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The  
British University  
*in Dubai*

## **Corporate Social Responsibility in a Professional Services Firm**

المسؤولية الاجتماعية الاعتبارية في شركات الخدمات المهنية

**By**

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Dissertation submitted in fulfilment of the requirements for the degree of  
MSc in Project Management

Dissertation Supervisor

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**Title**

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## **Abstract**

Corporate Social Responsibility (CSR) is an ever-growing business concept throughout the world today. It has evolved over the years and is believed to be at its most developed stage in Western countries. On the other hand, CSR in the Middle-east and MENA countries has not reached the same level of development. This dissertation investigates CSR in the Middle-East and MENA countries, the types of CSR initiatives and activities adopted are examined. In particular, the selected CSR initiative for this research is blood donation.

This dissertation examines a case study of PSF Middle-East and the blood donation initiative it has taken on. The research focuses on how PSF Middle-East currently implements activities related to this initiative and how it can be further developed or improved.

The main method of data collection is quantitative; the necessary data was collected via an online questionnaire that was sent to 2,500 PSF Middle-East employees across the offices of the region. The data was analysed using predictive analytical software (PASW) and several findings were obtained. The dissertation investigates that the blood donation CSR initiative taken on by PSF Middle-East assessing the extent of its acceptance by employees and the level of interest employees in learning more about blood donation.

**Key words: Corporate Social Responsibility (CSR), MENA countries, CSR initiatives, Professional Services Firm (PSF), Blood donation.**

## خلاصة

إن المسؤولية الاجتماعية الاعتبارية ( سي اس آر ) تعتبر مفهوما تجاريا يتطور بصورة دائمة على نطاق العالم في الوقت الراهن . وقد تم تطوير هذا المفهوم عبر السنين و الاعتقاد يشير أنها تشكل المرحلة الأكثر تطوراً في الدول الغربية .

من ناحية أخرى فان المسؤولية الاجتماعية الاعتبارية لم تصل في الشرق الأوسط وشمال إفريقيا لنفس مستوى التطور . هذه نتيجة بحث دراسة علمية حول المسؤولية الاجتماعية الاعتبارية في الشرق الأوسط وشمال إفريقيا . أنواع مبادرات ونشاطات المسؤولية الاجتماعية الاعتبارية التي تم إقرارها قد تم فحصها . وعلى وجه الخصوص ، تم إختيار مبادرة المسؤولية الاجتماعية الاعتبارية لهذا البحث التبرع بالدم .

فحصت الاطروحة دراسة حالة شركات الخدمات المهنية في الشرق الأوسط و أخذت مبادرة التبرع بالدم .

يرتكز البحث في كيفية ان شركات الخدمات المهنية ( بي اس اف ) الشرق الأوسط تنفذ حالياً النشاطات ذات الصلة بهذه المبادرة وكيف يمكن أن تطور أكثر أو تتحسن .

الطريقة الرئيسية لتجميع البيانات كانت كمية وتم تجميع البيانات الضرورية عبر الاستبيان على الانترنت التي أرسلت إلى 2.500 شخص من شركات الخدمات المهنية (بي اس اف ) لموظفي الشرق الأوسط عبر المكاتب الإقليمية . تم تحليل البيانات باستخدام برنامج التحليلات التنبؤية ( بي ايه اس دبليو ) وتم الحصول على نتائج عديدة .

خلص بحث الدراسة العلمية بأن مبادرة المسؤولية الاجتماعية الاعتبارية ( سي اس آر ) التبرع بالدم اخذت من قبل شركة الخدمات المهنية الشرق الأوسط لتقييم مدى قبولها من قبل الموظفين ومستوى إهتمام الموظفين في تعلم المزيد حول التبرع بالدم .

بيان الكلمات : المسؤولية الاجتماعية الاعتبارية ( سي اس آر ) ، دول ام إي ان ايه ، مبادرات المسؤولية الاجتماعية الاعتبارية ( سي اس آر )

شركة الخدمات المهنية ( بي اس اف ) ، التبرع بالدم .

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## **Abbreviations**

- |   |                 |
|---|-----------------|
| 1. Corporate Social Responsibility        | CSR             |
| 2. Professional Services Firm Middle-East | PSF Middle-East |
| 3. Middle East and North Africa           | MENA            |
| 4. United Arab Emirates                   | UAE             |
| 5. Dubai Thalassemia Centre               | DTC             |

# **1. Introduction**

## **1.1 Research Overview**

This study investigates CSR activities in the Middle-East, focusing on blood donation related initiatives in particular. CSR theory and practice is also studied in the context of MENA countries. Literature has suggested that CSR in MENA countries is mainly philanthropic in nature (Jamali et al. 2009; Jamali and Neville, 2011). This leads to the case study addressed in this dissertation which relates to a philanthropic initiative; blood donation.

The prominent case study used in this research is the case study of PSF Middle-East. PSF Middle-East has adopted blood donation as one of the main CSR initiatives of the globally known organisation. The initiative is examined in the light of CSR activities in MENA countries in particular as well as in more developed regions. Blood donation is being adopted as a CSR initiative both regionally and globally. Similar to PSF Middle-East, other global organisations that have taken on blood donation as a CSR initiative include HSBC, Ernst and Young, BP, Citibank and KPMG. Blood drives seem to be a common blood donation CSR activity that is being adopted by many firms regionally and globally and so this study focuses on the blood donation initiative taken up by PSF Middle-East.

The collaboration with PSF Middle-East allows for this study to examine the perceptions of the employees of PSF Middle -East regarding blood donation. Giving insight to how employees/blood donors feel about the procedure and what drivers or concerns they have regarding blood donation. In turn, this feedback is examined and analysed to provide a better understanding of employees as well as to highlight knowledge gaps or areas for improvement. Findings can be taken into account to improve and further develop CSR blood related initiatives.

Also taken into account is the Thalassemia initiative, Thalassemia is a widely spread blood disorder in the MENA region. It is also the most common blood disorder in the UAE (Abdelrazzaq et al.2011). It is examined in the context of the region and in context of CSR blood donation initiatives and how they contribute to the cause.

## **1.2 Research Problem**

The literature shows that CSR is a concept that has been acknowledged by businesses throughout the world. Modern history of CSR has shown that the definition of CSR has evolved over the years and that it is now a prominent dimension of business today. Organisations all over the world are adopting CSR as an important aspect of their operations. Furthermore, it seems that blood donation is gradually becoming an important and widely practiced CSR initiative of organisations around the globe. Blood donation is crucial to many blood disorders but also to health related issues in general as it contributes to saving lives. Blood is always on demand whether for the case of blood disorders, transfusions, accidents or surgeries. There is always someone who needs blood and that is the main reason why blood donation is vital to saving lives. In the case of Thalassemia, 52 pints of blood a year are needed for one patient. This figure really emphasises the substantial amount of blood that is needed and the importance of having a stable supply of blood to support demand, especially in the MENA region where the disorder is most common. This study aims to examine blood donation CSR activities, the case of PSF Middle-East is taken into account and the perceptions of the organisations employees regarding blood donation are examined to provide insight on the issue.

## **1.3 Scope**

The scope of the research is quite large as it covers twelve offices across the MENA region. The research extends over 2,500 employees across the PSF Middle-East offices of the United Arab Emirates, Saudi-Arabia, Qatar, Bahrain, Kuwait, Oman, Lebanon, Egypt, Iraq, Jordan, Libya and Palestine. Data is collected from the offices in the form of an online survey consisting of 21 multiple choice questions regarding perceptions on blood donation. Five

main areas are covered including, background information, knowledge level of blood donation, attitude towards blood donation, motivational factors and means of exposure to blood donation.

## **1.4 Research aims and objectives**

This study aims to examine CSR activities in the Middle-East, concentrating in particular on blood donation related activities. There are two main issues addressed in this dissertation.

1. The practice and implementation of blood donation related CSR activities in the Middle-East.
2. The perceptions of employees regarding the blood donation issue.

The objectives of the research are outlined below and illustrate the order of the research:

- 1.To explore and examine CSR theory and practice level in MENA countries
- 2.To examine the blood donation issue in relation to CSR initiatives.
- 3.To examine the case of PSF Middle-East and the blood donation initiatives adopted by them.
- 4.To examine and discover how PSF Middle-East employees regard blood donation.
- 5.To gain insight on the perceptions of PSF Middle-East employees and blood donation in general in relation to CSR activities.

## **1.5 Research questions**

The research questions of this dissertation are derived from the issue of CSR and blood donation in MENA countries.

1. What are the perceptions of the blood donors (employees) regarding blood donation?
2. To what extent are global organisations adoptive of local causes and CSR initiatives?

3. What can be done to further improve blood donation activities and initiatives?

## **1.6 Research Propositions and Hypotheses**

Propositions and hypotheses developed were based on ideas and issues identified in the literature review. Concepts regarding CSR in MENA countries, blood donation and CSR and findings of the PSF Middle-East case study have been taken into account when formulating the hypotheses. These concepts are examined in chapters 2, 5 and 6 of this dissertation.

1. CSR in MENA countries: CSR in MENA countries is not developed to its full potential but is progressing.
2. Blood donation and CSR: Blood donation is an important CSR initiative in MENA countries.
3. PSF Middle-East case study findings: There are distinctive features to blood donor profiles.

## **1.7 Significance of Research**

The main significance of this research is that it provides insight to blood donation CSR related activities in the MENA region. Moreover, it explores ways in which blood donation activities can be improved to satisfy blood donors. The study also examines the case of PSF Middle-East, illustrating the concept of CSR activities and blood donation in the region.

## **1.8 Research Strategy**

The research strategy of this dissertation consists of firstly reviewing literature on the topic of the definition and history of CSR. Next reviewed are the practice and theory levels of CSR in the MENA region. The issue of blood donation in relation to CSR activities and blood donation contributing to the Thalassemia cause are also examined. Derived from the findings are donor and non-donor profiles that will be examined based on PSF Middle-East employees' perceptions.



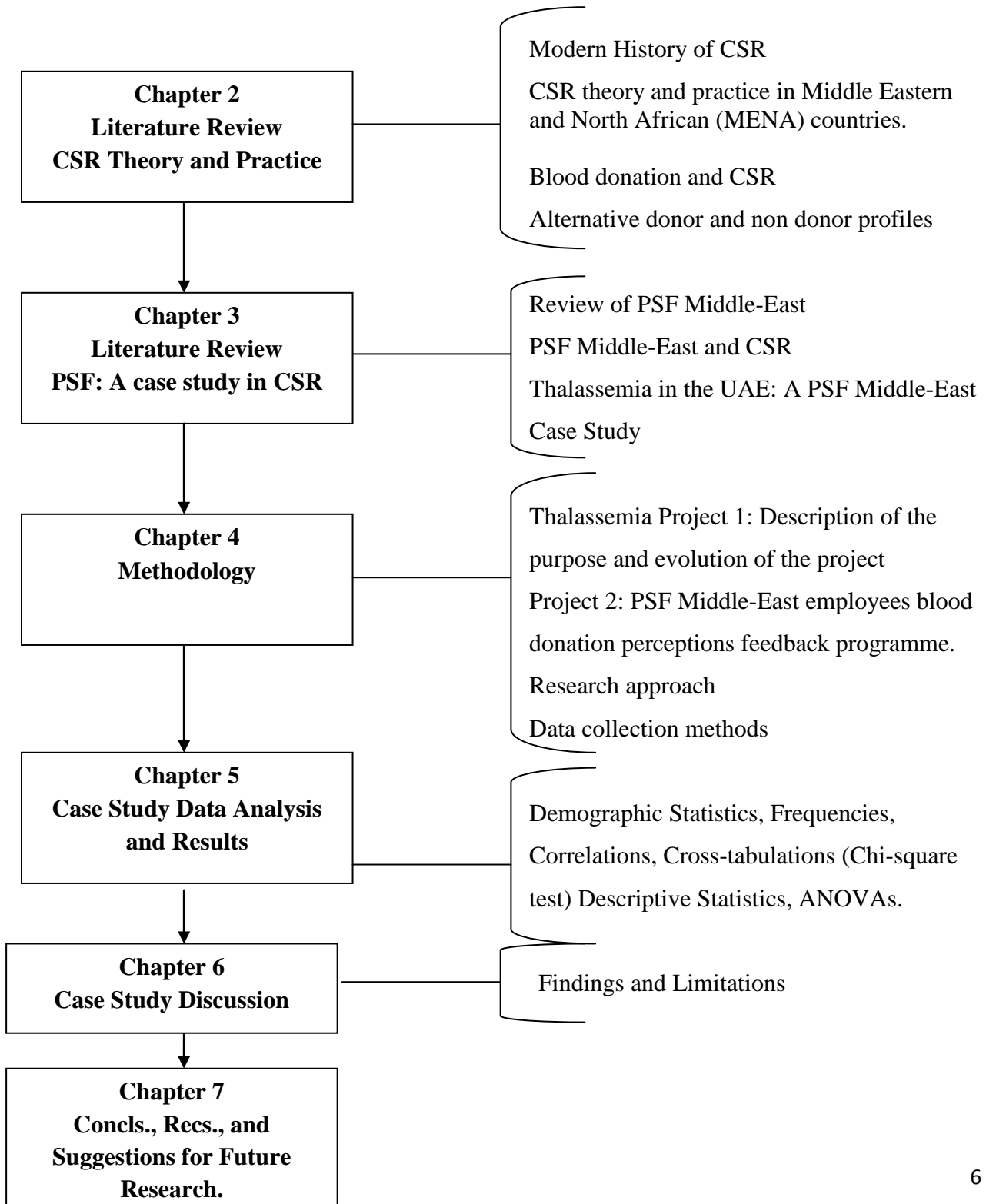
As PSF Middle-East is the focus of study in this dissertation, the history of PSF Middle-East and CSR is also examined. After obtaining and analysing results from PSF Middle-East employees regarding blood donation perceptions a series of recommendations are drawn up for different relevant parties.

## **1.9 Design limitations of the study**

The main design limitation of this study is that in order to satisfy the client's needs and requirements, the questionnaire was designed in a way that did not allow for Likert scale format. This is the main design limitation of the study as it would have perhaps provided more insight on the attitude of employees towards blood donation to use attitude rating scales.

## 1.10 Structure of the Dissertation

The flow chart below illustrates the outline of the dissertation starting from chapter 2 to chapter 7.



## **2. Literature Review – CSR theory and practice**

### **2.1 Modern History of CSR**

CSR has been traced back in history and seems to have always existed in one form or another. It appears that it became a prominent theme in the 1950's, and has been a growing subject ever since. Carroll (1999, p. 268) describes the 1950's as the "the modern era of CSR". Definitions regarding the term have increased throughout the 1960's and 1970's but other themes began to arise during the 1980's. (1999, pp. 268) also states that, "In the 1990s, CSR continues to serve as a core construct but yields to or is transformed into alternative thematic frameworks".

It is interesting to note that Carroll's (1999) paper investigates the various definitions of CSR over the decades starting from the 1950's to the 1990's. From his findings it seems that in the 1950's, a real solid definition of CSR was rare, however over the next decades numerous different definitions emerged. During the 1950's according to Carroll (1999, p. 270), Bowen (1953, p. 6) defined CSR as, "the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society". Carroll (1999, p. 270) also names Bowen as the "Father of Corporate Social Responsibility", this further emphasises the point that the 1950's were a significant decade in the history of CSR. However in the 1960's Carroll (1999) shows that more solid definitions of CSR emerged such as the definition of Davis (1960, p. 70), who defines CSR as "businessmen's decisions and actions taken for reasons at least partially beyond the firm's direct economic or technical interest". Compared to the Bowen definition of the 1950's it is clearly more specific as it refers to businessmen contributing to things outside a firms own interest whereas Bowen (1950) does not specifically refer to overlooking a firms own interests for a greater good, but that businessmen should also consider what is desired by society.

It is also interesting to note that the words "businessmen" and their "decisions" are used in both definitions as the responsible party rather than firms or businesses themselves. I think that this

reflects the decades in which these definitions emerged, whereas in today's world I think definitions of CSR would be directed at "corporations" and the "businesses" themselves. Again another definition from Davis (1960, p. 71) that Carroll (1999, p. 271) examines in his paper is; "social responsibilities of businessmen need to be commensurate with their social power". It is significantly more clear-cut than Bowen's definition of the 1950's but yet again still holds businessmen as responsible individuals in relation to CSR. It is also interesting to note that Carroll (1999, p. 271) also describes Davis as "the runner-up to Bowen for the Father of CSR designation." Further emphasising the similarities of definitions and decades as well as the development of the definition of CSR.

Over in the 1970's, Carroll (1999, p. 273) examines definitions of CSR from various other authors. Johnson (1971, p. 50) defines CSR in accordance to firms and not only "businessmen", it is a less individually centred definition than that of the 1950's and the 1960's. The definition is directed at "firms" as the responsible party; "A socially responsible firm is one whose managerial staff balances a multiplicity of interests. Instead of striving only for larger profits for its stockholders, a responsible enterprise also takes into account employees, suppliers, dealers, local communities, and the nation". Carroll (1999, p. 274) also unveils a definition from the Committee for Economic Development (CED) (1971 p. 11), which states that, "Business enterprises, in effect, are being asked to contribute more to the quality of American life than just supplying quantities of goods and services." Again it is obvious that here definitions were starting to move away from and are less focused on "businessmen" as the responsible party in comparison to firms as a whole, this again reflects the decade in which several new definitions emerge and continually evolving conceptualisation of CSR.

