

# Employer Attraction & Employee Retention in the Pharmaceutical Industry of Egypt and Pakistan

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by

Mohammed Alkafafy & Abdul Hafeez Siddiqui

Supervisor: Rikard Larsson

Examiner: Ola Mattisson

# **Abstract**

This thesis is placed in the context of Employer Attractiveness and Employee Retention within the Pharmaceutical Industry of Egypt and Pakistan. Most of the studies conducted in the past are either specifically done on Employer Attractiveness, Employer Branding, or a combination of both, indicating a lack of research between employer attractiveness and employee retention; thus, this thesis will bridge the gap between them and will be a great contribution. The purpose of this thesis is to identify what factors attract potential employees from Egypt and Pakistan to work in the Pharmaceutical Industry and, after gaining employment, what factors retain them to keep working in the industry. The study also indicates the disappointment in the attractiveness factors by the employees after employment.

The empirical data was collected through a survey with structured questionnaires. A response of 103 was collected, 50 from Egypt and 53 from Pakistan, and the responses were analyzed using a quantitative method. The findings from the empirical data indicated a positive correlation between the Attractiveness/Retention factors with Employer Attractiveness and Employee Retention in both the countries. Moreover, the regression model explained what Attractiveness/Retention factors were significant in explaining Employer Attractiveness and Employee Retention.

We can conclude from our analysis that the survey results are in line with what we expected to see based on our review of previous research and our analytical model. The top attractive factors are not necessarily the same as the top retention factors, according to the study. The results also indicated that compensation and benefits in both countries are not a significant retention factor in retaining employees. HR professionals should also be mindful of the variances in branding considerations. As a result, it's vital to comprehend employees' personal lives and backgrounds in order to employ the appropriate retention strategies. Moreover, our findings indicate that marital status may play a role in determining the top retention factors. Lastly, this outcome is in line with previous research findings. However, personal differences also have an impact on job retention, according to this study.

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### 1. Introduction

#### 1.1 Background

In the earlier times, obtaining and retaining the right talent was primarily the concern of smaller or upcoming companies: Compared to larger and relatively well-established organizations and the shiny compensation, long term security, and career-building opportunities associated with them, these junior (in terms of size and age) companies worked hard to attract and sustain the right talent. With the continuous expansion of networks of large organizations to various parts of the globe and the consequent rise in the availability of opportunities across numerous geographies, companies have enjoyed many benefits as well as challenges. One of these challenges has been the talent shortage that has come to the fore, driven primarily by demographic changes (Stahl et al., 2012). Despite the growth, without the right applicants, it becomes increasingly difficult for organizations to develop the level of competitive advantage required to succeed in unstable economies (Backhaus & Tikoo, 2004). Furthermore, not only is such talent expected to become scarce in multiple sectors but also, the generational differences in work preferences between the existing and preceding generations of workers (Cennamo & Gardner, 2008) necessitate that organizations get actively involved in the "war for talent" to attract the employees with the desirable and lucrative qualities that fit the current and future business landscape (Chapman et al. 2005).

Organizations are investing their efforts into cultivating a 'uniqueness' factor and emphasizing the benefits offered to current or potential employees and the development of an employer brand. Organizations create a distinct and easily recognizable identity as an employer through the employer brand. As a result, employer branding is a tool available to human resources specialists and managers. "Employer branding" refers to the application of branding principles to human resource management (Backhaus and Tikoo, 2004). Employer branding strategies and efforts help to boost an employer's desirability in the labor market as a whole and, more particularly, among possible skilled candidates, by effectively drawing attention to the unique and positive features of the work experience and environments offered by the employer (Backhaus and Tikoo, 2004). By applying effective employer branding practices, organizations can increase their attractiveness as employers. The sum of the benefits seen by employees or potential employees of a certain firm is referred to as organizational attractiveness (Berthon, Ewing, and Hah, 2005).

Organizations continuously want to develop an image of an attractive employer: With the advantages such as wider recognition of its products and services and attracting desirable talent (Lievens, Hoye & Schreurs, 2005), organizational attractiveness has become a highly sought-after attribute. In a longitudinal study, Fulmer et al. (2003) found that the top 100 companies to work for also performed better over the broader market, and in certain cases, over the matched group. In addition, employee retention strategies are a vital part of an organization's vision, mission, values, and policies. In today's highly competitive labor market, there is extensive evidence that organizations, irrespective of size, technological advances, market focus, and other factors, are encountering retention challenges, given the substantial investments in employee retention efforts within organizations. Low unemployment levels can force many organizations to reexamine employee retention strategies as part of their efforts to maintain and increase their competitiveness. Furthermore, Hale (1998) stated that 86% of employers were experiencing difficulty attracting new employees, and 58% of organizations claim that they are experiencing difficulty retaining their employees.

Based on our current research, studies were either done on employer attractiveness or employee retention. There has been studies which indicated employer attractiveness and employer branding but a few to no studies were found which had both employer attractiveness and employee retention, which implies the lack of research done between them. Therefore, in this thesis we will focus on Employer Attractiveness and Employee Retention specifically in the Pharmaceutical Industry of Egypt and Pakistan.

#### 1.2 Problem Discussion

Not unexpectedly, the competition for the best people has intensified and become more crucial than attracting and retaining profitable customers, because employees are the ones who give the company a long-term competitive advantage. Companies use many techniques and approaches to identify, attract, motivate, and retain individuals with specialized expertise, skills, and experience in order to succeed. However, a substantial proportion of businesses must contend with the possibility of employees leaving for whatever reason. It's all about fluctuation, which is defined as employee movement in the labor market or between companies. Fluctuations are inevitable, and firms must remember that innovation and effective company performance require a steady intake of "new" knowledge and experience. The issue arises when the fluctuations is excessively high and frequent, as this indicates that there are issues in the firm for which

individuals are leaving. Another issue is if the corporation has left talented people in whom it has invested substantial resources in developing human capital. (Pavlovic, 2018)

Moreover, it is obvious that if applicants are not attracted to an organization in the preceding recruitment or selection phases, it is impossible to convince them in the subsequent phases (Murphy, 1986). The only idea that can be quantified in this early stage of recruitment is attractiveness as an employer. This essentially means that this first phase of attracting applicants is extremely important. Since job choice intentions are influenced by job attributes, companies should become aware of the factors that determine their attractiveness (Cable & Judge, 1996). Once a corporation recognizes its competitive advantages as an employer and the importance of building an employer brand, it should establish effective external and internal communication. This explains why job advertising and branding are becoming more important (Berthon, Ewing & Hah, 2005). This also explains why employer attractiveness is frequently associated to employer branding in many literatures; it can be assumed that the more attractive the organization is, the stronger its employer brand will be (Berthon et al., 2005).

The benefits of employer attractiveness appear to be influencing businesses to include it into their everyday operations as a new strategy to develop and promote the 'employer brand' to potential employees in order to attract talented and exceptional candidates. According to Ewing et al. (2002), strategies for both attraction and retention of employees will need to be updated in the knowledge economy. According to Wright, Ferris, Hiller, and Kroll (1995), organizations should examine the essential condition of attracting and retaining superior employees because it can help enhance efficiency and enable distinctiveness.

# 1.3 Research Purpose

Scholars have long recognized that an organization's capacity to attract and retain high-quality employees is important to its competitiveness (Delery & Shaw, 2001; Ulrich, 1993). While many studies focus mainly on attractiveness or retention, few to no studies were found which had both, which implies the lack of research done between them. Based on our research Figure 1 indicates the research done on Employer Attractiveness and Employee Retention and the intersection part indicates the research which had both employer attractiveness and employee retention. In this thesis we will focus on Employer Attractiveness and Employee Retention specifically in the Pharmaceutical Industry of Egypt and Pakistan and we intend to relate them to each other and see the intersection between them. Thus, with these findings, we will

bridge the gap in existing research and additionally, we seek to inform HR practitioners on how Attractiveness and Retention are closely related. The relationship between Employer Attractiveness and Employee Retention will be discussed more in detail in our literature review section 2.4. Based on our research we only found two studies indicating the relationship between employer attractiveness and employee retention. The two studies are:

- Organizational Attractiveness as a predictor of employee retention
- Employer Attractiveness and the Employee Turnover and Retention

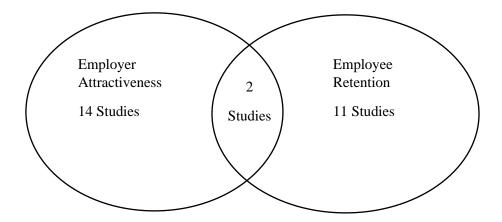


Figure 1: Number of Studies done on Employer Attractiveness and Employee Retention

Moreover, in this study, we identify the elements that contribute to 'initial employer attractiveness' and effective existing employee retention. We first examine the perspective of current workers; i.e., employees, on what they consider to be initial attractive elements and characteristics of the organizations in the pharmaceutical industry of Egypt and Pakistan and then the current retention factors, as well as the length of time they are willing to stay with the respective organization. Finally, the study will show us the difference between employees' perception of initial attractiveness and retention in two different countries.

#### 1.4 Research questions

To obtain the purpose of this study, this thesis aims to answer the following research question:

- (RQ1) What factors attracted the employees to the firm they are working in now?
- (RQ2) Why do those employees choose to stay?
- (RQ3) Do employees perceive the factors that attracted them to be the same ones that kept them?

These questions are intended to identify the factors that attracted people to the pharmaceutical company where they work in Egypt and Pakistan. Then investigate the elements that kept them with the company. The next step is to look at the relationship between attractive and retention elements by asking them if they are disappointed by attractive factors or if the factors that kept them were the same.

#### 1.5 Demarcations

The scope of this study has been limited due to time constraints. If there had been more time, we could have included other countries. However, in order to have enough time to distribute the survey, present our research, and ensure that employees had enough time to complete the questionnaire, as well as enough time to statistically analyze the results. We emphasize the focus of this study on the current employees working in the Pharmaceutical Industry of Egypt and Pakistan. However, due to the constraints on this thesis and the interest for as high a response rate as possible, factors have been limited to eight for attraction and 9 for retention. Moreover, topics like attractiveness and retention are prominent in all sectors. However, this study is placed in one specific industry in the two mentioned countries. Thus, this thesis will not explore those topics in other industries or countries.

We will not specify the employer branding factors and how an organization can brand them in order to attract potential employees. This is because our focus is mostly on attraction and retention; nevertheless, we included branding in our litterateur review section because it is closely linked to both attractiveness and retention. Furthermore, we do not include employer branding because it is primarily about the company's perception and efforts to make it a desirable place to work. We are, however, looking into the employees' perceptions.

Additionally, we will not investigate company perceptions of retention and attractiveness in this study; rather, we will concentrate on employee perspectives. The reason for this is that we discovered numerous studies focusing on companies' views. We also discovered one study that looked into HR managers' perspectives of how their organizational practices and external contextual changes in industrial relations legislation present problems for the industry and influence the attraction and retention of highly skilled workers. That encouraged us to consider the viewpoint of the workforce.

#### 2. Literature Review

#### 2.1 Employer Attractiveness

With the tight labor market, organizations need to work harder to be able to attract the most qualified candidates. Several companies have adopted this viewpoint, which is considered as an important aspect of an organization's effort to change its image. Employer branding has risen over the last decade as a strategic tool for organizations to retain and attract new talent, similar to how a company's positioning is a strategy geared towards customer attraction (Chhabra & Sharma, 2014). According to various authors, a closely related concept to employer branding is the notion of 'employer attractiveness' (Bhanot, 2016; Thomas, et al., 2014; Dabirian, et al., 2019). Employer attractiveness is described as "the expected benefits that a prospective employee perceives in working for a specific organization" (Berthon et al., 2005).

