 2006).

While previous literature on cross-border M&A has employed appraisal theory of emotion, appraisal was assumed as a broad and static concept without sufficient attention on the exact nature of appraisal process. This leads to inconsistent findings. For instance, Sinkovics et al. (2011) developed the model which suggests employees’ emotions in M&A situations are evoked by the subjective appraisal of managerial communication. Gunkel et al. (2015) tested Sinkovics et al.’s (2011) model and found no significant relationship between perceived communication and employees’ emotions. In this study, we use Lazarus’s (1991) cognitive-motivational-relational model to further elaborate the appraisal pattern and process. According to Lazarus (1991), emotion starts with ‘primary appraisal’ of whether the stimuli will harm or benefit one’s relevant concerns, determining valence and intensity of emotion. An event that thwarts/promotes a person’s important goal invokes strong negative/positive emotions. Motivated by initial awareness of stimuli-concern interactions, an individual will evaluate resources and prospects to deal with the event or ‘secondary appraisal’. In this stage, more complex checks such as certainty (i.e., the extent to which events seem predictable or comprehensible), accountability (the degree to which someone/something other than oneself is responsible for events) and coping potential (the extent to which events can be influenced by individual agency) are considered, underlying the quality of experienced emotions. The results of primary and secondary appraisals represent different types of the people-environment relationship or ‘core relational theme’ (e.g., other-blame for anger; threat for fear), which underlies the subjective feelings verbally elaborated as emotional experience with explicit/subtle expressive cues (Lazarus, 1991). For example, Hassett et al. (2018) found that top managers appraised cultural difference in an Indian-Finish acquisition as loss of status or decision-making power (e.g., harm to important concerns), lack of understanding from foreign colleagues (high certainty and others’ accountability), and the conditions of contractual agreement with the acquirer to enact changes (coping potential), leading to feeling of anger or discontentment (other-blame). We argue that the appraisal checks are intricately connected with the manager’s personal evaluation of country differences (Smith et al., 2011), providing a useful framework to map various emotional experiences linked with PD (Håkanson & Ambos, 2010).

Because emotional experience provides information about the individual’s most pressing concerns, there is an immutable urge to respond to the felt emotions or ‘action readiness with control precedence’ (Frijda et al., 1989). Rather than being a fixed response, action readiness is a state that sets individual for action to maintain favourite person-environment relationship (Frijda et al., 1989). Hence, emotions can motivate a range of coping responses through externally visible ‘affect-driven behaviours’ or internally experienced attitudes, depending on the situational opportunities to enact emotional responses (Lazarus, 1991; Weiss & Cropanzano, 1996). In general, positive emotion indicates the situation is safe, leading to more expanded and creative information processing for exploration (Frederickson, 2001). In contrast, negative emotion signals that the situation is problematic, prompting narrow and vigilant information processing for immediate threat (Forgas & George, 2001). Furthermore, different emotions prompt unique coping responses informed by its appraisal theme, although differentiation is less salient in positive emotion (Roseman, 2013). For example, guided by the relational aim of ‘removing the harm’, angry subordinates cope with abusive supervision via direct confrontation with an aggressive supervisor, deliberately under-performing the given task, or increase work efforts to expand personal influence (Oh & Farh, 2017). Fear propels the customers to ‘move away from danger’ by more mindful inspection on the product’s quality or avoiding the unfamiliar product (Harmeling et al., 2015). While emotional responses have adaptive value, they concentrate on ‘here and now’ aspect of the situation while discounting evaluation of long-term consequence or necessity beyond immediate personal stake (Fridja, 2006). This is reflected in Aichhorn and Puck’s (2017) study of language barriers in two Austrian-based MNEs. They found that immediate code-switching induced by “foreign language anxiety” helped MNE professionals to restore their self-image but it undermined the content and relationship dimension of cross-border collaboration (Aichhorn & Puck, 2017, p.749). By implication, understanding the impulsive characteristics of emotional responses derived from the immediate urge to address situational demands extends the current literature on PD coping which is preoccupied with rational analysis of bridging or avoiding information asymmetries (Puthusserry et al., 2014).

**2.4. MNE Knowledge transfer as context focus of PD perception and emotion**

Utilizing appraisal theory, we employ intra-MNE knowledge transfer as a relevant context to explore emotionality of PD. The very existence and advantage of MNE is attributed to internal knowledge flows (Kogut & Zander, 1993). PD matters because uncertainty brought by relevant country differences affect the firm’s ability to transfer information from or to dissimilar market (Dikova, 2009). Emerging micro-foundation research further highlights MNE knowledge process is fundamentally driven by individuals making conscious effort to create a “shared cognitive background” (Buckley & Carter, 2004, p.387) and “personally absorbing or filtering tension” between home and abroad (Cramton & Hinds, 2014, p. 1076). As concluded by Foss and Pedersen’s (2019, p. 1618), “ultimately, psychic distance can be reduced to cognitive and affective states of mind of individuals, and how these states influence individuals’ behaviours and interactions”. The iterative and interactive nature of MNE knowledge transfer is well-suited to capturing the dynamic nature and cumulative impact of PD derived from relatively recurring, identifiable emotions towards the stimuli (Ellsworth & Scherer, 2003). Fleeting emotions tend to be too rare to create solid patterns and effects in management process (Vuori & Huy, 2016)

Gibson (2001) developed a framework for understanding the cognitive micro-foundation of knowledge transfer in teamwork. This framework posits that knowledge activities among team members consist of four consecutive phases. During the initial accumulation phase, team members perceive information from each other, then select pieces of information with appropriate attributes and store them under meaningful categories. In the following interaction phase, members exchange relevant information retrieved from transactive memory, and structure exchange by establishing reliable communication patterns. Then, team members move into more complex examination phase where different courses of action are negotiated, assumptions are checked, and key information is typically evaluated according to the role of its contributors. In the final accommodation phase, member’s judgements are integrated via mutual perspective taking and then generate decision and action. By explicating cognitive patterns in knowledge processes, Gibson’s (2001) model offers a relevant point of departure for our exploration of PD-related emotion from cognitive appraisal perspective.

**3. Methodology**

**3.1. Research design: A qualitative, single case study**

Our aim is to explore the emotional dimension of PD in MNE knowledge transfer and therefore we adopted a qualitative case study research strategy. Premised on the interpretative paradigm (Welch et al., 2010), a case study approach allows us to identify the novel constructs that emerge from thick description (Stake, 1995), and thus generates new theoretical explanation closely grounded in the event being observed (Suddaby, 2006). We adopted a single case study design with its potential for a more processual understanding and a stronger assertion of how PD-related emotions were elicited, felt and responded to (Siggelkow, 2007), both in terms of the number of factors studied and sources of information obtained (Patton, 1980). Past research shows that a single case study is an appropriate method to capture full range of emotional experiences (i.e., what participants think, feel and act) in the organizational events such as radical change, strategy implementation, and innovation process (Vuori et al., 2018).

**3.2. Research Context**

We follow the view that PD is a contingent, multilevel phenomenon, including country, firm/business and individual differences relevant to the business transaction under investigation (Maseland et al., 2018; Safari & Chetty, 2019). Accordingly, Fletcher and Plakoyiannaki’s (2001) ‘multilevel approach’ is employed to select samples and integrate different contexts for capturing various facets of PD ultimately experienced by the individuals in MNE knowledge transfer.

Level 1 refers to country selection. China has become the dominant player in the new wave of outbound FDI (Zhao et al., 2022). China was the second largest global investor in 2019, with 44,000 overseas enterprises from 18 major industries in 188 regions around the world (UNCTAD, 2020). In 2020, amidst global pandemic, outward FDI from China stabilized at $133 billon, making the country the world’s largest investor (UNCTAD, 2021). Acquiring firms in developed economies represents a ‘springboard’ for Chinese MNEs in search of international know-how (Luo & Tung, 2007). However, as latecomers, Chinese knowledge-driven FDIs face significant challenges in terms of country differences, often exacerbated by ‘liability of emergingness’ (i.e., institutional weakness and legitimacy deficit of home market) when geared towards advanced countries (He et al., 2018; Madhok & Keyhani, 2012).

Level 2 relates to the choice of industrial sector. China’s I.T. service industry exemplifies the rapid rise of Chinese MNEs. The ability of IT to codify service delivery in electronic forms and domestic learning via offshore I.T. hub for advanced MNEs enabled Chinese firms to achieve rapid internationalization (Manning et al., 2015). However, Chinese I.T. industry is still in its infancy characterized by the low value, labour-intensive outsourcing work. This is different from those of advanced economies offering high value, knowledge-intensive consulting services (Oshri et al., 2023). To move up I.T. value chain, it is observed that Chinese vendors bear more uncertainties and costs in transferring industry-specific knowledge from developed markets (Zhu & Morgan, 2018).

Level 3 refers to the choice of MNE. Our case company is one of the largest China-based I.T. service firms. Founded in 1997, the firm was subcontractor of lead software multinationals from US and slowly became a first tier I.T. suppler to global firms in China. In the mid-2000s, the company started to acquire a number of local firms in the West in order to upgrade service capability. At the time of conducting our research, the company employed 23,000 staff in 15 major cities in the world, with over 60 per cent of its net revenue coming from foreign markets.

To ensure competitiveness in home and international market, the company adopted the ‘agile principle’ from its American subsidiaries, in which core components of international I.T. project – coding, testing, configuring and maintaining software system – were executed simultaneously across different functional units. While this new delivery system achieved a balance between a customized end-to-end I.T. service and concerns about costs, it also created pressure of managing knowledge flow under both “spatial dispersion” and “context differentiation” (Ambos & Ambos, 2009, p.4), particularly for Chinese vendors like our case company with limited experience in managing innovation at global scale (Oshri et al., 2023).

Level 4 discusses the selection of MNE units. We limited our focus on the company’s global I.T. service co-delivered by the three regional headquarters (i.e., Beijing, Shanghai, Dalian) in mainland China and six subsidiaries in the US, Australia and Europe, given their embeddedness in the ‘Confucian cluster’ and ‘Anglo-Saxon cluster’ respectively (Ronen & Shenkar, 2013). Beyond salient country and industry difference between two clusters, the practice of conducting and evaluating allocated I.T. work differed too. In western countries, I.T. services are normally contracted in accordance with pre-defined objectives, thorough assessment of delivery process and specific agreed timeframes. This is in contrast with business practice in China where ‘vendor management system’ still remains embryonic. The governance of contracted work tends to be unstructured, ad-hoc and subject to changes (Oshri et al., 2023). Reinforced by a ‘light-touch integration’ (Liu & Meyer, 2020), the knowledge transfer between chosen home and overseas made relatively subtle differences in business habit more apparent for our investigation (Safari & Chetty, 2019).

Finally, level 5 refers to the choice of the source of evidence. This includes our research participants who directly interpreted and responded to PD challenges in MNE knowledge transfer. Previous research suggests an in-depth single case research is appropriate to fully capture and explain the variety of individual emotions following the company’s cross-border acquisition (Hassett et al., 2018). In the next section, we explain in detail the collection of emotional data from the individuals’ different experiences of tension or affinity between home and abroad.