Votaw (1973, p. 11) stated that, "The term [social responsibility] is a brilliant one; it means something, but not always the same thing, to everybody. To some it conveys the idea of legal responsibility or liability; to others, it means socially responsible behaviour in an ethical sense; to still others, the meaning transmitted is that of "responsible for," in a causal mode; many simply equate it with a charitable contribution; some take it to mean socially conscious; many of those who embrace it most fervently see it as a mere synonym for "legitimacy," in the context of "belonging" or being proper or valid; a few see it as a sort of fiduciary duty imposing higher

standards of behaviour on businessmen than on citizens at large.” This statement well reflects the diversity of the definitions of CSR and the different ways that people perceive it. On the other hand, Frankental (2001, p. 21) argue that “CSR is a vague and intangible term which can mean anything to anybody, and therefore is effectively without meaning.” Clarkson (1995, p. 102) also adds that “society is a level of analysis that is more inclusive, more ambiguous and further up the ladder of abstraction than a corporation itself.” Hence, we can see that the definition of CSR is a hard one to agree upon, it represents different responsibilities to different parties or entities.

In the 1980’s, Carroll (1999, p. 284) examined the definition proposed by Jones (1980, p. 59-60); “Corporate social responsibility is the notion that corporations have an obligation to constituent groups in society other than stockholders and beyond that prescribed by law and union contract.” This definition is definitely a more solid interpretation of CSR than those in the previous decades; here the definition of CSR is directed at corporations, showing that the definition has shifted depending on the decade and the more widely recognised entities of the time.

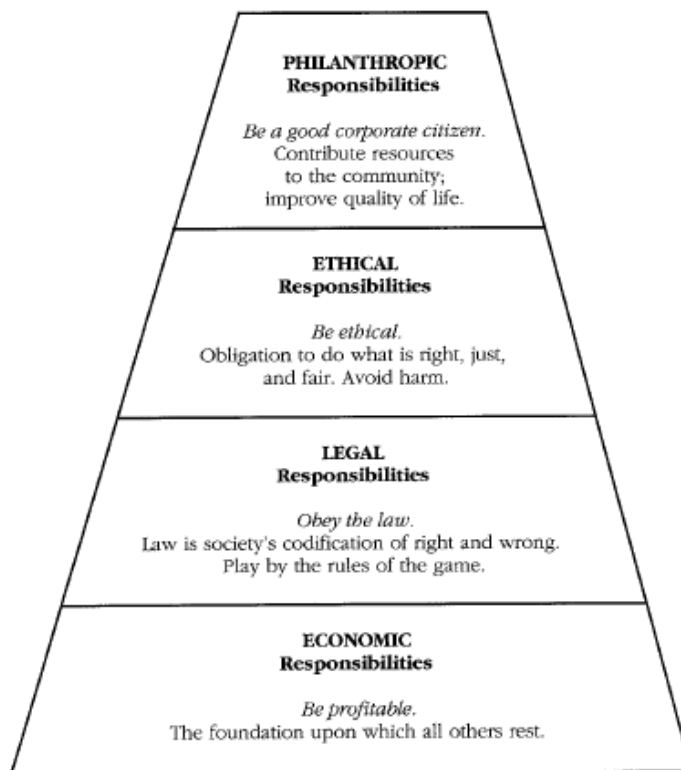
During the 1990’s, Carroll (1999, p. 288) states that “very few unique contributions to the definition of CSR occurred in the 1990s”. He implies that in this decade rather than defining CSR, various themes and theories related or similar to CSR emerged. He describes “CSP, stakeholder theory, business ethics theory, and corporate citizenship” as the most prominent themes in relation to CSR in the 1990’s. Similarly, Sahlin-Andersson (2006, p. 596) notes that “Studies tracing the development of CSR have shown that its media coverage has expanded dramatically during the 1990s (Buhr and Grafström, 2004).

## **2.2 CSR in theory**

From the literature previously reviewed we could identify that there are traditional and modern mindsets to CSR. To help examine CSR in theory, two main models from the vast literature on CSR are examined. Carroll’s corporate social responsibility four-dimensional pyramid, and Quaizi and O’Brian’s two dimensional model. Carroll’s CSR pyramid has been chosen as it

seems to be the most recognised model and it also breaks down CSR in a clear understandable way. On the other hand, the two-dimensional model is chosen because it is not only based on developed economies and countries, it was actually designed to provide more information on CSR perceptions in less developed economies and countries. This is an important aspect as this research is based on CSR in the Middle-East and so the two-dimensional model would provide valuable and reliable insight.

Carroll's CSR pyramid:



**Figure 1: Carroll's CSR Pyramid** (Carroll 1991, p. 42)

Visser (2005, p. 29) states of Carroll's pyramid; "Carroll's CSR Pyramid is probably the most well-known model of CSR, with its four levels indicating the relative importance of economic, legal, ethical and philanthropic responsibilities respectively." Hence, this model is designed to provide a review of CSR related responsibilities of firms and their importance.

Carroll (1991) examined the range of responsibilities a business undertakes in order to assume CSR. He breaks down the concept of CSR into four types of social responsibilities that come

together to form the bigger picture of CSR. According to Carroll (1991), the four dimensions that form CSR are economic, legal, ethical and philanthropic responsibilities. Each dimension is made up of its own components that in the end all contribute to the overall form of CSR. Firstly, the economic responsibility dimension relates to the most basic and obvious objectives of any business. It is the dimension that deals with making a profit; Carroll (1991) describes this dimension as traditionally relating to providing goods and making a profit, as well as more recently relating to “maximizing” profit. This can be compared to the very popularly linked concept of “profit maximization” which would also fall under the economic responsibility category (Jamali, 2008, p. 217). It is vastly examined in relation to the concept of CSR and seems to have always been regarded as a main objective of businesses. It deals with the economic responsibilities of firms and business; to be as competitive, efficient and profitable as possible, as well as maximizing EPS (earnings per share) and remaining constantly profitable (Carroll 1991, p. 40).

Carroll (1991, p. 41) also states that “All other business responsibilities are predicated upon the economic responsibility of the firm, because without it the others become moot considerations.” The pyramid above illustrates the importance of this dimension in relation to the existence of the other three dimensions; it is the base upon which other responsibilities can start to be built up on.

The second dimension proposed by Carroll (1991) to make up the CSR pyramid is the legal responsibilities dimension. This responsibility relates to the business operating in line with legalities and regulations drawn by the government and state. It suggests that a business must thrive to meet its objectives within a set legal framework by providing goods/services that meet requirements and hence reach business objectives lawfully. This dimension deals with operating within the regulations set by the law, following rules and regulations and lawfully pursuing objectives. Additionally, Carroll (1991, p. 40) states that “It is important that a successful firm be defined as one that fulfils its legal obligations.” similar to the economic responsibilities it seems that this dimension is also essential to a business’s survival and success. Its position in the pyramid also points to its importance as it is the second “base” upon which the other two responsibilities are to be built.

The third dimension of CSR is ethical responsibility; this dimension represents a business's position towards the expectations of society out of the framework of legal responsibilities and economical objectives. Ethical activities are those which society expects, but which businesses are not obliged to provide or undertake by law. In a way it could reflect the choice and image of a business towards society and consumers concerns. It could also show how far a business is willing to go to meet the expectations of consumers regardless of legal requirements or profit maximization; whether a business strives to only satisfy economic and legal necessities or whether they are willing to go further and satisfy society's expectations as well. It is interesting to note that although Carroll (1991, p. 41) has defined ethical responsibility as the third dimension of CSR, at the same time he also accepts that legal responsibilities could actually be derived from ethical responsibilities. He states that "In one sense, changing ethics or values precede the establishment of law because they become the driving force behind the very creation of laws or regulations. For example, the environmental, civil rights, and consumer movements reflected basic alterations in societal values and thus may be seen as ethical bellwethers foreshadowing and resulting in the later legislation." According to Carroll (1991), ethical components include, keeping in line with societal expectations and morals, accepting any changes to these expectations, striving to reach expectations despite economic objectives, carrying out what is expected to be morally correct by society and behaving ethically rather than solely accepting societal expectations as morals.

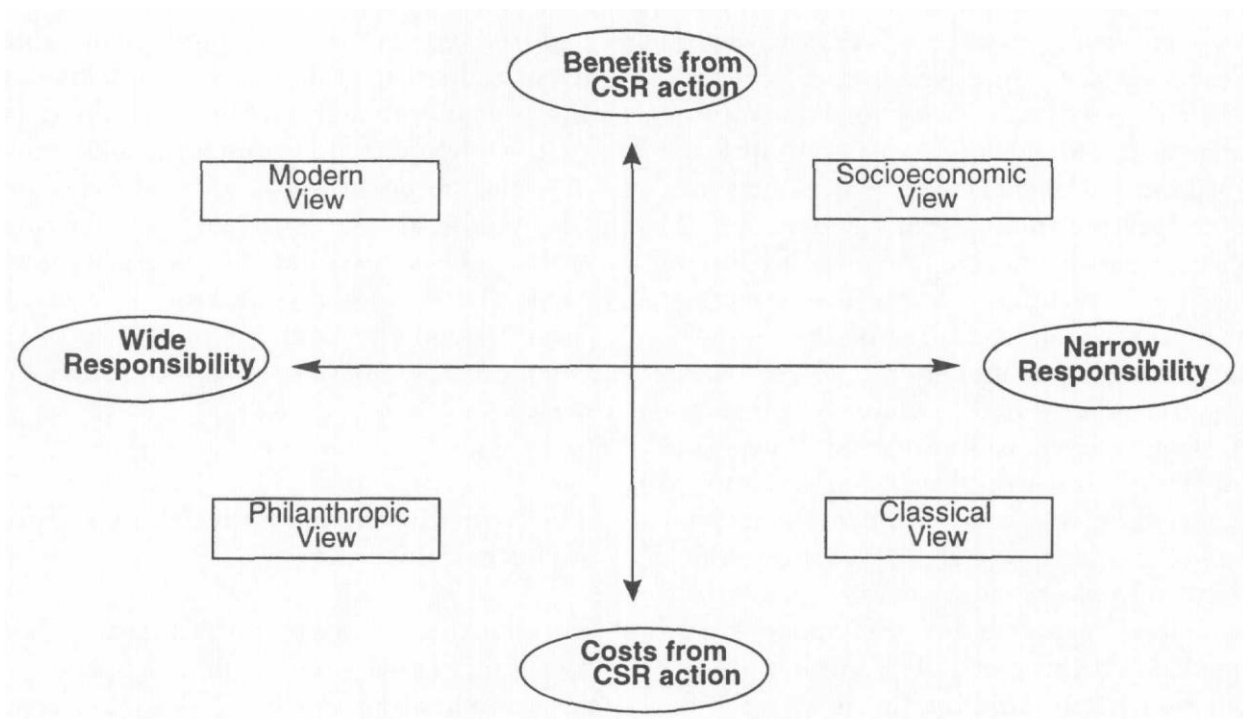
The last dimension that Carroll proposed to form the CSR pyramid is philanthropic responsibility. This type of responsibility is similar to ethical responsibility but the difference between them lies in that philanthropic responsibility is more voluntary whereas ethical responsibilities are regarded as rights. Philanthropy represents the actions businesses will undertake in reaction to societal expectations whereas ethical responsibility would be to comply with these expectations and not disappoint by behaving unethically. Carroll (1991, p. 42) states that "Examples of philanthropy include business contributions of financial resources or executive time, such as contributions to the arts, education, or the community." These activities are not expected ethically and hence they go under the philanthropy category of CSR. Carroll (1991, p. 42) further explains that "Communities desire firms to contribute their money, facilities, and employee time to humanitarian programs or purposes, but they do not regard the firms as



unethical if they do not provide the desired level.” Ethical responsibility represents staying in line with the general morals and expectations of society, whereas philanthropy would represent going that “extra mile” to not only comply with expectations but to also act upon them.

After examining Carroll’s pyramid of CSR, we can clearly see that the base levels of the pyramid; the economic and legal responsibilities are the most essential and important. They are necessary not only for the success of a business but also for its survival. A business must be able to make profits as well as follow governmental rules and regulations to guarantee its existence. The next two levels of ethical and philanthropic responsibility are what would make a business or businessman a “good corporate citizen”.

Another model that is appropriate to explore and examine in relation to this research is the two-dimensional model developed by Quaizi and O’Brien (2000). The two –dimensional model was developed by the authors to fill the gap within the existing CSR literature regarding less developed countries and economies. They state that, most existing models are “descriptive in nature and are based on the experiences of western countries”. The model proposed deals with examining CSR perceptions in both a developed and developing country; Australia and Bangladesh.



**Figure 2: The two-dimensional model** (Quaizi and O'Brien, 2000, p. 36).

The figure above represents a diagram of the two-dimensional model. The model aims to divide perceptions of CSR into two dimensions. One dimension represents a “wider” and “contemporary” view of CSR whereas the other dimension represents a “limited narrow view” (Quaizi and O'Brien, 2000, p. 33). The tests and findings of the study revealed that these two dimensions did indeed exist in both countries and thus the model was proven to be valid. The model helped conclude that “corporate social responsibility is two dimensional and universal in nature and that differing cultural and market settings in which managers operate may have little impact on the ethical perceptions of corporate managers.” (Quaizi and O'Brien, 2000, p. 33).

According to Quaizi and O'Brien (2000, p. 35), “The two dimensions are the span of corporate responsibility (narrow to wider perspective) and the range of outcomes of social commitments of businesses (cost to benefit driven perspective).” The model has two sides to it as well as two axes, each axis has an extreme, the horizontal axis ranges from “wide” to “narrow” responsibility. One end represents the “narrow” view of responsibility being that social responsibility does not go far beyond the corporation and profit maximisation. On the other extreme lies the “wide” view that CSR goes beyond strictly serving organisational goals but also to consider society and take responsibility. The authors describe this view as “reaching beyond regulation to serve the wider expectations of society in areas such as environmental protection, community development, resource conservation and philanthropic giving.” (Quaizi and O'Brien, 2000, p. 35).

The vertical axis of the two-dimensional model represents the differently perceived outcomes of CSR implementation. The perceptions regarding the outcomes range from “benefits from CSR actions” and “costs of CSR actions”. Each end represents one of these two views on the outcomes of CSR implementation. The “benefits” end focuses on the advantages of CSR to society whereas the “costs” end focuses on the disadvantage to businesses in terms of cost when implementing CSR activities. The “benefits” side is also more focused on the long-term effects of CSR and acknowledges that CSR implementation will provide results in the long run; in

contrast, the “costs” side views CSR in the short-term and thus do not see beyond the cost of funding CSR activities.

The two axes create four different spaces on the diagram; each space represents a different view or outlook on CSR. Quaizi and O’Brien (2000) identify these views as classical, socio-economic, modern and philanthropic. The classical view is the narrowest view, assuming that CSR should be limited and not present extra costs and that profit maximisation is the most important focus of any business. The socio-economic view is still considered to be a “narrow” view of CSR yet it is more accepting of the costs of CSR because it also acknowledges the advantages of implementing CSR. According to Quaizi and O’Brien (2000, p. 36) these include, “avoiding costly and embarrassing regulation, building good customer relationships, good supplier relationships or the politics of networking.” It seems to represent a more rational and realistic view of CSR; understanding that it can be costly but can also serve the firm financially and socially.

The other views represent the “wide” outlook on CSR. The modern view looks at CSR in the long run and regards CSR in relation to society and not just the corporation. The philanthropic view represents the widest view of CSR in this model and is focused on bettering society despite costs. This view seems to be motivated by ethical reasons that strive to better society.

Comparing Carroll’s CSR pyramid to Quaizi and O’Brien’s two-dimensional model, we can see that both models have some similarities and differences. Carroll’s CSR pyramid identifies four types of responsibility whereas; the two-dimensional model identifies four different views on CSR. In a way, Carroll’s economic and legal responsibilities could be representative of the narrow side of the model, where the socio-economic and classical views reside. On the other hand, the wide side of the two-dimensional model which consists of the modern and philanthropic views could be representative of the ethical and philanthropic views identified by Carroll. It seems that Carroll’s pyramid aims to identify and organise the responsibilities in terms of importance whereas the two-dimensional model aims to divide the four views into “wide” and “narrow” views of CSR. Both models aim to breakdown CSR into different sections that in the end appear to represent views on CSR as a whole. Carroll’s pyramid breaks the idea

behind CSR into four dimensions while Quaizi and O'Brien's model breaks CSR into two dimensions, each dimension representing a range of two views. Additionally, the two-dimensional model aims to compare views on CSR in developed and emerging economies, whereas Carroll's CSR pyramid gives a more universal view of CSR as a whole.

In comparison to the traditional and modern mindsets, it seems that the ethical and philanthropic levels of Carroll's pyramid and the "wide" dimension of the two-dimensional model would present the more modern perspective of CSR. Meanwhile, the economic and legal levels, as well as the "narrow" dimension of Quaizi and O'Brien's model would present the more "traditional" views of CSR.

### **2.3 CSR today**

Corporate Social Responsibility (CSR) is a widely recognised concept today. It is a term especially popular with entities and corporations which are becoming ever more responsible towards society, the environment and communities. Konrad et al. (2006) illustrate the position and importance of CSR and business ethics today, by identifying the various strategies international corporations have adopted and integrated; such as marketing and involvement strategies. Sahlin-Andersson (2006, p. 595) describes the globalisation of CSR as a "trend", emphasising how corporations are increasingly becoming more active in implementing CSR. Moreover, O'Riordan and Fairbrass (2008, p. 745) also comment on the growing dominance of CSR by stating that, due to the "critical attention" from the media and governmental sectors on businesses, "there has been mounting pressure on businesses to respond to the challenge of corporate (social) responsibility (CSR)." Although it seems to be like there is no one defined meaning to CSR, it is clear to see that CSR is becoming an increasingly dominant and significant issue being undertaken by many corporations and businesses today.