Moreover, there are two types of employer attractiveness: internal and external attractiveness. Internal employer attractiveness refers to how appealing a company is to its current employees. External employer attractiveness is attractiveness in the eyes of prospective employees. This branch can be further broken down into two types. One is the desirability of an employer from the perspective of experts in the field. The other is the desirability of an employer from the perspective of novices, primarily students. Novices do not have expert knowledge, but they do bring with them some other useful attributes. The better the employer's brand image of a company, the more favorable the perception of the organization held by future employees.

Some of the parameters that have been utilized as control variables in analyzing employer attractiveness include age, values, gender, work experience, education level, extended job offers, and organizational performance (Judge and Bretz 1992). The respondent chooses an organization with whom he or she appears to share similar values (Schneider, 1987). The desire of a candidate to apply, attend an interview, and accept a job offer is influenced by the company's performance in connection to the environment, as well as the treatment of minorities (Greening and Turban, 2000). Employer attractiveness has been explored as a recruiting strategy as well as a retention tool. Moreover, Employer Attractiveness has been considered as a dependent variable in relation to Corporate Social Responsibility in several studies (CSR). A study by Schmidt Albinger and Freeman (2004) indicates that Corporate Social Performance (CSP) is positively related to employer attractiveness for job seekers with a high level of job choice.

Employer attractiveness has an impact on the employer brand; thus, the more appealing an employer is to potential employees, the stronger the employer brand (Berthon, et al., 2005). Wilden et al. (2010) delve more into the link between employer branding strategy and attractiveness, concluding that a well-thought-out employer branding strategy is a crucial tool for creating a desirable and competitive employer brand. Similarly, Kucherov & Zavyalova (2012) define the relation between employer attractiveness and employer branding in their definition of an employer brand as "qualitative features of the employing company, which are attractive to a target audience." Hence, the importance of understanding what aspects attract employees is crucial to crafting a strong employer brand.

Researchers have looked into several aspects of attractiveness; for example, Bendaraviciene, Krikstolaitis, and Turauskas (2013) studied the organizational attractiveness of higher education institutions and established the Organizational Attractiveness Extraction Scale (OAES): With 67 items in all, the scale examines 11 characteristics of organizational attractiveness. The OAES has the following dimensions (Bendaraviciene et al., 2013):

- 1. Organizational Culture
- 2. Fairness and Trust
- 3. Teamwork
- 4. Academic Environment
- 5. Strategic Management
- 6. Job Satisfaction
- 7. Supervisor Relationship
- 8. Compensation and Benefits
- 9. Training and Development
- 10. Work-Life Balance
- 11. Working Conditions

Functional, economic, and psychological benefits are identified by Ambler and Barrow (1996) as three dimensions of employment. Berthon et al. (2005) confirmed and extended these into five factors of employer attractiveness:

- 1. Interest value
- 2. Social value
- 3. Economic value
- 4. Development value
- 5. Application value

The psychological benefits are captured by interest value and social value, whereas the functional benefits are captured by development value and application value. The different factors are used to determine the degree to which a person is attracted to a particular employer. Interest value measures a person's desire to work for a company that provides an exciting work atmosphere, encourages forward-thinking and innovation, and produces innovative, high-quality products and services. The attraction to a pleasant and cheerful work environment, as well as strong connections with superiors and coworkers, is measured by social value. The economic value component evaluates the attractiveness of work in terms of pay, compensation, promotion opportunities, and job security. The appeal to work that delivers recognition, career-enhancing experience, self-worth, and confidence is measured by development value. Finally, application value is related to acceptability, the ability to apply and exchange knowledge, and a humanitarian and customer-oriented environment. The authors argue that it is likely that the dimensions of employer attractiveness contribute to the employment brand value. (Berthon et al., 2005)

# 2.2 Employer Branding

The term 'employer brand,' apparently first coined by Ambler and Barrow (1996), has been defined as a package of functional, economic, and psychological benefits provided by employment and identified with the employing company. The concept of employer branding has been described as, among other things, 'the sum of a company's efforts to communicate to existing and prospective staff that it is a desirable place to work' (Lloyd 2002). Essentially, the ultimate goal of employer branding is to convince the minds of the potential labor market that the company is a 'great place to work,' more so than others, with the aim of drawing the attention of existing and emerging talent pools towards them (Ewing et al. 2002). Advertising is often seen as a crucial tool for organizations to attract and retain talent and is key to building an employer brand. The advantages that a strong employer brand brings to the company are multifold, including, but not limited to, a reduction in the cost of employee acquisition, improvement in employee

relations, an increase in employee retention, and, in some cases, lower salary offers for comparable staff to firms with weaker employee brands (Ritson 2002).

Another perspective on the notion of 'employer brand' centers the company's image on the perception of its associates and potential hires (Martin & Beaumont, 2003, p. 15). This definition entails the key aspects of 'the employment experience'; i.e., it takes into consideration what it is like to work at a company by evaluating tangible and intangible benefits, such as salary, company culture, and values (Ruch, 2002). The Rynes et al. (1991) study also suggests that employer brand image is largely shaped by the experiences of employees, and Barrow and Mosely (2011), too, insist that there should be more attention directed towards true employment experience. Yet another lens through which to look at the idea of employer branding, is that presented by Ambler and Barrow (1996). The authors draw a parallel between an employer brand and a product brand; stating the following: "The employer brand has a personality and may be positioned in much the same way as a product brand"; essentially suggesting that the employer brand should remain consistent with its 'personality.' Moroko & Uncles (2008) highlight that an employer brand must be noticeable, relevant, and unique, as the idea of employer branding maintains similar characteristics to those of consumer and corporate branding.

# 2.3 Employees retention

Employee retention has a significant impact on employer brand and attractiveness. The turnover rate of a company is simply one internal component that can significantly impact how the employer brand is regarded in the marketplace. Employee retention is critical to an organization's long-term stability, growth, and profitability. Every aspect of an organization's principles and operations should include staff retention measures (Cloutier, Felusiak, Hill, & Pemberton-Jones, 2015). Moreover, employees have always been valuable assets to any company. They might be referred to as an organization's life-blood because of their crucial nature (Kyndt, Dochy, Michielsen, & Moeyaert, 2009). An important point to address is that as technology advances, most firms are becoming increasingly technology-driven. However, because the technology requires human resources to operate, this circumstance does not diminish the worth of employees in a business (Kyndt, Dochy, Michielsen, & Moeyaert, 2009).

#### 2.3.1 Definition of employee Retention

Employee retention refers to keeping or encouraging employees to stay with a company for as long as possible (Bidisha & Mukulesh, 2013). Bidisha (2013) defined it as a procedure in which personnel are motivated to stay with the company for as long as possible or until the project is completed. Also, employee retention is defined as a tactic used by firms to keep staff efficient while meeting operational objectives (Mita, 2014).

According to Workforce Planning for Wisconsin State Government (2015), Employee retention is a deliberate effort to develop and cultivate an atmosphere that encourages employees to stay employed by having policies and practices in place that fulfill their unique requirements. Recently, Employee retention has been defined as the option of an employee to stay within an organization while not actively seeking new job positions in another organization (Basu Mallick, 2020)

#### 2.3.2 Enhancing employee retention

Walker (2001) identified seven factors that can improve employee retention: (I) compensation and appreciation for completed work, (ii) challenging work, (iii) opportunities to advance and learn, (iv) an inviting atmosphere, (v) positive relationships with coworkers, (vi) a healthy balance between professional and personal life, and (viii) effective communication. These findings point to a set of workplace norms and practices that might be construed as encouraging employee involvement. Employee retention is influenced by personal principles such as loyalty, trust, dedication, and identification and attachment to the organization, according to Hytter (2007). She also showed that workplace elements, including pay, leadership style, career possibilities, skill training and development, physical working conditions, and the balance of work and family life, all have an indirect impact on employee retention (Hytter, 2007).

Furthermore, Tang et al. (2000) discovered that earning more money has just an indirect impact on employee retention; it does have an impact when a person's job satisfaction is low. Other studies (Arnold 2005; Herman 2005) have found that excellent training and opportunities to grow and develop improve employee retention. Employee retention is also influenced by the manager's integrity and involvement, empowerment, responsibility, and fresh opportunities/challenges (Birt et al. 2004). Other researchers (Gunz, 2007) have also confirmed the positive impact of work experience and tenure. Birt et al. (2004) also discovered that employees' perceptions and experiences with these elements have the greatest impact

on employee retention. Still, even if a company tries to incorporate all of these variables to improve employee retention, an employee may still opt to quit the company due to, for example, poor management (Kaliprasad, 2006).

Personal factors, in addition to organizational issues, can influence employee retention. Individual variations have been shown to improve or decrease employee retention (Kyndt, Dochy, Michielsen, & Moeyaert, 2009). Employee retention is favorably connected to self-perceived leadership qualities and seniority. Respondents having a longer tenure with the organization appear to feel more strongly linked to the company and are less likely to leave. Employee retention is adversely correlated with education, readiness, and initiative to learn. Individuals who are eager to learn, desire to be pushed in their current position and have the opportunity to gain new skills (Kyndt, Dochy, Michielsen, & Moeyaert, 2009). A negative relationship between the level of education and employee retention is in line with the findings of Angle and Perry (1983) and Glisson and Durick (1988).

# 2.3.3 Why is it so important to keep key employees?

Fitz-enz (1997) estimates that every ten managerial and professional staff who leave the company costs the organization \$1 million. Exempt employee turnover costs a minimum of one year's pay and benefits and a maximum of two years' pay and benefits, including direct and indirect costs. The impact on an organization's overall economic performance is enormous when one of its key employees leaves, especially given the knowledge that is lost as a result of the employee's leaving (Ramlall, 2004). Employee turnover has a significant financial impact on a company's bottom line. According to Lucas' (2013) analysis, companies are unaware of the cost of significant staff turnover. Recruiting new employees is expensive due to advertising and administrative costs, as well as the time and resources required for onboarding and training. Employee engagement, according to Baldoni (2013), extends beyond productivity: it minimizes employee absenteeism, safety issues, and quality concerns.

According to an employee survey conducted by SHRM in 2004, the majority of employees leave their jobs for a variety of reasons, including a lack of professional growth opportunities, inadequate salary, poor work/life balance, job stress, and unfair treatment. This would be even more apparent for women and minorities in a less diverse workplace.

#### 2.3.4 Challenges of Employee Retention

According to research, retaining employees is difficult due to fluctuating demand and the occasional job-hopping of a number of employees (Faldetta et al, 2013). According to Powell's (2012) research, most employers and executives have a hard time understanding why their employees leave. Unfortunately, many business leaders blame high turnover on bad employee-manager relationships. According to a SHRM employee poll from 2004, the majority of employees leave their employment for a variety of reasons, including a lack of professional growth opportunities, insufficient pay, poor work-life balance, workplace stress, and unjust treatment. This would be considerably more visible for women and minorities in a less diverse workplace.

The authors of the study (Eldridge & Nisar, 2011; Terera & Ngirande, 2014) discuss three types of issues that firms encounter when it comes to staff retention. They are (1) intense competition from competitors, and (2) brain drain, which is the migration of skilled workers from one country to another that offers better chances and incentives. (3) Companies are unable to forecast future personnel needs and, as a result, are unable to take corrective action. A similar viewpoint is articulated in another article (Scott, McMullen, & Royal, 2012), in which the authors discuss the skill deficit as a result of rising global talent. Companies also believe that an increase in the proportional number of elderly people will increase the demand for qualified workers (Kyndt, Dochy, Michielsen, & Moeyaert, 2009).