In sum, levels 1-4 represent macro-level difference factors providing the specific context for emotional appraisal. level 5 captures the micro-level difference factors (i.e., personal background and experience) that affect individual awareness and appraisal outcome, leading to various emotional experience (Safari & Chetty, 2019). These different levels of context helped us to obtain a more nuanced explanation of appraisal process that underlies the emotionality of PD (Lazarus, 1991, Welch et al., 2011).

**3.3. Data collection**

Data were collected through field work when the company began to offer global I.T. service delivery in 2014 (see Table 1, 2, 3).

=Insert Table 1, 2, 3 about here=

This approach allowed us to empirically operationalize emotion as multi-component changes in response to a relevant event, accompanied with “face expression and other emotionally expressive cues” (Elfenbein, 2007, p.315). From this perspective, emotions generate external signals that reveal the expresser’ internal emotional states. To capture and analyse emotional cues in a consistent manner, we applied Ekman (1992)’s basic emotion model as our organizing framework (see Appendix 1). This model specifies a number of irreducible emotional states or ‘basic emotions’ that “are evolved through adaptive value in dealing with fundamental life-tasks” (Ekman, 1992, p. 169). Thus, each basic emotion has an innate biological basis with a set of unique, universally recognizable verbal and non-verbal expressions. Although basic emotions can be deliberately modulated or inhibited, those repressed feelings can still ‘leak’ out via subtle expressions. A natural, happiness smile involving smooth changes in both the mouth and the eyes was differentiated from fake, strategical smile that entailed uneven changes in the mouth region only. (Ekman, 1992). Using the basic emotion model suited our purposes to examine the fundamental emotions individuals naturally feel when perceiving PD stimuli in MNE knowledge transfer.

We conducted 60 qualitative semi-structured interviews. All interviewees had been involved in the company’s global I.T. service delivery and displayed a sufficient diversity with respect to organizational position, functional area, firm tenure, and nationality. To recruit participants, we employed a “snowballing” strategy to ask informants to name a number of foreign colleagues with whom they needed to interact in order to exchange information for the assigned project. Emphasizing the workflow interdependence enabled us to generate bilateral perspectives of how emotions naturally emerge from the knowledge exchange and to eliminate the sample bias.

In three China-based units, we conducted 36 face-to-face interviews with the Chinese participants in their native language. Due to travel commitments and financial costs, 20 out of 24 interviews with subsidiary staff were conducted in English via Skype or conference call. Except for the minor technical disruptions, they were quite comfortable with technology-assisted interviews due to its extensive use in their daily work. Online video interviews also allowed a faithful recording and thus repeated examination of non-verbal cues for emotions alongside interviewees’ verbal accounts. Specifically, we employed Ekman et al.’s (2002) Facial Action Coding System (FACS) to capture facially displayed emotions as confirmatory indicators of emotional encounters recalled by our informants. This is line with ample evidence that retrieval of a memorable emotional event often reactivates emotional experience and reactions (Frijda 2006).

Meanwhile, subsidiary staff who were either native English speakers or professional bilinguals welcomed the opportunity to express their views in English about their Chinese employer with the assured confidentiality. Likewise, the opportunity to conduct interviews in interviewee’s native language enhanced our rapport building, rich description of affective events, and familiarity with “context” and “content” of PD-related emotions reported by the informants (Welch & Piekkari, 2006).

The interview questions were informed by the literature, and they have evolved following selected site visits, and one of the authors’ 6-month internship in the company’s headquarters. Our initial objective was to understand how MNE staff perceive and react to country differences in cross-border knowledge transfer. However, following the initial field work we were struck by emotionally charged narratives, which challenged our assumption that PD is a mainly cognitive function. Intrigued to understand this unexpected finding, we moved back and forth among different analytical lenses, theoretical explanations and ongoing data collection/interpretation. Thus, we adjusted our interview protocol several times to better explore dual-structure conceptualization of PD containing both cognitive and emotional components (Ambos et al., 2019). This non-linear process intertwining extant theory and empirical evidence of unfolding themes and insights leads us to apply a combination of inductive and abductive approach, which is explained in more detail in section 3.4. on data analysis.

We started the interview with some “grand-tour” questions about the interviewee’s background information, daily tasks in the project, interaction with the colleagues at the other sites (Spradley, 1979). Grand tour questions help us to move towards details of specific events and participants experience of them with mini-tour questions (Spradley, 1979). This sequence of inquiry is particularly useful in probing delicate subjects such as emotions. Consistent with our conceptualization of emotion as being driven by the appraisal of specific event (Lazarus, 1991), we employed critical incident technique (Durand, 2016, Sinkovics et al. 2011), and directed our interviewees’ narratives towards the concrete and frequent challenges in cross-border knowledge transfer. Based on the emotions our informants described, we subsequently asked probing questions to understand the nature of those emotions and their consequence. In this way, the retrospective account was characterized by ‘where’ and ‘how’ certain emotion occurred rather than semantic knowledge of ‘what’ that emotion category was. In the end, interviewees were asked to share their thoughts about the relationships between those feelings, knowledge transfer and perception of foreign colleagues. We probed their general statement by asking them to illustrate these relationships with specific examples.

Given the interactive nature of qualitative interviews, a particular challenge was that the respondent’s feelings could also affect the researcher’s own emotions and role as “an informed outsider” (Welch et al., 2002, p. 625). Based on experience of the researcher who conducted the fieldwork, most of the informants were “corporate elites” (Welch et al., 2002) and found it uneasy to talk about emotion in the workplace. Hence, the interviewer felt particularly attached to the interviewees who were displaying appreciation and interest in our research. The interpersonal liking might run the risk of over-estimating the value of data from those elite but nice informants. We found collaboration with other IB researchers provided a good health check to avoid a single researcher in the fieldwork to “be carried away” by the informants’ powerful emotions.

In addition to interviews, we also observed three specific international projects of the company’s I.T. service. To ensure that the observed events were representative of the knowledge transfer process taking place in the cross-border teams, we structured observations around the key project milestones: presales, bidding, delivery and evaluation. These observations were critical to studying emotions and their impacts as they occur instantaneously. For instance, Ekman et al.’s (2002) FACS was applied to our participation in several virtual team meetings across the project lifecycle. This enabled us to code and examine facial expressions as primary indicators of the emotions that occurred in the real time of performing global I.T. service. Finally, a wide range of documentary data was collected including project report, PowerPoint presentations, annual reports, internal newsletters, staff survey, industry-related white papers. We used documentary information for data triangulation as well as identifying future issues to explore. For instance, a number of post project reports highlighted the importance of positive emotional climate in delivering high-quality I.T. service, thus stimulating our inquiry of how individuals cope with perceived PD through emotional reactions. Table 3 summarizes our participant observations and documents for data collection.

= Insert Table 3 about here =

**3.4. Data analysis**

Consistent with Magnani and Gioia’s (2023) systemic approach of qualitative data analysis, we specifically followed the inferential process of the Gioia Methodology (see Gioia et al., 2013) that departs from informant centred understanding by adhering faithfully to our participants’ experience of PD in MNE knowledge transfer (i.e., inductive reasoning), and moves towards theory centred understanding on emotional dimension of PD, guided by Dubois and Gadde’s (2002) suggestion on ‘systemic combining’ of extent literature and empirical data from the field (i.e., abductive reasoning). The interplay between induction and abduction are more likely to generate “novel theoretical insights” and “best explanations” than induction alone (Timmermans & Tavory, 2012). Thus, we concur with the view that Gioia Methodology should not be conceived or used as a template for “procedural rigor” that undermines “interpretive rigor” (Magnani & Gioia, 2023; Mees-Buss et al., 2022).

The inductive epistemology guided our first stage of data analysis, where we focused on how our participants define and understand macro-level PD stimuli in the context of MNE knowledge transfer. Following Gioia et al.’s (2013) practice, open coding was used to create short statements across all interviews indicating our informants’ perspectives and their word choices on how and why country differences matter in their knowledge exchange with foreign colleagues. This is consistent with our conceptualization of PD as perceptual. Through content analysis, we organized and grouped these statements into high-level nodes or first-order category.

By coding and categorizing qualitative data grounded in our participants’ lived experience, we inductively explored the relationship between macro-level PD stimuli and individual-level perceived PD (Dow and Karunaratna, 2006). In this process, we were struck by emotionally charged narratives, which challenged our assumption that PD is a mainly a rational cognitive information process as dominant IB literature suggests. This new focus generated interesting anomalies. We observe even similar levels of knowledge about country differences might affect managers differently, invoking attraction for one manager, but hostility for the other. These emotions motive attitudes and behaviours that defy the suggestion that uncertainty of PD could be addressed with more accurate information (Weber et al., 2020).

To further understand these anomalies, we complemented data analysis with abductive search for plausible explanations. We followed Sætre and Van De Ven (2021, p.684) definition of abduction as: “[…] generative reasoning that begins with observing and confirming an anomaly, and generating and evaluating hunches that may explain the anomaly, for subsequent deductive constructing and inductive testing”. In this process, we sought explanation for intriguing evidence in the light of psychological literature on emotion before returning to the data to securitize the speculations on the emotion dimension of PD. After evaluating different theories of emotions (e.g., evolutionary theory, psycho-physiological theory, social constructionist theory), we used the appraisal theory of emotion for its power to explicate the process and consequence of emotional experience. And a small number of IB studies on the role of emotion in cross-border M&As apply cognitive appraisal theory but treat appraisal as broad, static concept. Little attention was paid to the exact nature of appraisal process that elicits emotion and determines its differentiation, which generates inconsistent results on emotional triggers in M&A situation and employee’s responses (e.g., Sinkovics et al., 2011, Gunkel et al., 2015). To enhance our analytic framework on ‘when’ and ‘how’ PD-related emotion occurs, we further elaborated appraisal theory and particularly emphasized appraisal as ‘cognitive-motivational-relational’ process consisting of distinctive primary and secondary appraisal (Lazarus, 1991, Frijda et al., 1989).

We resumed our data analysis with a focus on both the emotional and cognitive components of PD and created more codes. This led to the second stage of selective coding when we needed to determine the common properties of those codes and reduce them into a more manageable number. To identify the strongest themes, we sought similarities and differences among these codes and categories via constant comparative method, which is vital to both inductive and abductive analysis (Sætre & Van De Ven, 2021). For the inductive part, we selected the statements of each interviewee within the same company’s unit and contrasted them based on organizational position and other individual attributes. Then, we juxtaposed and refined core categories across the functional role of units. For the abductive part, we compared our data with exiting concepts and theories, which in turn generate a non-linear ‘matching’ process between theory and reality (Dubois & Gadde, 2002). For instance, with the appraisal theory of emotion, existing concepts of ‘personal concern’ ‘valance and activation’ were used to interpret our data (Lazarus, 1991). Then, we imported these concepts from the field and explored their meaning from our interviewees’ lived experience of PD-related emotion in MNE knowledge transfer. This helped us to better examine and retain the most important thematic categories.

