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# Application of signaling theory in management research: Addressing major gaps in theory

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#### ABSTRACT

Dealing with information asymmetry is essential for developing a strong signaling environment with signals flowing efficiently and effectively between the firm and its stakeholders. This study applies signaling theory to examine the flow of signals between corporate headquarters (HQ) and the local subsidiary of a multinational and explore the implementation and outcomes of employer branding change programs, with the aim of achieving authenticity in employee voice by reducing information asymmetry. Findings suggest that developing a strong signaling environment requires understanding how best to deal with negative signals; the significance of signal precedence; and the role of countersignals (feedback) in the signaling process. These questions inform major gaps in signaling theory research to which this paper contributes. The study also has far reaching implications for subsidiary managers and extends their knowledge on reducing information asymmetry between HQ (signal designers) and local employees (signal receivers) through efficient and effective signaling, so that employer branding programs can be implemented successfully.

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## 1. Introduction

The emergence of signaling theory resulted from the study of information economics under conditions in which buyers and sellers dealt with asymmetric information while interacting in the market (Spence, 1974). The theory has been extensively used to study information asymmetry between two parties, occurring as a result of knowledge disparity, in a variety of organizational and business contexts (Connelly, Certo, Ireland, & Ruetzel, 2011; Spence, 2002; Stiglitz, 2002). According to Connelly et al. (2011), getting accurate information is crucial as it affects the decisionmaking processes used by individuals, businesses, and governments. Therefore, it is one of the key functions of signaling theory to reduce such asymmetries in information (Spence, 2002), which is particularly relevant to the current study that examines the signaling between corporate HQ of a European multinational and its local subsidiary in a developing country during the implementation of employer branding change programs. Hence, the main contribution of this study is to help us understand the complexities involved in signaling effective employer brands across the two divergent environments.

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The concept of employer branding was coined by Ambler and Barrow (1996) who defined it as 'the package of functional, economic, and psychological benefits provided by employment, and identified with the employing company' (p. 187) and was initially discussed in this journal by Martin, Beaumont, Doig, and Pate (2005) who provided the evidence for the then emerging branding-HR relationship while supporting the contention through a model based on the review of literature from a variety of fields including marketing, communications, organizational studies, and HRM. One of the main purposes of an employer brand is to create an image of the organization as a good working place hence it has emerged as a concept for differentiating employers from competitors by providing distinct employment experiences. To do this, employers must clarify the unique aspects of their offerings by sending signals to their stakeholders in order to appear different than competitors and yet remain socially legitimate in the eyes of their stakeholders. This is particularly important for designing authentic employer brands that reflect on the voice of local stakeholders (Harquail, 2009) and respond to the local needs. This is also important for multinationals to address a wide range of strategic issues including the integration-responsiveness problem (Martin, Gollan, & Grigg, 2011; Rosenzweig, 2006). This brings in sight the possibility of exploring the concept through the lens of signaling theory as it underpins employer branding research and plays an important role in the branding process by explaining the honesty of signals and the costs associated with sending dishonest signals (Martin & Groen-in't Woud, 2011) thereby helping firms develop authentic employer brands. Nevertheless, authentic employer brands require a strong signaling environment based on efficient and effective signaling between organization and its employees at all levels who are able to send and receive honest and credible signals thereby reducing information asymmetry. However, establishing a strong signaling environment requires us to understand how the presence of negative signals disturb the signaling process; how signal precedence affects receiver's interpretation of signals; and how feedback-seeking behavior improves the overall signaling process. These questions that inform significant gaps within signaling theory research are addressed in this study.

The paper begins with a critical review of literature around the application of signaling theory in management research to identify potential gaps. This is followed by a discussion of the study's methodological approach. Findings are then presented which are discussed in the light of extant theory. Finally, the implications of the study for theory and practice are discussed and its limitations and future research areas are highlighted.

## 2. Signaling theory in management research

It is interesting to notice the attention signaling theory has received in the last couple of decades by viewing the number of its citations in management literature (see for example, [Strategy] Carter, 2006; Chung & Kalnins, 2001; Coff, 2002; Deephouse, 2000; Kang, 2008; Karamanos, 2003; Lampel & Shamsie, 2000; Lee, 2001; McGrath & Nerkar, 2004; Miller & Triana, 2009; Perkins & Hendry, 2005; [Entrepreneurship studies] Arthurs, Busenitz, Hoskisson, & Johnson, 2008; Bell, Moore, & Al-Shammari, 2008; Certo, Daily, & Dalton, 2001; Certo, 2003; Daily, Certo, & Dalton, 2005; Filatotchev and Bishop, 2002; Higgins & Gulati, 2006; Michael, 2009; Zimmerman, 2008; [HRM and OB] Ehrhart & Ziegert, 2005; Hochwater, Ferris, Zinko, Arnell, & James, 2007; Highhouse, Thornbury, & Little, 2007; Ryan, Sacco, McFarland, & Kriska, 2000; Srivastava, 2001). which increased from 16 to 144 between 1989 and 2009; a rise of 128 citations (Connelly et al., 2011). Furthermore, numerous studies have integrated signaling concepts with other related theories of management (e.g. Deephouse, 2000; Ryan et al., 2000; Sanders & Boivie, 2004) to understand information asymmetry. In the field of management, it has been applied to help explain the influence of asymmetric information in a wide range of research contexts e.g. a corporate governance study showed how CEOs signaled their firms' unobservable quality to potential investors through the observable quality of their financial statements (Zhang & Wiersema, 2009). It has also been used by a range of researchers to explain how firms make use of diverse boards to communicate adherence to social values to a variety of organizational stakeholders (Miller & Triana, 2009). It has been frequently applied in the entrepreneurship literature to examine the signaling value of board characteristics (Certo, 2003), characteristics of top management teams (Lester, Certo, Dalton, Dalton, & Cannella, 2006), founder involvement (Busenitz, Fiet, & Moesel, 2005), and angel investor presence and venture capitalist (Elitzur & Gavius, 2003). While majority of the HRM and OB studies have examined the signaling in talent attraction and recruitment processes (Celani & Singh, 2011; Suazo, Martinez, & Sandoval, 2009) recent studies have also applied signaling theory to employer branding and corporate reputation management research (such as Bergh, Ketchen, Boyd, & Bergh, 2010; Celani & Singh, 2011; Martin & Groen-in't Woud, 2011).