Kurokawa and Macer (2008) explain that the traditional meaning of CSR actually emerged from the finance sector, the representative terms of CSR in terms of finance would be NPV and IRR which relate to maximising values of shareholders. Jamali et al. (2008) also present a similar concept where they studied the Quaizi and O'Brien (2000) two-dimensional model, where

perceptions of CSR are divided into two concepts. Classical and modern outlooks are used to represent two opposing views on CSR. Similarly to the traditional view of CSR that Kurokawa and Macer (2008) explained, the classical outlook is more focused on the financial aspects and outcomes of CSR such as extra costs and less competitiveness. These are issues that will reflect back on the shareholders interest which is the main focus of the traditional view as well. On the other hand, the modern outlook that Jamali et al. (2008) also refer to, represents the other view which regards CSR in relation to society and the community. The modern outlook focuses on corporation's own responsibility towards society, far beyond the financial aspects of the classical outlook as well as beyond the maximisation of the shareholders interests of the traditional view. Jamali et al. (2008, p. 173) conclude that the modern outlook represents the view that "the responsibility of a business extends beyond making profits to include protecting and improving society's welfare or the well-being of specific constituent groups within society".

There are many reasons as to why CSR has become so significant today, from the literature reviewed, it is clear that CSR provides various factors that could satisfy both the traditional and modern view of CSR. CSR itself, if employed correctly seems to be able to serve both the financial and social aspects of contemporary businesses. According to, Quazi and O'Brien (2000, p. 34), "businesses traditionally concentrated on activities aimed at satisfying consumer needs as a key to meeting organisational needs i.e. profit maximisation. The vast social world and its emerging needs which is also strategically important for businesses was neglected as long as there was no perceived profit potential in the short term". This statement emphasises the need and importance of CSR, as it could bridge together both "organisational needs" and the "social world" of businesses. It also shows that the "social world" which CSR relates to could also be beneficial if not critical to profit maximisation. It appears that in today's world, as many social issues are becoming increasingly important, the need and importance of CSR has also increased. The strong passion of consumers towards some environmental and social issues could be another reason for the increased significance of CSR. Additionally Carlson et al. (1993, p. 27) state that "The effort to target environmentally-conscious consumers has been quite evident in the nature of the advertising messages of commercial firms."

Quaizi and O'Brien (2000, p. 34) state "For example, if a corporation invests in rectifying green house problems or developing environmentally friendly products, society is likely to reward that corporation with positive ratings and profit (Carlson, Grove and Kangun, 1993)." Furthermore, they state that "Research shows that consumers prefer to purchase products from and invest in shares of those companies caring for environment and maintaining good citizenship behaviour (Zaman et al., 1996; Gildea, 1995)". Moreover, Menon and Menon (1997) suggest that businesses can create a distinctive corporate image by providing products/services that will cater to and satisfy environment and society concerned consumers. Therefore, as more businesses realise the potential profit that can be made through adopting CSR and taking responsibility for some of the most prevalent social and environmental issues that are championed by consumers, the relevance of CSR to firms increases.

From the literature, as Quaizi and O'Brien (2000) suggest, it seems that there are two main perspectives on CSR. The two-dimensional model that they present has been based on the two most obvious views on CSR which they have identified as a "classical", "narrow" view and a "modern", "wide" view. Businesses that are more financially-orientated seem to share the "classical" or "traditional" view of CSR, whereas businesses that are more socially-orientated or businesses that can see both the strategic and social value of CSR tend to lean towards the "modern" view of CSR. Quaizi and O'Brien (2000, p. 35) conclude that "The broader dimension of social responsibility, therefore, calls for innovation in production and marketing to reap the benefits of proactive social action." This also relates to how some businesses see CSR in terms of their goal, it seems that business who focus on short-term goals are more "classical" in their view of CSR, as they mainly see the financial objectives in relation to CSR. In contrast, businesses that are more focused on the long term benefits of CSR on the business seem to view CSR in the "modern" and wider way. It is interesting to note that Ahmed et al. (1998), as discussed in Quaizi and O'Brien (2000, p. 35), proposes that the view or dimension of businesses towards CSR depends on the critical factor of the business itself. They suggest that to smaller firms cost is a priority as their existence and survival rely on it, whereas, bigger firms are more accommodating towards CSR as they can afford to take on the practices due to the difference in priorities. Quaizi and O'Brien (2000, p. 35) state that "Others may however, look at the long-term outcome of social action in terms of strategic advantage by way of cost savings and

differentiation.” So, the priorities of a firm appear to be major determining factors of a firm's attitude and attraction to CSR.

## **2.4 The importance of CSR**

There are many reasons for why CSR is considered to be so fundamental in today's business world. Ben Brik et al. (2011) claim that it is vital from a marketing point of view, where a firm's extent of participation in CSR activities reflects its attitude and dedication towards stakeholders and shareholders. Additionally, CSR activities encourage a more positive relationship between a firm and its stakeholders (Ben Brik et al., 2011).

Similarly Jamali and Mirshak (2007) state that advocates of CSR regard it as vital to successfully run operations as well as motivating firms to focus on the bigger picture beyond financial aspects and pay some attention to social issues. Moreover, research conducted by Papsolomou-Doukadis et al. (2005) on Cypriot businesses has shown that the prospect of benefiting financially is a major reason why CSR activities are accepted and implemented. Juholin (2004), through research on CSR in Finland, also identifies the prospect of long-term financial gain, the role of management and rival companies as the main factors driving CSR adoption in firms. We can see that not only do financial gains from CSR exist, but that they are also a major driver to the adoption of CSR activities in firms.

Lindgreen et al. (2010), based on their research on Malawi and Botswana, have shown that even in less developed countries, the financial and social benefits of CSR activities are still recognized and appreciated. Similarly, Rettab et al. (2006, p. 384), through their research regarding CSR in Dubai, confirm that financial benefits from CSR also exist in emerging economies. They state that, “The most important finding in our study, and contrary to our prediction, is the positive association between CSR and financial performance. This result is consistent with previous empirical studies conducted in western developed economies showing a positive relationship between CSR efforts and financial performance.”

Furthermore, results from research conducted by Jamali and Mirshak (2007, p. 253) has identified other key factors to adopting CSR as “a license for continued operation and appreciation by society” and “a desire to seek social betterment in their local communities”. Another reason why CSR is significant for some firms is that it enables the firm to create a unique image that is reflected by its CSR work. Sahlin-Andersson (2006, p. 596) also regards this factor as a driving force in adopting CSR practices, claiming that “In the wake of anti-globalization movements and more specific critiques of specific corporations or industries, and at a time when the market strength of corporations is derived largely from brand image, there has been a need for companies to demonstrate an awareness of social, human and environmental issues.”

Additionally, Sahlin-Andersson (2006, p. 603) also describes CSR activities, as “a means of appearing legitimate, modern and attractive for potential employees, collaborators, customers and others.” As well as, “a means of strengthening their competition for resources, attention and legitimacy.” Sahlin-Andersson (2006, p. 606). On the other hand, Lamberti and Lettieri (2009, p. 153) also note that “consumers perceptions concerning CSR deficiencies can be extremely detrimental to corporate profitability and market share (Enderle and Tavis, 1998).” This statement justifies just how dominant CSR has become in today’s world; consumers are becoming increasingly supportive of social issues and thus firms who are actively pursuing CSR activities are more appealing to them. Firms can use CSR activities as a way of winning over consumers trust (Lamberti and Lettieri, 2009).

Based on the research conducted by Lamberti and Lettieri (2009, p. 163) on Italian food company “Babyfood”, they have concluded that “All managers who have been interviewed agreed that Babyfood won stakeholders’ trust over the last 30 years because of the CSR business practices that had been adopted. The practices help in Babyfood being perceived as a socially and environmentally responsible food manufacturer and Babyfood’s products being perceived as safer as and healthier than the average in the market.” Therefore, it appears to be that CSR activities can have a huge impact on the performance of firms. Additionally, CSR allows for differentiation which can help firms to perform better since it gives them a chance to specialise and serve specific consumers.



Furthermore, Lamberti and Lettieri (2009, p. 164) imply that CSR activities are used to serve different goals of different firms, “These considerations may suggest that companies that leverage on CSR and business ethics to boost business performance (i.e. when an enlightened self interested approach is pre-eminent) select unbalanced portfolios of CSR business practices because of contingent needs, while companies that recognize business ethics as part of their mission (i.e. when a proactive change approach is pre-eminent) prefer more balanced initiatives.” Hence, it seems that CSR activities are able to serve each firm in a certain way and can even be employed to help achieve short term or medium term goals such as enhancing customers’ trust and boosting competitive advantage.

CSR is important as it presents potential advantages to firms, it can be adopted as a marketing strategy, a unique corporate image through differentiation, a promoter to the relationship between a firm and stakeholders as well as a means of enhancing productivity, growth and innovativeness (Quaizi and O’Brien, 2000). Furthermore, research conducted by Ahmed et al. (1998,) has shown that environmentally concerned firms perform better than firms who are not concerned with the environment. An example of the enhanced innovativeness that adopting CSR can promote is presented by Quaizi and O’Brien (2000, p. 35), “business can also benefit from converting waste by-products into new commodities. For example, DuPont in the U.S.A. successfully converted methylglutaronitrite from nylon into a new chemically based commercial product generating extra revenue for the company (Hemphill, 1995).” By being environmentally friendly, a great CSR initiative today, DuPont was able to create a new product using the same sources hence illustrating the advantages and potential of adopting CSR practices.

Thus it seems that, similarly to the theories and models of CSR, adopting CSR activities can provide financially to firms, as well as philanthropically. Lamberti and Lettieri (2009, p.164) state that “Companies that recognise business ethics as a part of their mission will promote holistic approaches to CSR because they will want to pay the same attention to all groups of stakeholders. On the contrary, companies that recognise business ethics as a new means to leverage on in order to improve business performances will be more attracted by self-interested CSR business practices.” On the other hand, Capaldi (2005, p. 414) claims that “issues of CSR

cannot be separated from issues of profit”. It seems that CSR is here to stay and that it is important not only to society but corporations as well. There is a financially orientated side to why CSR is so important to firms as well as a socially orientated side that allows the firm, in a way to show support for social concerns that are consistent with a firms own beliefs and philosophy.

Additionally, Owen and Swift (2001) argue that firms who have had positive performance outcomes from adopting CSR practices, will probably regard CSR as an important tool to boost financial performance. Similarly, Lindgreen et al. (2010, p.439) support this belief by stating that, “those organizations that invest more in CSR activities ... are more likely to perceive positive benefits associated with CSR.” Lamberti and Lettieri (2009, p.166) also claim that, “In fact, top managers become more and more aware that CSR and business ethics are not only an alternative means to increase profitability in the short term, but they are the pillars of the company’s system of values and mission (van Marrewijk, 2004; Willard, 2002).”

## **2.5 CSR theory and practice in Middle Eastern and North African (MENA) countries.**

The popularity of CSR has spread worldwide, developed and developing countries alike are under pressure to adopt and engage in CSR activities. Yet, despite globalisation and the growth of CSR, it seems that MENA countries have still not reached the practice level of CSR that western countries have. Jamali and Neville (2011, p. 613) illustrate this point through their CSR related research in Lebanon; they claim that, “All interviewees generally agreed that CSR in Lebanon is still in its infancy and there are very few signs of the infiltration of a global CSR institutional infrastructure.” Additionally, they state that “In this respect, interviewees noted that while CSR is becoming an increasingly familiar term, it comprises mostly symbolic initiatives, because of the absence of key components of an effective CSR infrastructure.” Robertson (2009, p. 617) also comments on the state of developing countries in relation to CSR; “The U.S. and U.K. models of corporate social responsibility (CSR) are relatively well defined. As the

phenomenon of CSR establishes itself more globally, the question arises as to the nature of CSR in other countries.”

Each culture regards CSR differently. Jamali and Neville (2011, p.601) state that “CSR in developing economies has been recently characterized as more extensive than commonly believed, less embedded in corporate strategies, and less politically rooted than in most high income countries (Visser, 2008).” Likewise, Jamali et al. (2008, p.173) state that, “Yet, in view of vastly differing national cultures and institutional realities, mixed orientations to CSR continue to be salient in different contexts, oscillating between the classical perspective which considers CSR as a burden on competitiveness and the modern perspective that views CSR as instrumental for business success.” It seems that the viewpoints on CSR are diverse and differ between economies.

In contrast to western countries, it seems that CSR in Africa and the Middle-East is more philanthropic and “culturally-embedded” (Jamali et al., 2009). Lindgreen et al. (2010, p.431) further support this view and add that “Africa is generally still at an early stage of maturity in CSR rather than the more embedded approaches now common in developed countries.” Furthermore, Jamali and Neville (2011, p. 601,) state that “CSR activity in developing countries is, therefore, portrayed in these writings as on-going and extensive, although it tends to be less formalized, more sunken, and more philanthropic in nature (Amaeshi et al., 2006; Visser, 2008). It also draws on deeply engrained cultural/religious values and is primarily oriented toward local communities (Jamali et al., 2009; Visser, 2008).” Studies have shown that CSR in Turkey is also mainly Philanthropic in nature; the CSR initiatives are driven by the beliefs and values of the business leaders (Robertson , 2009). Similarly, Turker (2009, p.411) has also examined CSR in Turkey and states that “The first CSR practices in Turkey were conducted by multinational companies (Ararat, 2004, p. 255). However, since the Ottoman era, there has been a strong tradition of corporate philanthropy through an institutional mechanism called ‘waqf’ (foundation).”

It is interesting to note that, through Robertson’s (2009) study on CSR in Singapore, Turkey and Ethiopia, we can see that each country’s perspective and expectations of CSR are different. In

Singapore and Turkey the implementation of CSR is more prominent, whereas in Ethiopia, due to its less developed economy CSR is not really considered, as a firm's main objective is to remain in existence. Robertson (2009, p. 623) sheds light on the idea of CSR in Ethiopia by stating that "Firms do not think in terms of CSR, but instead, for the most part, are concerned with economic survival." Robertson (2009) also examines the "openness" of a country's economy in relation to CSR. Singapore being the most developed country with the most accessible economy in the study had the most engagement in CSR whereas Turkey had less CSR engagement and Ethiopia even less as it has the least accessible economy. Findings of the research conducted by Robertson (2009) has proven to support the beliefs of Amaeshi et al., (2006) as well as Visser (2008), regarding the features of CSR in developing countries. Based on findings, Robertson (2009, p.629) also suggests that, "firms should alter approaches to CSR strategy to tailor programs to individual country needs."

Similarly to the findings of other authors discussed previously, the findings of research conducted by Jamali and Neville (2011) in Lebanon, has also shown that the view of CSR was mainly philanthropic. The type of CSR activities implemented by the Lebanese management also proved to be philanthropic in kind, activities such as donations and education programs were very common. Additionally, the interviews conducted through the research showed that the CSR perceptions of managers are deeply related to their own cultural and religious values. A quote from an interviewee further illustrates this point; "seizing the opportunity to promote fairness and social inclusion through helping activities; we are now using this new language of CSR but what we do today is not much different from what we have always practiced reflecting in fact long-engrained religious norms." Jamali and Neville (2011, p. 613). Thus, it appears to be that the idea of CSR in African and Middle-Eastern cultures is deeply embedded in their own values and beliefs and so perhaps one can argue that they are more philanthropic in nature than the views of western cultures. Jamali and Neville (2011, p. 613) further state that, "In other words, the SME managers considered philanthropy and extending a helping hand as customary requirements of their business conduct, and these expectations had cultural and religious roots."

Research conducted by Jamali et al. (2008) has brought light to the perspectives of CSR in Middle-Eastern countries. In their research, managerial perspectives from Lebanon, Syria, and

Jordan have been examined. Results have shown that across all three countries, classical and modern perspectives of CSR were prominent, yet the modern perspective was the more popular view. Despite the lower practice level or “lower priority” of CSR in developing countries that literature has implied (Retabb et al., 2006), Jamali et al. (2008, p. 189) state that “Hence, while some managers in this part of the world still adhere to the perspective that ‘the business of business is business,’ there seems to be a larger proportion of managers in the Middle Eastern context that see an added value in CSR and serving a wider array of stakeholders. This is reassuring indeed.”

Similarly, Quazi and O’Brien (2000) have conducted research comparing a developed and developing country. In their case, Australia and Bangladesh. Results have shown that in parallel to Jamali et al. (2008) findings, modern and classical views were identified to exist in both countries. Furthermore, they have found that in Bangladesh, the developing country, the modern view was more dominant than the classical view. This is extremely similar to the findings of the other authors in Lebanon, Syria and Jordan, however Jamali et al. (2008) have also discovered other views in these Middle-Eastern countries that Quazi and O’Brien (2000, p. 190) did not identify with Bangladesh. Other views include, “a philanthropic cluster in Lebanon and Syria, a socio-economic cluster in Syria and Jordan, and two variations of the modern cluster in Jordan and Lebanon.”

According to Retabb et al. (2006), CSR in Dubai is positively related to financial performance, employee commitment, and corporate reputation. Compared to western or more developed countries, these are similar outcomes of CSR. As mentioned earlier, Pappasolomou-Doukadis et al. (2005) have also found financial gain to be a clear result of CSR in Cypriot businesses.

However, Retabb et al. (2006) also consider the UAE as one of the “emerging economies” along with China and India, where despite their growth, CSR is still “a low priority”. Companies in developing countries seem to not recognize or acknowledge the value of informing stakeholders of CSR initiatives. (Foo, 2007, Wright et al. 2003). This could be referred to as ineffective stakeholder management; the significance of strategically managing stakeholders, in relation to CSR. Firms in Dubai need to inform stakeholders of the CSR initiatives being implemented or else stakeholders may not acknowledge the advantages of CSR to the firm (Rettab et al., 2006).

Rettab et al., (2006) recognize ineffective communication means, and the diversity of cultures and priorities in Dubai firms as drivers to ineffective stakeholder management and thus less engagement in CSR.

Moreover, Rettab et al. (2006, p.375) explain this point in more detail by adding; “Further, because of the lack of communication platforms to disseminate information about CSR activities, CSR efforts often go unnoticed and are largely unknown to stakeholders and subsequently may not have an impact on performance.” In a way this reflects back on their earlier point of CSR being a “low priority”, which could be due to the fact that stakeholders are not even aware of the CSR initiatives being undertaken by firms and so cannot appreciate the added value to organizational performance that CSR can provide.