The combination of inductive and abductive analysis guided us to organize first-order concepts into second-order themes. Through ‘direction and redirection’ of ongoing data analysis (Dubois & Gadde, 2002), we found Gibson’s (2001) work on cognitive process of knowledge activities provide a suitable theoretical anchor linking MNE knowledge transfer, PD perception and emotions. We further iterated our dataset and theories to the point where no additional insights were identified. Finally, we consolidated second-orders themes into more overarching, theory-driven constructs for our conceptual model (see Figure 1 below).

=Insert Figure 1 around here=

While coding was predominantly conducted by one of the co-authors, the emerging themes and different interpretations were discussed among all the co-authors during the entire process of data analysis. Our transcripts were checked by two fluent Chinese and English speakers with professional knowledge of international business, and they confirmed that our translation was accurate and consistent.

To capture emotions, we relied on Ekman’s (1992) basic emotion model to code primary emotions mentioned by the interviewees. There is a high agreement about five primary emotions: anger, fear, disgust, sadness and happiness. Each primary emotion is not a single psychological state, but a family of states united by the core relational theme (Lazarus, 1991). The variations within each emotion family generate different sub-emotions. For instance, fear is defined as the appraisal of danger with unique evolutionary, cross-cultural and physiological bases, distinguishing it from anger as the appraisal of blame. Feeling nervous can be considered as a more moderate form of fear once individuals learn the danger is not so life-threatening. For analytic parsimony, various emotive statements or expressive cues about sub-emotions were grouped together and labelled accordingly. To avoid making too wide an inferential leap, whenever possible, we ensure the illustrations of emotional process in PD development are evidenced by the participants from both sides of knowledge transfer. The overall cultural similarity between our research team and the participants gave us an additional ‘in-group advantage’ to decode emotional expressions and their appraisal patterns more accurately (Elfenbein, 2007). Table 4 illustrates the operationalization of the inferred emotions.

=Insert Table 4 about here=

**4. Findings: The perceptual psychic distance within MNE knowledge transfer.**

To explore the perceptual PD within MNE knowledge transfer, we first drew on our informants’ context specific understanding of distance factors based on their own ‘native categories’ of (Buckley & Chapman, 1997). We then organized these emic views in line with Gibson’s (2001) four consecutive phases for cognitively processing knowledge exchange, in which we describe how various emotions are unfolded by the subjective appraisal of distance in one phase moving towards the next one.

**4.1. Accumulation phase - perceiving knowledge**

Perceiving is a precondition of MNE knowledge transfer when “members become aware of new information” from each other (Gibson, 2001, p.124). As a group, the foreign subsidiaries undertook projects following a mature software development plan. The I.T. professionals employed their analytic skills in proposing concrete solutions to address clients’ complex business issues. Underlying this performance, according to our informants, was a set of conceptual “software architecture knowledge” explicitly encoded in models, diagrams and manuals (#5 Australian). In contrast, the work undertaken by the Chinese HQs was not as structured, nor as demanding, as that delivered by the foreign subsidiaries. Sheltered by strong interpersonal relationship with the Chinese clients, domestic projects were described as a “safety net” (#12, Chinese) where many interviewees acquired knowledge via ‘trial and error’, ‘on-the-job training’, and ‘shadowing senior staff’.

When the staff mutually perceived their foreign colleagues’ knowledge of the global I.T. service, perception of useful knowledge became discrepant, specifically whether such knowledge was characteristically codified or tacit. The subsidiary-based informants described the HQ knowledge “invisible” because a substantial amount of knowledge was not codified. As one respondent put it, the knowledge base of the Chinese HQs did not meet “what you initially expected from a global I.T service provider” (#1, Australian). Lack of explicit knowledge was also raised by the top subsidiary managers who expected to have a comprehensive view of the company’s knowledge base. One US-based senior project manager said:

*To run a global I.T. project, the basic expectation is that the project lead can easily identify and trace the company’s services to the relevant teams. When a project needs help from the Chinese sites, I do not have any sort of knowledge map telling me where the delivery teams are and what they are doing.* (#12, American)

Being asked about the visibility of knowledge in the HQs, the Chinese interviewees emphasized their collective endeavours to codify service capabilities such as the online knowledge repository, recent appointment of Chief Information Officer, and compulsory project documentation. However, they argued the level of knowledge codification expected by subsidiary colleagues was not viable on account of the “huge financial investment”, “risk of information leakage” and the “constant organizational restructuring”. As a counter, most Chinese staff saw the greater value in tacit knowledge developed from work relationships. For them, this tacit knowledge was felt superior for the conduct of work assignments and critical to gaining an in-depth understanding of the firm’s competitive (dis)advantages. One Chinese interviewee who worked his way up from technical support to top business operation manager said:

*We do have an online knowledge repository where people can post or access ‘best practice’. However, it soon lost its popularity because you still need to add your own style to make the advice work. For me, it is through my daily interactions with different teams, not from the documents, that I learned the company’s strengths and weaknesses in service capabilities.* (#18 Chinese)

**4.1.1 PD-related emotion in perceiving knowledge**

***4.1.1.1. Negative emotions from the subsidiaries***

The cognitive dissonance in perceiving foreign knowledge evoked a general affective state of tension or discomfort. Recurring situations where perceiving distant knowledge occurred consolidated these diffused affects into acutely felt emotions (Lazarus, 1991). Many informants felt frustrated when uncodified information in the Chinese HQs created disruptions to exploit the expected synergy for global I.T. service. As an unpleasant emotional state, frustration involves a serious disruption at something for which success is expected (Lazarus, 1991). This frustration was highlighted by one Australian manager.

*We have to spend a lot of time in finding the right information to know about, not even execute, the capability. For instance, what we refer to BPO [Business Process Outsourcing] in Australia turns out be different from how BPO is done in China. What you feel is the business opportunity virtually slips away in front of your naked eyes, but you can’t do anything about it.* (#6, Australian)

The employees in the subsidiaries felt more frustrated when the limited amount of codified information directly affected their work efficacy. One US-based marketing analyst described how frustrating it felt for him that unavailable information in HQs diminished his professional competence.

*It’s quite frustrating to carry out my work on Cloud-based service because I did not have basic information that should be ready for me. Instead, I had to ask people in China all the time, and sometimes you just do not get any responses at all.* (#13, American)

Frustration stirred up more negative attitude towards the way HQs’ knowledge was organized. Feeling frustrated with her constant recreation of PowerPoint slides for the Chinese delivery team, one American informant said: “people in the HQs are just too lazy to make information accessible for us*”* (#10 American). Another European manager gave a damming verdict of the company’s knowledge stock as “very messy, not really fit for the purpose of international I.T. project” (#19 European). These statements echo the proposition that frustration tends to prime individuals’ attention on negative information, leading to more pessimistic assessment of unfamiliar situation (Forgas & George, 2001).

***4.1.1.2. Negative emotions from the Chinese HQs***

The Chinese interviewees reported strong frustration triggered by the subsidiary’s’ constant demand for knowledge codification. One Chinese project manager expressed his dissatisfaction when he had to amend a case study several times for the subsidiary:

*To be honest, it is not our strength to produce pre-sales material. But if our technical highlights are not expressed clearly, the account manager in Australia will lose interest. So, I have to push myself and those already frustrated team members to write this case study again.* (#23 Chinese)

For many Chinese informants, it was more frustrating that their experience would be discredited if not capable of being codified to the subsidiaries’ standard. This biased ‘information filtering’ perpetuated what a top Chinese manager called “an annoying stereotype” (#18 Chinese) that Chinese I.T. engineers were only capable of delivering cost-focused, ‘staffing’ work. The Chinese delivery teams often found themselves in an uncomfortable situation where the foreign account managers exaggerated ‘staffing’ capability in front of the clients. This point was well illustrated by one Chinese manager when he received a requirement specification from the US subsidiary

*Two engineers’, ‘from testing to developing’, ‘from next Monday to Friday’. That is impossible. At least, this is work requiring 15 days. Those American account managers have no bloody clue of what we are doing here except telling the client how much cost could be cut by cheap Chinese I.T. workers (*#1 Chinese)

Like many Chinese delivery teams we observed, this project manager accepted the seemingly undeliverable workload because the subsidiary managers had more experience in international project execution, client engagement and market expansion. To address the implication of “overselling”, the Chinese delivery team had to “bottle up any bad feelings and work around the clock” (#1 Chinese). This repressed resentment made the Chinese teams more resistant to the subsidiary request on knowledge codification, generating more barriers for the subsidiary staff to obtain relevant information (Smith & Ellsworth, 1985). Not surprisingly, one subsidiary manager reported that “getting the Chinese teams to produce a case study was ‘like pulling teeth’” (#11 American).

***4.1.1.3. Positive emotions***

Despite negative emotions in perceiving knowledge, some informants reported the feeling of being “pleased” and “encouraged”. They acknowledged the tension but focused more on learning opportunities. One subsidiary participant illustrated how his direct consultation with the Chinese staff enhanced his awareness of new information:

*I directly approach the Chinese staff I know and ask for help. It is challenging as not all western managers are comfortable to do so. But I am pleased that most Chinese staff I contacted are very helpful. Now, I become more aware of the differences in talking and delivering the PGS [Product Globalization Service] between China and Europe.* (#20 European)

Equally, some Chinese informants feel pleased with the benefits of codified knowledge. An illustrative example came from one Chinese participant who talked about the vendor management templates she learned from the subsidiary:

*Every day, I need to screen hundreds of applicants’ CVs, and match their individual skills with different project requests. I used to stay up very late to meet my daily target. I am very grateful to my European colleagues for introducing me to the templates. I feel relieved that with these templates, I can better organize the screen process and get my work done on time. (*#7 Chinese)

Feeling encouraged by these learning benefits, informants showed more interest in the novelty of distant knowledge. This echoes the view that positive emotions are likely to fuel the investment of energy into new activities of exploration and development (Forgas & George, 2001). One Australian manager described how worthwhile and promising it was felt for him to visit the Chinese HQ in person:

*Of course, I can learn about our Cloud service through the documents. But I believe the best way to really understand it is to come here [The company’s HQ in Beijing]. Talk to the teams, walk around the floor, have an open and informal discussion. Then, I can share this knowledge confidently with my team back in Australia. That is why I made this trip.* (#3 Australian)

**4.2. Interaction phase - exchanging knowledge**

Once useful knowledge is perceived, it needs to be exchanged via “a set communication connections” between different team members (Gibson, 2001, p. 125). And communication is inseparable from the language. Given that the I.T. outsourcing industry was dominated by clients from English-speaking countries (Oshri et al., 2023), the case company adopted English as the official working language for international projects. Since most subsidiary personnel were native English-speakers or bilinguals with a professional English proficiency, the English language policy clearly bolstered their ability to interact with the company’s highly valued western clients. Although the importance of English had been clearly reflected in corporate recruitment and training policies, most Chinese staff felt it natural and essential to discuss work-related issues in their native tongue, which allowed them better to capture the tacit side of information.