Therefore, in an attempt to contribute to the growing body of literature, I apply signaling theory in the context of employer branding research to examine the signaling mechanism prevalent

within an MNE to understand the implementation and outcomes of employer branding programs, which need a strong signaling environment for signals to flow efficiently and effectively between signal designer (employer) and receivers (employees) in pursuit of minimizing information asymmetry. In so doing, the paper will address the signaling theory gaps as highlighted in the previous section.

## 3. Key elements of signaling theory: identifying major gaps

The key elements of signaling theory comprise of signaler, signal, and the receiver. Signalers are insiders, such as the management or executives, who obtain information about an individual (Spence, 1973), organization (Ross, 1977), or product (Kirmani & Rao, 2000), which outsiders are unaware of. Normally, insiders obtain information, positive and negative, that is useful for the outsiders and includes a number of details such as specifics about the products and services, news regarding preliminary sales results report, or information about organization's other aspects such as union negotiations and pending lawsuits (Connelly et al., 2011). In simple terms, this private information helps insiders develop their perceptions regarding the underlying quality of some aspect of the individual, product, or organization (Connelly et al., 2011). In terms of management research, signaler is generally a person, product, or organization. HRM and OB studies focus on signals eliciting from individuals, such as recruiters (Ehrhart & Ziegert, 2005; Ma & Allen, 2009; Rynes, Bretz, & Gerhart, 1991), managers (Ramaswami, Dreher, Bretz, & Wiethoff, 2010), or employees (Hochwater et al., 2007). This study will focus on the organization at the HO and local subsidiary levels as employer brand signalers.

Signals are informational cues sent out by one party to another in order to influence desired outcomes. After obtaining private information (positive or negative), insiders decide whether to communicate it to the outsiders or not. Usually, the prime aim of insiders is to send out positive signals to outsiders and avoid sending negative information deliberately in order to reduce information asymmetry, which helps firms reach their ultimate goal of positively influencing desired outcomes e.g. leaders of a young firm in an initial public offering (IPO) appoint diverse group of prestigious directors to send a message to potential investors about the firm's legitimacy (Certo, 2003; Filatotchev & Bishop, 2002). In this context, the main focus of signaling theory remains on purposely communicating positive information for conveying positive attributes of the organization to outsiders (Connelly et al., 2011). However, in the process, negative signals may be sent out unintentionally e.g. the issuance of new shares sends negative signals to outsiders because equity is issued by executives when they think that the stock price of the company is over-valued (Myers & Majluf, 1984). Therefore, it is important to understand how these unintended (often negative) signals that complement the intended (often positive) signals disturb the signaling process and confuse the receivers. As this paper focuses on sending positive employer brand signals, it is essential to understand how negative (unintended) signals confuse the receivers (employees in this case). Therefore, the first gap question I address is: how do negative signals disturb the signaling process?

Nevertheless, signaling process cannot complete without the *receiver* of the signal. Generally, OB or HR studies are concerned with the elements within the labor market and mostly have employees as the receivers of signals (Davila, Foster, & Gupta, 2003; Ehrhart & Ziegert, 2005; Martin & Groen-in't Woud, 2011). These receivers are generally outsiders who possess limited information regarding the organization and are willing to receive it (Connelly et al., 2011). Both, signalers and receivers have conflicting interests in a way such that the signaler is benefitted from a

successful deceit at the expense of the receiver (Bird & Smith, 2005). The signaling process requires that the signaler is the beneficiary of some action of the receiver which the receiver will not take unless otherwise i.e. signaling should have a strategic effect (Connelly et al., 2011).

Researchers have discovered that effectiveness of the signaling process, in part, depends upon the characteristics of the receiver, such as the *receiver attention*, the extent to which receivers scan the environment for signals (Connelly et al., 2011). If receivers are not looking for the signals, the process will not work. It becomes even more important in the case of weak signals, which might be ignored if receivers are not looking for them (Ilmola & Kuusi, 2006). Receivers are more likely to attend to the signals in future if they have assisted the receivers in making their informed choices in the past (Cohen & Dean, 2005). Nevertheless, *receiver interpretation* is of key importance as they may interpret signals differently than what signalers have intended (Perkins & Hendry, 2005; Srivastava, 2001). This is critical for the current study as it examines the response of local employees on employer brand signals designed by the HQ (global level) and subsidiary (local level).

As receiver attention is extremely important for successful signaling, it becomes essential to understand the impact of the order in which signals are received by employees as signals may have different influence depending upon their position in the signaling queue. This too, is an important gap that needs to be addressed as it affects the interpretation of signals by the receivers. Therefore, the second question I address is: how might signal precedence affect receiver interpretation?