However, despite the ineffective stakeholder management found in the case of Dubai, Rettab et al. (2006) conclude from their research that, in contrast to their hypotheses and expectations, CSR turned out to be positively related to both financial performance and corporate reputation. Furthermore, the findings confirmed their other hypothesis of CSR being positively related to employee commitment in emerging economies.

## **2. 6 Criticisms of CSR**

The topic of CSR is a highly debated one in the business and management literature, Maon et al. (2009, p. 71) state “CSR has moved from ideology to reality and represents an important dimension of contemporary business practices.” Thus its existence in the business world today cannot be denied, however the outcomes and influences of CSR remain contested. So far we have examined some of the reasons why CSR is important; mainly due to the financial and social advantages it can provide to both firms and consumers. However, it can be argued that there are also negative aspects to CSR which can lead to pessimistic perceptions of it.

Ludescher and Mahsud (2010, pp. 123-124) argue that “Although CSR has served us well in shifting popular consciousness regarding global ethics, the concept now lies on its deathbed. The

successive collapse of various prominent financial institutions points to a major problem with CSR - namely, that companies can use it to conceal financially risky strategies to pursue short-term gain by means of high-profile bankruptcy.” To demonstrate this point, they refer to the corporations of Enron and Washington mutual as real life examples of CSR being used to cover up problems. However, it is interesting to note that it seems that they regard the idea of CSR itself negatively; rather than referring to the negative aspects of CSR as misuse they appear to view the idea of CSR as negative in the long term. Ludescher and Mahsud ( 2010, pp.123-124), further add, “While these companies were disbursing philanthropic goods to the public, however, they mismanaged their own affairs, and as a result their more immediately implicated stakeholders - the shareholders and the employees - paid a high price for the management's incompetence, greed, and charity.” Similarly, Tench et al. (2007, pp.349) also point out this negative aspect of CSR stating that, “High profile corporate debacles such as Enron, Marconi and WorldCom have served to focus attention on the often largely obscured world of corporate behaviour.” In these cases, it seems that the authors believe that CSR was used to conceal illegal or unethical activities which eventually hurt shareholders and consumers in the long run.

Another point Ludescher and Mahsud (2010) relate to negatively in association with CSR, is the irony of certain industries that practice philanthropic CSR based activities. Interestingly, they refer to a few industries including the defence, tobacco and nuclear industries. They strongly criticise the adoption of CSR by these types of industries as they seem to clash with the ethical idea behind CSR. These industries seem to practice CSR activities but their services and products can be argued to be destructive to society. They comment on the defence industry stating that; “The fundamental flaw in praising these CSR initiatives is that defense companies are in the business of designing weapons and military technology used to threaten and destroy human beings.” Thus the idea behind this criticism of CSR by these authors is the sense of irony of the CSR activities in relation to the industry. “The inconsistency in stakeholder treatment that businesses practicing CSR can get away with can be identified most readily in businesses that manufacture products of dubious ethical value” (Ludescher and Mahsud 2010, p. 124). It seems that CSR is being misused to represent unethical activities and that in a way it should not apply or be adopted within all types of industries. Yet, one could argue that the CSR initiatives being adopted by these industries at least provide these industries with a chance to provide a positive

outcome for society rather than only providing “products of dubious ethical value” or harmful products. Ludescher and Mahsud, (2010, p. 128) further argue that social responsibility should not be limited to or only expected of corporations. “If CSR were true to its name, it would include multiple institutions under its umbrella.” Again, they focus on the irony of the term in relation to its practise.

Interestingly, Tench et al. (2007, p.356) identify five different perceptions of CSR through their research: conformist, cynic, realist, optimist and strategic idealist. They describe the “cynic” or negative view of CSR stating: “For the cynics CSR is a laudable cause but the motives, drivers and determinants of change are business and economic self interest and not any inherent desire to sign up to CSR for its own sake.” Whereas, the most pro-CSR perception is the optimist view which focuses on “the positive benefits of CSR for themselves, their communities and their businesses.” A moderate view on CSR would be represented by the strategic idealist who acknowledges both the positive and negative aspects of CSR but seeks to “maximise the positive benefits and minimise the negative effects”. On the other hand, the conformist perception of CSR regards CSR purely as a trend, whereas the realist perception recognizes the benefits and shortfalls of CSR but focus on its potential. It is worth noting that some of these views are alike to the views identified by the two-dimensional model discussed previously in this chapter.

The research of Tench et al. (2007, p. 367) has found that the UK media mainly have a cynical or conformist view of firms relationship to CSR. This reflects the negative aspects and criticisms of CSR in general. They conclude that, “Generally the results demonstrate that journalists view organisations' engagement with CSR from either a conformist or cynical view.”

Moreover, Sahlin-Andersson (2006, p. 596) also points to another negative aspect of CSR; “the CSR trend is driven by a criticism that corporations are exploiting the world.” From this view, the globalization and growth of CSR is perceived negatively, as if it were dominating businesses worldwide. However, at the same time Sahlin-Andersson (2006, p. 601) also examines the positive view of CSR stating that, “ When engaging in corporate social responsibility, states, civil society groups and international organizations seek support from corporate actors in



pursuing and diffusing internationally agreed-upon norms concerning human rights, workers' rights and environmental awareness.” Therefore, it also seems that CSR can bring together different entities to contribute towards “a greater good”.

In conclusion it is clear that there are mixed reviews on the outcomes and practices of CSR. The five perceptions proposed by Tench et al. (2007) illustrate the different individual ways of viewing CSR. This again confirms that both positive and negative aspects of CSR exist; there is no strict unilateral way to view CSR. Factors regarding CSR range from positive to negative depending on the way one chooses to view it, as well as the priorities of firms. In a way this is very similar to the idea of CSR having no single definite meaning mentioned earlier; the overall view on CSR seems to depend on individuals or firms own perceptions, knowledge and experience of CSR.

## **2.7 Blood donation and CSR**

Blood donation is becoming a common CSR initiative by corporations around the globe and especially the Middle-East. Over the world, corporations such as, HSBC, Chevrolet, Toyota, PSF Middle-East, and Mitsubishi are examples of globally-known organisations that have adopted blood drives as a CSR activity and initiative.

Unfortunately, blood donations are crucial and are in high demand all over the world. Abdel Gader et al. (2011, p. 7), studying the blood supply in Saudi Arabia, state that “The transfusion of blood and its derivatives is a vital supporting service to clinical medicine.” In the UAE, blood donation is an increasingly important issue as one of the most common diseases is a blood disorder called Thalassemia. According to Abdulrazzaq et al. (2005, p. 183), “The thalassemias are the most common genetic hemoglobinopathies in the United Arab Emirates.” In this case, hemoglobinopathies refer to defects in the hemoglobin molecule structure. This disorder calls for monthly blood transfusions and so regular blood donation is vital to keep a healthy blood supply for patients.

Dubai Islamic Bank, DP world, Emirates driving institute, First Gulf bank, Emirates bank, TECOM Investments, Mashreq Bank, Dubal, Du, DUCAB and Dubai Healthcare City are just a few of the locally based organizations that have hosted blood drives as CSR initiatives contributing to the blood donation and Thalassemia cause.

Despite how important blood donation is to the community, people in general have mixed feelings or perceptions regarding donating blood. Al Drees (2008, p. 74) states that “Blood donation and transfusion are remarkably safe medical procedures. However, attitudes, beliefs and level of knowledge associated with blood donation and transfusion may affect such procedures.” Hence, the way people think and feel in relation to donating blood shape their attitude towards it. Whether a person is a blood donor or not depends on their perception of blood donation. The research conducted on the Saudi population’s attitude towards blood donation by Al Drees (2008), reveals that most common type of donor in Saudi Arabia is the direct donor. Direct donors refer to donors who are found and called upon by the blood receiver. These donors are usually close to the recipient and could be a relative or friend. Hence, volunteer donors are not as common; these are the donors who donate blood on their own and not to anyone in specific but to contribute to a cause or blood disorder in general.

Al Drees (2008, p.75) suggests that it is the perceptions associated with blood donation that could be restricting and discouraging potential blood donors from donating blood. He also states that, “In the developing countries around 50% of blood donations are made by either direct or paid donors.” This shows that directly donating blood is the most prominent type of blood donation not only in Saudi Arabia but in most developing countries. Hence, there must be some negative perceptions or knowledge gap regarding blood donation in these populations. Al Drees (2008) suggests that this issue be considered when blood donation campaigns are run, as they could be affecting the type as well as number of donations. Al Drees (2008, p. 75), adds that “effort to improve donor’s perception of the donation experience may lead to an increase in the first time donors and the return of repeating donors”. Not enough information regarding blood donation as well as distrust and doubts regarding hospitals are identified as issues to be addressed in order to clarify the perceptions regarding blood donation.

Al Drees (2008, p. 75) also states that “There is growing evidence that the public perceives blood transfusion as risky although during the last 20 years remarkable advances have been achieved in blood safety especially transfusion transmitted viral infection.” Thus, it seems that blood donation numbers and types could be reliant on the public perceptions regarding the procedure and so awareness as suggested by the author earlier, is crucial to fill this knowledge gap and increase donation numbers. Additionally, Al Drees (2008, p. 74) has actually found that “69.5% did not know if the blood banks were in need of blood or not and 17.4% believed that all surgical procedures require blood transfusion.” This again also reflects the issue of awareness and knowledge gaps which contribute to the perceptions on blood donation, which in turn, affect the number and type of blood donations.

However, the results from the sample studied by Al Drees (2008) , has shown that most of the participants believed that blood donation was safe. 88.5% of participants actually shared this opinion whereas, 20% of the participants would not even receive blood if they were in need because they believed the procedure to put them at risk of being infected by a disease. It is interesting to see that 11.6% of the participants of the study also claimed to have obtained diseases after receiving blood have a great influence on how they would regard blood donation. Naturally, they would believe the procedure to be unsafe and risky since they have actually been infected. Additionally, 84.5% of participants favoured direct donations over other types of donations, this echoes the findings on direct donations mentioned earlier. Similarly, Abdel Gader et al. (2011, p. 121) have found that “92% will donate if a relative/friend needs blood.” And hence again it seems that direct donations are the most prominent type in these regions of the world.

Another issue identified by Abdullah (2011, p. 167) affecting blood donation perceptions, is the issue of repeated donation of blood harming the donor. He states that “Regular blood donation can lead to iron deficiency.” This side-effect identified with regularly donating blood, could discourage people from donating blood. It can act as a restriction or limitation affecting perceptions on blood donation.

However, other issues, to be considered when discussing perceptions on blood donation are cultural and religious values. Culture and religion can greatly shape one's opinion on such an issue as there can be certain values and beliefs which cannot be disregarded. Focusing on the Middle-East, the dominant religion is Islam. In Islam, blood donation in general is acceptable. Abdel Gader et al. (2011) have examined this aspect in their research on the attitude to blood donation in Saudi Arabia and have found that not only is it accepted, but they have actually proposed that it is a religious obligation and 91% of participants agreed to this. Similarly, Van den Braden and Broeckeaert (2011) have also conducted research on blood transfusion in Islam and have found that it is acceptable and even regard it as a kind of charity.

Abdel Gader et al. (2011, p. 123) emphasise the role of religion in shaping perceptions of blood donation by stating that "Religion is deeply rooted in the Saudi society and there is little doubt that it is a major motivating factor for the local population to donate blood, as 91% of the donors in the current study believe that blood donation is a religious duty. This very high response rate may, in part, be based on the religious ruling ["fatwa"] from the most respected religious cleric, the late Sheikh Abdul Aziz bin Baz, who advised that it is the duty of a Muslim to donate blood to save the life of a needy patient; pamphlets carrying his "fatwa" are placed in most donor centres in Saudi Arabia." Hence, it can be concluded that blood donation is not only acceptable in Islam but also encouraged and identified as a religious duty and so religion should not be a restricting factor to blood donation in the Middle-East. However, it is clear that confusion and doubts regarding the safety and side-effects of blood donation could well be restricting factors to this CSR initiative.

## **2.8 Literature review findings**

From the literature reviewed, it can be concluded that, although CSR remains a debatable issue, there is no denying that it is a dominant part of the business world today and will probably grow even more dominant with time. CSR seems to no longer be considered and implemented by only some firms, but regarded as essential by many businesses. We can clearly see that as to any concept, there are positive and negative aspects to CSR. CSR can be costly to fund but at the

same time if employed efficiently can serve both corporations and society greatly. It can also provide many financial and organisational benefits to a corporation's performance.

It can also conclude that there are two main views regarding CSR, the traditional and modern view. The traditional view looks at CSR in a "narrow" and "limited" way whereas the modern view regards CSR more broadly. It is also seen that developing countries CSR stems from cultural and religious values and is mainly philanthropic in nature, while in comparison to developed countries, CSR is more politically and strategically rooted. Moreover, the practice level of CSR in developed countries seems to be higher than that in developing countries where CSR exists but is still not as advanced.

Moreover, we can see that blood donation is a crucial issue and CSR initiative in the world. Blood donation is highly needed in the Middle-East due to the common blood disorder; Thalassemia. Many corporations have adopted blood drives in their CSR frameworks and hence contribute to the blood donation issue. However, it seems that perceptions and beliefs regarding blood donation limit and affect the type and number of donors. Religious beliefs have been shown to support blood donation and even regard it as a duty towards humanity in need. Thus, the low knowledge level and general mistrust and fear of blood donation could be major limiting factors to blood donation.

## **2. 9 An argument for alternative donor and non donor profiles**

Reviewing the literature of various authors on beliefs regarding blood donation, it seems that there would be differences between the views of donor and non-donors on the issue. The profiles of both donors and non-donors should be examined so that differences or similarities can be identified and addressed.

### *Age*

Firstly, background characteristics such as age, gender and nationality could be factors that differentiate between donors and non donors. Considering the age factor, (UAE Donors, 2007) state that a blood donor can be of 18-60 years of age. However, they also state that you cannot

donate blood if you have undergone any major surgeries recently and if you take medication for heart or lung diseases. Other restricting factors include; having cancer or if you are taking medications for high blood pressure. Although donors can be of older age, the limiting factors are ones that are mostly to be associated with old age and so one can assume that most donors would be of young age. This assumption is supported by the findings of Abdel Gader et al. (2011), the results from their research sample have shown that 31% of the non-donors from the sample were ineligible to donate due to age. Therefore we can assume that age is a distinguishing factor between donors and non-donors. Additionally, in the sample researched by Abdel Gader et al. (2011), the donors were mostly of 30 years or younger, hence we can also assume that donors seem to be of younger ages.

#### *Gender and nationality*

Gender and nationality are two other characteristics that could be examined as distinguishing factors to donor and non-donor profiles. Boulware et al. (2002, p. 85) state that, “Both race and gender are important identifiers of those less willing to donate”. Gender also seems to be important to the blood recipient, Al-Drees (2008) found that, most of his sample which included both males and females preferred receiving blood from a female, due to the belief in Saudi Arabia, that it is more likely for a male to acquire a transferable disease than a female. Thus in Saudi Arabia, based on the sample examined by Al-Drees (2008), we can see that gender is an important factor in blood donation. Additionally, Al-Drees (2008, p. 77) states that, “It has been reported that age, race and gender are important identifiers of those less willing to donate”. The figures derived from his research also support this statement as he found that donors were more likely to be male than female. Likewise, Chliaoutakis et al. (1994, p. 1461) state from their research that “Donors were more likely to be men than women”.

#### *Knowledge and Education level*

The knowledge and education level of blood donation is another factor that could distinguish donors from non-donors. Most likely, individuals with a higher knowledge level of blood donations would be donors, whereas less knowledgeable individuals are more likely to be non donors. Abdel Gader et al. (2011) claim that education is a key factor in the formation of beliefs regarding blood donation. However, they have also found that despite overall education

influencing perceptions regarding blood donation, the field of education is not relevant. For example, a background in science or scientific education is not relevant but overall general education is a key factor. Abdel Gader et al. (2011) have also reviewed research conducted in Spain; the research findings showed that non donors had a less positive attitude towards blood donation, but that this could be altered by educating and increasing knowledge levels regarding blood donation. Based on these findings, it could also be proposed that education and knowledge level could also affect whether an individual decides to donate blood as well as the frequency of donations. Donors are more likely to donate blood more regularly due to their higher knowledge level and acquired comfort with blood donation.

On the other hand, the lower knowledge level of non donors would probably cause them to donate more rarely than donors if ever. Similarly, awareness regarding the eligibility guidelines and conditions under which an individual can or cannot donate blood can also serve as distinguishing factors of donors and non donors. It is more likely that individuals who are more knowledgeable about blood donation conditions will be donors. Chliaoutakis et al. (1994, p. 1461) support this factor by stating that “blood donation (40.8% of the study population) was found to be correlated with gender, place of birth, occupation and knowledge about donation.” Additionally, Abdel Gader et al. (2011) have also found that participants in their study were aware of frequencies of donation; and most stated that they would donate blood six times per year. This indicates a high knowledge level, as it is the maximum number an individual can donate blood per year. Additionally, Al Drees (2008, p. 78) states that “It is surprising to find that participants in the current study were not well informed about blood supply in blood banks and blood donation and blood transfusion in general.” Again indicating the possible relation of awareness level to blood donor profiles.

Other awareness and knowledge related issues are those relates to fear and safety concerns regarding blood donations. Regular donors most probably find from experience that blood donation is safe whereas non donors would be suspicious of the procedure. Al-Drees (2008, p. 74) claims that, “88.5% of the people who participated in the study believed that blood donation was not harmful, 20% of them stated that they would refuse blood transfusion even if they were in need because of the risk of acquiring infectious disease.” Moreover, “11.5% of the participants

in the current study believe that blood donation is harmful to the donor.” Hence, fears and confusion regarding blood donation can discourage individuals not only from donating blood but even from receiving blood. Al-Drees (2008, p. 75) also states that “Therefore, attitude, beliefs and level of knowledge associated with blood donation may discourage donors from giving blood.” Hence, perhaps the knowledge level and awareness affects the overall attitude towards blood donation, donors are more likely to have a positive attitude while non donors are more likely to have a negative attitude towards blood donation.