When knowledge needed to be communicated via English as the lingua franca, disparity with regard to foreign language proficiency became important. Almost all subsidiary staff felt that overall English proficiency in the Chinese HQs was not up to a professional level. For their part, the Chinese staff maintained that using English simply “blocked” many good ideas that could otherwise be expressed in their mother tongue. They also felt that the stress for them to communicate their ideas in a foreign language was not well recognized by the subsidiary staff. As reported by one Chinese informant:

*When wring a project report in English, I had to constantly check with the spelling, expression and grammar. A two-page report can take me the whole day. I do not think most of our subsidiary colleagues can really understand the pain our Chinese colleagues had with English.* (#23 Chinese)

**4.2.1. The PD-related emotions in exchanging knowledge**

***4.2.1.1. Negative emotions from the subsidiaries***

For many subsidiary informants, the repeated communication breakdowns invoked recurring discontent. One American participant described her constant struggle of explaining project requirements to the Chinese teams in English.

*What is usually the case is that Chinese colleagues do not know what kind of inputs I need because of their poor English. Even though I put my requests in simple words, they still do not get what I want.* (#15, American)

Many subsidiary staff felt disappointed that communication with Chinese colleagues who demonstrated good English skills was not effective neither. Specifically, the Chinese staff employed “fancy English words” (#7 Australian) phrased in long sentences that complicated business communication. Quite often, they had to spend much time to extract or speculate over the core message from a lengthy email or wordy presentations. One Australia-based informant said:

*I took me long time to read through an email from my Chinese colleague, and I eventually realized that it was simply a meeting request. And I still could not figure out what I needed to prepare for that meeting.* (#1 Australian)

For those subsidiary personnel who spoke English as the second language, their annoyance with the Chinese staff’s wordy English was yet more discernible. One European interviewee was disappointed that his pleas for plain English were largely unheeded in the Chinese HQs:

*I often said to my Chinese teams we are writing emails or report not to show off our English, and I am also not a native English speaker. And using simple words would help me to better understand the things from the HQs. It is very frustrating that I still have to deal with lots of wordy emails or documents every single day. (*#17 European)

For our subsidiary interviewees, it was more infuriating that the Chinese staff completely disregarded the English-only policy in cross-site team meetings and reverted to talking between themselves in Chinese or resorted to frequent ‘code-switching’ (Harzing & Feely, 2008). We observed code-switching occurring in meetings where the complexity of certain project issues or technical jargon forced the HQ staff to consult with each other. As the Chinese delivery team usually outnumbered the foreign on-site team, the meeting could be taken over by prolonged exchanges in the Chinese-language. The subsidiary staff felt angry with this rude communication behaviour that unfairly excluded them from knowledge exchange. One American top manager recounted his fury in one meeting where the Chinese managers switched to their native language without warning:

*The meeting started well, and everyone discussed the things in English. When the topic went deeper and involved technical jargons, a few Chinese staff spoke to each other [in Chinese] and I could not understand at all. Then, it was spreading like wildfire and the meeting quickly became a Chinese conversation. We were supposed to work out a business plan together, but I feel I was excluded from this important task. That was very rude.* (#16 American)

Anger indicates a strong coping potential to overcome obstacles (Roseman, 2013). Subsidiary managers at middle or senior level tended to deal with repeated code-switching by demanding a full meeting report in English or terminating the communication with those who did not comply with the English-only policy. In contrast, non-Chinese staff at the operational level had to bear the brunt of this Chinese code switching, which gave rise to a feeling of helplessness. With a strong certainty that ‘nothing can be done’ (Frijda, 2006), this powerless feeling accentuated the division between in-group and outgroup that underlies the perceived distance in MNE knowledge transfer. Reflecting her experience on code-switching, one American gave the following account while expressing sadness:

*The company is trying hard to push the mandate of English as our working language because we try to be a global company. Most people in HQ just do not speak too much English and I find lots of things can only be done [in the company] if you can speak Chinese* (#9, American)

***4.2.1.2. Negative emotions from the Chinese HQs***

Many HQ staff considered lack of foreign language proficiency as a personal flaw that severely undermined their personal as well as professional image. This gave rise to the emotion of shame. Shame is defined as a failure to perform a specific behaviour in social context, and this failed performance is seen as reflecting a defective self (Tangney et al., 1996). Ashamed people feel “a sense of shrinking or being ridiculed by an internalized observing other” (Tangey et al., 1996, p. 1257). One Chinese manager highlighted a feeling of shame in one cross-border meeting when he was struggling to present the service capability in English

*When I started to describe the technical highlights of cloud computing, I suddenly got stuck on few English words and phrases. Then, my mind seemed to completely stop working. When I saw those stern faces of the American managers, I felt I had disappointed myself as well as my delivery team.* (#28 Chinese)

Interestingly, the Chinese staff with a good English fluency seemed to be more conscious of shame in their communication with foreign colleagues. As one Chinese informant explained:

*The way you speak or write English is the most important ‘business card’ when you introduce yourself to our foreign colleagues. I would feel ashamed if my English in the email or presentation was not phrased in the best way I could.* (#37, Chinese)

Given its focus on self-inadequacy, shame motivates a desire to hide away from a humiliating experience. For the Chinese staff with low language fluency, shame stimulated an intention to avoid or reduce knowledge exchange with native English speakers, despite the professional common ground. One Chinese informant said:

*Certainly, I want to have more communication with those American colleagues who share similar interest in Big Data technology. But I feel I am totally useless to speak or write English that is understandable to them. It makes me painful to consider for what reason they would overcome the distance and exchange ideas with a guy who can’t even express himself.* (#23 Chinese)

For those Chinese informants with relatively good language skills, shame propelled the tendency for more fancy words and long sentences to “polish the English”, which made their ideas more difficult to understand for the subsidiary staff. According to our informants, the knowledge exchange felt like being dominated by more complicated form of language barrier. Taken together, the emotion of shame tended to exaggerate language distance at the experience of other important similarities in knowledge exchange.

***4.2.1.3. Positive emotions***

Compassion was the positive feeling that emerged from exchanging knowledge in English. Compassion is a “care-taking” emotion that arises from witnessing another’s suffering that motivates a subsequent desire to help. (Ovies et al., 2010, p.618). Compassion can be inferred from the statement of one US-based manager who had extensive international working experience. By taking the perspective of non-native speakers, this subsidiary manager transformed his initial anger into sympathy

*When I set up a conference call with the managers of the delivery team, my previous international working experience tells me they are struggling to express themselves in English. I would say “OK, you can speak Chinese”. I was not offended. But once you talk in Chinese, let me know the content of your discussion as much as you can.* (#12 American)

The compassion displayed by this sympathetic native speaker helped to reduce the perceived distance felt by the ashamed Chinese staff, who, in turn, could better focus on the instrumental purpose of knowledge exchange. One Chinese employee described how a sympathetic subsidiary manager built up his confidence in using English.

*Russ is one of a few foreign managers who understands our struggle with English. When he chairs the cross-site meeting, he grants us more time and encouragement to express ourselves in English. Even when reading his emails, I feel very relaxed and willing to read through the email. And I usually read his email again to learn his choice of words and style. Now, I feel more confident to express my views in English.* (#3 Chinese)

**4.3. Examination phase - evaluating knowledge**

Evaluation occurs when group members start to inspect the exchanged knowledge in detail. The members’ role serves an “essential guiding function” that enables them to understand the contributor’s expertise and make more effective judgement of various opinions (Gibson, 2001, p.219). Given that the work practice in foreign subsidiaries was highly specified, the team member’s contact details, job responsibility, functional specialization, were clearly delineated at the beginning of the project. According to the subsidiary-based staff, knowledge evaluation usually involved assessing each other’s technical demos, detecting the “bugs” or faculty logic, or discussing execution plans.

Staff in the Chinese HQs faced a different situation where most knowledge was dispersed within different groups. Thus, group team members’ role clarity was not essential to project delivery. Typically, a Chinese newcomer became a trusted ‘in-group’ member through intensive social interaction, and then developed his/her expertise via expanding personal contacts or undertaking different projects that were authorized primarily by the co-located supervisors. Our Chinese participants highlighted that problem-solving took place within these groups and that information was evaluated, with the decision on how it should be evaluated proceeding according to personal relationships, in-group/out-group boundaries and deference towards authority figures.

The perception of cost associated with knowledge evaluation diverged between the subsidiaries and the Chinese HQs, i.e., became asymmetric. The subsidiary personnel found the “effort cost” to identify the right person for ‘weighing’ the knowledge at hand was higher than expected. Their experience was that they were obliged to contact numerous individuals at the HQs, and to repeat their requests to find the person with relevant expertise or the appropriate role. The barriers to identifying HQ group members’ expertise was exacerbated by the “reference cost” in securing many senior Chinese managers’ approval or involvement. Many subsidiary staff characterized discussions with the Chinese teams as “senior-level engagement”. As explained by one Australian interviewee:

*In Australia, project discussion consists more of dialogue or lively debate. When it comes to weekly meeting with our Chinese delivery teams, only the Chinese project heads do the talking and the rest of Chinese team members are just listening.* (#5 Australian)

The Chinese personnel, on the other hand, held the view that the time and energy to locate the right Chinese members for knowledge evaluation were not a real problem. Senior HQ managers usually set up the initial contact with the subsidiaries, guided the discussion and helped to assess the opinions of the contributors to the meeting. This had the effect of controlling, the “face cost” of being evaluated negatively by the subsidiary staff, which was often felt to be excessively high. One Chinese operation manager commented:

*When I discussed business strategy with my Chinese colleagues, everyone was happy to follow the instructions posing few difficult questions. However, when I explained the same plan to the foreign staff, I was often bombarded with very abrupt questions. This made me feel my position as project lead had been seriously questioned in public.* (#23 Chinese)

**4.3.1. PD-related emotion in evaluating knowledge**

**4.3.1.1. Negative emotions from the subsidiaries**

Effect and reference costs in knowledge evaluation evoked feelings of irritation and frustration. Many subsidiary staff felt annoyed with the mandate of Chinese senior managers’ approval or involvement, which went against their belief in leadership as “knowledge facilitator”. This irritation gave rise to the negative perception of Chinese leadership in knowledge evaluation. One US-based informant said:

*Quite often, we just want an information discussion with our Chinese teams. It is quite annoying that we must involve many top managers in the HQs and wait for their approval. A leader should be here to create practical dialogue rather than red tape.* (#8 American)

Meanwhile, the subsidiary informants lamented that in the meetings where they were trying to explain or seek ideas, most Chinese team members preferred “remaining silent”. In the several meetings we observed, frustrated managers in the subsidiary directly rebuked the Chinese teams as “unwilling to speak out”, and then asked Chinese project managers to name someone to talk. More subsidiary frustration occurred when candid opinions from the Chinese side were sought to rectify emerging project issues. Amplified by the intense upset, subsidiary managers appeared to experience more cognitive dissonance as well as physical exhaustion caused by the distance in knowledge evaluation. One US-based project lead highlighted this point when he recounted his collaboration with a Chinese delivery team:

*We detected a few bugs in the testing system and informed our delivery team immediately. In the following 3 or 4 weeks, the project managers assured us everything was fine and there was nothing to worry about. Then 3 days before the delivery date, they approached us, saying “we’ve got a problem”. We had to re-run the testing system to identify and fix the bugs. The project was completed at the end, but nobody was happy.* (#12 American).