Finally, the feedback process or sending of counter-signals by the receiver to the signaler is an important component of the signaling process, which has been ignored by prior studies. Majority of the HRM/OB studies deal with one way signaling with signals generally emanating from the organization (Ehrhart & Ziegert, 2005; Hochwater et al., 2007; Highhouse et al., 2007; Ryan et al., 2000; Srivastava, 2001). As signaling theory research has thus far concentrated only on signals flowing between HQ (signal designers) and the local subsidiary management as signal receivers (Davila et al., 2003; Ehrhart & Ziegert, 2005; Martin & Groen-in't Woud, 2011), it has actually ignored the authentic voice of local employees (local-local level), which is critical for promoting authenticity in employer brands. This diverts our attention towards counter-signals that are extremely important in reducing information asymmetry as they reflect on the voice of those who best understand the local situational factors. Both, Srivastava (2001) and Connelly et al. (2011) support this contention as signaling process works on the underlying assumption that receivers desire information from signalers and that signalers also expect information back from the receivers in order to confirm that their signals have been interpreted in the desired way. Srivastava (2001) argues that feedback makes the signaling process effective. Hence, the curiosity to understand whether feedback-seeking behavior of signal receivers is of any importance to the overall signaling mechanism seems relevant. Therefore, the third question I address is: how does feedback-seeking behavior improve the signaling process?

While responding to the signaling theory gaps highlighted above, I will closely examine the *signaling environment* in the case organization which too plays a critical role in reducing information asymmetry (Lester et al., 2006; Rynes et al., 1991). It is important for the environment to be free from *distortion* that may affect the observability of the signals (Connelly et al., 2011). Next, I discuss the study's methodological framework.

## 4. Methodological framework

I adopted an interpretivist approach because it fits the purpose

of exploring complex social phenomena when there is a requirement of dealing with people and real life experiences and where the researcher is required to understand the problem through reflecting, probing, understanding and revising meanings, structures, and issues (Hirschman, 1986; Orlikowski & Baroudi, 1991). Such an approach was suitable as the researcher is considered an important part of the research and takes a subjective insider view of the phenomena (Saunders, Lewis, & Thornhill, 2003). Although, critics of interpretivism raise the issue of generalizability, this is less relevant when the research aims to capture rich complexities of social situations (Saunders et al., 2003). A case study design was selected as it closely meets the research objectives and is most appropriate for addressing the research questions. This method becomes interesting for a researcher who intends to gain a rich understanding of the research context and the enacting processes (Morris & Wood, 1991). Eisenhardt (1989) supports this notion by arguing that case studies tend to gain in-depth understanding of the situation/phenomenon under investigation in its context. They generate answers to the 'why' 'what' and 'how' questions, hence they are used in exploratory and explanatory research (Saunders, Lewis, & Thornhill, 2009).

The case study of a European multinational operating in the Pakistani telecom sector was chosen to examine the signaling between HQ, local subsidiary management, and local employees. Interviewees were recruited using purposive sampling technique that followed strict selection criteria (see Appendix 1). As qualitative researchers are often recommended to take small sample sizes for in-depth study (Miles & Huberman, 1994), 10 semi structured interviews with senior and middle subsidiary managers and 3 focus group interviews with 24 lower level employees were conducted. The semi-structured interviews comprised of an equal number of HR and non-HR managers to safeguard against possible biasness in views of HR managers who were mainly responsible for the signaling mechanism within the firm which could have encouraged exaggeration and unreasonable glorification of employer branding programs and their outcomes in reporting. For focus group interviews, a representative sample of employees was taken from three local offices based in 3 different cities of Pakistan (8 from each office).

To further strengthen the study, interview data was complemented by documentary evidence (Bell, 1993). The rationale of interviewing across different hierarchical levels and analyzing documentary evidence was to compare employees' views with managerial rhetoric in the light of published material and also to observe and examine the flow of signals (in written format) to be able to identify asymmetric information more accurately. This was important to pragmatically understand the perceptions of staff and management regarding how and why employer branding programs were implemented and what were their outcomes. The process comprised of analyzing secondary sources/publications including company magazines, bulletins, newsletters, performance reports, formal/informal organizational reports, and the reports of external consultants. These documents were the secondary sources of appropriate information and helped in developing substantial understanding about employer branding programs and the flow of signals within the case organization. It was further used as a tool to verify the responses provided by interviewees thereby improving the study's validity. Documents were analyzed using the same set of themes generated for interview data analysis during the literature review stage.

The data analysis comprised of two stages (i) initial on-field analysis, and (ii) detailed analysis of the whole data. In the first phase, interview transcripts were analyzed on one-to-one basis. Codes were selected based on the themes generated at the literature review stage; Nvivo software was used to assist with coding. The two staged analysis ensured the practice of reflective research and led to systematic progress via further contact and successive

enquiry that enabled me to identify any discrepancies in the collected data in which case I would contact the respondent to seek further clarification before proceeding ahead with analysis. This process ensured that data was accurately captured and also enhanced the data's validity and reliability. In the analysis process, first of all, the collected data was coded and categorized to reduce the data bulk into analyzable units (Coffey & Atkinson, 1996). Secondly, this compressed data was then retrieved and read to look for similarities and differences between the responses of the participants. During this process, an open mind was kept in order to allow the discovery of new themes and concepts. The data was displayed in a meaningful and understandable manner to encourage the emergence of themes, patterns, propositions, and concepts (recommended by Miles & Huberman, 1994). Finally, based on the displayed data, conclusions were drawn. This process was continuous in nature and iterative.

As the research was undertaken as part of my doctoral studies, ethics approval was sought from the University of Glasgow Ethics Committee. Furthermore, approval was also sought from the local head office of the case study organization on the condition that confidentiality of the data and respondents will be maintained.

## 5. Contextual background and case study findings

The case organization is a globally recognized mobile phone company with its headquarters in Western Europe. The company operates across 11 European and Asian countries including Pakistan where it started operations in 2004. It has a total workforce of over 40,000 employees globally and over 3750 in Pakistan alone (as of March 2012) and is the fastest growing mobile phone company of the country with a subscriber base of over 29 million (147 million subscribers worldwide). With an investment of over \$1 billion on its infrastructure and operations in Pakistan at the time of research, the company was the second largest mobile phone network holding 24% of the market share. Due to its size and increasing number of employees, the firm decided to launch employer branding programs in 2006. According to its Annual Financial Report (2010–11), by mid-2011 the employer brand of the company was worth millions of Pakistani Rupees, which remained successful in attracting over 50,000 potential recruits annually, the highest for any mobile phone operator in the country.