#### 2.4 Relationship between Employer Attractiveness and Employee Retention

Numerous research has been conducted on the relationship between organizational attractiveness and other parameters. According to the research, Vroom (1966) was the first to raise scholars and professionals' attention to the attractiveness of any business as the finest location to work with in order to attract talent. Vroom employed a single item scale to assess potential candidates' perceptions of an organization's attractiveness, and he concluded by stating that organizational attractiveness is unique to each firm. After a few years, Singh (1973) utilized a single item measure to assess a company's attractiveness as an employer; however, he limited his research to determining an organization's attractiveness based on the possibility of an individual accepting an employment offer from that business.

Further Judge and Cable (1997), and Catanzaro et al. (2010), in their studies have described organizational attractiveness through likelihood of potential candidate of organizational culture of a particular organization. They argued that the organizational culture that best matches a potential candidate's beliefs and principles is appealing to him; as a result, it is critical for any organization's organizational culture to

project or reflect values that are appealing to the majority of qualified people. Various scholars have taken a different approach to describing organizational attractiveness (Turban and Cable, 2003; Caligiuri et al., 2010; Williamson et al., 2010), claiming that organizational attractiveness can be explained in terms of organizational reputation (Turban and Cable, 2003; Caligiuri et al., 2010; Williamson et al., 2010). According to Turban and Cable (2003), organizational reputation is a significant factor in attracting the right candidate to any organization, and individuals will prefer to work for a company with a good reputation in the external market, so reputation is something that adds to the attractiveness of any organization.

In addition, another concept that governs an organization's adjustment with its employees and external stakeholders is organizational attractiveness and its terms with reputation. Turban and Cable (2003) described organizational reputation as a means of attracting skilled workers to apply for jobs in any business, hence boosting the value of the entity while also increasing psychological satisfaction of customers and stakeholders too. It gives a business a global competitive advantage, and a chance to grow in the future owing to its appeal, and it attracts job seekers to join the candidate pool. According to Robertson, organizational attractiveness offers a positive message to job seekers about better workplace orientation, causing them to be more interested in applying for a position in an organization. Employees' individual personas are affected by organizational attractiveness, which causes them to be cautious by developing a special attachment to the firm, resulting in loyalty, trustworthiness, and retention psychology, resulting in self-motivational force, which also reflects organizational work culture and growth.

Another idea that has been linked to the concept of organizational attractiveness from time to time is CSR. Organizational Attractiveness and Corporate Social Responsibility (CSR) have their own unique combinations. CSR, according to Wood (2010), is described as a broad range of business activities that generates implicit benefits for employees, stakeholders, and, ideally, society. According to Turban and Greening (1996), CSR not only focuses on the company's own employees, stakeholders, and the surrounding society, but it also affects job seekers' perceptions of the company's work environment, luring them to the company. Kim and Park (2011) in their study, concluded that potential job seekers are more interested in working for companies that engage in CSR activities, and they investigated the impact of CSR performance on a company's profit.

Creating appealing working circumstances for employees is one of the methods for managing employee retention. This is actually a form of employer attractiveness that comes as a result of using internal

marketing in the field of human resource management. Internal marketing, according to Kotler, is the task of successfully hiring, training and motivating able employees to serve the customers well. Internal marketing is based on the notion that employees are the company's first customers, and that their demands must be met. In order for a company to create satisfied and loyal employees, it must provide appealing working conditions, such as a good balance of life and work, stimulating compensations, challenging tasks, the opportunity for advancement, additional education, and a working environment with good interpersonal relations, among other things. As a result of creating attractive conditions, the company is able to attract the best individuals from the labor market, decrease recruitment expenses, develop an organizational culture in which employees are ready for change and continuous learning, and enhance overall performance.

#### 2.5 The Analytical Model

We developed an analytical model based on our literature review. According to our Analytical model (see figure 2), employer attractiveness and employee retention are the dependent factors. The dependent factor are the factors being tested and measured and are dependent on the independent factors. Moreover, dependent factors are the factors that changes as a result of the independent factors manipulation. It's the outcome you're interested in measuring. In addition, the independent factors are the factors the researcher manipulates or changes and is assumed to have a direct effect on the dependent factors. Furthermore, independent factors are the variables that you change or manipulate in a study to see how they affect the results. It's labeled "independent" because it's unaffected by any other factors in the study. In this study following are the independent factors: Company Reputation, Compensation and Benefits, Career Pathway & Opportunities, Training Development, Organizational Culture, Work-Life Balance, Challenging and Innovative Environment, CSR Activities and Supervisor Relationship. However, the independent factor supervisor relationship is a factor only for employee retention and not for employer attractiveness. Finally, we also have a dummy variable. A dummy variable also known as an indicator variable is a dichotomous, quantitative variables. Their value range is limited; they can only take on two quantitative values. As a practical matter, regression results are easiest to interpret when dummy variables are limited to one of two values: 1 or 0. Typically, 1 represents the presence of a qualitative attribute, and 0 represents the absence. In our study the employee disappointments after employment is our dummy variable. Through this analytical model we aim to fulfill our purpose of the study.

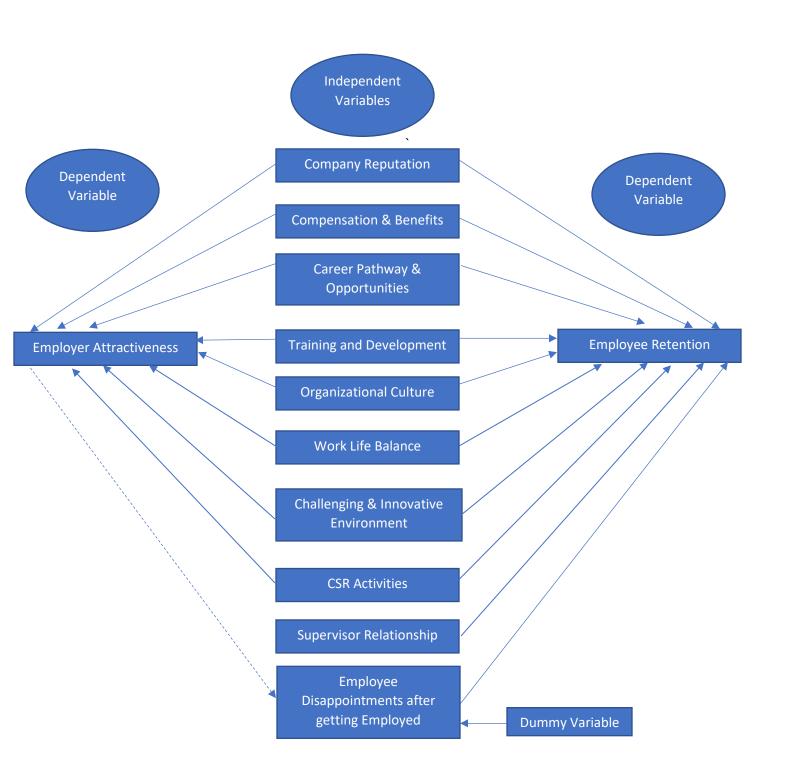


Figure 2: The Analytical Model

#### 3. Method

#### 3.1 Research Approach

We predominantly used a deductive research approach (Locke, 2007). As the deductive research method is based on previous research (Woiceshyn & Daellenbach, 2018), we were able to offer substantial introductions and justify the theoretical background. In order to gain an understanding of our topic, we read the available literature and research thoroughly, which was collected mainly from Google Scholar and from LUB search- Lund University's database for academic papers. When delving into the topic area, keywords were used to narrow down the search field, including, for example, "employer attractiveness," "employer branding," and "employee retention." However, we could not find any relevant studies of employer attraction and employee retention in the Pharmaceutical Industry of Egypt and Pakistan.

The Pharmaceutical Industry is a growth industry in both Egypt and Pakistan with a very excellent future. It is a well-known truth that the pharmaceutical sector invests more in R&D than any other industry on the planet. In addition, the Pharmaceutical Industry is a great place to work if you want a steady job with plenty of opportunities for advancement. Hence, with the immense growth and competition the power to attract and retain the best in the labor market has become a challenge for the employers in the Pharmaceutical Industry.

While pay and benefits are still important considerations, candidates are also looking at a company's track record and reputation for diversity and inclusion, community, societal, and educational engagement, corporate culture, work-life balance strategies, and career development opportunities. Thus, it will be interesting to investigate what factors attracts the potential employees to the pharmaceutical industry and what retains them to keep working.

Therefore, we moved forward with an inductive research approach, narrowing it to a Quantitative method where we will be making use of a survey. This method will help us obtain information directly from the participants and deeply understand the research field that we intend to investigate. The research design is descriptive in nature. The core data is gathered from employees working in different departments in Egypt and Pakistan's Pharmaceutical Industry using a standardized questionnaire. A sample of a total of 103 responses were collected, 53 responses from Pakistan and 50 responses from Egypt.

#### 3.2 Data Collection Methods

Our primary source of data collection is through surveys, and the secondary source of data is academic literature. We will be using Google Forms as our Primary collection of data from the employees working in the Pharmaceutical Industry in Egypt and Pakistan. In order to analyze our data, we will be using Google Form Analytics.

#### **3.2.1 Survey**

The attractiveness and retention elements can be identified using a quantitative method where data is collected via an online questionnaire based on the purpose and research questions of this study. In order to collect primary data regarding employer attractiveness and employee retention from workers in the pharmaceutical industry in Egypt and Pakistan, an online questionnaire was designed.

The questionnaire was created using information from the literature review part, as well as the existing studies for inspiration (Walker, 2001; Bendaraviciene et al., 2013).

There are three sections to the questionnaire:

- 1. Background of the participants
- 2, Attractive factors when they applied for the job
- 3. Retention factors that convince them to stay at the company

#### **Section 1: Background of the Participants**

Although the survey is done for workers of one industry and within two countries, we tried to include some diversity factors that can help us obtain different results to compare and analyze. Gender and age were chosen to represent surface-level diversity attributes, and marital status and education background were chosen to represent a deeper level of diversity. Different weights for each variable were considered; however, we are eager to see how attractiveness and retention factors are influenced by some diversity factors such as marital status, the location of the company, and the educational level of the participant in question.

#### Section 2: Attractiveness Factors when they Applied for the Job

A 6-point Likert scale is used to measure the importance of 8 factors while participants chose the company and attracted them to it. A 6-point, symmetrical Likert scale was used to ensure participant independence and the ability to choose a neutral option if this reflected their feelings towards the statement (Joshi, Kale, Chandel & Pal, 2015).

The rating scale is used as it gives a high resolution of the results, as well as for the reason that the respondents often tend to choose the middle options, a phenomenon that we wish to avoid. The statements are mostly inspired by a review of the existing literature discussing employer attractiveness and employee retention by Walker (2001) and Bendaraviciene et al (2013). Most of the factors that are included here are also included in Section 3; however, the relationship with the supervisor is excluded in this section.

#### Section 3: Retention factors that make them stay at the company

Here, we intend to explore why the interested employees ultimately choose to stay with the company and the length of time for which they typically intend to stay. Most of the factors mentioned here are the same factors as those mentioned in Section 2, with a few additions. The reason behind that is we want to investigate whether, from the employees' perspectives, the attractiveness factors bear prominent similarities to retention factors whether this trend has evolved over time. Also, within this section, we will ask the respondents how long they think they will stay so that we may draw a comparison between those who believe that they will stay for a longer period with those who believe that they will stay for a relatively shorter time.

#### 3.3 Data Analysis Method

According to Fejes and Thornberg (2015), the data analysis process is when the researcher systematically analyzes and organizes the collected data to define the result. So, our analysis will be done in two stages. The 1<sup>st</sup> stage is to analyze the findings from each country separately then analyze and compare the findings in 2 countries.

The investigated factors of attractiveness and retention are analyzed in terms of their similarities and differences in the two countries. This step aims to identify the most important attractiveness and retention factors as well as check if the pharmaceutical industry, in particular, presents any unique or unexpected

factors. After we distinguish between common and conditional factors, we will rank them according to their importance. We define 'common factors' as those that have been mentioned in the literature part; however, we define conditional factors as those that are industry-specific in nature or parts out of our expectations.