**4.3.1.2. Negative emotions within the Chinese HQs**

For the Chinese staff, establishing a good relationship, via a hierarchical arrangement to connect with more senior colleagues on the personal level, was a precondition for knowledge evaluation. However, the relatively flat hierarchical structure in the subsidiaries created more anxiety than encouragement for the Chinese staff endeavouring to effectively evaluate knowledge. One Chinese participant explained the reason:

*When contacting a project lead in a domestic BU [business unit], I usually start with my manager who will introduce me to the official contact person in that BU, then I move to the middle- and senior project manager. However, when you check the details of the leads in the foreign BUs, you can’t see who is reporting to them. Quite often, you have to directly contact or speak to those senior foreign managers to find out, which can be very intimidating and nerve-racking.* (#5, Chinese)

Many Chinese interviewees also felt annoyed by the “abrupt” and “aggressive” way subsidiary staff presented their ideas, seemingly turning an orderly meeting into a chaotic argument. Such irritation gave rise to the perception that those subsidiary leaders who claimed to be the experts in global I.T. services were incapable of conducting a proper conversation. Using the Chinese phrase “paper tiger”, irritated HQ managers thought those “rude and incompetent” foreigners were “paper tigers” and did not deserve their attention or responses in the cross-site meetings. This passive attitude towards cross-border collaboration generated more ambiguities and frustration for the subsidiary staff to interpret and assess correctly the project updates from the Chinese side.

Caught in the middle between unhappy Chinese managers and critical subsidiary staff, the Chinese employees felt frightened to bring their problems to the surface. To avoid upsetting both sides, they preferred to keep problems to themselves even when they knew the benefits of receiving input from those senior colleagues. One Chinese informant recounted his own experience of one bi-weekly meeting:

*We had one Australian project lead give his views on our Big Data service. However, the meeting was not going well, and everyone could feel the tension between my project manager and this Australian guy. Although I had some technical questions, I just kept quiet. I was so scared to say something that might add fuel to the fire.* (#13 Chinese)

**4.3.1.3. Positive emotions**

Provoked by recurrent unpleasant experience, some informants began to approach and then consulted their foreign colleagues. However, they became relieved that their taking the initiative to make additional effort in knowledge evaluation had paid off in the end. To illustrate, one Australia-based manager illustrated his optimism with his endeavour to embrace the Chinese way of discussion:

W*ith the help of my Chinese colleagues, I started to realize that I should respect the Chinese hierarchy and their need for “Face”. Instead of the typical western way of ‘who is the winner or loser’, in public I try to focus more on their achievement, no matter how small it is. And I feel encouraged that most of my colleagues reacted to this feedback from me quite well.* (#2 Australian)

In return, the Chinese staff felt relieved after reporting their issues to this Australian manager, and gradually came to accept the directness and thoroughness of the western style evaluation. After reading a project post-mortem report from the Australian site, a Chinese project manager commented:

*I do not feel upset with criticism like I used to do. In fact, such a detailed and rigorous report gives me lots of food for thought to improve my team’s performance.* (#6, Chinese)

**4.4. Accommodation phase – integrating knowledge**

Knowledge integration occurs when team members’ opinions, judgements and perceptions are combined to generate decisions and actions. It requires “opening up one’s own interpretive schemas to mutual scrutiny” (Gibson, 2001, p.126). Our data suggest that relative position in the I.T. service value chain affected the schemas relating to knowledge integration. The subsidiaries were engaged in higher end ‘solution/consulting’ work that involved ‘exploring the latest technology’, ‘scaling up the software development process’, and ‘customizing interaction with end-users’. As one senior project manager emphasized, the success of the solution/consulting work counted on “the service-based mind-set powered by innovation” (#3 Australian).

In contrast, over 70 percent of Chinese staff were graduates from local Chinese universities in their 20s or 30s. Thus, they were often assigned to lower end ‘outsourcing’ work that only entailed ‘elementary software testing skills’, ‘few methodological requirements’, and ‘limited client-facing engagement’. The profit margin came simply from the number and cost of billable engineers deployed or “head-counting” (#20 Chinese) The exploitation of their capabilities to conduct labour-intensive work, e.g., to follow orders, and to save on cost, became paramount.

When subsidiary and HQ staff tried to combine their evaluations of ideas, the perceptions on each side of integration efficacy became discrepant. The subsidiary participants complained that their own high disseminative capability was not fully utilized on the Chinese site due to insufficient drive from the top management. As an illustration, one European middle manager described her recent experience of integrating a technical feature with a management database in the HQ:

*When the Chinese delivery team started to implement the changes we requested, no one guided them. They had to re-do the same process 3 times following testing and reported bugs 3 times… My impression is that there is a general lack of ownership and coaching on the Chinese side. The managers in HQ tend to forward a task and then check the results. But in many cases the executing teams do not have the experience, the skills or the knowledge to do it and they fail.* (#18 European)

For their part, Chinese managers believed that their western counterparts under-estimated the complexities of implementing new ideas in the Chinese HQs. The sheer number of front-line employees in need of close guidance to execute new technology simply exceeded their supervisory capability. As one senior project manager commented:

*Most of our Chinese team members are young and inexperienced. You must push and guide them step by step to meet project deadlines. With our current workforce, it is not viable to deliver new solution-based service.* (#22 Chinese).

**4.4.1. PD-related emotion in integrating knowledge**

**4.4.1.1 Negative emotions in the foreign subsidiary**

The subsidiary staff were disappointed that the traditional “outsourcing mind-set” of their Chinese counterparts blocked the integration of new ideas. They felt more upset that the Chinese HQs often declined their endeavours without a clear explanation. One project manager illustrated how infuriating it felt for him that his initiative was dismissed on the grounds of vague “historical reasons”.

*I provided a Chinese project manager with a detailed plan to implement a new data management system. What really made me furious was that the plan was rejected “for historical reasons”. But nobody tells me why we still need these “historical reasons” to judge our current innovation.* (#12 American)

Through her personal contacts in the Chinese HQ, the above American manager eventually escalated this issue to the senior Chinese manages and got the proposal approved. However, those subsidiary staff with limited organizational power thought the company’s innovation policy was never clearly explained or even accessible to them. The inevitable dismissal by the Chinese HQ gave rise to the emotion of sadness. A distinctive feature of sadness is the belief that nothing can be done to change an unpleasant situation (Smith & Ellsworth, 1985). This feeling of helpless can be detected in one American employee when she gave the following account with her eyes occasionally looking downwards:

*What happens is that you were very persistent before, but [you] reach a point, saying to yourself “I do not get anything except defeat by proposing new ideas for the company. Why am I bothered to fight throughout the company?”* (#14, American)

**4.4.1.2. Negative emotions in the Chinese HQs**

On the HQ site, most Chinese staff referred to themselves as “I.T. coders” whose primary job was to follow “what my project managers asked me to do” (#13 Chinese). Even when they developed a good idea, the strong social norms – often described as ‘collectivism’ (Hofstede, 1980) – in Chinese culture made them more reluctant to deviate from the accepted practice of not pursuing or promoting their individual ideas. For their part, the HQ managers frequently pronounced that “outsourcing is in the DNA of the company”. Hence, we observed a strong feeling of sadness and resignation when our Chinese participants talked about knowledge integration. This sadness undermined the perceived relevance or the benefits of foreign ideas, reinforcing the ‘not-invented-here’ attitude in the Chinese HQs (Bhagat et al., 2002).

*Do not forget the company starts from outsourcing. Whenever there is need for outsourcing, we, by default, will do it because it is in our DNA. I am afraid there is no “soil” for overseas knowledge to grow and thrive here until we start to do more solution or consulting services*. (#20, Chinese)

**4.4.1.3. Positive emotions**

Our data suggest a shared enthusiasm in exploring new I.T. services emerged as “required lubricant” in knowledge integration. As a positive emotion associated with exploration, enthusiasm promotes perseverance, empathy and ‘consensus frame’ for knowledge integration despite the experienced difficulties (Gibson, 2001). For instance, reflecting her recent collaboration with a Chinese team, an American middle manager said:

*We had many different views on what this brand new ‘asset tracking technology’ should look like. But my Chinese colleagues had same passion in applying this new technology.* *This enthusiasm gave us a kind of drive to overcome our differences and leverage our synergy.* (#14, American)

In addition to enthusiasm, they also felt grateful for the respect, tolerance and encouragement from their optimistic Chinese HQ colleagues. This emotion of gratitude consolidated the interpersonal trust, which is vital for resolving uncertainties caused by the differences over knowledge integration (Safari & Chetty, 2019).

*I feel grateful to some of my colleagues in Australia for their support, and especially for pointing me in new way of managing cross-border project. And our relationship is getting stronger as time goes on. Now, they are my eyes in Australia and I am become their eyes in China.* (#22 Chinese)

**5. Discussion**

**5.1. Emotional dimensions of psychic distance in intercultural knowledge transfer**

Through drawing on the appraisal theory of emotions and a qualitative study of MNE knowledge transfer we propose a conceptual model that illustrates the antecedents, process, and consequences of PD-related emotions in intercultural knowledge transfer in Figure 2 below.

=Insert Figure 2 about here=

Our findings confirm that a distinctive business and cultural environment where the case company’s units were located gave rise to impact on PD perceptions (Dow & Karunaratna, 2006). Our qualitative case study, premised on interpretive sense-making, enabled us to unpack the exogenous distance stimuli from an emic, contextualized approach (Welch et al. 2011; Tung & Stahl, 2018) and it revealed that much of the firm’s knowledge was locally embedded. This embeddedness of the company’s capability resulted in “shared cognitive background”, governing what was known and how it was known, and enabling staff to conduct their local work (Buckley & Carter, 2004, p. 378). When distributed teams were brought together for cross-border collaboration, those tacit thought patterns developed into salient cognitive dissonance in perceiving, exchanging, evaluating and integrating new information. This result reinforces the argument that PD is not simply dependent on broader culture or other differences, but on the perceived uncertainties resulting from these differences in focal business process (Zaheer et al., 2012). In other words, differences do not necessarily lead to greater PD. Leveraging qualitative, emic data, our research resolves the problem of equivalence that several pre-determined, overlapping distance stimuli are used simultaneously (Shenkar, 2001), and it identifies the most meaningful distance factors based on ‘native categories’ understanding of MNE staff across knowledge transfer process (Buckley & Chapman, 1997).