The Context-Content-Process model (Pettigrew & Whipp, 1993, 1991) has been adopted for organizing the case study data in a logical manner (see Fig. 1). This framework is important as it communicates the three necessary dimensions essential for understanding strategic change in organizations i.e. context, content, and process of change. Pettigrew (1985) argues that strategic change is a continuous process that occurs in given contexts and it is not possible to comprehend such changes as separate episodes that are disconnected from their historical, organizational, and economic circumstances from which they emerge (Pettigrew, Hendry, & Sparrow, 1989). The interesting point to note here is the richness of the context and the resulting strategic change (i.e. employer branding) in the firm (Pettigrew & Whipp, 1993). It also shows that strategy does not move forward in a straight line, but is rather iterative and uncertain. Hence, to present data in the most meaningful manner, this model was adopted, which demonstrates signaling across the three levels i.e. global (HQ), local (subsidiary), and local—local (local employees). It can be seen in the figure that signals are designed at the global level by the HQ which are transferred to the subsidiary managers who process and transfer them further to the local employees who then decode and interpret them and give meanings to these signals to develop their perceptions about employer branding programs.

## 5.1. Context: influences upon the signaling environment

Despite having wide cultural and institutional differences, the local subsidiary had adopted a Western corporate culture; a major component of which was the open communication culture that allowed ample opportunities of communication across different hierarchical levels thus allowing signals to flow in both directions (from employer to employees and vice versa) as evident in Fig. 1. This practice is uncommon in the traditional Pakistani business environment where lower level employees are discouraged to openly communicate with their seniors, particularly if sharing negative information. Therefore, the open communication environment helped the firm (case organization) achieve a unique identity amongst competitors and became one of its key strengths by fostering a strong, open, and two-way communication culture. Hence, the firm's employer brand soon gained recognition and served as a strong signaling mechanism to attract and retain employees via projecting a positive image of the firm. Furthermore, lots of opportunities were provided to facilitate informal discussions across the hierarchy e.g. the use of commons areas and shared canteens along with staff events such as Away-day and other annual events, which promoted informal interaction amongst staff; hence, signals would flow in both directions. A senior marketing manager explained:

We have provided plenty of opportunities of communication between senior and junior staff in the form of shared eating and dining areas and organizing shared events such as our semi-annual Away-days where people would meet and share their experiences and concerns.... The environment is very casual and we have observed that people are normally confident in mingling with their seniors and juniors and sharing work related and other experiences, which provides an excellent environment for informal feedback

However, the key challenge was to promote the company's (Western) corporate culture within a conservative environment dominated by strict cultural values. The firm also realized that Islamic religious doctrines were at the core of business activities and that successful operations required strict adherence to the Islamic ideology. Therefore, it started practicing the local norm of giving official prayer breaks to employees and reducing working hours during the holy month of *Ramadan*, allowing employees to wear the local attire, *Shalwar Kameez*, and giving special bonuses to employees on *Eid* festivals. These actions, through sending positive signals to local employees, strengthened the employer brand by making it competitive in the local region and helped the firm gain social legitimacy in the eyes of the local stakeholders by infusing into Pakistani society as a good corporate citizen. A regional HR manager expressed this in the following words:

Successful operations in Pakistan means adhering strictly to religious and cultural norms and practices. Pakistani people follow their culture and religion very seriously and therefore it is important that multinationals understand these values too and show flexibility otherwise they may face undue difficulties... Within a short period, [company name] has transformed itself into a desirable place to work by showing respect and acceptability towards the religious and cultural ideologies of the local people [employees] and I can give you many examples of this

Thus, it is evident from the HR manager's views that by responding to the religious and cultural needs of its employees, the case organization became an attractive employer brand in a religiously and culturally conservative Pakistani business environment

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Global Level Subsidiary/Local Level Local-Local Level Context-Content-Process **Outcomes** Highly positive perceptions regarding employer branding programs CONTENT held by employees . Implementation through HR and Building reputation M&C departments . Improving profitability . Attracting and retaining key employees . Different EVPs Coping with labour demands . High staff for different Providing excellent working satisfaction levels employee segments environment Dealing with globalization, innovation and competition Corporate Local **Employees** Headquarter . Highly effective employer branding PROCESS CONTEXT programs Internal Two-way Decentralized signaling Two-way decision-making High cultural and signaling . Development of Resource-rich institutional distance authentic employer organization . Consideration for brand capable of . Low resource religious factors dependency on HO effectively dealing . High degree of Senior leadership with integrationcompetition from home country responsiveness problem Counter-signals sent directly to corporate HQ Signal Design Signal Design and Evaluation Outcomes SIGNALING ENVIRONMENT Signals received from the corporate HQ are evaluated by the local subsidiary which are then further sent Signals designed by Outcomes of the signaling

 $\textbf{Fig. 1.} \ \ \textbf{Signaling environment in the case organization}.$ 

down to the local employees who then evaluate these signals and send back counter-signals to the higher

and that being unresponsive to the religious and cultural needs of the local people has remained a fundamental reason of failure for Western MNEs that operate across Pakistan. Hence, it was discovered that cultural and religious messages were key employer brand signals, which the firm clearly understood.

management in local subsidiary

the corporate HQ to

be sent to

subsidiaries

In lieu of its policy of promoting authenticity in employee voice and reducing information asymmetry, a more decentralized decision-making model was adopted and local managers had the liberty of shaping up corporate policies to suit local needs. This was complemented by the firm's strong financial position and its resource independency. Finally, local leadership was chosen to inform better localized decisions for the subsidiary. This was also beneficial in terms of promoting authenticity as local leadership understood the local culture and religious influences better and hence ensured that all key decisions were guided by the local influences, which further promoted authenticity in the resulting employer brand; all of which contributed towards the firm's strategic agenda of developing an authentic employer brand.