### *Donor type*

Another important factor that could be examined to distinguish donors is the type of donor. Al-Drees (2008) has identified four different types of donors through his research, these include direct donors, volunteer donors, paid donors and autologous donation. Direct donors, as mentioned previously are donors who are directly called upon by the recipient of blood, these are usually friends or family members. Paid donors are those who receive a fee for donating their blood, while voluntary donors are those who donate their blood out of their own willingness. Autologous donors are those who donate their own blood for their own use in the future. From the literature reviewed, it seems that most donors would be either direct or voluntary donors. Al-Drees (2008, p. 76) has found some insight to why direct donation is the preferred method in Saudi Arabia, he states that “The majority of the sample 84.5% preferred the donor to be a direct donor either a family member or a friend to eliminate the risk of acquiring infectious disease. In addition, 49% of sample stated that they would accept blood transfusion only from a relative.” Hence it can be assumed that donors who regularly donate blood to friends/relatives would be direct donors as they are donating blood because they want to help a friend/relative in need. On the other hand, voluntary donors are those who donate because they want to help anyone suffering from a disease in general, not necessarily a friend or family member. Abdel Gader et al. (2011) have also identified the donors of their research as both voluntary and direct donors, with voluntary donors being the most common type in the study.

Chliaoutakis et al. (1994, p. 1461) have conducted research regarding blood donation in Greece, another country where Thalassemia is a prevalent blood disorder. They state that blood donation is needed due to “...the high frequency of Thalassemia and to the high rate of traffic accidents.”



Thus their findings regarding blood donor behaviour could be of great use when studying blood donor profiles. They examine gender, birthplace, occupation, knowledge and the affect of emotions as factors that characterize donors. In regard to these factors, they have found that men are more likely to donate than women and that men from urbanized places were more commonly blood donors. Chliaoutakis et al. (1994, p. 1464) also found that “Students, military recruits and the unemployed were more likely to be donors than scientists and professionals”. In regard to the knowledge factor, they conducted a questionnaire that examined participants’ knowledge regarding blood donation. They concluded that participants who scored higher tended to be often blood donors than those who scored lower. They also examined emotions and found that participants who felt a sense of helping others or a sense of guilt to be “emotionally charged” and that these participants donated blood more often than those who were less “emotionally charged”.

### *Motivating factors*

Reasons and driving factors behind blood donation can also be used to differentiate between donors and non donors. Motivating factors include, a sense of helping others, helping a friend/relative in need, helping the community, obtaining information about one’s own health (check-up) and recognition or rewards. De-motivating factors include pain and stress related to blood donation, poor health conditions, distance or location of blood donation, behaviour/professionalism of blood donation staff and fears such as hygiene and safety of the actual procedure. Al Drees (2008, p. 75) identifies the de-motivating factors with non-donors, stating that “The non-donors group stated that long distance to donation site, transportation difficulty, time commitment, getting a short break from work/office or a time off from home, different fears, mistrust, lack of information and not being approached by anybody to donate were the main factors discouraging them from blood-donation.” Similarly, Chilaoutakis (1994) has also identified fears as a reason behind non donor behaviour. On the other hand, it would appear that donors are more associated with motivating factors and a positive attitude towards blood donation. Chliaoutakis et al. (1994, p. 1463) also state that “As we anticipated, the majority had donated blood on behalf of relatives (195 or 59.1%) or friends (148 or 35%); the rest had anonymously donated (58 or 17%)”. Chliaoutakis et al. (1994, p. 1464) also examine the idea of free health checkups as a motivating factor for donors, and identify “...the free

examinations available upon donation as a positive motivation in blood donation.” Likewise, Abdel Gader et al. (2011) have also examined health related drivers such as free tests and screening as motivating factors. Hence it seems that donors actually correspond to motivating factors whereas non donors are more likely to associate with de-motivating factors.

#### *Preferences to location of blood donation*

Preferences on where to donate blood could also be examined in relation to donor and non donors profiles. Abdel Gader et al. (2011) have found that most participants in their study did not oppose visiting a blood centre themselves to donate whereas, some participants would rather have the procedure conducted by the blood donation staff to be at home or at the workplace. An implication of their study may be that donors will be those who would accept donating at the blood donation centre whereas non donors are those who have a preference regarding the place of donation.

#### *Exposure level*

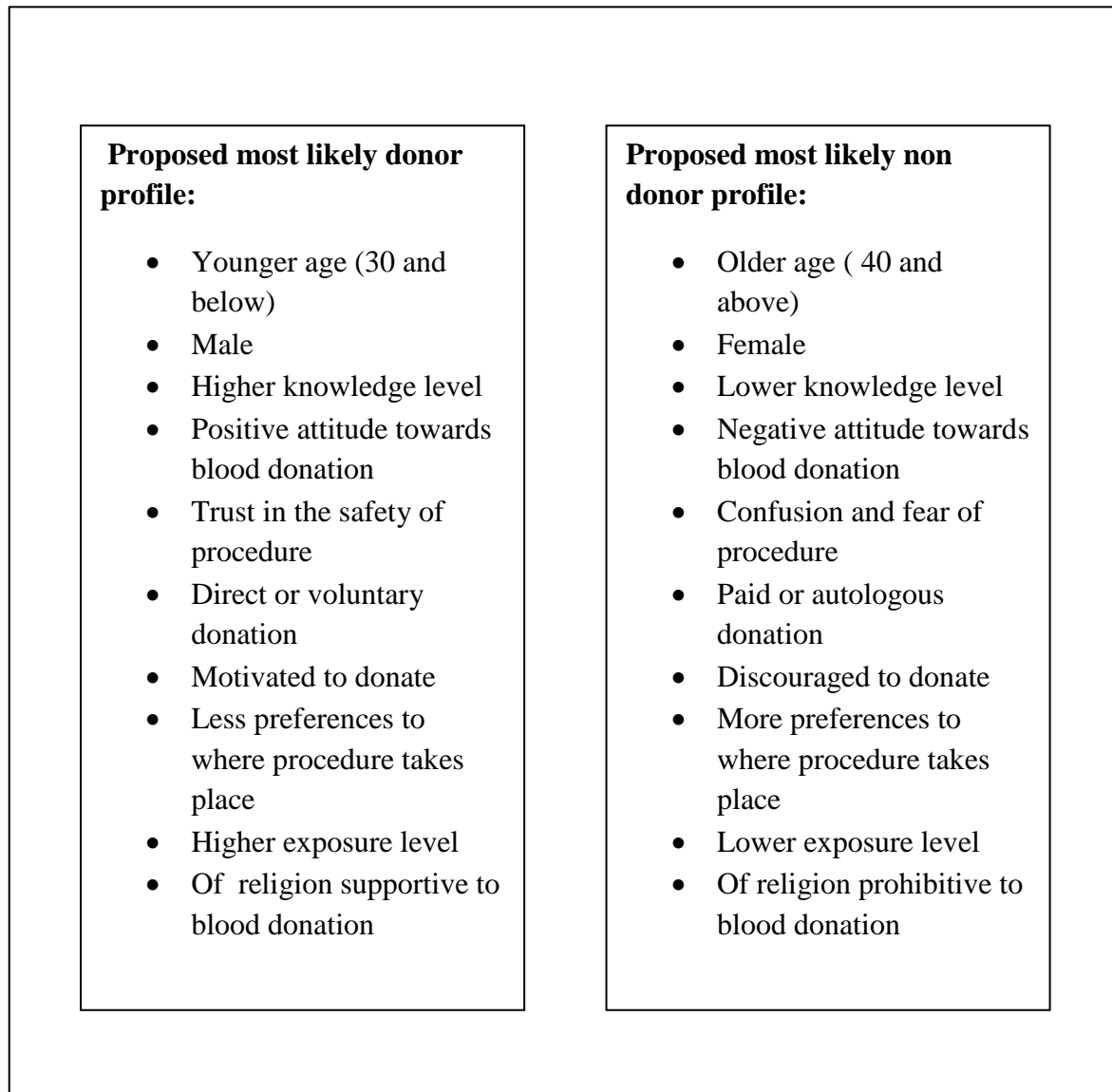
Exposure to blood donation is another factor that can be examined between donors and non donors. Al-Drees (2008, p. 78) found through his study that “The majority of the participants acquired their information about blood donation and blood transfusion from daily news papers and/or TV compared to 14.77% who used the internet as the source of information.” On the other hand, only 1.8% of the sample in the study carried out by Chliaoutakis et al. (1994) were persuaded to donate blood by the mass media. Perhaps, it is proposed, donors will be participants who are more influenced by mass media whereas non donors will tend to be less influenced by the mass media.

#### *Cultural and religious factors*

Lastly, an interesting factor that could be used to identify between donors and non donors are religious factors. Abdel Gader et al. (2011) proposes that religion can either motivate or discourage individuals to donate blood. Individuals of religious beliefs that allow and support blood donation are more likely to be donors than individuals who have religious beliefs that prohibit donating and accepting blood. However, it must also be noted that it is possible that individuals of religions that prohibit blood donation, do donate blood despite their religious

restrictions. The same possibility also applies to individuals of religions that encourage blood donation, it is possible that they do not donate blood even though it is acceptable to their religion.

### **A conceptual framework of donor and non donor profiles:**



**Figure 2A.**

### **3. Literature review – PSF Middle-East: A case study in CSR**

#### **3.1 Brief review of PSF Middle-East**

PSF Middle-East, is a professional services firm that was formed in 1998. It was originally founded in London in the year of 1849 but became known as PSF Middle-East after a series of mergers and acquisitions of partnership firms over the decades.

PSF Middle-East is a limited liability partnership (LLP), and has offices in 158 countries worldwide and operates in 771 locations. Today it is a global corporation known and recognised worldwide, it is mostly known for its accounting and auditing services among many of the other services it provides. PSF Middle-East provides services within three main divisions, Actuarial, advisory and tax. However, the services provided differ in each country. This is interesting as it is consistent with one of the ideas from the CSR literature review, that each country or culture has its own perceptions and needs. Thus it appears that PSF Middle-East aims to cater to the needs of each country it serves individually.

#### **3.2 PSF Middle-East in the Middle East**

PSF Middle-East has been present in the Middle-East for 40 years. PSF Middle-East offices and headquarters exist in twelve middle-eastern countries which include, the United Arab Emirates, Saudi-Arabia, Qatar, Bahrain, Kuwait, Oman, Lebanon, Egypt, Iraq, Jordan, Libya and Palestine. These offices employ approximately 2,500 people and offer a range of services, including insurance and audit, consulting, deals, family business and tax. Industries that PSF Middle-East cater to in the Middle-East consist of, banking and capital markets, insurance, real estate, health industries, financial services, telecommunication, manufacturing, transportation and logistics, energy utilities and mining, government or public services and Islamic banking.

### **3.3 PSF Middle-East in the United Arab Emirates**

The UAE is one of the fastest growing countries in the Middle-East with one of the highest GDP growth rates in the region. On the PSF Middle-East website, it is described as “...one of the best examples in the region of an economy that has moved away from a reliance on the energy sector. Initially driven by Dubai, and more recently Abu Dhabi, a significant proportion of the GDP is being derived from non-oil revenues.”

In the UAE, PSF Middle-East offers similar services to those provided globally and throughout the Middle-East. The services include auditing, insurance, taxation and business advisory services.

### **3.4 PSF Middle-East and CSR**

Being a globally recognised firm, it is only natural that PSF Middle-East has been active in CSR. As stated on the PSF Middle-East website, “PSF Middle-East is a leader in both the conceptual and practical aspects of corporate responsibility. Every year across our network of firms, thousands of PSF Middle-East people volunteer their time to support community programs, contribute their professional expertise to not-for-profit organisations, and help mobilize various business coalitions that address local needs.”

Mel Wilson, associate partner of Sustainable Business Solutions at PSF Middle-East, states that “There is a growing global awareness and demand for business to demonstrate commitment to CSR and sustainability.” According to Ellinor (2006, p. 8), PSF Middle-East’s focus on CSR has saved the firm £1.5 million in the year of 2006. Ellinor (2006, p.8) also states, “Iain Jackson, Head of Sourcing at PSF Middle-East, said CSR should be treated as an opportunity and not a threat”. And that “ It’s an increasingly important subject for corporate and customers alike.”

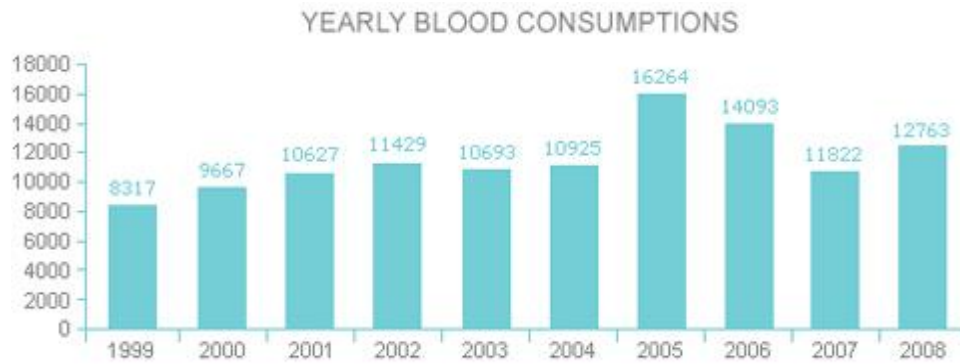
Ellinor (2006, p. 8) also states, “When asked what PSF Middle-East’s CSR policy costs the firm, Jackson replied: “The cost saving to us of having corporate responsibility policies this year is about £1.5 million, so it’s making us money.” According to Jackson, the motives of PSF Middle-

East adopting CSR are, meeting consumer expectations, better reputation and a great working environment. Hence it seems that PSF Middle-East has a “modern” or “broad” perspective on CSR. PSF Middle-East seems to acknowledge and understand that CSR pays off in the long run both financially and socially.

### **3.5 Thalassemia in the UAE : A PSF Middle-East case study on CSR**

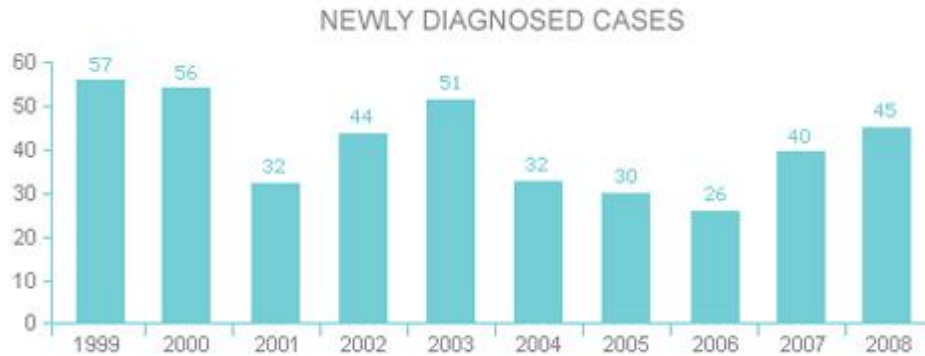
Thalassemia is a rapidly growing blood disorder in the UAE. It is especially common in Asian, Middle-Eastern and Mediterranean countries. It is a genetic blood disease which causes abnormalities in the haemoglobin of red blood cells, this leads to defects which cause the blood disorder. There are two main types of Thalassemia, Alpha Thalassemia and beta Thalassemia. A patient suffering from alpha Thalassemia does not have enough alpha protein whereas, people with beta Thalassemia do not have enough beta protein. Beta Thalassemia is the most common type of Thalassemia found in the UAE (Dubai Thalassemia Centre, 2010).

According to the Dubai Thalassemia Centre (2010), “ It is known that over 3-5% of people throughout the world are carriers of Thalassemia mutation. In the UAE , the carrier rate for Thalassemia is over 8% .” Similarly, according to Abdulrazzaq et al. (2005, p. 183), “The thalassemias are the most common genetic hemoglobinopathies in the United Arab Emirates and are found in a broad belt stretching from the Mediterranean basin to India and the oriental countries.  $\beta$  thalassemia is most prevalent in Italy, Greece, Cyprus and Malta. It is also common in the western part of Africa, Turkey, Iran, Syria, the Gulf countries, India and Pakistan. In the UAE, the gene frequency for  $\beta$  thalassemia is 8.3% ” This emphasises how common the disease is in the UAE, and how it is significantly related to the blood donation initiative. The high amount of Thalassemia patients in the UAE will always be in need of blood transfusions and so a regular and healthy blood supply is essential.



**Figure 3. Yearly Blood Consumptions** (Dubai Thalassemia Centre,2010)

This figure illustrates the yearly blood consumptions based on the Dubai Thalassemia centre patients. There is a clear increase in blood consumption from the year 1999 to 2005, after 2005 the blood consumption levels decline but peak again towards 2008. Thus, in general it appears that the blood consumption levels increase by time.