More importantly, we explore the emotional elicitors, experiences and responses in PD development. We identify a number of recurrent ‘affective events’ (Weiss & Cropanzano, 1996), where cognitive dissonance of processing distant knowledge triggered emotional tension. That is, the individual needs to constantly override or modify the habitual thoughts, beliefs or practice for the very occurrence of productive interactions with foreign partners. Emotional awareness emerged from the adaptive challenge of PD being evaluated with personal concerns as frame of reference (Lazarus, 1991). For instance, the Chinese staff felt stressed about knowledge exchange because the mandate of English as a working language detrimentally decreased the perceived value of their technical or managerial competence. The subsidiary staff felt also stressed that they were often excluded from knowledge exchange due to language code-switching (from English to Chinese) by the Chinese side. Given the interactive and iterative nature of MNE knowledge transfer, the momentary tension of distance could last over a long period of time when neither side of knowledge transfer attends to each other’s personal concerns (Zaidman & Cohen, 2020). As our data show, the lack of a mutually accepted level of knowledge codification created a vicious cycle of emotional tension from the very beginning of transfer process. This echoes the proposition that local adaptation significantly increases the ‘stickiness’ for firms to deploy knowledge in foreign countries (Jensen & Szulanski, 2004). We argue that adaptational pressure at the individual level could drive PD perception to ‘personalization’ (i.e., individual discerns impact of country differences in the appraisal of personal concerns), thus making transfer process more ‘sticky’ in the sense that information asymmetries are complicated by emotional stress.

Our analysis of the general emotional tension has revealed different types of PD-related emotions. The prominence of negative emotions provided additional support that lack of formal knowledge governance in an emerging MNE generated significant cross-cultural friction experienced at the individual level (Zhao et al., 2022). Meanwhile, we employed critical incident technique and structured on-site observations to capture emotions trigged by specific knowledge transfer events. Unlike previous research focusing on emotions towards cross-border M&A in general (e.g., Hasset et al., 2018), the mixed emotions emerged from our data were not prominent. Following the established approach in general management and IB literature (Seo et al., 2004; Sinkovics et al., 2011), we used ‘circumplex model’ to organize and explain our interviewee’s emotional experiences (Russell & Barrett, 1999). According to this model the essence of emotional experiences or ‘core affects’ included two fundamental, independent dimensions, namely degree of pleasantness and degree of activation. Valence, at the level of subjective experience, reflects hedonic experience of emotion and is related to primary appraisal of personal benefit/harm (Oreg et al., 2018). This underlies the degree of personal affinity with foreign culture and business practice, which manifested in our participants’ ‘international orientation’ (Dichtl et al., 1990), driven by their positive attitudes towards country differences and willingness to explore alternative meaning systems held by others (Smith et al, 2011; Sousa & Bradley, 2006). Activation refers to the intensity of action readiness (high or low arousal of emotions), which is positively related to secondary appraisal of coping potential (Oreg et al., 2018). This underlies the level of situational efficacy in addressing impact of country differences on the self (Smith et al., 2011), which appears to depend on our participants ‘functional/hierarchical power in the company’, ‘personal connections with experienced local staff’ and ‘pervious work experience of international I.T. project’. As Figure 3 demonstrates, interactions between international orientation and situational efficacy to address relevant differences capture four types of PD-related emotional experience: negative and activated (e.g., angry), negative deactivated (e.g., sad), positive and activated (e.g., encouraged) and positive and deactivated (e.g., contented).

=Insert Figure 3 around here =

The 2x2 typology of emotional experience derived from our identified appraisal themes answers the call for more theory-informed explanation about various anxieties and affinities evoked by the distance (Nebus & Chai, 2014). As the findings further demonstrate, those appraisal themes are conceptually intertwined with individual attributes such as international experience, personal network and being open to change, which are found to influence or compensate cognitive processing of country difference information in previous PD studies (Smith et al., 2011). Because emotions are highly personalized analysis of country differences, we argue that even with same baseline knowledge of country differences, PD can be felt in an asymmetric way. For instance, our respondents from both China HQs and foreign subsidiaries considered cost in knowledge evaluation as disruptive, their emotional experience towards same disruption were strikingly asymmetric in terms of valence (e.g., irritation versus optimistic) and activation (e.g., anger versus fear).

Finally, the analysis of our qualitative data has revealed that PD-related emotions lead to various attitude and behaviour. As emotion-driven coping strategies towards PD, these attitudes and behaviour is consistent with fundamental motive of the experienced emotions to address personal concerns (Lazarus, 1991). Following the adaptive themes of basic emotions (Ekman, 1992), we identify 4 specific coping modes of PD summarized in Table 5.

=Insert Table 5 around here=

Overall, negative emotions accentuated or amplified our participants’ perceptions of distance. We find anger (attacking mode) evoked negative attitudes towards foreign partners’ work ethic, discounted their knowledge, and intention to truncate the unpleasant cross-border contact whenever possible. This is different from fear (avoiding mode) which generated excessive self-doubt on one’s capability to resolve information asymmetries or reduce personal contact with foreign colleagues even instrumental benefits of cross-border interactions were acknowledged. Short of salient action readiness, sadness (withdrawing mode) arises from an irrevocable loss of valuable goals (Roseman, 2013). Hence, defeated by the constant setbacks of international collaboration, sad participants in MNE knowledge often framed PD as an insurmountable obstacle or indicated their intention to quit from the ongoing project.

On the other hand, we find happiness (exploring mode) to reduce the perception of distance. In line with broaden-and-build function (Fredrickson, 2001), we find happiness facilitated the transformation of asymmetry into synergy through a commitment to resolve the setbacks along the transfer process, tolerance of friction as leaning curves, and interest to exploit the synergy between people with diverse cultural and business background.

Frijda (2006) characterizes emotional response as ‘control precedence’. That is, they not only overrule other actions but also generate persistence in achieving immediate aim even at the risks of long-term repercussions. Both features underlie the impulsive nature of emotional effect. Hence, emotion-driven PD coping could be ‘irrational’ for MNEs in search of effective knowledge management while nevertheless following ‘implacable logic’ for the individuals experiencing PD-related emotions. Previous work on PD coping is primarily driven by the focus on rational calculation on information requirement or costs (Child et al., 2019; Puthusserry et al., 2014). It is assumed firms will eventually overcome uncertainties associated with PD through cognition-based managerial learning (Weber et al., 2020). We propose that strong emotional responses could render rational assessment of information-procurement irrelevant by provoking individual attention and commitment upon the urgency of addressing personal concerns.

**5.2. Theoretical contribution**

We develop a theoretical framework explicating the emotionality of PD perception in cross-border knowledge flow. While recent IB literature on cross-border M&A found emotions to be provoked by socio-cultural differences, emotions are primarily perceived as static in this literature (Sarala et al., 2019; Zahoor et al., 2022). Our model provides a coherent explanation of appraisal process and their differentiated effects on triggers, experiences, and effects of PD-related emotions. It suggests that PD is formed in the primary appraisal of personal concerns about country differences, triggering salient emotional awareness. With further appraisal of individual’s international orientation and situational efficacy to address differences, the emotional awareness produces path-dependent influences on emotional experiences and emotion-consistent attitude and behaviours towards PD. By explicating the fundamental emotional pathway (Elfenbein, 2007), our model helps to explain when and why emotions influence the distinctive way an individual perceives or copes with PD. Complementary to the extant literature on individual’s cognitive function of processing distance stimuli (e.g., Maitland & Sammartino, 2015; Nebus & Celo, 2020), we argue that development of PD perception also involves an emotionally charged processes of individual evaluating country difference with personal concerns as prominent referent context. As our study suggests, there are critical incidents when professional managers can take country difference very ‘personal’, experiencing intense emotions. These naturally felt emotion shape how the initial conditions of perceived PD are modified and responded to. As emotion represents “relational meanings” concerning the implications of one’s circumstances for personal well-being (Lazarus, 1991), our conceptual model on emotionality of PD offers a more contextualized approach to explain when and how distance matters (Leung et al., 2005). On measuring distance, our classification of PD-related emotions could contribute to more sophisticated instrument that truly synergize macro-level PD stimuli and micro-level perceived PD (Dow & Karunaratna, 2006).

We are also able to shed light on the sequence of cross-border business interactions in the phases of PD’s emotionality. Following Gibson’s (2001) model, we demonstrate that information transfer consists of 4 consecutive phases concomitant with necessary cognitive patterns. In the empirical context of MNE knowledge transfer, our findings reveal that PD stimuli created a path-dependent emotional trajectory, affecting the progression of the phases. Generally, negative emotions seem to exacerbate the cognitive dissonance caused by country difference, disrupting the movement of transfer into the next phase. In contrast, positive emotions seem to compensate or transform the cognitive distance of county difference, driving the knowledge transfer from one phase to the next. We also argue that if PD-related emotions, and negative emotions in particular, are not addressed in one phase, their path-dependent consequence could amplify the perceived distance in the subsequent phases or cease the transfer process entirely. Hence, path-dependent nature of emotion trajectory does not mean emotionality of PD is static and highly predictable. Given MNE knowledge transfer entails interrelated, specific events, our data indicates the emotional experience in one phase serves as an input for the appraisal of distance stimuli in the next phase, which contributes to new PD emotions with differentiated coping activities (Frijda, 2006). Extrapolating from our interviews, emotion is a vital but neglected factor that needs to be accounted for when analysing the firm’s internationalization process. While firm’s ability to move from psychologically close to distant countries depends on the accurate knowledge about country differences (Johanson & Vahlne, 1977), we expect that emotions as personal evaluation of new environment will shape how and even whether objective knowledge will be used at all (Lazarus, 1991).

Finally, we identified four PD stimuli as emotional triggers over the corresponding phases of MNE knowledge transfer. They indicate the critical incidents where PD perception is either accentuated by negative emotions or weakened by positive emotional path, altering the purpose, pattern and efficacy of individual cross-border interactions. Given the impulsive, contagious nature of emotions (Frijda, 2006), we propose that these emotional catalysts tend to be more prominent to emerging MNEs which heavily rely on knowledge brokers to absorb the tension of cross-border knowledge flow (Zhao et al., 2022).

**5.3. Managerial relevance**

Communication in English and via technology-mediated tools (e.g., email, online conference call) are common practice in MNEs, specifically for those in I.T. service industry. However, reliance on low-context, efficiency-driven communication practice makes it more difficult to detect and manage PD-related emotions (Vuori et al., 2018). This study provides insights into how MNEs can better understand when and how learning from distance becomes too emotional to handle even for the professional managers. In particular, the companies should recognize ‘getting emotional’ is a natural experience as individual discerns personal meaning of country differences. MNEs need to be altered with these emotion episodes. MNEs can increase staff awareness and capability to leverage PD-related emotions via debriefing, simulated scenario or assigning a mentor. The typology of emotions triggered by distance offers a useful starting point for the managers to strategically ‘cool down’ some emotions or ‘warm up’ others. An informed emotion management is particularly vital for EMNEs to create a positive affective social integration that encourages collaborations with the staff in acquired units on functional upgrading after cross-border M&A (Torres de Oliveira et al., 2020).