#### 3.4 Validity and Reliability

Validity "indicates the extent to which observations accurately record the behavior" that a researcher is interested to measure (Bougie & Sekaran, 2020) and is related to the integrity of the conclusions that result from a study (Bryman & Bell, 2015). To increase the validity, the survey is based on established models (e.g., Organizational Attractiveness Extraction Scale "OAES") or findings of previous studies (e.g., seven factors that can improve employee retention). Furthermore, the survey questions are non-leading and worded as precisely and clearly as possible.

Bryman (2011) goes on to say that 'validity' may be twofold in nature: Internal vs. external. Internal validity involves the project and the immediate relationship between empirical and theoretical notions, according to the same author. External validity also refers to the project as a whole as well as the ability to generalize and apply the data to a larger population.

Reliability "refers to the consistency of a measure of a concept" (Bryman & Bell, 2015, p.169). According to Bryman (2011), reliability is also divided into internal and external reliability. External reliability, according to the same author, relates to a study's replicability. Also, Bryman (2011) explains that internal reliability is when the researchers agree on interpreting what they see and hear when gathering the data.

Regarding the reliability of the responses to the questionnaires, one can be rather confident that only the intended respondents have completed the survey, as the questionnaire was only sent to the respected target group. In order to ensure reliability, conditions within the project are kept the same for all the participants. This means that all participants were given the same information and received the same survey. Furthermore, we also intend to ensure the proper understanding of the survey; we will translate it also into the local language so that participants can answer easily.

#### 3.5 Ethical consideration

Diener and Crandall (1978, cited in Bryman & Bell, 2015) stated four major points regarding ethical considerations: harm to participants, lack of informed consent, invasion of privacy, and deception. As for

harm to participants, we ensured that all respondents had been informed that they would be kept anonymous. However, it was emphasized that the reader would know that workers in the pharmaceutical industry in Egypt and Pakistan are the focus of the study. This level of anonymity was clarified in the initial introduction of the questionnaire as well as while spreading the survey.

Regarding informed consent, participants should have enough understanding of the research project in order to make an informed decision about taking part (Bryman & Bell, 2015). Therefore, essential information about what participation would entail is described in the initial introduction, with emphasis that participation was voluntary after asking them for their consent. Regarding privacy, as we were asking questions about their personal background (e.g., their marital status), we thought it vital to ensure that all participants were informed about how the information would be used.

# 4. Empirical Data

In this section, the main purpose is to present the findings we got from the surveys. Data were received from 53 employees working in different organizations in the Pharmaceutical Industry of Pakistan and 50 employees working in the Pharmaceutical Industry of Egypt. In order to make this section reader friendly we have summarized our data in Tables. However, all the figures from the surveys can be found in the Appendix. It is beneficial to begin this chapter by reviewing the pharmaceutical industries of both countries.

## 4.1 Pharmaceutical Industry of Pakistan

Pakistan's pharmaceutical business is expected to be worth around USD 3.2 billion in 2019, up from USD 1.64 billion in 2011. When institutional sales are factored in, the industry estimates that this sector would easily grow to a USD 4 billion retail market. Exports totaled USD 218 million in 2019, up from USD 44.4 million in 2003. According to industry sources, exports from the sector might reach USD 0.5-1 billion in 3 to 5 years; if this critical mass is reached, export growth could become exponential.

In addition, there are about 650 companies in the Pakistan's pharmaceutical market, with just about 30 of them being multinational. Moreover, the industry is dominated by local / national companies which account for 2/3rd of market share whereas multinationals enjoy the remaining 1/3rd. The top ten companies account for over 46% of the market, while the top 50 companies account for nearly 90% of the market.

| Name  | Ranking | National/Multinational | Listed   |
|---|---------|------------------------|----------|
| GlaxoSmithKline<br>Pakistan Limited                 | 1       | Multinational          | Listed   |
| Getz Pharma (Private)<br>Limited                    | 2       | National               | Unlisted |
| Sami Pharmaceutical<br>(Private) Limited            | 3       | National               | Unlisted |
| Abbott Laboratories Pakistan Limited                | 4       | Multinational          | Listed   |
| Martin Dow<br>Pharmaceuticals<br>(Pakistan) Limited | 5       | National               | Unlisted |

| The Searle Company<br>Limited           | 6  | National      | Listed   |
|---|----|---------------|----------|
| Sano Aventis Pakistan<br>Limited        | 7  | Multinational | Listed   |
| OBS Pakistan (Private)<br>Limited       | 8  | National      | Unlisted |
| GSK Consumer<br>Healthcare Pakistan Ltd | 9  | Multinational | Unlisted |
| Hilton Pharma (Private)<br>Limited      | 10 | National      | Unlisted |

Table 1: Top 10 Pharmaceutical companies of Pakistan

Growth in sales of national companies has been higher than that multinationals. It is primarily a low-cost generic market, with a large number of new generic medicines being introduced at higher unit prices. Pakistan's pharmaceutical industry contributes about 1% of the country's annual GDP.

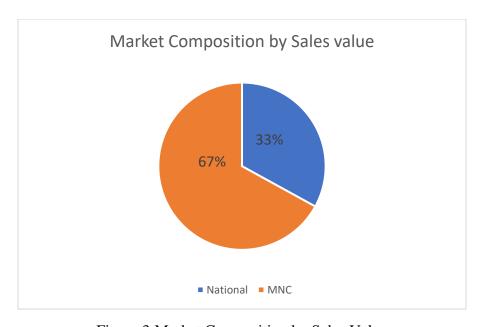


Figure 3:Market Composition by Sales Value



Figure 4: Market Composition by Number of Companies

Pakistan's pharmaceutical industry is strictly regulated by the government. The Pakistani Drug Regulatory Authority (DRAP) oversees the registration of new medications and manufacturing facilities. It also establishes the MRP (Maximum Retail Price) for all drugs sold in Pakistan. In Pakistan, there are around 9,000 active marketed medications available for prescription at licensed pharmacies. There is also a sizable market for over-the-counter (OTC) drugs, such as multivitamins, pain relievers, and cold and flu relief.

Although the Pakistani pharmaceutical business is mostly an out-of-pocket market (with most healthcare spending coming from individual's private savings), the government provides free or low-cost treatment at government hospitals and clinics. Despite the fact that Pakistan does not have a national health insurance plan, the health insurance business is slowly expanding to provide citizens with hospitalization coverage. In the health sector, public-private partnerships have grown, with several pharmaceutical corporations collaborating with governments and non-governmental organizations to ensure that people have access to medicines they need.

# 4.2 Pharmaceutical Industry In Egypt

Egypt is one of the Middle East's and Africa's leading producers and users of pharmaceuticals. The industry's growth is reliant on strong population growth, a rising generic medicine sector, and increased health awareness, all of which are typified by high demographic expansion and urbanization. Egypt has a Risk/Reward Index of 44.3 out of 100, which is higher than the regional average of 40.4 and places it as Africa's fourth most attractive pharmaceutical market.

The market is expected to increase at an annual pace of 8.0 percent in local currency terms by 2020, reaching a value of EGP 48.6 billion. Due to the lack of a comprehensive health-insurance system in Egypt, pharmaceutical sales are predicated on out-of-pocket expenses, as consumers believe that self-medicating is the most cost-effective treatment option. Prescription medications and over the counter (OTC) drugs account for the majority of pharmaceutical sales. Prescription medicine sales account for 82.5 percent of total drug sales in Egypt, compared to 17.5 percent for over-the-counter products. Generic and brand-name medications account for the majority of prescription drug sales. Egypt's indigenous pharmaceutical sector is strong, with roughly 120 companies, fewer than 10 of which are multinationals with local manufacturing bases. The Holding Company for Pharmaceuticals (HoldiPharma) was founded in the 1990s with the help of 12 subordinate state-owned firms. In the industry, there are 17 private sector businesses and nine international pharmaceutical companies. With a market share of 10-12 percent, EIPICO is Egypt's largest private sector corporation. Two additional major players in the business are Amoun and Pharco.

Moreover, The Egyptian Military's National Agency for Military Production was granted a license to participate in the creation of a firm called the Egyptian National Company for Pharmaceuticals on the 17th of January 2017. The directive was justified by the necessity to manage short- and medium-term medicine shortages. As for growth, With population growth and urbanization anticipated to accelerate across Africa, Asia, and Latin America, a 90 million-person consumer market like Egypt presents prospects for numerous pharmaceutical companies. An appealing market for pharmaceutical businesses is characterized by rising GDP per capita, a growing population, and rising health awareness. Additionally, efforts to introduce basic universal health insurance should assist the 20% of the population who do not have access to public or private health insurance in participating in the prescription medication market. Furthermore, the government intends to increase healthcare spending to the ambitious objective of 3% of GDP. Egypt's public health insurance system now covers fewer than half of the population, allowing out-of-pocket patient expenses to account for the majority of the country's healthcare spending.

| Rank |                      | VOLUME (Million Units MAT<br>10/2018) | VOLUME (% PPG Previous Year<br>MAT 10/2018) | VALUE (Sales in USD<br>millions MAT 10/2018) | VALUE (% PPG Previous<br>Year MAT 10/2018) |
|------|----------------------|---------------------------------------|---|--|--|
|      | TOTAL MARKET         | 2,263                                 | 4.4%  | 3,805  | 25.1%                                      |
| 1    | Novartis             | 110                                   | -4.9%                                       | 288  | 17.8%                                      |
| 2    | GSK                  | 177                                   | -5.1%                                       | 234  | 15.5%                                      |
| 3    | Sanofi               | 100                                   | 3.9%  | 198  | 18.5%                                      |
| 4    | Pharco               | 223                                   | 1.6%  | 193  | 18.4%                                      |
| 5    | Amoun                | 132                                   | 12.9%                                       | 186  | 29.9%                                      |
| 6    | Eipico               | 171                                   | 5.5%  | 138  | 17.7%                                      |
| 7    | Eva Pharma           | 51                                    | 5.2%  | 131  | 20.6%                                      |
| 8    | Pfizer               | 37                                    | -6.6%                                       | 120  | 21%  |
| 9    | Hikma                | 41                                    | -0.2%                                       | 97   | 36.8%                                      |
| 10   | Medical Union Pharma | 110                                   | 20.7%                                       | 92   | 38.8%                                      |
| 11   | Marcyrl              | 35                                    | 28.5%                                       | 87   | 43.6%                                      |
| 12   | Global Napi          | 41                                    | 6.9%  | 77   | 20.3%                                      |
| 13   | Merck                | 30                                    | 3.9%  | 76   | 33.4%                                      |
| 14   | AstraZeneca          | 16                                    | 13%   | 75   | 33.7%                                      |
| 15   | Multiapex Pharma     | 31                                    | 14.1%                                       | 74   | 23.7%                                      |
| 16   | Abbott               | 33                                    | -2.5%                                       | 69   | 18.4%                                      |
| 17   | Servier              | 19                                    | 6.8%  | 60   | 22.8%                                      |

Figure 5: Top 20 Pharma Companies in Egypt 2018, Source: IMS

# **4.3 Survey Results**

We will present the data in three sections; Background about the participants, attractiveness factors when they applied for the job and the retention factors.