## 5.2. Content: designing the signals

The firm had a robust employer branding strategy with a clear aim of becoming an employer-of-choice by strengthening its human resources, which helped in improving its reputation and competitive position. This was reflected in the firm's vision statement:

Our vision is to lead the telecom industry by providing excellent services to our customers through a competent and skilful human resource

Taken at face value, the vision statement appeared to send strong signals to employees by identifying them as key stakeholders. It also exposed the firm's intentions of becoming the industry leader that would attempt to emanate positive signals. Hence, at the strategic level, it seemed that the firm was serious in building strong human resources to provide competitive services to clients, which could

spark positive energies amongst staff. As seen in Fig. 1, the key contents of employer branding programs were gaining competitive advantage, minimizing turnover, consistently improving work environment, coping up with labor demand, establishing and maintaining the firm's reputation as a quality employer and increasing profitability; hence signals were designed along these lines.

## 5.3. Process: transmitting signals to receivers

The local subsidiary received employer brand signals from HQ and altered them to suit local needs; hence the final programs were shaped within the subsidiary. The departments of HR and Marketing & Communications (M&C) were mainly responsible for designing and disseminating these signals. Signals (both intended and unintended) were also transmitted by various stakeholders who emphasized different elements of the branding strategy e.g. the CEO and Board of Directors transmitted signals regarding the firm's strategic activities such as reputation building, whereas the finance department sent signals regarding the firm's financial health by revealing its financial position. Similarly, the HR department transmitted signals in the form of increment in the pay scales or through improved recruitment and retention procedures. These signals, despite being unintended, greatly influenced the signaling environment, which demonstrates that a signal does not necessarily have to be intended and at the same time important for everyone. Employees might pick up on different signals depending on their priorities and backgrounds. It also came through the data clearly that the sequence in which these signals were received (signal precedence) affected their interpretation. As a result, employees may pick on unintended signals while ignoring the intended signals or perceiving them in an unintended manner e.g. a decrease in the training budget of one department might send unintended (negative) signals across the board and create confusions that the firm intends to cut down on training budgets of all departments. That is why counter-signaling is important as it enhances clarity and reduces the chances of signal misinterpretation. A marketing manager explained this:

...Due to the efficient communication system that we have here, messages could be easily taken at face value and they are interpreted differently by those not targeted in a particular communication... because there are two main sects of employees i.e. technical and non-technical, messages get confused quite easily and unintended messages are often picked up by non-targeted audience; I believe this is one of the key challenges an open communication system can address and the only option we have is to keep promoting two way communication

It seemed that the existence of two-way signaling was useful as the organization received staff feedback during design and implementation phases so that signals could be amended timely, which helped the firm prepare better programs with improved chances of successful implementation. The following quotes explain this situation:

Input from staff helps in making useful amendments to programs; we take staff input seriously (General Manager – Regional Office)

'Fair' compensation and benefits is a key component of our employer branding program and these have been shaped over the years with immense input from the local staff. Our pay packages and bonus schemes are not the same what they initially looked when communicated by the corporate office (Regional HR Manager)

Despite the strong feedback mechanism, programs may not always be successful as management may choose to ignore the counter-signals deliberately that undermines its feedback-seeking behavior. On the contrary, by considering the incoming messages seriously firms can develop authentic employer brands. In this particular case, the two-way signaling process provided the firm with an opportunity of studying, analyzing, and addressing the counter-signals and utilizing them in positive ways, hence focusing on the importance of feedback-seeking behavior.

## 5.4. Outcomes: interpretation of signals by receivers

## 5.4.1. Management's perspective (subsidiary level)

As the tone of subsidiary managers was similar to the messages sent by HQ, it seemed that at least at the top level there was consistency between HQ and subsidiary views, which indicates that messages were interpreted in the intended way at the subsidiary level. Moreover, the firm also conducted various awareness and training programs and workshops at regular intervals for increasing local management's awareness of employer branding programs and their outcomes. A major reason for the high level immersion of local managers in the branding logic was their involvement in policymaking at the signal design stage as highlighted above. At the strategic level, managers believed that the effective implementation of employer branding programs helped in addressing strategic issues, such as the integration-responsiveness problem, by responding to the local needs. A senior marketing executive explained:

I find employer branding as very effective in resolving these dual logics only if it is applied properly, is given the opportunity to be authentic, and managers put their confidence into it... It has got the potential and we have seen this in our organization where through our employer brand local employees are given the opportunity to participate in strategy-making; when their authentic voice is heard, it gives the opportunity to take local concerns into account and it becomes easy to deal with the integration-responsiveness problem (Vice President – Marketing)

## 5.4.2. Employees' perspective (local-local level)

The outcomes of employer branding programs are evidenced by employees' perceptions of the message and the extent to which they report attitudinal and behavior change. Focus group interviews revealed a generally positive feedback regarding the employer branding process, which employees regarded as positive in improving the image of the firm as a quality and caring employer and they agreed to have received good treatment from the senior management. The organization sent signals through various communication channels, which seemed useful due to the speckled weightage and preference given to these channels by employees. So for instance, a policy in written form became more important when also discussed by the management during face-to-face interactions, which means that if positive signals are sent in an organized sequence, they will create positive impact hence diverting our attention towards the importance of signal precedence. Staff discussed how their employment experiences had improved as a result of the organization hearing their views and giving importance to their feedback. A couple of quotations from focus group interviews illustrate this:

I started as a Customer Services Officer few years ago and things were very different then. We were occasionally provided with opportunities for feedback and issues took longer to resolve. I can feel I am being given more importance since the start of HR

branding within our firm and opportunities for feedback have increased. Management's efficiency in resolving employee issues have improved and many other things have turned out to be positive as well... I am exposed to more training opportunities and my feedback holds more weight (Customer Services Executive)