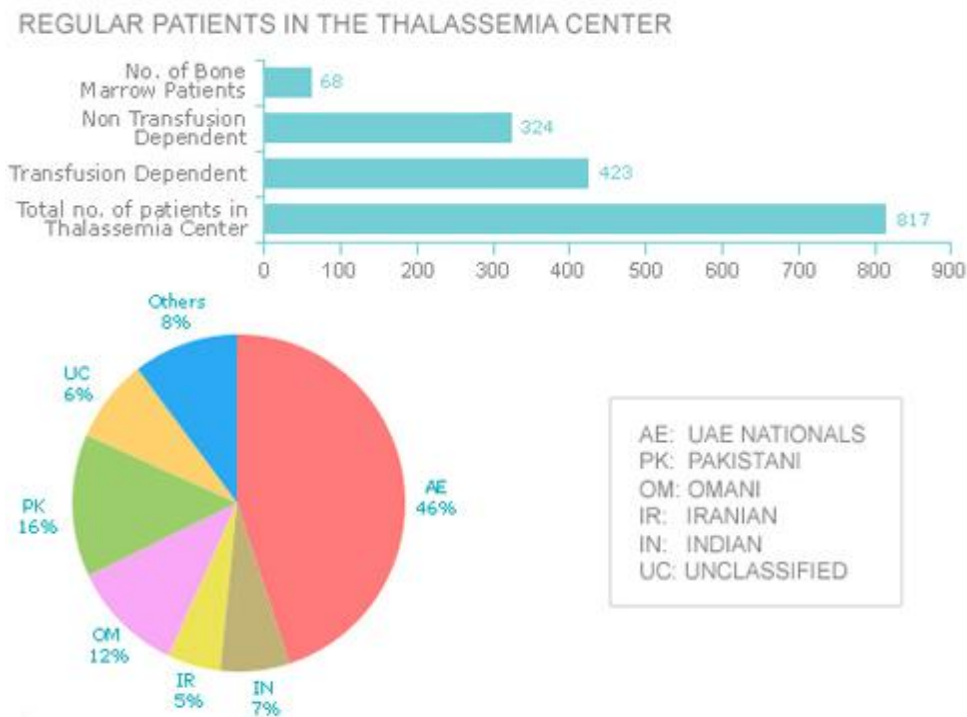
**Figure 4. Newly Diagnosed Cases,** (Dubai Thalassemia Centre,2010)

This diagram shows the yearly number of newly diagnosed Thalassemia cases in Dubai. There is no obvious correlation to this graph, the number appears to peak then decline and peak again. However, there seems to be a lower number of patients in recent times than earlier times. Perhaps this could be due to increased awareness after the year of 1999.



**Figure 5. Yearly Admissions, (Dubai Thalassemia Centre,2010)**

We can see that there is a clear increase in the number of yearly admissions to the Dubai Thalassemia centre of the years. This emphasises that Thalassemia is a prominent disease in the UAE and that blood drives contributing to the disorder are very valuable.



**Figure 6. Regular Patients In The Thalassemia Centre (Dubai Thalassemia Centre,2010)**

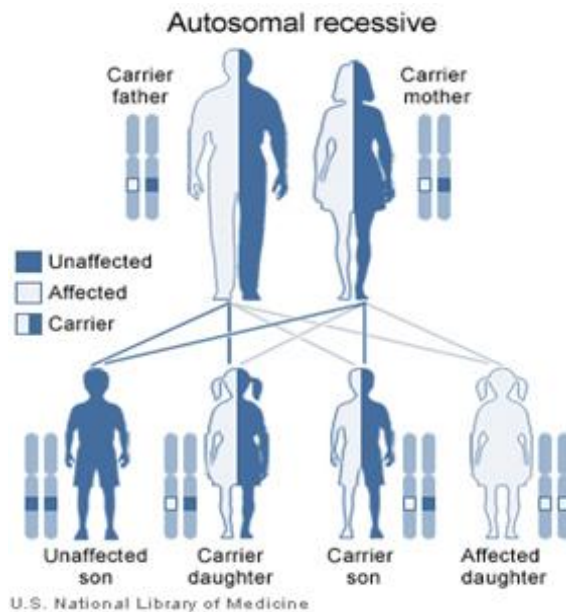
This figure illustrates the many nationalities of the Dubai Thalassemia Centre patients. It also shows the number of patients who depend on transfusions. In comparison to the non transfusion dependant patients the number of transfusion dependant patients is almost higher by a 100 patients. This again emphasizes the need and vitality of blood donations to the centre.

According to the Dubai Thalassemia centre, “The Thalassemia are inherited disorders of haemoglobin (Hb) synthesis. Their clinical severity varies widely, ranging from asymptomatic forms to severe or even fatal entities.” (The Dubai Thalassemia centre ,2010). This statement



helps others understand that there is a range in the severity of the diagnosis. The centre also explains the different cases of Thalassemia patients, there are three types of diagnose:

- “BETA THALASSEMIA MINOR : If one of the genes responsible for the production of beta globin is defective it produces beta-thalassemia trait, also called beta-thalassemia minor. As this is asymptomatic it remains unrecognised in a family for a number of generations. The beta thalassemia trait individuals are normal healthy people, leading a normal active life.
- BETA THALASSEMIA MAJOR : When a beta thalassemia trait (in whom only one gene is defective) marries another beta thalassemia trait then a child can be born with two defective genes for the production of beta globin chains.
- BETA THALASSEMIA INTERMEDIA is a condition intermediate between the major and minor forms. Affected individuals can often manage a normal life but may need occasional transfusions e.g. at times of illness or pregnancy, depending on the severity of their anemia.”



**Figure 7. Autosomal Recessive** (Dubai Thalassemia Centre,2010)

Figure 7 shown above, illustrates how Thalassemia is passed on by carriers through marriage and birth. There are carriers of Thalassemia that can live unaffected, however, if not diagnosed and a carrier marries another carrier, the children they bear can be diagnosed with a more severe case of the disorder. There is a 25 % chance that a child born of two carrier parents will be diagnosed with Beta Thalassemia Major. This more severe diagnosis results in anemia, leading to a life-long regime of monthly blood transfusions. However, as vital as the blood transfusions are to Thalassemia patients health and survival, side-effects also exist due to regularity of transfusions such as iron accumulation which can occur and be harmful to the body and organs.

The Dubai Thalassemia centre (2010) also explains that the carriers of the Thalassemia gene, can lead a normal life and don't need treatment unless they have deficiencies in iron. However this is not the case with Thalassemia patients, who need regular blood transfusions; "Patients with severe Thalassemia require medical treatment, and a blood transfusion regimen was the first measure effective in prolonging life, it was found to provide patients with many benefits, including reversal of the complications of anemia, elimination of ineffective erythropoiesis and its complications, allowance of normal or near-normal growth and development, and extension

of patients' life spans.” This emphasises the importance and severity of Thalassemia on human life, patients need blood transfusions roughly every three weeks depending on their case. According to Thalassemia.org (2011), patients need a substantial amount of blood yearly; “While Thalassemia patients were given infrequent transfusions in the past, clinical research led to a more frequent program of regular blood cell transfusions that has greatly improved the patients' quality of life. Today, most patients with a major form of Thalassemia receive red blood cell transfusions every two to three weeks, amounting to as much as 52 pints of blood a year”.

Therefore, blood is crucial to a Thalassemia patients life and to society. Al Drees (2008, p.74) states that, “Donated blood can be lifesaving for individuals who have lost large amounts of blood because of serious accidents, civil and military conflicts, widespread tragedies or surgery, as well as, for individuals who have become severely anemic or have dangerously low platelet counts because of certain hematological diseases such as sickle cell anemia or treatments such as cancer therapy.” This statement illustrates the importance of blood donation not just to Thalassemia but to the blood donation needs of society as a whole.

Awareness itself is another aspect that could aid in the prevention of the Thalassemia disorder in the UAE. Carriers of the gene who are aware of their condition , have the opportunity and chance to know that a child with another carrier could result in a child with Thalassemia, and so this can be considered when decisions are made.

## **4. Research Methodology: PSF Middle-East Thalassemia project case study**

### **4.1 Thalassemia Project 1: Description of the purpose and evolution of the project**

The literature shows that CSR is indeed active in MENA countries even though it is less developed. It has shown that the level and type of CSR varies from country to country. However, the practice level of CSR in general is lower in developing countries than in developed or western countries. Philanthropic and ethical activities seem to be the most popular type of CSR activities in MENA countries. In the Middle-East in particular, blood donation is a popular example of a philanthropic CSR activity that is being undertaken by many corporations as part of their regular CSR initiatives.

To carry out research on the topic of CSR projects in the Middle-East or MENA countries, a collaboration with the international organization of PSF Middle-East was established. A meeting was set up with the CSR department of the Dubai-based PSF Middle-East office to work out a potential collaboration that could contribute to the dissertation project as well as to valuable research for PSF Middle-East.

The first meeting was set at the beginning of May, it was mainly regarding what projects in CSR PSF Dubai was undertaking and for what causes. The main initiatives that PSF Dubai contributed to were Thalassemia and breast cancer. I was instantly drawn to the Thalassemia cause as it is a very common disorder in the UAE. It is one of the most common diseases among the UAE; one in every 12 people carry the disease. There was to be a blood drive on the 26<sup>th</sup> of May at PSF Middle-East to collect blood donations for Thalassemia patients. The Thalassemia cause was chosen to be a potential topic of research in CSR initiatives of PSF Middle-East, and so it was decided that research on the Thalassemia initiatives in the UAE as well as CSR in the UAE should be conducted prior to the next meeting.

## **4.2 Methodology: The evolution of the Thalassemia project**

Due to the high amount of blood required by Thalassemia patients to live a healthier life, it seemed that a collaboration with the Dubai Thalassemia centre and PSF Middle-East would be extremely beneficial to the patients as well as PSF Middle-East who were looking to make blood drives a regular CSR initiative at their offices.

About a month later, the second meeting with the CSR department at PSF Middle-East was held. It was initially planned to have completed the required research on the cause and CSR before the blood drive of May 26th so that the findings could be of use to PSF Middle-East prior to their blood drive, however it took longer than expected to setup a meeting with a specialist at the Thalassemia centre in Dubai and so unfortunately the research was completed after the blood drive date.

During that time, the Dubai Thalassemia Centre and the CSR Arabia network were contacted. The Dubai Thalassemia Centre is the first centre of its kind in the Middle-East and the only Thalassemia centre in the GCC region. Due to the increasing number of Thalassemia cases in this region especially; it seemed that the collaboration with the centre would be a great opportunity for PSF Middle-East to undertake another CSR activity relating to Thalassemia. It is a very prominent issue in the region and so continual support for this cause can greatly contribute to alleviating the problems.

A one hour interview was conducted with a Thalassemia specialist at the Dubai Thalassemia Centre. From the meeting, very valuable information regarding the disease itself as well as how to coordinate events and how collaborations are set up with interested organizations for CSR was obtained. From the interview, it was concluded that the centre would be very interested in a collaboration with PSF Middle-East, and that there were many options or ways to collaborate. Options included financial and non- financial support in the form of blood-drives or awareness campaigns although financial support was greatly emphasised as many patients need bone-marrow surgeries which are very expensive. Thalassemia patients also need costly regular medications and so financial support would be a major contribution. It also gives the centre a

chance to spend the funds on what is needed for patients. This was an important point, as the centre would naturally be the most aware of exactly what funds were needed to support the patients and centre.

Moreover, it was also understood that the collaboration can be established through meetings offered by the centre to undertake education seminars or visits. These might be either at the centre or a specialist visiting the organisation/firm or an exchange of both, as well as MOU's between the parties; partnerships such as exclusivity for one year or events. Collaborations can also be developed based on moral support; employees can volunteer to visit patients and provide emotional support or donate financial support (cheques etc.) and companies can volunteer to offer jobs, training, and scholarships to patients.

After the meeting, there was a better understanding of the disease and how a potential collaboration could be created with PSF Middle-East.

### **4.3 Potential CSR Thalassemia Project in a Big 4 Accounting global partnership firm.**

This section presents an account of the alternative ideas proposed to PSF Middle-East and what was agreed upon.

- Fund- raising event hosted by PSF Middle-East, perhaps clients of PSF Middle-East can be invited to participate in the event to raise funds for Thalassemia; they can even be invited to donate funds. The centre can use the funds raised as needed, it usually also holds an event at the centre whenever funds or services are donated to the centre in the name of the organisations as a sign of appreciation. The event is also published on their website and also involves media coverage. I believed this would be a highly appropriate option as it involves the last two points mentioned above and could also eventually lead to a mutual relationship between PSF Middle-East and the DTC. The event can be focused on collecting funds for general use for the Thalassemia cause or it can concentrate on raising funds for specific

aspects of the Thalassemia disease. For example: funds for medicine supply, funds for operations, funds for trips etc.

- Event hosted by PSF Middle-East to raise awareness for Thalassemia. Awareness is crucial to preventing the disorder from spreading. This is another strong aspect of the Thalassemia cause. Clients of PSF Middle-East can be invited to participate in the event. Perhaps a seminar might be conducted by someone from the centre and donations could follow. This would be a good way to support the cause as it creates awareness and hopefully prevents an increase in future cases, and at the same time directly assists the current patients through donations.
- A Blood-drive for Thalassemia. I learnt that this had already been implemented recently by PSF Middle-East to help Thalassemia patients. Yet, for this cause there can never really be enough blood drives. Perhaps the next blood drive could include more people, or it can be another blood drive and promoted to beat the last blood drive's number of donations? This would make it more motivating in a way, as it can be a driver to beat the last blood drive's score. Clients of PSF Middle-East can also be invited to join and make the event even larger and support the cause.

In collaboration with the centre, it might be possible that the centre could also invite their contacts to any of these events or activities. A mutual relationship could be established between PSF Middle-East and the centre to support the Thalassemia/blood donation cause.

On the other hand, The Arabia CSR network is a network that has been created to focus on efforts towards CSR in the Middle East. It is a network that organizations can join through requesting a membership proposal. Unfortunately, the details of the proposals could not be obtained as an individual is not eligible to view the contents of the proposal, however organizations would get a document stating the membership details and benefits. The membership requires an annual fee of AED 20,000 and involves publicity for the organisations' support.

Prior to the meeting, details regarding the findings and information collected from the Thalassaemia centre and the Arabia CSR network were emailed to the contacts at PSF Middle-East. An email reply was received expressing interest and so the meeting was arranged to discuss the findings and exchange ideas ( see Appendix 1, p.143).

As it turned out, PSF Dubai was already in contact with the blood donation centre in the same hospital in which the Thalassaemia Centre was based. The blood centre would take the blood donations from the PSF Middle-East event and distribute it to any hospitals that needed blood for Thalassaemia. The Thalassaemia Centre only caters to Thalassaemia patients and so the blood would directly be used for patients in need that come to the centre. However, since PSF Middle-East already had an established relationship with the blood donation centre, and had already collaborated with them for the previous blood drive they were not interested in collaborating more exclusively with the Thalassaemia Centre. PSF Middle-East seemed interested in the seminars that the Thalassaemia centre can provide but again they already had an established relationship with the other centre and so it was understandable that this idea wasn't particularly appealing, especially that they had already had a very successful event with the blood drive held on the 26<sup>th</sup> of May.

The PSF Middle-East contacts were also not interested in becoming immediately more involved with the Arabia CSR network; the annual report was presented to them and the work of the organization in general was explained. During the meeting some ideas were exchanged and I asked about the previous event which was very successful with 81 donors, I also asked about what the employees/donors thought of it and it turned out that they had meant to ask for feedback but still hadn't done so and so it was proposed to create a feedback programme for the blood drive that was held.

After the meeting with PSF Middle-East, it was concluded that blood drives were the preferred method of contribution to the Thalassaemia cause. In a way, donating blood over financial support is more important to this cause, as there is no substitute for the blood that is continually needed by patients of Thalassaemia. It was concluded that PSF Middle-East already has an established relationship and collaboration with the blood donation centre and so the Thalassaemia Centre



would not make much of a difference, especially since the last event was so successful. It was agreed to pursue the feedback programme regarding the PSF Middle-East blood drive of the 26<sup>th</sup> of May.

#### **4.4 PSF Middle-East Blood donation feedback programme project**

The feedback project, as agreed in the previous meeting with PSF Middle-East, consisted of creating an online survey that would enable the employees to express their thoughts on the previous events, as well as provide feedback to the CSR department that organised the event. This method of data collection was proposed by the PSF Middle-East contacts as it would be more easily accessible to employees if an online survey could be sent to them via email. It was also proposed to create an online link that would facilitate the feedback process.

This review would enable the department to consider the feedback when setting up the next event. The type of questions that PSF Middle-East would want to ask employees were discussed. Most of the questions discussed at the meeting were related to the event and how it was experienced by each employee as well as how it could be improved. The survey was intended to be aimed at all employees, not just employees who took part in the event so PSF Middle-East could find out why some employees did not participate and if they would the next time.

It was preferred for the survey to be quick and accessible, and it was requested to be ready before June 14<sup>th</sup> which would be the international blood donation day and it was thought appropriate and fitting to circulate an email to the PSF Middle-East employees with a link to the survey on that day.

An online survey was created that consisted of 14 questions and included some general questions such as age, gender etc (see Appendix 2, p.147). As agreed at the meeting, a draft of the questionnaire was sent to the CSR contacts at PSF Middle-East so that they could check it and decide if it was appropriate. The online survey was reviewed and a minor adjustment was requested. It was amended and the survey was later sent out to all employees at PSF Middle-

East. A few responses to the survey were obtained at the beginning and later increased but resulted in only 21 responses.

As soon as the link to the survey was sent out one response was received, which was followed by a few more within the next few days. Eventually 21 responses were collected in total, which seemed to be a low number of responses compared to the sample of 81 employees who took part in the event and so a gentle reminder was sent out for employees to complete the survey.

After two weeks had passed with no increase in responses, another reminder was sent out by Mr. Roberts to the employees on the 28th of June. After a few weeks it became apparent that no more responses to the survey would be obtained.