# 4.3.1 Background about the participants

In this section we will present the data related to the background of the participants in terms of gender, age, education level, educational background, and marital status. Table 2 illustrates the results of the background of the participants.

| Factor          | Pakistan  | Egypt   |
|-----------------|---|---|
| Gender          | • 77.4% of the employees working in the Pharmaceutical Industry are male, and 23.1% are Female  | • 58% of the employees working in the Pharmaceutical Industry are male and 42% are Female.  |
| Age             | <ul> <li>32.1% of the employees fall between the age of 35-40.</li> <li>30.2% of employees between the age of 30-35.</li> <li>17% of the employees between the age of 40-50.</li> <li>15.1% between 25- 30.</li> <li>Finally, 5.7% between the age of 20-25.</li> </ul> | <ul> <li>38% of the employees fall between the age of 25-30.</li> <li>20% of employees between the age of 20-25.</li> <li>18% of the employees between the age of 35-40.</li> <li>12% between 30-35.</li> <li>10% between 40-50.</li> <li>Finally, 2 % between the age of 50-60.</li> </ul> |
| Education Level | <ul> <li>58.5% of the employees hold a graduate degree.</li> <li>37.7% of the employees have a post graduate degree.</li> </ul>   | <ul> <li>70% of the employees hold a graduate degree.</li> <li>28% of the employees have a post graduate degree.</li> </ul>   |

|                           | • 1% of them are high school graduates.  | • 2% of them selected others.   |
|---------------------------|--|---|
| Educational<br>Background | <ul> <li>43.4% of the employees have a Business and Management background.</li> <li>32.1% have an educational background of Pharmacy.</li> <li>17% have a background in others.</li> <li>2% have a background in Social Sciences.</li> <li>finally, 1% of them have a background in Engineering and Medicine.</li> </ul> | <ul> <li>52% have an educational background of Pharmacy.</li> <li>16% have a background in medicine.</li> <li>12% have a background in physical Sciences.</li> <li>8% selected others.</li> <li>6% of the employees have a Business and Management background.</li> <li>4% of them have a background in Engineering.</li> <li>1% have a background in Social Sciences.</li> </ul> |
| Marital Status            | <ul> <li>79.2% of the employees are married.</li> <li>20.28% of the employees are single</li> </ul>  | <ul> <li>48% of the employees are married.</li> <li>46% of the employees are single.</li> <li>4% of the employees preferred not to say.</li> <li>1% of the employees are widowed.</li> </ul>  |

Table 2: Background about the participants

#### **4.3.2** Attractiveness Factors

In this section we will present the data related to the attractiveness factors of the organization. The attractiveness factors are measured according to our analytical model. A 7-point Likert scale was used to measure the importance of 8 factors when the participants chose the company that attracted them to it. Table 3 implies the average scores of the Employer Attractiveness we received from both countries.

| Factors                        | Average score of Pakistan | Average score of Egypt |
|--------------------------------|---------------------------|------------------------|
| Company Reputation             | 6.26                      | 5.8                    |
| Compensation & Benefits        | 5.79                      | 6.04                   |
| Career Pathway & Opportunities | 6.37                      | 5.58                   |
| Training and Development       | 6.07                      | 5.42                   |
| Organizational Culture         | 6.28                      | 5.36                   |
| Work-Life Balance              | 5.96                      | 5.6                    |

| Challenging & Innovative<br>Environment | 6.26 | 5.26 |
|---|------|------|
| CSR Activities                          | 5.43 | 4.38 |

Table 3: Average Score of the Employer Attractiveness Factors

# **4.3.3 Retention Factors**

In this section we will present the data related to the employee retention factors within the organization. The retention factors are measured according to our analytical model. The importance of 9 factors that influenced employees' decisions to stay at the company was assessed using a 7 point Likert scale. The majority of the factors listed here are the same as those listed in Section 4.3.2, with supervisor relationship as a new addition.

| Factors                                 | Average score of Pakistan | Average score of Egypt |
|---|---------------------------|------------------------|
| Company Reputation                      | 6.32                      | 5.62                   |
| Compensation & Benefits                 | 5.92                      | 5.92                   |
| Career Pathway & Opportunities          | 6.13                      | 5.66                   |
| Training and Development                | 5.96                      | 5.6                    |
| Organizational Culture                  | 6.35                      | 5.74                   |
| Work Life Balance                       | 6.11                      | 5.68                   |
| Challenging & Innovative<br>Environment | 6.15                      | 5.28                   |
| CSR Activities                          | 5.75                      | 4.38                   |
| Supervisor Relationship                 | 6.24                      | 5.82                   |

Table 4: Average Score of the Employee Retention Factors

## 4.3.4 Disappointment Factors after Employment

Finally, we also questioned the respondents if any of the attractiveness factors had disappointed them after they started working. According to a survey conducted in Pakistan, 58.3% of employees were disappointed with attractiveness factors after starting work. The majority of employees were disappointed with the Organizations' compensation and benefits, as well as their career opportunities and pathways.

According to an Egyptian survey, 76% of employees were dissatisfied with attractiveness factors after starting work. After Training & Development, the majority of employees were dissatisfied with their career pathways and opportunities.

# 5. Empirical Analysis and Results

Initially, we exported all our survey responses from Google Form to MS Excel to have an overview of the data we received. Additionally, to test the relationship of Employer Attractiveness/Employee Retention (Dependent Variables) with the Attractiveness Factors/Retention Factors (Independent Variables) we used the software called Stata for our correlation and regression analysis. We averaged the attractiveness and retention factors of every employee response to get a significant value for Employer Attractiveness and Employee Retention to proceed with the software. Moreover, we had to shorten the names of the dependent and independent factors for the software to accept thus, the following abbreviations were given (see Table 5 and Table 6). The abbreviations which don't indicate ER in Table 6 are abbreviations for Employer Attractiveness.

| <b>Dependent Factor</b> | Abbreviations |
|-------------------------|---------------|
| Employer Attractiveness | EA            |
| Employee Retention      | ER            |

Table 5: Abbreviations for Dependent Variables

| <b>Independent Factors</b>             | Abbreviations |
|--|---------------|
| Company Reputation                     | Comp Rep      |
| Compensation and Benefits              | Benefits      |
| Career Pathway and Opportunities       | Car PO        |
| Training and Development               | TD            |
| Organizational Culture                 | Org C         |
| Work-Life Balance                      | WLB           |
| Challenging and Innovative Environment | Chal Envir    |
| Corporate Social Responsibility        | CSR           |
| Company Reputation                     | Comp Rep ER   |
| Compensation and Benefits              | Benefits ER   |
| Career Pathway and Opportunities       | Car PO ER     |
| Training and Development               | TD ER         |
| Organizational Culture                 | Org C ER      |
| Work Life Balance                      | WLB ER        |
| Challenging and Innovative Environment | Chal Envir ER |
| Corporate Social Responsibility        | CSR ER        |
| Supervisor Relationship                | SR ER         |
| Disappointments after Employment       | Disapp_dum1   |

Table 6: Abbreviations for Independent Variables

In this study we used the most popular type of Correlation "The Pearson Correlation". In the Pearson Correlation the correlation coefficient is a value that ranges from -1 to +1. A value of 0 means there is no linear correlation between the two variables, a value of +1 means there is a perfectly positive correlation

between the two variables in other words as one variable increase so does the other. Finally, a value of -1 indicates a perfectly negative linear correlation between the two variables.

To understand the correlation coefficient between employer attractiveness/employee retention and the attractiveness/retention factors we applied the conditional formatting function to the data with a 3-color scale format. The value of -1 will be indicated by a red color, the value of 0 will be indicated by the color white and finally, the value of +1 will be shown by blue. Since the 3-color scale format is a color gradient any values between -1 to +1 will have a shade of color that represents their correlation coefficient value.

Moreover, a regression model was made through the software to test the relationship between Employer Attractiveness/Employee Retention and the Attractiveness/Retention factors. According to our regression model the R-Squared indicates the variance of Employer Attractiveness/Employee Retention explained by the Attractiveness/Retention Factors. The Root MSE is the root mean squared error. In addition, the two-tail p-values and t-values test the hypothesis that each attractiveness/retention factor is different from 0. The p-value must be lower than 0.05 to be statistically significant in explaining Employer Attractiveness and Employee Retention. Furthermore, the t-values also show the importance of a variable in the model. The t-value must be greater than 1.96 to be statistically significant in explaining Employer Attractiveness and Employee Retention. You can get the t-values by dividing the coefficient by its standard error.

## 5.1 Data Analysis of Pakistan's Survey

In this section we will analyze the results of the 53 employees working in the Pharmaceutical Industry of Pakistan. We will analyze the results in the following categories: Background about the participants, attractiveness factors when they applied for the job, and finally, the retention factors.

## 5.1.1 Background about the Participants

According to our results it clearly indicates that Pakistan's Pharmaceutical Industry is a very male dominant industry, with only 22.6% females working in the industry. In addition, majority of the employees working in the industry are between the age of 30-40. In addition, Pakistan's pharmaceutical industry has a high literacy rate. Majority of the employees working in the Pharmaceutical Industry are highly educated and have a very diverse educational background. Furthermore, 79.2% of the employees working in the industry have a married marital status and 20.8% of the employees are single.

#### **5.1.2** Analysis of the Attractiveness Factors

In accordance with our results majority of the employees have more than 10 years of experience working in the pharmaceutical industry. Our results were diverse with employees working in different departments but majority working in Marketing and Sales. In terms of attractiveness majority of the employees were attracted to all the factors mentioned in our survey. There was not an even distribution among the graphs in the attractiveness factors, the graphs were more leaned towards the right where the attractiveness was high at all the factors. Therefore, to describe the bivariate relationships between the Employer Attractiveness and attraction factors we performed a correlation test and created a correlation matrix and in order to test the relationship between employer attractiveness and the attraction factors a regression model was made.

|                | Employer<br>Attractiveness |
|----------------|----------------------------|
| Employer       |                            |
| Attractiveness | 1                          |
| Comp Rep       | 0.70                       |
| Benefits       | 0.82                       |
| Car P&O        | 0.85                       |
| T&D            | 0.75                       |
| Org C          | 0.88                       |
| WLB            | 0.82                       |
| Chal Envir     | 0.70                       |
| CSR            | 0.51                       |

Table 7: Correlation matrix between Employer Attractiveness and Attractiveness Factors in Pakistan

In accordance with our matrix shown in table 7 for Employer Attractiveness in Pakistan, there is no negative correlation between employer attractiveness and the attractiveness factors. All the attractiveness factors have a positive correlation with employer attractiveness. In addition, strong positive correlation can be seen between Employer Attractiveness with benefits, organizational culture, career pathway & opportunities and Work Life Balance. However, the matrix also implies a weak positive correlation between Employer Attractiveness and Corporate Social Responsibility.

According to our regression model for Employer Attractiveness illustrated in table 8. The Attractiveness Factors explains 93% of the variance in Employer Attractiveness, indicating our model was successful. The model indicated a Root MSE of 0.2 indicating a very minor error.

Table 8: Regression model of Employer Attractiveness in Pakistan

| Source      | SS          | df        | MS         | Numb   | er of obs | =   | 53        |
|-------------|-------------|-----------|------------|--------|-----------|-----|-----------|
|             |             |           |            | - F(9, | 43)       | =   | 63.47     |
| Model       | 46.6047902  | 9         | 5.17831003 | 3 Prob | > F       | =   | 0.0000    |
| Residual    | 3.50841731  | 43        | .0815911   | L R-sq | uared     | =   | 0.9300    |
| -           |             |           |            | - Adj  | R-squared | =   | 0.9153    |
| Total       | 50.1132075  | 52        | .96371553  | 3 Root | MSE       | =   | .28564    |
|             | ı           |           |            |        |           |     |           |
| EA          | Coefficient | Std. err. | t          | P> t   | [95% co   | nf. | interval] |
| CompRep     | 016033      | .0529171  | -0.30      | 0.763  | 122750    | 6   | .0906845  |
| Benefits    | .0740196    | .0460132  | 1.61       | 0.115  | 018774    | 8   | .166814   |
| CarPO       | .0309609    | .0830912  | 0.37       | 0.711  | 136608    | 4   | .1985302  |
| TD          | .1197705    | .052021   | 2.30       | 0.026  | .014860   | 1   | .2246809  |
| 0rgC        | .3012267    | .0865146  | 3.48       | 0.001  | .126753   | 4   | .4757     |
| WLB         | .1585255    | .049303   | 3.22       | 0.002  | .059096   | 5   | .2579545  |
| ChalEnvir   | .1458572    | .062856   | 2.32       | 0.025  | .019095   | 9   | .2726184  |
| CSR         | .1694323    | .0318904  | 5.31       | 0.000  | .105119   | 3   | .2337453  |
| Disapp_dum1 | 1200501     | .0908074  | -1.32      | 0.193  | 303180    | 7   | .0630806  |
| _cons       | .3287903    | .3279033  | 1.00       | 0.322  | 332489    | 7   | .9900702  |

In the regression model company reputation, compensation and benefits, disappointments and career pathways and career opportunities are not statistically significant in explaining Employer Attractiveness since their p-value is greater than 0.05. However, training and development, organizational culture, work life balance, challenging environment and CSR are statistically significant since their p-value is less than 0.05 and thus, these factors have a significant positive impact on Employer Attractiveness.