**5.4. Limitations and future research**

There are several limitations of our work that offer interesting avenues for future research. First, derived from a single case study of an MNE from emerging countries, our findings on emotionality of PD require further empirical testing in those advanced MNEs where more established organizational routines could shape the individual responses to discrete emotions in knowledge interactions. Second, the empirical context of this paper centres on the obstacles to vertical information flow between HQ and subsidiary. Previous research has indicated that the knowledge flow among subsidiaries often entails different motivation, process and consequence (Michailova & Mustaffa, 2012). This points to a promising research avenue on how horizontal information flows could moderate role of emotions in formation of distance perceptions. Third, this research did not delve into the distinction between the ‘Anglo cluster’ and the ‘Confucian cluster’ and its impact on what our participants want or strive to feel (Tsai, 2007). Future studies could employ the lens of ‘feeling rules’ to examine how managers try to adjust their naturally felt emotions to ideal emotions shaped by cultural preference (Ekman, 1992). Finally, our qualitative research design is limited in terms of measuring the full range or intensity of specific emotions and their impact on distance perception. Research indicates that negative (positive) emotions could improve (undermine) the efficacy of cognitive/behaviour response when their intensity reaches a certain threshold (Sarala et al., 2019). Hence, combination of multiple research designs and methods would be required to further explore the link between emotions and PD. For instance, experimental design might further testify the exact efficacy of coping modes through the momentary emotional responses towards distance (Buckley et al., 2007).

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| Table 1: Overview of semi-structured interviews in the case company's six foreign subsidiaries   |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | Interview Number | Position | Management Level | Firm Tenure (Year/Month) | Nationality | Gender | Location of the subsidiary | Interview method | Duration | Interview starting/ending date | | Informants based in Australia | 1 | Marketing | Middle | 1.5 | Australian | Male | Sydney | Conference call | 50 min | 02/09/2014  -  04/11/2014 | | 2 | HR | Top | 1.5 | Australian | Male | Sydney | Conference Call | 1 h 20 min | | 3 | Business development | Top | 3.7 | Australian | Male | Sydney | Face-to-face | 1 h 18 min | | 4 | Sales | Non-Managerial | 1 | Australian | Female | Sydney | Skype | 1 h 07 min | | 5 | Data integration | Non-Managerial | 0.9 | Australian | Male | Melbourne | Skype | 1 h 33 min | | 6 | Business operation | Middle | 1 | Australian | Male | Melbourne | Conference call | 57 min | | 7 | Technology quality control | Top | 3 | Australian | Male | Melbourne | Conference call | 49 min | | Informants based in U.S. | 8 | Data testing | Non-Managerial | 1 | American | Male | Redmond | Conference call | 36 min | 15/09/2014  -  05/01/2015 | | 9 | Technical support | Non-Managerial | 1 | American | Male | Redmond | Conference call | 44 min | | 10 | User experience | Middle | 4.5 | American | Female | Redmond | Face-to-face | 1 h 42 min | | 11 | Sales | Top | 1 | American | Male | Redmond | Conference call | 28 min | | 12 | Project management | Top | 4 | American | Male | Charlotte | Skype | 1 h 26 min | | 13 | Business intelligence | Non-Managerial | 1.9 | American | Female | Charlotte | Skype | 1 h 05 min | | 14 | Technology coordinator | Middle | 3.5 | American | Female | Charlotte | Conference call | 1 h 13 min | | 15 | Sales | Middle | 1.8 | American | Male | Charlotte | Conference call | 56 min | | 16 | Project quality control | Top | 2.2 | American | Male | Charlotte | Conference call | 48 min | | Informants based in Europe | 17 | Sales | Non-Managerial | 1.2 | Spanish | Female | Barcelona | Skype | 1 h 13 min | 07/06/2014  -  23/02/2015 | | 18 | Vendor management | Middle | 2.5 | British/ French | Female | Barcelona | Conference call | 1 h 17 min | | 19 | Business operation | Middle | 2.5 | Spanish | Female | Barcelona | Conference call | 1 h 05 min | | 20 | Technical support | None-Managerial | 1 | American | Male | Barcelona | Skype | 50 min | | 21 | Business development | Top | 3 | Finnish | Male | Barcelona | Conference call | 1 h 27 min | | 22 | Sales | Non-Managerial | 2 | British | Female | London | Face-to-face | 35 min | | 23 | Business development | Top | 2 | British | Male | London | Face-to-face | 1 h 45 min | | 24 | Technical support | Non-Managerial | 1 | British/ American | Male | London | Face-to-face | 52 min | |

Table 2: Overview of semi-structured interviews in the case company's 3 regional headquarters

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Interview number | Position | Management level | Firm Tenure (Year/Month) | Nationality | Gender | Location of the headquarter | Interview method | Duration | Interview starting-ending date |
| Informants based in the Chinese HQs | 1 | Project operation | Middle | 7 | Chinese | Male | Beijing | Face-to-face | 1 h 08 min | 07/08/2014 -02/02/2015 |
| 2 | Quality control | Middle | 6 | Chinese | Male | Beijing | Face-to-face | 1 h 23 min |
| 3 | Quality control | Middle | 5 | Chinese | Female | Beijing | Face-to-face | 1 h 12 min |
| 4 | Vendor management | Middle | 5 | Chinese | Female | Beijing | Face-to-face | 47 min |
| 5 | Project operation | Non-Managerial | 1 | Chinese | Male | Beijing | Face-to-face | 54 min |
| 6 | Project operation | Non-Managerial | 3 | Chinese | Female | Beijing | Face-to-face | 1 h 40 min |
| 7 | Vendor management | Non-Managerial | 3.5 | Chinese | Male | Beijing | Face-to-face | 1 h 17 min |
| 8 | Business solution | Middle | 2 | Chinese | Male | Beijing | Face-to-face | 27 min |
| 9 | Business solution | Top | 6 | Chinese | Male | Beijing | Face-to-face | 1 h 34 min |
| 10 | Sales | Middle | 4 | Chinese | Female | Beijing | Face-to-face | 1 h 15 min |
| 11 | Project operation | Middle | 5 | Chinese | Male | Beijing | Face-to-face | 1 h 45 min |
| 12 | Sales | Middle | 5 | Chinese | Male | Beijing | Face-to-face | 1 h 02 min |
| 13 | User experience | Non-Managerial | 1 | Chinese | Male | Beijing | Face-to-face | 41 min |
| 14 | Marketing | Non-Managerial | 1.2 | Chinese | Female | Beijing | Face-to-face | 1 h 07 min |
| 15 | Marketing | Non-Managerial | 2 | Chinese | Female | Beijing | Face-to-face | 57 min |
| 16 | Marketing | Middle | 2.7 | Chinese | Male | Beijing | Face-to-face | 1 h 07 min |
| 17 | Sales | Top | 3 | Chinese | Male | Beijing | Face-to-face | 1 h 02 min |
| 18 | Business development | Top | 3 | Chinese | Male | Beijing | Face-to-face | 1 h 16 min |
| 19 | Client management | Top | 3 | Chinese | Female | Beijing | Face-to-face | 1 h 37 min |
| 20 | R&D director | Top | 4 | Chinese | Male | Beijing | Face-to-face | 1 h 31 min |
| 21 | Business operation | Top | 7 | Chinese | Male | Shanghai | Face-to-face | 1 h 42 min | 13/10/2014  -13/12/2014 |
| 22 | Business operation | Top | 10 | Chinese | Female | Shanghai | Face-to-face | 53 min |
| 23 | Project operation | Middle | 7 | Chinese | Male | Shanghai | Face-to-face | 47 min |
| 24 | Sales | Middle | 5 | Chinese | Male | Shanghai | Face-to-face | 1 h 05 min |
| 25 | Sales | Non-Managerial | 3.5 | Chinese | Male | Shanghai | Face-to-face | 1 h 03 min |
| 26 | Technical support | Non-Managerial | 1 | Chinese | Male | Shanghai | Face-to-face | 58 min |
| 27 | Software development | Top | 16 | Chinese | Male | Shanghai | Face-to-face | 1 h 52 min |
| 28 | Project operation | Middle | 3 | Chinese | Female | Shanghai | Face-to-face | 51 min |
| 29 | Technology support | Non-Managerial | 1 | Chinese | Male | Shanghai | Face-to-face | 46 min |
| 30 | Business operation | Middle | 4 | Malaysian/Chinese | Female | Dalian | Face-to-face | 58 min | 17/12/2014 - 13/01/2015 |
| 31 | Business operation | Middle | 5 | Malaysian/Chinese | Male | Dalian | Face-to-face | 50 min |
| 32 | HR director | Middle | 3 | Singaporean/Chinese | Female | Dalian | Face-to-face | 1 h 04 min |
| 33 | Business operation | Top | 12 | Chinese | Female | Dalian | Face-to-face | 1 h 16 min |
| 34 | Sales | Middle | 3 | Chinese | Male | Dalian | Face-to-face | 1 h 24 min |
| 35 | Sales | Non-Managerial | 1 | Chinese | Male | Dalian | Face-to-face | 41 min |
| 36 | Marketing | Middle | 2 | Chinese | Male | Dalian | Face-to-face | 1 h 09 min |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Table 3: Participant observation activities and documents used for data collection | | | | | | |
| Observation site | Project | | Project stage | Activities observed  Or participated in | Period | |
| Beijing | Using AI technology to establish a voice recognition system for a top American life insurance company | | Presales | Regular cross-site conference calls | 08/2014 - 09/2014 | |
|  |  |  |  | Internal presentation on competitor analysis and market report |
|  |  |  |  | Preparing case study for the target clients |
|  |  |  | Bidding | Video conference with the client representatives | 09/2014 | |
|  |  |  | Delivery | Ad-hoc online meeting | 09/2014 - 01/2015 | |
|  |  |  |  | Training Webinars |
|  |  |  |  | Weekly conference call for progress report |
|  |  |  | Evaluation | Preparing the project post-mortem report | 01/2015 | |
| Shanghai | Improving UX (user experience) design for an American online retail company | | Presales | Writing up case study for the targeted client | 10/2014 | |
|  |  |  | Bidding | Internal discussion on the project budget | 10/2014 | |
|  |  |  | Delivery | Ad-hoc online meeting | 11/2014-12/2014 | |
|  |  |  |  | Weekly conference call for progress report |
|  |  |  | Evaluation | Final project meetings with the client representatives | 12/2014 | |
| Dalian | Establishing a digital omni-testing platform for a leading Australian Telecom company | | Delivery | Weekly conference call for the project review | 12/2014 - 01/2015 | |
|  |  |  |  | Online training on Cloud technology |
|  |  |  |  |  |  |  |
| Documents | PowerPoint presentations, case studies, annual reports, internal newsletter, staff surveys, industry-related white papers | | | | 06/2014 - 02/2015 | |

Figure 1: Data Structure

1st order concepts 2nd order themes Aggregate dimensions

Statements on the value of codified knowledge: “systematic information management”; “requirement of global I.T. service providers”

Statements on the value of social knowledge: “learning from the real work”; “match with the Chinese organization”

Valence of felt emotion

Belief

Discrepancy in evaluating knowledge.