Our feedback has influenced pay re-structuring in a positive way and pay scales have improved... Compensation packages are amazing, you can't simply complain or remain dissatisfied. Soon as you hear the company's name against a job advertisement, you know the compensation package will be great (Sales and Marketing Executive)

Despite the largely positive feedback, segmentation of employees with regards to the offerings of benefits and opportunities resulted in the reception of confusing signals, unintended by the firm. This shaped negative perceptions as employees claimed that the benefits were not allocated fairly and that treatment of employees depended upon their association with departments (technical and non-technical). The comments of two local employees illustrate this:

They focus too much on the technical staff and then claim that every employee is important. I think all this branding stuff is done to attract technical people only and non-technical staff is secondary in importance (Customer services Executive)

I don't say that the employer branding program is not benefitting us overall, but what I have observed is that their focus has always been on employees from the technical departments and more attention is paid to them. If you analyse the pay rise difference in recent years, you will observe that the pay scales have not risen uniformly across all departments (Assistant Manager - HR)

The above quotations offer minority views that employer branding programs prioritized technical over non-technical employees, also regarded as 'key' employees in the telecom sector, which seemed demotivating. However, hidden in these countersignals was the opportunity of minimizing the ill-effects of the unintended signals and improvise the signaling process by controlling asymmetry that could have helped the firm in reducing negativity in staff views. Nevertheless, it seemed from the interview data that the firm was at times ineffective in addressing these negative signals as it continued designing different sets of value propositions for technical staff while failing to convince the nontechnical employees about its rationale. This implies that complexity prevails in the signaling environment with the presence of multiple signals that make it extremely challenging to reduce information asymmetry between management and local employees. However, interview data informed that local managers took incoming signals seriously whereas local employees held contradictory opinions. The following quotation explains this:

I know most of us lower level employees have continuously been showing our displeasure towards a decrease in our mobile phone limits but no action was taken by the management as if we never existed... They first increased our training budgets to please us, which doesn't really matter to most of us in the department anyways, but soon announced the decrease in our phone limits, which was devastating as it was one of my most valued perks of this job... I truly wish they ever listened to us before taking one-way decisions (Customer Services Executive)

While it seemed that employees were generally satisfied with employer branding programs designed in consultation with them, a small population remained dissatisfied with the nature of signaling and the segmentation of benefits based on employees' association with a certain department. This clearly demonstrates that information asymmetry is a practical challenge facing firms as despite several efforts and having a strong counter-signaling mechanism the case organization still faced immense difficulties and material challenges in reducing asymmetry. However, it was due to the existence of an efficient counter-signaling mechanism that helped the local management respond to majority of the concerns of local employees. Nevertheless, despite criticisms, high satisfaction levels prevailed among lower level employees who seemed content with the firm's employer brand. It seemed that majority of the promised benefits were provided to employees and the firm was successful in establishing its unique identity in the market. Eventually, it had created an employer brand that was utilized as an efficient and effective signaling mechanism to communicate with the stakeholders.

## 6. Discussion

As evident in the case study, signaling theory has been useful in the implementation of employer branding programs due to its ability of reducing information asymmetry and strengthening the communication (signaling) system within the firm. In pursuit of developing an authentic employer brand, it was crucial to address three important issues that played vital role in positively affecting the signaling process. Addressing these important questions is the key contribution of this study towards signaling theory research.

## 6.1. How do negative signals disturb the signaling process?

An important first step towards shaping an authentic employer brand is to understand how negative signals disturb the signaling process. There are competing interests between signalers and receivers with inferior signalers always looking for ways of cheating and deceiving the receivers through false signaling (Johnstone and Grafen, 2003), which results in increased signaling costs (Ndofor & Levitas, 2004). Subsequent or continuous false signaling, also known as decoupling, damages signal honesty as receivers start associating the negative qualities of the signaler with the signals they transmit (Connelly et al., 2011). Furthermore, associated with the concept of signal honesty are the concepts of signal reliability and credibility (Connelly et al., 2011; Davila et al., 2003). For discussion purposes, we regard dishonest, unreliable, and noncredible signals as negative signals, which then divert our attention to the question whether negative signals disturb the signaling process. Findings of this study have important revelations regarding the understanding of negative signaling and their influence on the signaling process.

My findings affirm that unintended, negative signaling disturbs the signaling process. This happens when the impact of positive signals is undermined by the negative effects of negative signals. Moreover, unintended negative signals also affect the credibility of the signaler and adds to future signaling costs (Johnstone and Grafen, 2003; Martin & Groen-in't Woud, 2011; Ndofor & Levitas, 2004). The signaling process within the case organization seemed very effective in the creation of an authentic employer brand. The effectiveness of the employer brand came through authenticity in employee voice that was a result of the feedback-seeking behavior of the firm characterized by its strong counter-signaling mechanism (Connelly et al., 2011; Srivastava, 2001). As a result of effective twoway signaling/communication between the signaler (HQ and subsidiary management) and receivers (subsidiary management and local employees) employer brand signals were mostly interpreted the way intended by their designers, which came through very clearly in the data that indicates that receivers' signal interpretation played key role in ensuring that the received signals led to the desired outcome of the signaler. This is of key importance according to Perkins and Hendry (2005) and Srivastava (2001) who have argued that interpreting signals differently than intended by the signaler produces unintended outcomes, which too was clearly evident in the findings e.g. the curtailment of mobile phone budgets for customer service staff that potentially reduced the impact of intended signals. Nevertheless, this was a result of the existence of an efficient counter-signaling mechanism through which unintended signals were filtered, re-designed, and transmitted back to employees in order to produce positive outcomes, as intended by the signaler (firm).