With respect to the t-values the attractiveness factors: company reputation, compensation and benefits and career pathways and career opportunities are not statistically significant in explaining Employer Attractiveness since their t-value is less than 1.96. On the other hand, training and development, organizational culture, work life balance, challenging environment and CSR are statistically significant since their t-value is greater than 1.96 and thus these factors have a significant positive impact on Employer Attractiveness.

#### **5.1.3** Analysis of the Retention Factors

According to our results, majority of the employees retained in the Pakistan's Pharmaceutical Industry due to all the factors mentioned in our survey. Similar to attractiveness all the retention graphs had no even distribution and leaned more towards the right. Similar to employer attractiveness to describe the bivariate relationships between the Employee Retention and retention factors we performed a correlation

test and created a correlation matrix and in order to test the relationship between employee retention and the regression factors, a regression model was made.

| Employee   |           |  |  |  |
|------------|-----------|--|--|--|
| Retention  |           |  |  |  |
|            | Retention |  |  |  |
| Employee   |           |  |  |  |
| Retention  | 1.00      |  |  |  |
| Comp Rep   | 0.62      |  |  |  |
| Benefits   | 0.80      |  |  |  |
| Car P&O    | 0.88      |  |  |  |
| T&D        | 0.84      |  |  |  |
| Org C      | 0.84      |  |  |  |
| WLB        | 0.76      |  |  |  |
| Chal Envir | 0.75      |  |  |  |
| CSR        | 0.46      |  |  |  |
| SR         | 0.82      |  |  |  |
| SR         | 0.82      |  |  |  |

Table 9: Correlation matrix between Employee Retention and Retention Factors in Pakistan

In accordance with our matrix for Employee Retention in Pakistan there is no negative correlation between employee retention and the retention factors. All the retention factors have a positive correlation with employee retention. The matrix indicates a strong correlation between Career Opportunities, Training and Development, Organizational Culture and Supervisor Relationship with Employee Retention. However, a weak positive relationship is shown by the matrix between CSR and Employee Retention.

In addition, the regression model for employee retention illustrated in table 10 indicates that the Retention Factors explains 95% of the variance in Employee Retention, and the model has a Root MSE of 0.2 again indicating a very minor error and that our model was successful.

| Source     | SS          | df        | MS         |         | r of obs | =   | 53        |
|------------|-------------|-----------|------------|---------|----------|-----|-----------|
|            | 52 2400004  | 10        | F 224 222  | - F(10, | ,        | =   | 94.97     |
| Model      | 52.2188804  | 10        | 5.22188804 | 1 Prob  | > F      | =   | 0.0000    |
| Residual   | 2.30942147  | 42        | .054986225 |         |          | =   | 0.9576    |
|            |             |           |            | - Adj R | -squared | =   | 0.9476    |
| Total      | 54.5283019  | 52        | 1.04862119 | Root    | MSE      | =   | .23449    |
|            |             |           |            |         |          |     |           |
| ER         | Coefficient | Std. err. | t          | P> t    | [95% co  | nf. | interval] |
| CompRep    | .1420826    | .0437037  | 3.25       | 0.002   | .05388   | 5   | .2302802  |
| Benefits   | 0143538     | .0378157  | -0.38      | 0.706   | 09066    | 9   | .0619614  |
| CarPO      | .1557451    | .0494938  | 3.15       | 0.003   | .055862  | 6   | .2556276  |
| TD         | .1926186    | .0490858  | 3.92       | 0.000   | .093559  | 5   | .2916778  |
| OrgC       | .1373839    | .0562899  | 2.44       | 0.019   | .023786  | 2   | .2509815  |
| WLB        | .1324957    | .0408529  | 3.24       | 0.002   | .050051  | .2  | .2149402  |
| ChalEnvir  | .0428399    | .0584107  | 0.73       | 0.467   | 075037   | 6   | .1607175  |
| CSR        | .1833916    | .0309317  | 5.93       | 0.000   | .120968  | 9   | .2458143  |
| SR         | .1094206    | .0398512  | 2.75       | 0.009   | .028997  | 6   | .1898435  |
| Disaa dum1 | 114367      | .0724109  | -1.58      | 0.122   | 260498   | 1   | .0317641  |
| _cons      | 4453587     | .2874448  | -1.55      | 0.129   | -1.02544 | -6  | .1347284  |

Table 10: Regression model of Employee Retention in Pakistan

In this regression model the retention factors: compensation and benefits, disappointments, and challenging environment are not statistically significant in explaining Employee Retention since their p-value is greater than 0.05. However, the other retention factors are statistically significant since their p-value is less than 0.05 and thus these factors have a significant impact on Employee Retention. The same goes for the t-values in this model. The retention factors: compensation and benefits and challenging environment are not statistically significant in explaining Employee Retention since their t-value is less than 1.96. However, the other retention factors are statistically significant since their t-value is greater than 1.96, and thus these factors have a significant impact on Employee Retention.

Finally, table 11 indicates the correlation coefficient between the attractiveness and the retention factors in Pakistan.

| Attractiveness<br>Factors | Correlation<br>Coefficients | Retention<br>Factors |
|---------------------------|-----------------------------|----------------------|
| Comp Rep                  | 0.85                        | Comp Rep ER          |
| Benefits                  | 0.88                        | Benefits ER          |
| Car P&O                   | 0.78                        | Car P&O ER           |
| T&D                       | 0.72                        | T&D ER               |
| Org C                     | 0.79                        | Org C ER             |
| WLB                       | 0.70                        | WLB ER               |
| Chal Envir                | 0.68                        | Chal Envir ER        |
| CSR                       | 0.80                        | CSR ER               |

Table 11: Correlation matrix between Attractiveness Factors and Retention Factors

Overall, the attractiveness factors are very closely correlated with the retention factors. They all have a positive correlation with each other. Among all the factor's challenging environment has the least correlation coefficient.

#### 5.2 Data Analysis of Egyptian Survey

In this section we will analyze the results of the 50 employees working in the Pharmaceutical Industry in Egypt. The results are analyzed with respect to; Background about the participants, attractiveness factors when they applied for the job and finally the retention factors.

#### **5.2.1 Background about the Participants**

According to our results it clearly indicates that the Egyptian Pharmaceutical Industry is balanced to what extent where the females' percentage is 42%. In addition, majority of the employees working in the industry are between the age of 25-30, however the minority is between 50-60. Egyptian pharmaceutical industry has a high literacy rate. The majority of the employees working in the Pharmaceutical Industry had a graduate degree. Furthermore, 48 % of the employees working in the industry have a married marital status and 46 % of the employees are single.

## 5.2.2 Analysis of the Attractiveness Factors

In accordance with the results majority of the employees have less than 1 year of experience working in the company. The results were diverse with employees working in different departments but majority working in Marketing and Sales. In terms of attractiveness majority of the employees were attracted to all the factors mentioned in our survey. The results had an uneven distribution among the graphs in the attractiveness factors. Similar to the analysis for Pakistan to describe the bivariate relationships between the Employer Attractiveness and attraction factors we performed a correlation test and created a

correlation matrix and in order to test the relationship between employer attractiveness and the attraction factors a regression model was made.

|                    | Employer<br>Attractiveness |
|--------------------|----------------------------|
| Employer           |                            |
| Attractiveness     | 1                          |
| Comp Rep           | 0.60                       |
| Benefits           | 0.47                       |
| Career P&O         | 0.62                       |
| T&D                | 0.85                       |
| OC                 | 0.83                       |
| WLB                | 0.70                       |
| Chall & Innov Envi | 0.82                       |
| CSR                | 0.38                       |

Table 12: Correlation matrix between Employer Attractiveness and Attractiveness Factors in Egypt Similar to Pakistan, there is no negative correlation between employer attractiveness and the attractiveness factors in Egypt. All the attractiveness factors have a positive correlation with employer attractiveness. A very strong positive correlation can be indicated between Training and Development, Organizational Culture and Challenging Environment with Employer Attractiveness. Like Pakistan a weak positive relationship can be seen between CSR and Employer Attractiveness in Egypt.

With respect to the Attractiveness regression model for Egypt as shown in Table 13. The Attractiveness Factors explains 95% of the variance in Employer Attractiveness and a Root MSE of 0.28 also indicating that model is successful and has a very low error.

. reg EA CompRep Benefits CareerPO TD OC WLB ChallInnovEnvi CSR Dissapoint\_dum1

| Source         |    | SS          | df     |      | MS       | Number o             | f obs | =     | 50        |
|----------------|----|-------------|--------|------|----------|----------------------|-------|-------|-----------|
| Model          |    | E7 27E2     | 9      | -    | 36391111 | F(9, 40)<br>Prob > F |       | =     | 83.60     |
| Residual       | _  | 57.2752     | _      |      |          |                      | 4     |       | 0.0000    |
| Residual       | -  | 3.04480004  | 40     | . 6  | 76120001 | R-square             |       | =     | 0.9495    |
|                |    |             |        | _    |          | Adj R-sq             | uarea | =     | 0.9382    |
| Total          |    | 60.32       | 49     | 1.   | 23102041 | Root MSE             |       | =     | .2759     |
| E              | Α  | Coefficient | Std. e | err. | t        | P> t                 | [95%  | conf. | interval] |
| CompRe         | p  | .205542     | .03786 | 98   | 5.43     | 0.000                | .1290 | 0042  | .2820798  |
| Benefit        | S  | .1064094    | .05124 | 74   | 2.08     | 0.044                | .0028 | 3346  | .2099842  |
| CareerP        | 0  | .1582486    | .03279 | 16   | 4.83     | 0.000                | .0919 | 9743  | .2245228  |
| T              | D  | .0507644    | .04767 | 85   | 1.06     | 0.293                | 045   | 5974  | .1471262  |
| O              | C  | .1460061    | .0454  | 13   | 3.22     | 0.003                | .0542 | 2229  | .2377892  |
| WL             | В  | .1622634    | .03275 | 87   | 4.95     | 0.000                | .0966 | ð555  | .2284712  |
| ChallInnovEnv  | 'i | .1331683    | .0402  | 24   | 3.31     | 0.002                | .0518 | 3725  | .2144641  |
| CS             | R  | .0994142    | .02443 | 04   | 4.07     | 0.000                | .0500 | 3386  | .1487898  |
| Dissapoint_dum | 1  | .1310234    | .10053 | 13   | 1.30     | 0.200                | 072   | 1579  | .3342048  |
| con            |    | 4116391     | .30276 | 97   | -1.36    | 0.182                | -1.0  | 2356  | .2002814  |

Table 13: Regression mode of Employer Attractiveness in Egypt

The regression model of Egypt for employer attractiveness indicates that Training and Development and the Disappointments are not significant for employer attractiveness in Egypt since it has a p-value of greater than 0.05 and a t-value of less than 1.96. Except for training and development all the other attractiveness factors are significant for employer attractiveness in Egypt.