Discrepancy in integrating knowledge

Discrepancy in exchanging knowledge

Competence

Statements on potential to deal with perceived distance: “organizational status”; “personal network”; “international work experience”

Discrepancy in perceiving knowledge

Exploring mode

Statements on withdrawing from cross-border knowledge interaction: “reduce personal effort”; “pessimistic outlook of country differences”; “intention to quit from international I.T. project”

Statements on direct confrontation: “devalue foreign knowledge”; “blame the foreign partners”; “truncate unpleasant interactions”

Statements on positivity of perceived distance: “cross-border learning opportunities”; “respect and care from foreign colleagues”

Statements on personal implications in perceiving foreign knowledge: “disruption in decision-making”; “impaired work efficacy”

Statements on personal implications of knowledge communication: “Being excluded from information exchange”; “poor English as personal flaw”

Statements on exploring overseas knowledge: “mutual trust and commitment to cross-border interaction”; “tolerance of country differences”; “interest in synergy exploration”

Activation of felt emotion

Statements on the gap of applying foreign knowledge: “level of I.T. education”; “previous work experience”; and “authority to execute new technology”

Statements on personal role of knowledge evaluation: “advice giving/seeking”; “relationship building”

Statements on personal goal for knowledge integration: “I.T. consultant/ solution provider”; “I.T. coding labor”

Statements on self-consistency to examine foreign knowledge: “problem driven” “Guanxi driven”

Statements on self-consistency to apply foreign knowledge: “I.T. consultant” “solution provider” “I.T. programmer’ “coding labor”

nxi driven”

Statements on self-consistency to apply foreign knowledge: “I.T. consultant” “solution provider” “I.T. programmer’ “coding labor”

Statements on language issues for knowledge exchanging: “disparity of English proficiency”; “code-switching”

Statements on effort cost: “huge time and energy investment”; “escalation to senior managers”

Statements on inference cost: “information accuracy”; “reliability of information provider”

Statement on face cost: “being evaluated badly”

Avoiding mode

Withdrawing mode

Attacking mode

Statements on the attempt to avoid the tension: “self-doubt”; “minimize cross-border interaction”

Table 4: The operationalization of the interviewees’ emotional states.

|  |  |  |  |
| --- | --- | --- | --- |
| Important appraisal component | Core Relational Theme | Primary Emotion | Sub-emotions |
| Unpleasant state, certainty about situation, other-accountability, unfair treatment | A perceived wrongdoing where blame goes to others | Anger | annoyance, frustration,  resentment, anger, fury |
| Unpleasant state, uncertainty about negative outcome, low or uncertain coping potential | A dangerous situation to one’s well-being and a maximal uncertainty about that situation | Fear | worry, nervousness, fear, panic, horror |
| Unpleasant state, low coping potential | Irrevocable loss, and nothing can be done to set it right | Sadness | disappointment, helplessness, shame |
| Unpleasant state, motive-inconsistent, high coping potential | Eliminating contact with something offensive | Disgust | contempt, vulgarity |
| Pleasant state, certainty about positive outcomes, a strong desire to pay attention | A sense of optimism, attainment or success | Happiness | hope, challenge, fulfilled excitement, pride |

Note: Important appraisal components, core relational themes and categorization of the inferred emotions are based on Ekman (1992), Roseman (2013), Lazarus (1991) and Ellsworth and Scherer (2003).

Figure 2: Emotional dimensions of psychic distance (PD) in intercultural knowledge transfer

Initial conditions of individual perception of PD

Discrepancy in perceiving knowledge

Discrepancy in exchanging knowledge

Discrepancy in evaluating knowledge

Discrepancy in integrating knowledge

**Appraisal**

Personal concerns

International orientation

Situational efficacy

**Emotional coping**

Attacking mode

Avoiding mode

Exploring mode

Withdrawing mode

**Emotional Experience**

Negative activated

Negative deactivated

Positive activated

Positive deactivated

Changes in perceptions of psychic distance

Figure 3: Classification of emotional experiences in perception of psychic distance in intercultural knowledge transfer.

High situational efficacy

**Positive & activated**

(enthusiastic, optimistic, compassionate)

**Negative & activated**

(angry, frustrated, irritated)

Low degree of international orientation

High degree of international orientation

**Positive & deactivated**

(pleased, relieved, contented)

**Negative & deactivated**

(afraid, sad, ashamed)

Low situational efficacy

Table 5: Individual coping mode with PD in MNE knowledge transfer.

|  |  |  |
| --- | --- | --- |
| Emotional responses  /Coping mode with PD/ | Detailed coping activities in MNE knowledge transfer | Illustrative quotations from interview |
| Anger  /Attacking mode/ | Devalue the foreign knowledge. | “The knowledge in there [China HQs] is very messy, not really fit for the purpose of international project” (#19, European)  “In our meetings, some foreign managers just like to show off what they know, acting like ‘paper tiger’. In fact, their thoughts on project management are quite superficial. I can’t be bothered to argue with them” (#23 Chinese) |
| Blame foreign colleagues for the troubles | “When I ask the Chinese managers for a specific case study, you just say “No” without any more explanation. I can’t stop thinking the information I request is there, but they are just lazy and not bothered to check it for me” (#10, American)  “There is an annoying stereotype among the foreign sales teams that Chinese delivery team is only capable of doing the low-end, cost-saving, staffing work” (#18, Chinese) |
| Truncate the problematic cross-border contact | “They do not bother to respond my email with few simple English words, I figure they must have problem with their job. I was told the I.T. staff turnover is extremely high in China. I do not want to work with someone who could leave the project at any time when they see a better job offer” (#14, American)  “We once met an American account manager who was very demanding about our workflow, regular updates and deadline. Although the project was finished to his satisfaction, nobody wanted to work with him next time” (#1, Chinese) |
| Fear  /Avoiding mode/ | Excessive self-doubt to deal with perceived difference | “I blame myself for not putting effort in studying English at University. It is too late now as I do not have time or energy to sit in the class and to learn English from the beginning” (#13 Chinese) |
| Minimize contact with foreign colleagues | “Like me, lots of my teammates feel scared when meeting with those foreign PMs [Project Managers] who are very critical about our project. If we encounter technical issues, we prefer to resolve it among ourselves” (#5, Chinese) |
| Sadness  /Withdrawing mode/ | Reduce personal effort | “What happens is that you were very persistent before, but [you] reach a point, saying ‘I do not get anything except defeat by proposing new ideas for the company. Why am I bothered to fight throughout the company?” (#14, American) |
| Frame country differences as insurmountable barriers | “No matter how good their English is, it is not their native English. They feel more natural to speak in Chinese. They are still lots of people [in China HQs} who I can’t really talk to. They are in the senior position, but they prefer speaking in Chinese” (#21 European)  “I find my daily communication with Barcelona office are dominated by differences. Without a common cultural background, I think no matter how hard you try to explain the things in English, they just do not understand” (#7 Chinese) |
| Intention to quit from foreign project | “Quite a few managers reported to me that they are not listened to [by HQs]. They felt the company’s career pathway was never open to them after their ideas had been repeatedly ignored” (#2, Australian)  “This project is only in the initial stage where some technical issues are bound to happen. However, the account manager in US will directly email or phone me, requesting a proper explanation. Many of my team members are thinking of leaving because they find difficult to have basic professional respect from the US side” (#33, Chinese) |
| Happiness  /Exploring mode/ | Establish mutual trust and commitment | “I was very impressed with work ethics, friendliness and intelligence of the Chinese colleagues I had worked with. I have no double they are able to generate more innovative ideas once they are provided a good format to create knowledge at global level. And I believe I can definitely help with my international perspective” (#21, European).  “Mat from Australia is always quick and helpful when I need updates from the clients. In turn, I try to do the same whenever there is request from him. (#28, Chinese) |
| Tolerance of country differences | “Chinese respect ‘hierarchy’ and care about ‘face’. We try not to ask complicated question to make them feel uneasy in public. Whenever possible, we bring sensitive issues such as ‘low performance’ in private” (#1, Australian)  “I often remind my team members do not take it personal about some English expressions such as ‘it is none of your business’. Some words and phrases that we find quite offensive are quite normal for our foreign colleagues to express their genuine opinions (#3, Chinese) |
| Continuing interest in synergy exploration | “I often try to reserve 5 to 10 minutes in our weekly audio-conference and encourage everyone to share and learn from each other’s cross-cultural working experience, no matter it is good or bad” (#6, Australian)  “The company got 23,000 hard-working employees in China, and a team of seasoned I.T experts in 25 major cities in the world. The interesting question for me is how I can capitalize this synergy for my career development (#3, Chinese) |

Appendix 1: Emotional cues of basic human emotions

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| --- | --- | --- | --- | --- | --- |
|  | Verbal expressions in interview and document | | Non-verbal expressions in interview and participant observation | | |
| Verbal labels | Self-report of core feelings | Facial cues  (Facial action units involved) | Vocal cues | Physical cues |
| Anger | Angry, annoyed frustrated, furious | A perceived wrongdoing where blame goes to others | . Eyebrows lowered  . Widely open eyes  . Hard and direct glaring  . Tightly pressed lips  (AU4, 5, 7, 23) | . High, fast, tense pitch  . Dissatisfied tone  . Criticizing  . Swearing | . Leaning forward with head/chin jutting forward  . Clenching one’s jaw or fists  . Head shaking  . Arms folded |
| Fear | Nervous, anxious panicky | A threat of real or imagined harm to one’s well-being | . Upper eyelid raised sharply  . Tensed lower eyelids  . Jaw dropped open  . Lips stretched horizontally backwards.  (AU1, 2, 4, 5, 7, 20, 26) | . Tense and high pitch  . Trembling tone  . Increased speech rate with more strained tone | . Muscle tensing  . Body trembling  . Rapid change in breathing |
| Sadness | Disappointed, helpless, miserable, shamed. | Irrevocable loss of a valued object | . Angling-up of the inner corners of the eyebrows  . Upper eyelids drooped  . Lip corners pulled downward  (AU1, 4, 15) | . Decrease in pitch level  . Decrease in volume  . Crying or sobbing. | . A lowered or hunched posture  . Eyes looking away and/or downwards  . Lump in throat |
| Disgust | Distaste, vulgar | Something offensive or contaminating | . Eyebrows lowered  . Upper lip raised in an inverted “U” shape  . Lower lip raised and slightly protruding.  (AU9, 15, 17) | . A “yuck” or “ew” sound | . Nose Wrinkling,  . Turning the head or body away from the source |
| Happiness | Hopeful, fulfilled, proud, excitement | A sense of optimism or success | . Eyes narrowed.  . Cheeks raised.  . Lips pulled backward.  . Teeth exposed in a smile.  (AU6, 12) | . Increase in pitch range and variability  . Warm and smooth tone  . Laughing  . Joking | . A relaxed or upright body posture.  . Good warm eye contact |

Source: Ekman (1992), Ekman et al. (2002)