The local employees were allowed to provide feedback on employer branding programs and policies based on which the management altered and re-designed these programs, which helped in the embracement of policies by staff. Taking receivers' perspectives into account has remained a characteristic of OB and HR studies (such as Rynes, 1991; Suazo et al., 2009; Turban & Greening, 1996), hence by involving receivers' (employees in this case) perspectives in employer branding signaling, the firm was able to develop effective programs with higher success rates than without their input. This constitutes an important contribution to signaling theory research in the context of employer branding where prior studies would consider signals from local subsidiary's management as 'local' (see Davila et al., 2003; Ehrhart & Ziegert, 2005; Martin & Groen-in't Woud, 2011) and ignore the actual voice of employees at the lower levels within the subsidiary. This consideration for counter-signals helped ensure the elimination of negative signals from the signaling environment and also fostered signal reliability. credibility, and acceptability. However, interview data suggested that the firm took longer in addressing employees' concerns. This questioned the efficiency of its signaling process and the countersignaling mechanism that resulted in the prolonged existence of unintended, negative signals (in the form of negative perceptions of staff regarding branding programs), such as the case of nontechnical employees who considered employer branding efforts to be focused on key employees (i.e. technical staff) only.

Moreover, within the firm, confusions prevailed as the effect of positive signals were diluted by negative signals, such as the example where positive signals were interpreted negatively when the firm announced investment in customer service training programs and simultaneously decreased employees' mobile phone usage limit. Such signaling caused confusion by diverting the receivers' focus from the main incoming positive signal to the unintended signal, considered negative by employees, and hence distorted the signaling process. This example demonstrates the importance of signal honesty and the associated costs of sending honest signals. The negative effects created by the unintended signals disturbed the signaling process and diverted the receivers' attention from positive intended signals to negative unintended signals thereby signifying the importance of removing negative signals from the environment in order to protect the signaling process from distortion.

This study has addressed an important gap by explaining why firms must be aware of negative signals that disturb the signaling process by affecting the credibility of honest signals and allowing confusions to prevail in the signaling environment. It is, therefore essential that firms eliminate negative signals from the environment so that distortions can be minimized and confusions be averted. Signal designers must therefore be vigilant whilst designing signals and take into account the possibility of unintended negative signals that may flow along with carefully designed (intended) signals unintentionally and damage their signaling efforts.

6.2. How might 'signal precedence' affect receiver interpretation?

The second gap question dealt with the notion of signal

precedence, the order in which signals are received. As already emphasized, signaling process is incomplete without the receiver (Connelly et al., 2011). Therefore, the factors that influence the interpretation of signals by the receivers become immensely important for signalers as they are looking to maximize the intended interpretation in order to have the desired intended behavior from the receivers. It is worth noting that signalers and receivers have conflicting interests whereby a successful deceit at the expense of receiver is beneficial for the signaler (Bird & Smith, 2005). Hence, understanding the characteristics of the receivers of signals holds considerable importance for signalers so that they can maximize their benefits through intended interpretation. This becomes further important in the case of weak signals that have high probability of being ignored by receivers who are not interested in them (Ilmola & Kuusi, 2006). In such a scenario, the precedence of signals expectedly holds significance in the signaling process.

The current study explored the phenomenon of signal precedence and its effects upon receivers' interpretation. It was discovered that the order in which signals were transmitted towards receivers held importance as far as their impact on the receivers was concerned. Generally, a positive signal accompanied by a negative signal did not have a significant impact, however it made more impact when followed by a negative signal or when it followed a negative signal. Same was the case with negative and confusing signals, which were highly influential depending upon their precedence as compared to the positive signals. Numerous examples of such scenarios prevailed in the case study. In the quoted example of a situation in the firm, a negative signal transmitted right after a positive signal took priority over the latter when the firm announced that the mobile phone limits of staff will decrease right after announcing a rise in training budgets. The local employees paid attention to these signals because non-monetary benefits of mobile phone limits were important to them and altering these had significant impact. Hence, there also stands the need to determine the importance of signals for the receivers through determining the order in which signals flow. Similarly, when unintended signals, having the ability of negatively affecting the receiver, accompanied positive intended signals their effectiveness was determined by their precedence, in the form of interpretation by the receiver. When strong unintended signals were received they created confusions especially when the receivers considered them meaningful and important. For clarity purposes, I'd take the same example to illustrate this; when management intended to send positive signal through the announcement of increment in training budget for customer services staff, a parallel announcement of decrease in mobile phone limits affected the employees more, hence undermining the significance of the positive signal. This happened because mobile phone limits were more meaningful to employees than the increase in their training budgets. However, if the announcement of mobile phone reduction limit would have been made before sending the positive message of increase in training budget, employees' feelings would have been slightly different; hence illustrating the importance of signal precedence in the overall signaling process. Therefore, organizations should be very careful about the order in which signals are sent to receivers and it is also important to understand how the sequencing of signals can enhance positive interpretation by receivers.

6.3. How does feedback-seeking behavior improves the signaling process?

The final gap relates to the notion whether feedback-seeking behavior of a firm plays any role in improving the signaling process? The case study findings suggest that feedback-seeking behavior had considerable impact on the quality of the signaling process. Signalers always attempt to send out information cues (known as *signals*) in order to reduce information asymmetry (Connelly et al., 2011) so that desired outcomes can be achieved. However, in the process of sending positive signals, negative signals are often sent out unintentionally that influence the receivers' behaviors in unintended ways. Numerous examples of such negative outcomes have already been identified in prior sections. For this reason, the role of feedback within the signaling environment is considered important (Srivastava, 2001).