## **5.2.3** Analysis of the Retention Factors

According to our results, majority of the employees retained in the Egyptian Pharmaceutical Industry due to all the factors mentioned in our survey. Similar to attractiveness all the retention graphs had no even distribution and leaned more towards the right. Additionally, a correlation matrix was designed to describe the bivariate relationships between the Employee Retention and retention factors and a regression model was made to test the relationship between Employee Retention and the retention factors.

|               | Employee  |
|---------------|-----------|
|               | Retention |
|               | retention |
| Employee      |           |
| Retention     | 1.00      |
| Comp Rep ER   | 0.71      |
| Benefits ER   | 0.74      |
| Career P&O ER | 0.76      |
| T&D ER        | 0.84      |
| OC ER         | 0.64      |
| WLB ER        | 0.65      |
| Chal Envi ER  | 0.76      |
| CSR ER        | 0.58      |
| SR ER         | 0.57      |

Table 14: Correlation matrix between Employee Retention and Retention Factors in Egypt

With respect to employee retention the matrix indicated a positive correlation between employee retention and the retention factors. No negative correlations are indicated between employee retention and the retention factors in Egypt. A very strong coefficient is indicated between Training and Development and challenging environment with employee retention.

With respect to the regression model for employee retention as illustrated in Table 15. The Retention Factors explains 93% of the variance in Employee Retention and a Root MSE of 0.3 again indicating that model is successful and has a very low error.

| SS                       | df  | MS  |            |           | =                     | 50                        |
|--------------------------|---|---|------------|-----------|-----------------------|---------------------------|
| 46.9024385<br>3.51756148 |   |   | Prob > F   |           | = =                   | 52.00<br>0.0000<br>0.9302 |
|                          |   |   | •          |           | =                     | 0.9123                    |
| 50.42                    | 49 1  | .02897959   | Root MSE   |           | =                     | .30032                    |
| R Coefficient            | Std. err  | . t   | P> t       | [95%      | conf.                 | interval]                 |
| R .138833                | .0450004  | 3.09  | 0.004      | .0478     | 8111                  | .229855                   |
| .089633                  | .0603931  | 1.48  | 0.146      | 032       | 5236                  | .2117896                  |
| .1437044                 | .0545918  | 2.63  | 0.012      | .033      | 2821                  | .2541267                  |
| .072639                  | .0518663  | 1.40  | 0.169      | 032       | 2705                  | .1775485                  |
| .1314738                 | .043811   | 3.00  | 0.005      | .042      | 8577                  | .2200899                  |
| R .0976307               | .0438257  | 2.23  | 0.032      | .008      | 8985                  | .1862765                  |
| .1211109                 | .0388485  | 3.12  | 0.003      | .042      | 5324                  | .1996894                  |
| .0879977                 | .0300239  | 2.93  | 0.006      | .027      | 2687                  | .1487267                  |
| .0969221                 | .0372429  | 2.60  | 0.013      | .021      | 5914                  | .1722529                  |
| .1182703                 | .1134053  | 1.04  | 0.303      | 111       | 1135                  | .3476542                  |
| .0824161                 | .2788411  | 0.30  | 0.769      | 481       | 5933                  | .6464254                  |
|                          | 46.9024385<br>3.51756148<br>50.42<br>R Coefficient<br>R .138833<br>R .089633<br>R .1437044<br>R .072639<br>R .1314738<br>R .0976307<br>R .1211109<br>R .0879977<br>R .0969221<br>1 .1182703 | 46.9024385 10 4 3.51756148 39 .  50.42 49 1  R Coefficient Std. err R .138833 .0450004 R .089633 .0603931 R .1437044 .0545918 R .072639 .0518663 R .1314738 .043811 R .0976307 .0438257 R .1211109 .0388485 R .0879977 .0300239 R .0969221 .0372429 1 .1182703 .1134053 | 46.9024385 | F(10, 39) | F(10, 39)  46.9024385 | F(10, 39) =  46.9024385   |

Table 15: Regression model of Employee Retention in Egypt

Among the retention factors the regression model specifies that Compensation and Benefits, disappointments and Training Development are not significant factors for Employee Retention since their p-value is greater than 0.05 and their t-value is less than 1.96. Apart from these two factors all the other factors are significant for Employee Retention in Egypt.

Last but not the least, the table 16 indicates the correlation coefficients between the attractiveness and the retention factors in Egypt.

| Attractiveness | Correlation | Retention     |
|----------------|-------------|---------------|
| Factors        | Coefficient | Factors       |
| Comp Rep       | 0.55        | Comp Rep ER   |
| Benefits       | 0.64        | Benefits ER   |
| Car P&O        | 0.68        | Car P&O ER    |
| T&D            | 0.79        | T&D ER        |
| Org C          | 0.50        | Org C ER      |
| WLB            | 0.67        | WLB ER        |
| Chal Envir     | 0.80        | Chal Envir ER |
| CSR            | 0.74        | CSR ER        |

Table 16: Correlation matrix between Attractiveness Factors and Retention Factors

In general, the attractiveness and retention factors also have a positive correlation with each other. Among all the factors: CSR, challenging environment and training and development have the highest correlation with each other, but a least correlation coefficient can be seen in the Organization culture between the attractiveness and retention factors in Egypt.

#### **5.3 Empirical Comparison**

As per our regression analysis above, we have narrowed down our results with respect to our analytical model for better understanding. Figure 6 represents our results, the country names are given right next to the Attractiveness and Retention factors. The country names right next to the attractiveness and retention factor indicate which factors attracted and retained the employees in the organization with respect to the country.

According to our results in terms of employer attractiveness the employees in Egypt were attracted to all the factors except for training and development. On the hand, employees in Pakistan were only attracted to the following factors: training and development, organizational culture, work-life balance, challenging and innovative environment and CSR activities. In addition, company reputation, compensation and benefits, and career pathways and opportunities were not attractive factors for employees in Pakistan.

In relevance to employee retention the employees in Egypt are retained in the company due to all the factors except for compensation and benefits and training and development. However, in Pakistan the employees also retained in the company due to all the factors except for compensation and benefits and challenging and innovative environment

#### **5.4 Limitations and Non-Respondents**

The thesis' limitations will now be examined. It's important to remember that this study isn't flawless, and that there's always opportunity for improvement and further research. A quantitative survey of the 'working population' was conducted for this study. Respondents were found mostly through the authors' personal networks. Similarly, because the survey was distributed via the internet, the respondents must already be members of a group with certain digital skills. The fact that the authors acquired self-reported data could be a source of limitations in this study. The responses of respondents must be taken at face value, and there is no way to ensure that the questions are being answered as the authors intended. In terms of data analysis, this fact always bears a risk. Other sorts of research methodology, such as interviews with several employees or even case studies in order to acquire extremely precise data, could be used in future study. This study's strength comes from its breadth and ability to capture a snapshot of overall perceptions toward attractive and retention factors.

In terms of non-respondents, out of 103 response we received from both countries we had non-respondents. In terms of the Pakistan survey, we haven't had any responses from employees aged 50 to 60, but we did get a handful from the Egyptian survey. In addition, respondents from Pakistan were either single or married. We refer to this for a variety of reasons, including unfamiliarity with technology, being busy, or not having seen the survey.

### 6. Conclusion

The overarching aim of this study was primarily to determine the factors that attracted employees to the company and the factors played a role in their retention, while considering various diversity elements such as age, gender, background, and marital status, among employees working in the pharmaceutical industry in Egypt and Pakistan. Consequently, we attempted to identify factors that were not as effective in meeting their objective of employee attraction. Based on our analysis, we can conclude that the survey results are consistent with what we expected to see based on our study of past research and our analytical model.

Firstly, as far as the results associated with Pakistan go, all of the attractiveness factors have a significant correlation with the attractiveness of the employer. Company culture has demonstrated the strongest correlation with attractiveness, followed by career opportunities and pathways; while the CSR factor has the lowest positive correlation. The Egyptian data, on the other hand, seems to maintain a positive correlation, with training and development ranked first, followed by organizational culture, and lastly, CSR.

Secondly, we concluded that employee retention is influenced by a number of factors: Our findings support Fitz-enz's (1990) remark that employee commitment and retention are determined by a variety of factors rather than a single issue. All the retention variables show a significant link with employee retention in Pakistan, according to the findings. The strongest link between retention and career opportunities & pathways is followed by training & development. This is in line with Herman's (2005) finding that asserts the existence of a direct link between development opportunities and retention. The lowest positive correlation is the CSR factor. As for the Egyptian data, we discovered a positive association: Training & development is ranked first, followed by career opportunities & pathways, while CSR is ranked last. According to Ghapanchi and Aurum (2011) retention factors include remuneration and benefits, training opportunities, fair and equal treatment, organizational culture. Therefore, our findings support Walker's (2001) seven factors for improving employee retention.

Finally, there was a noticeable and interesting difference in disappointment factors between the two countries. The Compensation & Benefits is the most common source of disappointment in Pakistan, whilst Career Pathway & Opportunities is the most common in Egypt. According to Milkovich and Newman (2004), among all types of remuneration, monetary compensation is the most important determinant of

successful employee retention. Promotion and opportunities for growth were also identified by Prince (2005) as important factors in employees' decisions to leave or stay in an organization, and he went on to identify influential factors related to career growth opportunities, such as advancement plans, internal promotion, and accurate career previews.

Workers in both nations are of different genders. In comparison to Pakistan's pharmaceutical industry, the Egyptian industry employs more women. In addition, most of the employees in Pakistan are married, the percentage of single workers in Egypt is extremely close to that of married workers. This may account for the difference between the results in both countries. Perhaps married employees prioritize salary over all other factors.

#### **6.1 Practical Implications**

Scholars have long recognized that an organization's capacity to attract and retain high-quality employees is important to its competitiveness (Delery & Shaw, 2001; Ulrich, 1993). In terms of the research's practical implications, it can be beneficial in a number of ways. HR professionals can benefit from the findings by recognizing the attractive and retention factors. The study's practical implications include the fact that the top attractive factors are not always the same as the top retention factors. HR professionals should be aware of the differences in branding considerations. According to Bagraim et al. (2007), some employees have financial goals, while others have professional goals, and still others have personal goals. As a result, it's critical to understand employees' personal lives and backgrounds in order to apply the right factors to keep them. To attract and retain employees, organizations must also provide employee-focused excellent employment/high participation policies that create a happy workplace environment (Boxall & Macky, 2009).

#### **6.2 Future Research**

Because our small sample size and non-respondents may limit the generalizability of our findings, we urge that future studies use a bigger sample size and use mixed methods to gain more in-depth insights. In addition, we urge that future researchers look at the usefulness of retention elements other than those mentioned in our model. Such research can also be carried out in different nations and industries, with the results being compared for consistency. Another area of future research is the association between

employee retention and other personal characteristics such as age, gender, number of children, and level of education.

Moreover, it would be interesting for future researchers to assess at a deeper level, how to improve the compensation and benefits for the employees working in the pharmaceutical industry and how the how the Covid-19 pandemic has affected this industry. In specific, as the impacts of COVID-19 may potentially subside to a certain degree in the long term, it will be of benefit to the academic community to continuously build on this research and re-conduct aspects of it as necessary, as well as monitor the extent to which the pandemic's impact on employee behaviors and goals (such as prioritizing job security and flexible working hours for example) holds. Once again taking the generalizability aspect into consideration, we also propose that this research be conducted in the context of other countries and regions so as to rule out cultural and demographic bias (For instance, given that the pharmaceutical industry is male dominated in Pakistan, our results may be non-exhaustive compared to the results obtained through research in a more demographically diversified environment; or compared to regions that differ in the norms and customs, from those found in Egypt). It will also be noteworthy for future researchers to apply our analytical model to different industries within Egypt and Pakistan or globally and create a comparison among the industries based on our analytical model.