#### **4.4.1 Further developments with PSF Middle-East.**

On the 11th of July, I received an email from Mr. Roberts of PSF Dubai, it was suggesting that we extend the questionnaire to PSF Egypt and Saudi Arabia who had also recently run blood donation campaigns. It was suggested to contact PSF Egypt, to ascertain whether the questionnaire was appropriate for use in their offices as well. Due to the relatively low response rate of the questionnaire, this was a great opportunity for the dissertation research study to try to obtain more responses. PSF Egypt was contacted immediately and the questionnaire link to the blood drive feedback questionnaire created for PSF Dubai was sent. (See Appendix 3 for the record of the emails, p.152)

A few days later, an email from Juliette Legrande, health promotion manager at PSF Egypt was received. Ms. Legrande had received my contact details from Mr. Roberts from the last email. The email expressed an interest in collaborating and explained the initiatives and projects being undertaken by PSF Middle-East in relation to CSR. The email explained and introduced a PSF Egypt initiated project titled, “The Triple Effect Project”. It is a health promotion and blood donation program that has been created to raise awareness and provide solutions for blood safety and availability. It has been designed to educate donors and potential donors on living a healthy

lifestyle that would enable them to donate blood regularly. Below is a more detailed account on the Triple Effect CSR initiative presented by PSF Egypt:

### **“The Triple Effect”**

“The Triple Effect is a blood donation and health promotion program initiated by PSF Egypt. The project aims to seek solutions and works towards the common objective of regional blood safety and availability. The Triple Effect uses the power of 3:

- 1.) **Recruitment and retainment of regular, unpaid blood donors;** the safest source of blood donors. The program aims to spread the word, how 1 donor can save up to 3 lives, and can motivate 3 of his friends to donate, who can together save up to 27 lives (Triple the impact!).
- 2.) Empower employees to manage their health by providing them **healthy lifestyle** sessions. This will help them in becoming sustainable, healthy, regular safe blood donors.
- 3.) Encourage employees to become an **active citizen** by taking control over their own lives and collectively make a **strong impact in the society.**”

Hence, In order to design a good blood donation campaign, the team at PSF Middle-East started conducting research to find out the perceptions of people regarding blood donation, their knowledge level of blood donation, and to find out what would motivate or discourage people to donate blood.

The research on perceptions of blood donation was started by data collection. The primary data collection method was in the form of conducting interviews, but this appeared to prove inefficient and so it was discontinued. The idea of the online questionnaire that was created for PSF Dubai appealed greatly to the team at PSF Egypt. However, the original questionnaire created for PSF Dubai was regarding feedback on the blood drive campaign that was run earlier in the year at their offices, whereas the contacts at PSF Egypt were more interested in collecting

data on perceptions of employees on blood donation. However, it was felt that data on the perceptions of PSF Middle-East employees would lead to a better understanding of what could motivate employees to be regular blood donors, as well as contribute to the “Triple Effect Project”. Expanding this project regionally and globally is also an objective for the team at PSF Egypt.

#### **4.5 Project 2: PSF Middle-East employees blood donation perceptions feedback programme.**

It became apparent that PSF Egypt was actually looking for a student who could use this project for a study or research project and so it was a valuable opportunity. It was requested that the original questionnaire was combined with some new questions on blood donation perceptions or that a new questionnaire be designed to collect data on the perceptions of PSF Middle-East employees regarding blood donation should be created. It was still to be an online questionnaire that could be accessible to the PSF Middle-East employees via email. It was also requested to provide and share with PSF Middle-East a summary of the results or a small thesis on blood donation in Egypt and the region. The collaboration with PSF Egypt was accepted and a new questionnaire was created. The collaboration, it was agreed, would contribute towards this dissertation research as well as the PSF Middle-East initiative.

PSF Egypt also had plans that the questionnaire would later be shared with PSF Dubai and PSF Saudi Arabia if they decided to participate. This extended the scale of research immensely as the potential number of respondents to the questionnaire would increase substantially. This would provide a deeper understanding and more reliable results regarding the perceptions and knowledge level of PSF Middle-East employees on blood donation, , as well as a greater insight to the motivating and de-motivating factors in this region.

The questionnaire and results would also provide valuable information to the PSF Middle-East offices planning to run blood drives. The information gathered from the data could be used when setting up blood donation campaigns and make a contribution to the “Triple Effect Program”.

Firstly, a Skype meeting with the Juliette Legrande of PSF Egypt was organised. The meeting occurred on the 2<sup>nd</sup> of August 2011. This was the first meeting to discuss how to proceed with the new questionnaire and research. The course of goals and action plan was discussed, an account is presented below:

The action plan at the time was set as follows:

- 1.) Ms. Legrande drafts a new questionnaire, sends it to the researcher on the 3rd of August.
- 2.) Researcher adjusts questionnaire and gives feedback.
- 3.) Meet again on the 5th of August to define the new questionnaire together and send it to the CSR regional managers for approval.
- 4.) Ms. Legrande identifies the CSR/HR managers of the other PSF Middle-East offices to contact.
- 5.) On the 14th of August or earlier Ms. Legrande starts approaching other PSF Middle-East offices and sends out an email about the research and the Triple effect project. Follow-up with phone calls.
- 6.) Researcher creates the new online questionnaire, so it can be launched online at the latest on the 21<sup>st</sup> of August.
- 7.) As soon as the approval is obtained the questionnaire is to be launched.
- 8.) Follow up with the regional offices and reminder emails sent.
- 9.) Provide other regional offices with Triple Effect material.
- 10.) Close the questionnaire at the end of September.

11.) Start analyzing the data and deliver a small report by mid October.

The action plan was implemented except for the dates; unfortunately the set dates were delayed by more than a month mainly due to the decision to delay launching the questionnaire until the end of the summer as many employees were away, it is also worth noting that this was during a time of political unrest in Egypt. It is also happened that Ramadan was in the middle of this summer, so it made more sense to wait till after Ramadan when a more enthusiastic response would be expected as this can be a tiring month for some employees. Additionally, the time needed to gain approvals also contributed to a delay in the schedule that was originally planned. It was later decided to now extend the scale of questionnaire again by including the other Middle-East based PSF Middle-East offices; again the initial scope of the dissertation project was significantly increased.

Over the next week the new questionnaire was developed. This questionnaire consisted of 12 questions regarding the perceptions of PSF Middle-East employees on blood donation (see Appendix 4, p.155). A PSF Middle-East confidential report was also reviewed for inspiration and ideas regarding the questions. It was decided to design the questionnaire with open text boxes to allow the participant to give as much feedback as him/her needed and as possible, it was also thought that it would give more insight than other formats. However, after developing this questionnaire, it was checked by the supervisors, who suggested it to be changed to a multiple choice format. The suggestion was based on the belief that employees may not participate fully or be reluctant to participate because of the text box format of the questions. They might regard it as too time-consuming and hence not respond to the questionnaire. It was then agreed upon that the multiple-choice format seemed to be a better idea as it would be less time-consuming for employees. Additionally, based on the low response rate of the previous questionnaire that created for PSF Dubai, it was concluded that the text-box format might have discouraged employees from participating. It was decided that the employees would most probably be more comfortable with the multiple-choice format as is it faster and easier to complete than a text-box based questionnaire.

Hence, the original questionnaire was generally approved but the format needed to be changed from text-box responses to multiple-choice responses. Again, the PSF Middle-East confidential report was reviewed when editing the original questionnaire, there were now 15 multiple-choice questions on the perceptions of PSF Middle-East employees regarding blood donation. (see Appendix 6, p.162). Additionally, some changes and updates to the regional letter and introduction to the questionnaire were made.

Thereafter, the questionnaire was checked again but still not approved. It was updated again to consist of 17 multiple choice questions that would cover the areas of background information, knowledge level of blood donation, attitude towards blood donation, motivational factors and means of exposure to blood donation (see Appendix, 7, p.166).

After reviewing this version with Ms. Legrande and my supervisor, it was decided to add four more questions to improve the questionnaire's coverage on the means of exposure and motivational factors. Thus, two more questions were added to the means of exposure section as well as to the motivational factors section. At this point the questionnaire could now be subdivided into five areas.

<b>Section/Area of questionnaire</b>	<b>Questions</b>
Background information	1, 2, 3, 4, 5, and 16
Knowledge level/ awareness regarding blood donation	6, 7, 8, and 9
Attitude towards blood donation	10, 11, 12, and 21
Motivational factors	13, 14 and 15
Means of exposure to blood donation	17, 18, 19, and 20

Furthermore, it was also decided to add a small text box for some questions to facilitate further comment as well as an option given to allow participants to choose more than one answer to some questions. These are indicated with a "Please tick all those items that apply" caption after

the question. Question 19 is given as an example below which illustrates the new changes, the text box and the “Please tick all those items that apply” caption.

**19.**  
**At which of the following places have you ever been exposed to or learned of blood donation? ( Please tick ALL those items that apply)**

**School**

**University**

**Workplace/office**

**Your community**

**Commercial Centres/Shopping malls**

**Reset**  
**Other (Please fill in below)**

It was decided to add these text boxes to questions, 12, 13, 14 and 19. These are the questions where the participant might have a different answer to give, which was not provided in the multiple choice list. After adding these text boxes the questionnaire link was sent to Mr. Roberts at PSF Dubai for approval. In general, Mr. Roberts approved and supported the initiative but made a few more minor adjustments to the questions. It was requested to reword question 7 which was, “Please select which of the following factors are of importance in the decision if you are qualified or eligible to donate blood?”. It was not very clear and so it was edited to become “Please select any of the following factors that you think would be important in determining whether you are qualified or eligible to donate blood”. Additionally, an “I have not taken part in blood donation before” option was added to questions 12 and 16 as requested by Mr. Roberts. These questions were assuming that the participant had previously donated blood whereas our questionnaire is aimed at both donor and non-donors. “PSF Middle-East” was also added to the options of question 17 which addresses how the participant has first heard of blood donation.



There were also some more updates regarding the regional letter and introduction that is to accompany the questionnaire email to be sent to PSF Middle-East employees of the region.

Thus, the final version of the questionnaire was approved. It consisted of 21 questions which cover five areas that the research aims to examine in relation to the perceptions of PSF Middle-East employees regarding blood donation (see Appendix 8, p.170). It was now planned to be sent across the PSF Middle-East offices of the region. These include PSF Middle-East offices in Dubai, Egypt, Saudi Arabia, Bahrain, Oman, Qatar, Jordan, Palestine, Libya, Lebanon and Kuwait. The questionnaire was sent to 2,500 employees spread over these offices.

#### **4. 6 Research approach:**

Kumar (2005) argues that the course of research of qualitative and quantitative research is similar, but differs in the way data is collected. The author claims that qualitative research uses an unstructured approach to research whereas quantitative research employs a structured approach. The structured approach is more specific, factors of quantitative research, such as sample size and the range of questions are all decided upon. On the other hand, the unstructured approach seems to be more open-ended and questions are less “set in stone” than with the structured approach. Thus quantitative research is more rigid as opposed to qualitative research which is more flexible (Kumar, 2005).

Similarly, Sekaran and Bougie (2009, p. 3) refer to quantitative data as “generally gathered through structured questions”. On the other hand, qualitative data is described as “generated from broad answers...”. Hence, again there is a major difference in the flexibility of the structures of qualitative and quantitative research approaches. Collis and Hussey (2009, p. 7) also describe quantitative research as “highly structured”.

Kumar (2005, p. 17) also identifies differences in the methodology of each approach, arguing that there is an “open methodology” to the qualitative approach and a “predetermined methodology” to the quantitative approach. Additionally, Kumar (2005) also contends that the qualitative approach is generally used for descriptive purposes when addressing an issue whereas

the quantitative approach is mainly used to quantify an issue. The variables are classified in quantitative research, while qualitative research relies on a descriptive approach to variables. Furthermore, there is a great difference in the sample size of both approaches, quantitative research usually require a large sample whereas qualitative research can be conducted using a smaller sample.

According to Collis and Hussey (2009) there are two paradigms to the process of research; positivism and interpretivism. The positivist approach is more likely to be chosen when dealing with a large sample and aims to produce accurate, quantitative data. On the other hand, the interpretivist paradigm deals with smaller samples and aims to produce descriptive, qualitative data. Saunders et al. (2003) likewise identify positivism and interpretivism as paradigms but also attend to inductive and deductive approaches to research. The deductive approach is similar to the positivist paradigm and represents the same ideas as in quantitative data collection, a rigid structure, large sample sizes and detachment or independence of the researcher from the study. The inductive approach is similar to the interpretivist paradigm, emphasising the use of qualitative data, smaller sample sizes, researchers' attachment to study and flexibility. Generally, we can see that different approaches and paradigms contribute to qualitative and quantitative research.

The preferred research and data collection method for this project is the quantitative approach. It is the most suitable approach when the sample intended is large (Kumar, 2005).

#### **4.6.1 Data collection method:**

The research aims to collect data from a large sample of participants, in this case 2,500 employees are potential participants and so the quantitative approach seems to be the most appropriate. With such a large sample size, it would not be efficient to employ the qualitative approach. Additionally, the research aimed to collect data from a broad geographical area, data is to be collected from PSF Middle-East offices in Dubai, Egypt and Saudi Arabia, Bahrain, Oman, Qatar, Jordan, Palestine, Libya, Lebanon and Kuwait. Hence the quantitative approach is more accessible and practical to this research as it would enable the use of questionnaires. In

summary, this research study is quantitative and positivist, and a survey methodology will be used to collect primary data from the sample, which will then be analysed using statistical analysis software (Collis and Hussey, 2009).

The data gathered through survey included question items on five topics related to blood donation::

- General attitude towards blood donation
- The public knowledge level regarding blood donation
- Motivational factors contributing to blood donation
- Limiting or discouraging factors of blood donation
- Whether there seem to be philanthropic or positive perceptions from the questionnaire in comparison to the literature review findings.

A descriptive survey was used in this study, Collis and Hussey (2009, p. 77) describe this type of survey as “ an attitude survey, to investigate employees views...” In the case of this research, the perceptions of PSF Middle-East employees regarding blood donation are examined and so a descriptive survey, in the form of a relatively short on-line questionnaire was chosen as the most appropriate method of data collection.

Saunders et al. (2003) support the choice of using questionnaire in this case, by suggesting that questionnaires can be used for descriptive research. In this case study the perceptions of PSF Middle-East employees regarding blood donation are examined. Saunders et al. (2003, p. 281) state that “Descriptive research, such as that undertaken using attitude and opinion questionnaires...will enable you to identify and describe the variability in different phenomena.”

The type of survey or questionnaire used depends on the amount of contact the researcher has with the participants (Saunders et al., 2003). In this case, as there has been practically no contact with the participants due to the vast geographical distance between the researcher and

participants, the questionnaire was designed as a “self-administered” questionnaire. According to Saunders et al. (2003), these questionnaires are usually completed by the participants themselves and can be either on-line, postal or delivery and collection questionnaires. Online questionnaires are those which are sent to participants by e-mail or the internet. Postal questionnaires are those which are sent and returned via post whereas the delivery and collection questionnaires are those which are directly delivered to participants and then later collected (hard-copies).

In this case, on-line questionnaires are the preferred choice of questionnaire, as the postal and collection and delivery questionnaire are not so convenient. As the sample of participants is large and spread over a large geographical area, in this case across eleven countries, the on-line questionnaire is the most efficient data collection method. Saunders et al. (2003, p. 284) identifies large and “geographically dispersed” sample size as a key feature of on-line questionnaires. Similarly, Sekaran and Bougie (2009) also identify the facilitation of collecting data from vast geographical areas as a key benefit of on-line questionnaires.

Saunders et al. (2003, p. 283) suggest that on-line questionnaires have the least risk of contamination, stating that, “Email offers greater control because most users read and respond to their own mail at their personal computer (Witmer et al. 1999)” Moreover, the authors note that on-line questionnaires allow the researcher to be distant from the participants and so the responses are more reliable and less likely to be biased. They state that, “Respondents to self-administered questionnaires are relatively unlikely to answer to please you or because they believe certain responses are more socially desirable (Dillman, 2000).” The researcher being more distant might provide more freedom for participants to feel that they can answer the questions honestly and directly.

The online questionnaire distributed to the PSF Middle-East employees, consists of 21 questions regarding perceptions of employees in relation to blood donation. It covers five areas; background information, knowledge level of blood donation, attitude towards blood donation, motivational factors and means of exposure to blood donation. The questionnaire uses multiple choice responses and open text boxes so that the range of closed choices can be more comprehensively answered by participants. The questionnaire is anonymous so that participants

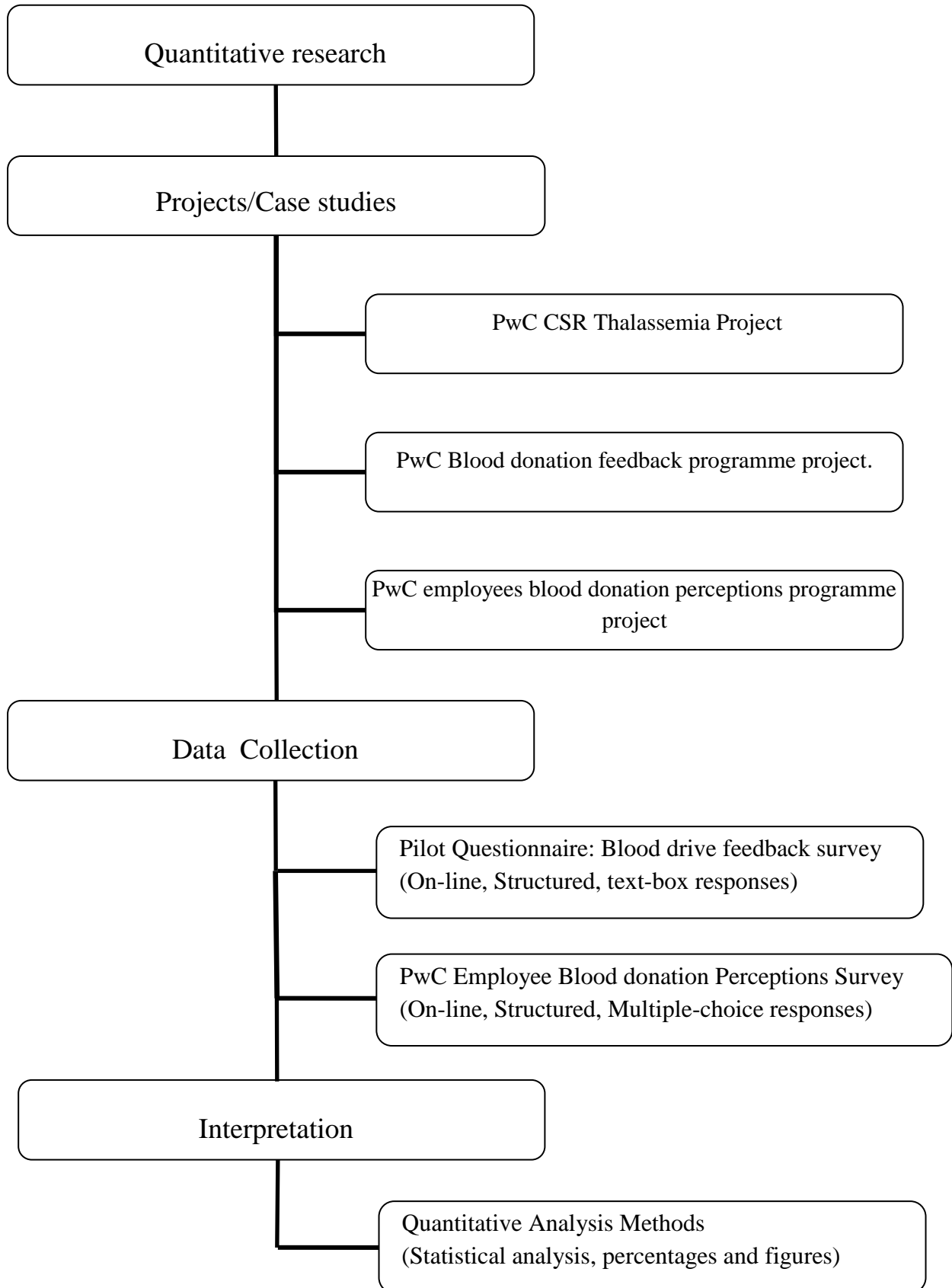
are assured that they will not be identified or penalised based on their perceptions (Collis and Hussey, 2009, p. 45). Additionally, Kumar (2005) emphasises the need for confidentiality to be maintained so that participants are not penalised or face consequences from expressing their views and opinions. The on-line questionnaire was designed to be confidential as well as anonymous, respondents cannot be identified and responses are not linked to individual participants. The results are generalised based on the whole sample and individual respondents are not identified.