As argued by Rynes et al. (1991) and Lester et al. (2006), signaling theory is important because it reduces information asymmetry, and for doing so, it becomes essential to know the views and perceptions of the actors involved in the process, employees in this case, so that distortion can be eliminated (Carter, 2006; Connelly et al., 2011). Hence, the role of feedback is critical in the success of the signaling process, which diverts the attention to the notion of firms possessing feedback-seeking behaviors, which this study explored. For the purpose of strategic decision and policymaking, the firm possessed a strong feedback mechanism, as evident by case study data. Within the signaling environment, minimum distortions were observed and reported as they were efficiently dealt with by the firm's vigilance in seeking feedback that enabled it to stay aware of the staff (receivers) needs with regards to employer branding programs. As a result of this behavior, the firm was able to achieve high employee motivation and satisfaction levels, as reported by employees and revealed by documentary evidence. Involving employees in strategic decisionmaking positively influenced their attitudes towards employer branding as they whole-heartedly embraced these programs. In the absence of such an approach, negative and confusing signals would have remained unidentified thereby negatively affecting the signaling process. On the contrary, existence of feedback-seeking behavior helps the firm improve its signaling process by constantly addressing the counter-signals coming in from stakeholders and removing unwanted, unintended, and negative signals from the signaling environment that have the tendency to increase information asymmetry. The firm's ability of reducing information asymmetry can be seen throughout the data that shows how the case organization was able to reduce confusions and misunderstandings by responding to the counter-signals from receivers (local employees), which helped the firm in attaining high satisfaction levels.

The above discussion elaborates on the need for improving the feedback-seeking mechanisms so that firms are aware of the negative signals in the environment and are able to address them timely i.e. before the damage is done. This will ensure successful implementation of employer branding programs and will give an earlier clue if things don't advance in the right direction. It also gives us a very clear idea about the importance of an efficient and effective signaling environment and what it takes to maintain that within firms.

## 7. Theoretical and practical implications

This study has contributed to signaling theory research by establishing the need for identifying and eliminating negative signals from the environment, understanding the role of signal precedence in successful implementation of strategic change programs, and determining ways of developing strong feedback-seeking mechanisms. Hence, it can be claimed that by further building on the work of Connelly et al. (2011), this paper has diverted the attention of management scholars towards three

important gaps that greatly influence the establishment of an efficient and effective signaling environment, which in turn affects the development of authentic employer brands. Furthermore, these questions exhibit different ways of reducing information asymmetry between signal designers and receivers and help us understand how to make signaling more effective for employer branding change programs to be successful.

Secondly, the study extends our knowledge about what it takes to develop authentic employer brands (Martin et al., 2011) particularly reflecting on the key role of signaling theory in the process, which hasn't been explored by prior studies. This is highly relevant to subsidiaries of multinationals that find themselves at the core of 'signaling sandwich' as they face the dual responsibility as signal receivers and senders simultaneously; they receive signals from HQ with the responsibility of transmitting them down to the local employees along with sending the signals received from local employees to the HQ. However, it is important that these signals reflect the authentic voice of local employees so that the resulting employer brand is authentic and effective in addressing the firm's strategic issues, such as the integration-responsiveness problem (Martin et al., 2011; Rosenzweig, 2006).

Finally, this paper has contributed to both, signaling theory and employer branding research by examining the role of countersignals in successful implementation of employer branding change programs (Connelly et al., 2011; Srivastava, 2001). Hence, the study advances organizational science research that has been seeking ways of improving implementation of change programs without focusing on the importance of communication system that connects its various stakeholders, both inside and outside the organization.

On the practical side, the paper has valuable implications for managers in subsidiaries of multinationals who are responsible for the implementation of strategic change programs. Firstly, the study shall help them understand the impact of negative signals that often prevail in the environment unintendedly and confuse the signal receivers. It offers guidance to managers on how to address incoming negative information from local employees and design a signaling mechanism where due care is taken about the order in which signals are transmitted, which has serious implications for the outcomes of the intended programs. Also, the need and importance of feedback-seeking behavior is highlighted in the study which should alert subsidiary managers in understanding the importance of such behaviors in successful implementation of change programs. Finally, findings of this study must enable subsidiary managers in realizing the importance of the notion of authenticity and the need of responding to the local environment that enhances acceptability of change programs and helps firms address key strategic issues, such as the integration-responsiveness problem.

## 8. Limitations and future research directions

The results are confined to a single multinational operating in Pakistan due to its unique contextual situation hence they cannot be generalized. The study represents the signaling environment prevailing within a specific organization that has its own signaling mechanism and faces unique signaling issues. In pursuit of developing the knowledge of signaling theory further, future researchers are recommended to explore the phenomenon in other organizations and sectors of the economy and involving a wider range of stakeholders as I only looked at internal stakeholders i.e. employees. Therefore, there is significant potential to explore how the signaling mechanism would work with external stakeholders such as suppliers or the local government.

#### **Appendix**

#### Table 1 Selection criteria for purposive sampling.

Criteria for respondent selection	
Experience	Respondents must possess a minimum of 3 years experience of working for the case organization and at least 5 years working experience in MNE setup in Pakistan. This is to ensure that they possess considerable experience of working in a multinational environment and are fully aware of formal HR practices and standards within multinationals generally and the case organization specifically.
Education	Employees taking part in this research must have a minimum education of undergraduate level. An undergraduate degree is the minimum educational level required for most formal jobs within Pakistan and it is expected that employees having bachelor's degrees are proficient in English and hence in better positions to handle the interview process, understand the questions and find comfort in answering them.
Age	Respondents must have a minimum age of 26 years. This is important so as to ensure that mature and highly experienced and qualified workers have been selected for the study who are capable of understanding HR practices. As the average working age of university graduates in Pakistan is 21 years, this will further ensure that respondents possess at least 5 years of work experience.
Gender	This research does not entail gender preferences at all. However, Pakistan is a male-dominant society where the workforce normally comprises more men than women, therefore the researcher's sampling choice may naturally include more males.
Managerial Level	This study involves respondents working at both, managerial and non-managerial levels.

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