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# **Appendix**

## **Survey Results**

The results on the left indicate the survey results from Pakistan and on the right survey results from Egypt are indicated.

#### **Background about the Participants**

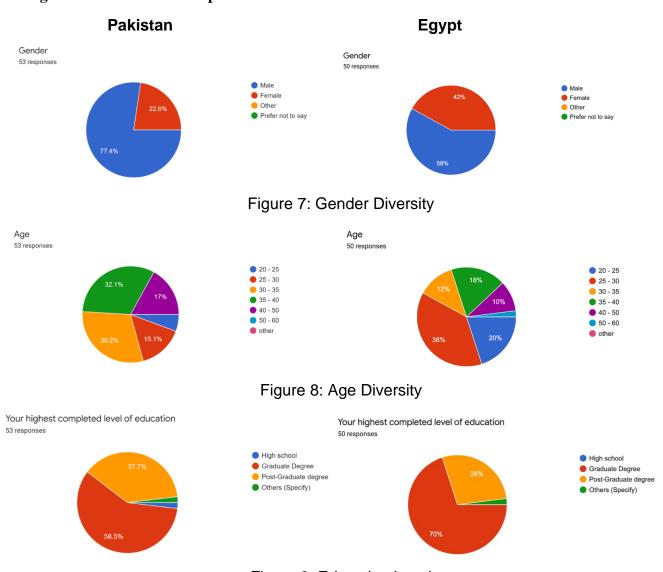


Figure 9: Education Level



Figure 10: Educational Background

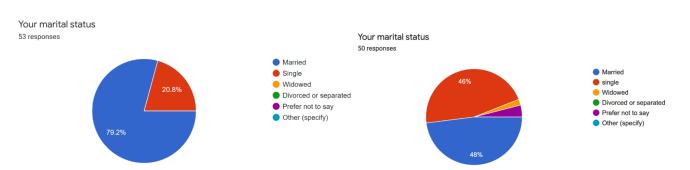


Figure 11: Marital Status

#### **Employer Attractiveness Factors**

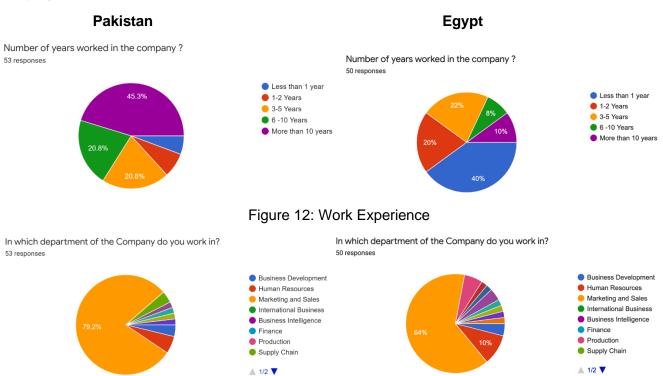


Figure 13: Employees in different departments

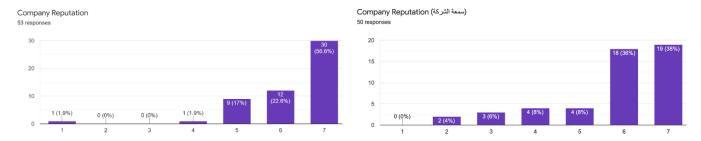


Figure 14: Attractiveness in terms of Company Reputation

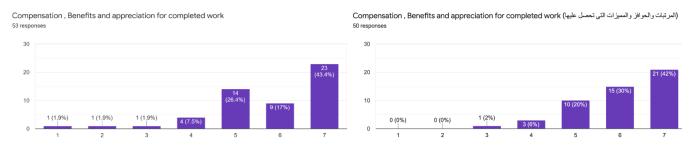


Figure 15: Attractiveness in terms of Compensation and Benefits

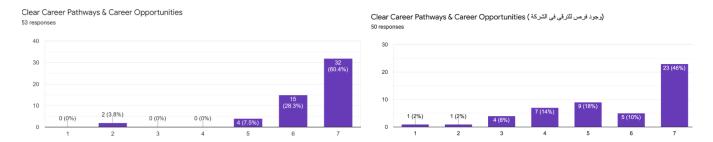


Figure 16: Attractiveness in terms of Career Pathways and Career Opportunities

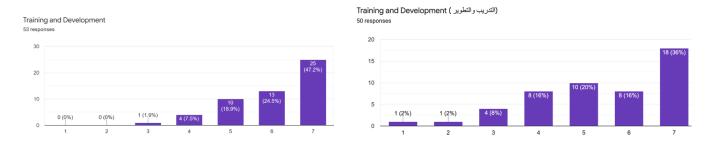


Figure 12: Attractiveness in terms of Training and Development

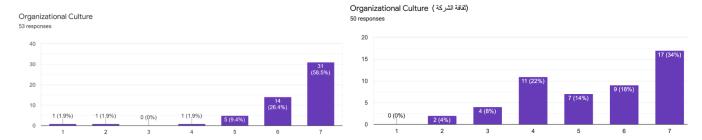


Figure 13: Attractiveness in terms of Organizational Culture

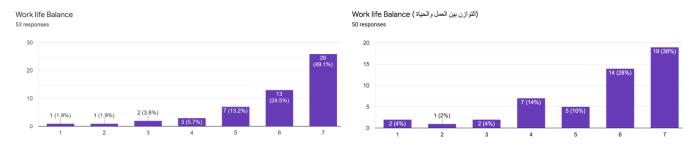


Figure 14: Attractiveness in terms of Work Life Balance

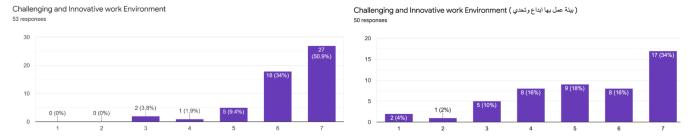


Figure 15: Attractiveness in terms of Challenging and Innovative Work Environment

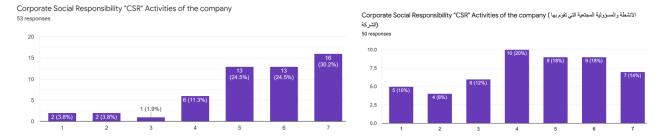


Figure 16: Attractiveness in terms of Corporate Social Responsibility

#### **Employee Retention Factors**

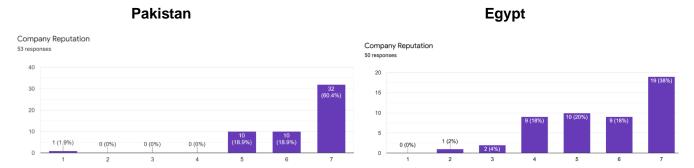


Figure 17: Retention in terms of Company Reputation

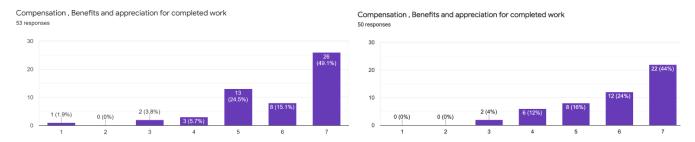


Figure 18: Retention in terms of Compensation and Benefits

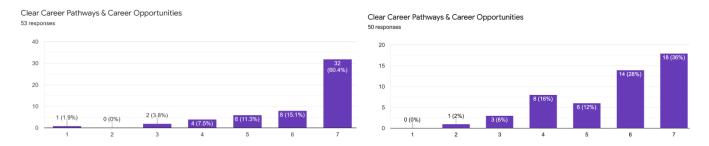


Figure 19:Retention in terms of Career Pathway and Career Opportunities

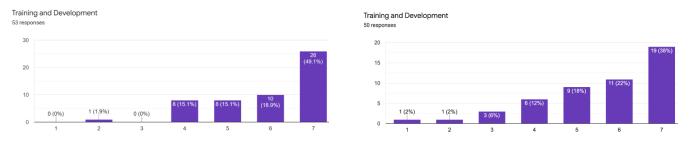


Figure 20: Retention in terms of Training and Development

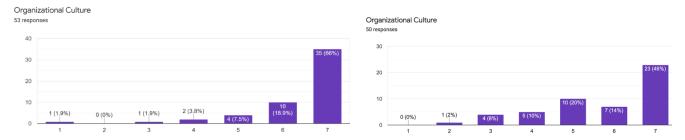


Figure 21: Retention in terms of Organizational Culture

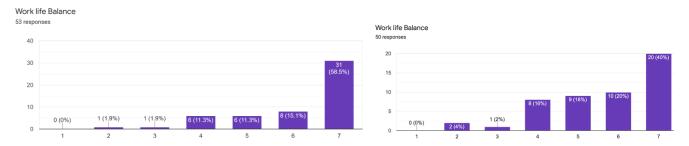


Figure 22: Retention in terms of Work Life Balance

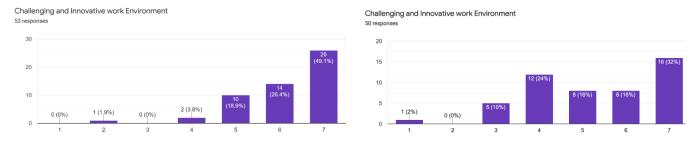


Figure 23: Retention in terms of Challenging and Innovative Work Environment

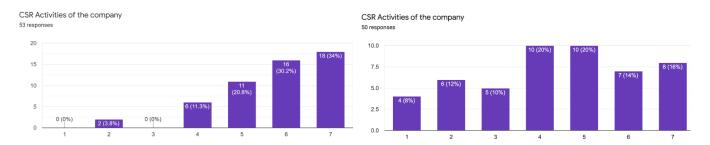


Figure 24: Retention in terms of Corporate Social Responsibility

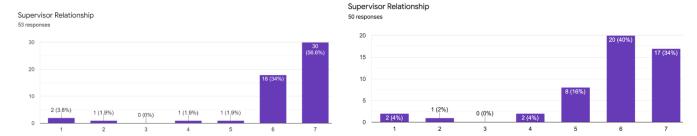


Figure 25: Retention in terms of Supervisor Relationship

#### **Disappointment Factors**

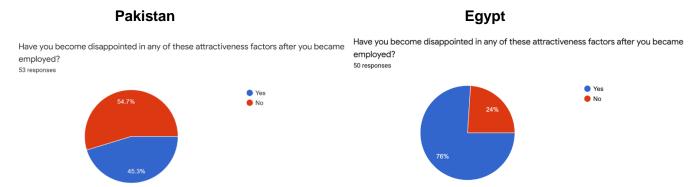


Figure 26: Employee Disappointment on attractiveness factor after they became employed

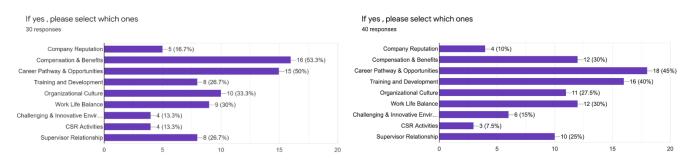


Figure 27: Disappointment in Employer Attractiveness

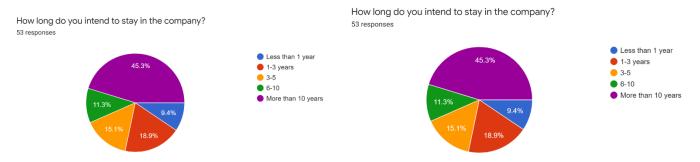


Figure 28: Intend to stay in the company