#### **4.6.2 Case study methodology:**

Collis and Hussey (2009, p. 82) define a case study as “methodology that is used to explore a single phenomenon”. Moreover, they go on to describe other types that have been identified in the literature, a type that is relevant to this research is the “Opportunist case study”, Collis and Hussey (2009) claim that this type of methodology is used when a researcher has an opportunity to examine a certain issue or case in regard to a specific business or person. In this case PSF Middle-East, presented an opportunity to the researcher, by allowing a case study of blood donation to be examined. Collis and Hussey (2009, p. 82) add that “Although such a study may be limited to just a few aspects of organisational life, results can be extremely simulating and original.” This is due to the uniqueness of a case that the research is enabled to examine. Saunders et al. (2003, p. 93) similarly praise the case study methodology by stating that, “We would argue that case study can be a very worthwhile way of exploring existing theory.”

In relation to this research, as illustrated by the literature reviewed previously, it is the practicality that the quantitative approach provides, in terms of data collection over geographical areas that is essential to this research. It would be very time consuming and costly to collect data from a large sample across these countries using another approach.

### 4.6.3 Summary of Methodology and Data collection:



## **4.7 The expected donor and non-donor profiles studied in the questionnaire**

After reviewing the literature on blood donor behaviour and beliefs, expected donor and non-donor profiles were drawn up in relation to the PSF Middle-East employees' blood donation questionnaire. It was expected that the answers of donors and non-donors would differ. The following typical sets of answers to the questionnaire for donor and non-donors are proposed.

### *1. Age*

As was established in the literature review, age is one of the most distinguishing factors of donors and non-donors. From the responses to the questionnaire I expect most donors to be of the younger age ranges; 25 years or less, 25- 35 or 36 to 45 years. I expect non-donors to be of the older age ranges; 16-55 years or 56 years or more. It is also possible that donors can be found in all age groups, however it is still expected that most donors will be in the younger age ranges.

### *2. Gender*

Gender is another factor that has been identified by researchers to be distinguishing between donors and non-donors. From the literature it is noted that males are more commonly donors than females and so it is expected that most donors will be men. Boulware et al. (2002) have identified gender as well as race as important distinguishing factors of non-donors.

### *3. Nationality*

Regarding nationality or race as distinguishing factors, it is difficult to predict which nationalities are more likely to donate blood and which are not. The majority of studies are more focused on one population or race rather than comparing populations. Hence from studies regarding blood donor behaviour in Saudi Arabia, Greece, South Asia and Oman, it can be assumed that these nationalities are willing to donate blood. On the other hand, it seems that due to cultural beliefs, individuals from the Nigerian population are less willing to donate blood; almost 20% of a study's Nigerian sample population would not donate or receive blood (Adbdel Gader et al.,

2011). Similarly, from the study conducted by Boulware et al. (2002) on the Baltimore, Maryland population it was concluded that white males and females were more willing to donate blood than black males and females. Additionally, out of the whole sample, white males were the most willing to donate, followed by black males. This again supports the previous expectation of most blood donors being males.

Thus, we can assume that each race or nationality, donors and non-donors exist, however due to religious or cultural beliefs as well as personal perceptions, it seems that some populations have a higher percentage of donors than others. Therefore, regarding the PSF Middle-East questionnaire, it is predicted that most donors will be of European or other western nationalities, followed by Middle-Eastern, Asian and Gulf Nationals.

#### *4. Have you ever donated blood?*

In this question, donors are expected to answer “Yes” whereas non donors are expected to answer “No” or “No, unfortunately I am not eligible to donate blood”. Reasons for the choice of response could be based on the previous factors discussed age or cultural beliefs related to race or nationality could have limited non-donors. As for the gender factor, non-donor females could have been limited by menstruation or pregnancy. For non-donors who chose the not eligible option it is expected that they are aware of restrictions for blood donation which are examined in one of the following questions.

#### *5. How often do you donate blood?*

It is expected that donors, who answered “Yes” to question 4, will choose any of the following responses: Monthly, Semi-Annually and Annually. Whereas, non-donors will choose Never or other.

#### *6. Do you know under which conditions you can and cannot donate blood?*



It is expected that most participants will choose “Yes”. Non-donors who choose the not eligible response in question 4, are especially expected to choose the “Yes” response to this question. Donors as well as non-donors are expected to answer yes however it is also expected that a smaller number of participants would answer “No”.

7. *Please select any of the following factors that you think would be important in determining whether you are qualified or eligible to donate blood. (Please tick all items that apply).*

Participants who answered “Yes” to question 6, as well as participants who chose the not eligible option of question 4 are mostly expected to tick more items as they are probably more informed of the conditions. Participants who answered that they were not aware of the conditions which you can or cannot donate blood are expected to choose less or no items at all.

8. *From the choices below which one mostly comes to your mind when you hear the word blood donation?*

Respondents who are Gulf-National and Middle-Eastern are expected to choose “Blood disorders” or “Accidents”, as answers. This is expected as blood disorders and accidents are common in these countries, Thalassemia is a prevalent blood disorder in the Middle-East and so respondents of these nationalities are probably more likely to associate blood donation with blood disorders or accidents. Additionally, as mentioned in the literature review Al Drees (2008), has concluded that most Saudi Arabian donors prefer direct donation, hence it can be assumed that Gulf-Nationals would prefer the same. Gulf-National and Middle-Eastern respondents are less likely to choose hospitals and blood banks as they are more general options which imply voluntary donation. European and Western nationalities are more likely to choose “Hospitals” and “Blood banks” as options as they would be less aware of Thalassemia which is not as common in western countries. This said, it would be useful to note that the questionnaire was distributed to PSF Middle-East offices and many employees of different nationalities would have been working in the region for years and so could have been informed and become aware of Thalassemia. This perhaps could have a measurable effect on expected results.

*9. What do you think of the blood donation procedure?*

Options include “Safe”, “Hygienic”, “Painful” and “Stressful”. It is expected that most donors will either choose safe or hygienic whereas non-donors will more probably choose painful or stressful. However some donors can also choose painful and stressful, these donors are expected to be those who donate less often. Perhaps donors who choose the annually or semi-annually option of question 5.

*10. Do you find it important to know where your blood is going to after your donation?*

Donors who select “Yes” are probably more inclined to direct donation and so they could be Gulf-National or Middle-Eastern participants, whereas it is expected that European and Western nationalities are less likely to find this factor important as they are expecting it to go to a blood bank or hospital, assuming that they have selected either option in question 8. It is expected that some non-donors will select “Yes” as well as it might be a reason as to why they do not donate blood.

*11. What are your fears/concerns regarding blood donation? (Please select all items that apply)*

Non-donors will probably select more concerns than donors, as they could be reasons for why they are non donors. Options include, “Stress/pain of procedure”, “The impact on your health after procedure”, “Safety and hygiene of procedure” and “Not enough information regarding the intended use of your blood”. Donors are expected to select less concerns as it is assumed that they donate blood and are tolerant and acceptable of the procedure. The stress and impact of health after donation options are more likely to be chosen by donors than the safety and hygiene option as they would already be confident of the safety and hygiene of the process since they are blood donors. It is expected that responses to this question will reflect the responses selected in question 9. Those who chose the “painful” and “stressful” options are expected to choose the “Stress/pain of procedure” and “Safety/hygiene of procedure” options as responses to question 11.

*12. What made you decide to donate blood?*

As mentioned previously, different types of donors will have different reasons to donate blood. Direct and voluntary donors are more likely to donate out of sympathy or obligation to a friend while paid donors will donate in exchange for monetary rewards. The literature reviewed has implied that Gulf-Nationals prefer direct donation and so it is expected that most donors will select the sympathy response or the obligation response. The sympathy response might be selected by the majority of western nationalities as well.

*13. What would motivate you most to donate your blood?*

It is expected that the “Friend/relative in need”, the “Sense of good deed and helping others” and “Giving back to the community” options will be the most common responses, as they are the most dominant reasons identified in the literature. Hence, we can assume that most donors will either choose the direct donor response; “Friend/relative in need”. Or the “Sense of good deed” or “Giving back to the community” which are both representative of a voluntary donor response. Recognition and getting information regarding one’s own health are expected to be the least chosen options among both donor and non-donor groups, as the literature reviewed has shown them to be least popular motives behind blood donation. It is expected that non-donors choose the same options as donors or the “Other” option.

*14. What would de-motivate you or discourage you the most from donating you blood?*

Similar to question 11, it seems likely that donors will select the “Distance/Location of the blood donation” or the “Behaviour of staff in charge of the procedure” options as the other options are more likely to be chosen by non-donors. Additionally, these options could have an effect on the number of donations from an established donor, however the other options relating to the pain/stress of procedure, poor health status and not being recognised for participation seem to be less applicable to donors as we assume that they already donate blood and are already aware and accepting of these factors. Thus the “Pain and stress related to the procedure”, “Poor condition of

your own health” and the “Not being recognised for your participation” options are most likely to be chosen by non-donors.

*15. Would you be motivated to donate blood if you knew that it would also allow you to check up on the status of you own health in general?*

This question comes with “Yes” or “No” options, similar to question 12 and 13, it is expected that most participants will select the “No” options as literature has shown that this incentive exists but it less dominant than other incentives. (Abdel Gader et al., 2011)

*16. Which of the following describes the most common type of your blood donation?*

Options include voluntary, paid, obligation to a friend or family, commercial and haven’t taken part in blood donation before. It is expected that most non-donors will select the “ I have not taken part in blood donation before” option, whereas donors, based on the nationalities distinguished and in the literature are most likely to be either voluntary or direct (obligation to friend/family).

*17. How did you first hear of blood donation?*

The literature reviewed has implied that mass media methods are a common source of awareness of blood donation. In the questionnaire, Friend/relative in need, hospital, radio, television, and PSF Middle-East are the options available to respondents. As mentioned earlier it is expected that a large key amount of participants will be direct donors due to the finding on nationalities and the region of the study, and so perhaps the “Friend/relative in need” will be the most selected option by donors. Moreover, regular donors could have also heard of blood donation from hospitals, radio, television or PSF Middle-East, so it is expected that they will select any of these options as well. On the other hand, non-donors are expected to have heard of blood donation in a less direct way, so the options of Radio, television and PSF Middle-East might be more likely selected.

*18. What is your preferred method to hear of blood donation?*

This question is also related to the previous question, Chliaoutakis et al. (1994, p. 1464) state that “... 56.7% of all respondents... answered that they believed that the mass media was an effective instrument in promoting blood donation.” Hence it is expected that perhaps most donors and non-donors will choose the radio, SMS messages or television as preferred methods due to their accessibility and speed. However, some participants might prefer social networks as the preferred method as nowadays, they are more common. The seminar/educational programs option is a difficult option to assess expectations as it the most serious option in a way. Perhaps, non-donors would select this option especially if they are non-donors due to lack of information or if they have misconceptions regarding blood donation.

*19. At which of the following places have you ever been exposed to or learned of blood donation? (Please select all items that apply)*

Options to this question include school, university, workplace/office, the community, commercial centres/ shopping malls and “Other”. It is expected that non-donors will choose less options as it is assumed that they are less informed about blood donation than donors. On the other hand, donors will probably select more options, the selection might also depend on the age of the participants; younger donors may have been more recently exposed to blood donation via either school, university or commercial centres. Older donors could be more often exposed through the office or community.

*20. If you wanted to donate blood again or in the future, where would you prefer to donate?*

Preferences on the location of blood donations has been examined in the literature. In regard to the questionnaire, the workplace, private hospital, public hospital and blood donation centre are presented as options. Researchers have found that most respondents in studies do not mind passing by a blood donation centre themselves to donate, whereas a smaller number of respondents preferred that the blood donation be made available to them at the workplace or home. Thus, it can be expected that respondents to this survey will select the workplace, as it is

where PSF Middle-East runs the blood donations. Also, donors will probably not mind going to a blood donation centre, especially if they are regular blood donors and so it could also be another donor option. However, non-donors may prefer the public hospital and private hospital options, especially if they are non-donors due to fears regarding the safety and hygiene of the procedure. Hospitals may present a safer and more hygienic place to donate blood to non-donors than the other options. It is also expected that private hospitals will be a more common preference than public hospitals due to the common belief of private hospitals being more secure and safe.

*21. When your office is going to organise a blood donation event, and the National Blood Transfusion Centre will come to your office to facilitate the blood donation, would you participate in this event and donate your blood?*

“Yes” and “No” options are available for this question, donors are expected to choose “Yes” whereas non-donors who are not eligible and non-donors who prefer not to donate blood will select “No”. Additionally, due to the location of the PSF Middle-East blood donation event, it is expected that respondents who chose “Public hospital”, “Blood donation centre” or “Private hospital” as their preferred location to donate blood will also select “No”. However, regular donors may overlook the location if it is not their preferred location and still select “Yes”, so it is probably non-donors who would feel more secure donating in hospitals that would select “No”.

## **5. Data analysis and results**

### **5.1 Account of the PSF Middle-East blood donation project:**

The PSF Middle-East blood donation project started as a collaboration with PSF Dubai to collect feedback regarding the blood donation event held by them previously. At the beginning of June, a meeting was held with PSF Dubai and it was agreed that an online survey would be created to collect feedback regarding the previous blood drive, it was also decided that the questionnaire will be sent out on the 14<sup>th</sup> of June as it would be world blood donor day and seemed appropriate. The online survey was created and approved by the CSR manager and distributed to the employees of PSF Dubai on the 14<sup>th</sup> of June. However due to the low response rate the data collected was not a sufficient sample size; only 21 out of 81 employees who participated in the blood drive responded. A few weeks passed but the response rate did not increase and it became apparent that no more responses would be received. On the 11<sup>th</sup> of July, an email was received from Mr. Roberts of PSF Dubai, which suggested extending the idea of the survey to PSF Egypt and Saudi Arabia in case they wanted to join and increase the number of survey participants. This was a great opportunity to increase the response rate and so the idea proposed was immediately agreed upon. Communication was established with PSF Egypt; on the 19<sup>th</sup> of July I received an email from Ms. Jackson expressing interest in a collaboration and asking for some details on the questionnaire created from PSF Dubai.

On the 2<sup>nd</sup> of August a Skype meeting was set up with Ms. Legrande and it was established that PSF Egypt were very interested to collaborate but instead of collecting data regarding blood drive feedback, they suggested designing a new survey to collect data on the perceptions of PSF Middle-East employees regarding the subject of blood donation. Additionally, PSF Egypt had also established the “Triple Effect Project”, which is aimed at increasing awareness of blood donation and general health to enable employees to become active blood donors. Thus, the data collected via the online survey would also contribute to the “Triple Effect Project” and so it was a suitable collaboration for everyone involved. More meetings were set up within the next few weeks of August. On the 5<sup>th</sup> the new questionnaire and action plan was discussed. On the 13<sup>th</sup> of August, the first draft of the online survey was created based on the instructions of PSF Egypt. It was sent to Ms. Legrande for approval. The questionnaire was reviewed by Ms. Jackson and her

managers and on the 22nd of August another meeting via Skype was set up to discuss changes to the questionnaire. As the original questionnaire for PSF Dubai was designed with both multiple-choice and text-box questions as approved by the Dubai PSF team, it was decided on the 11<sup>th</sup> of September by Ms. Legrande and the CSR manager that the questionnaire should be changed to multiple choice format. Over the next few weeks the questionnaire was checked, edited and sent for approvals. As many managers needed to approve it, this process took some time. This is also understandable as the questionnaire was now to be extended to other PSF Middle-East offices in the region.

Eventually, the online survey was designed and created to collect data on the perceptions of PSF Middle-East employees regarding blood donation. Final approval for the questionnaire was received on the 10<sup>th</sup> of October from Mr. Roberts and regional managers. The survey was distributed via email to 2,500 employees over the PSF Middle-East offices of the United Arab Emirates, Saudi-Arabia, Qatar, Bahrain, Kuwait, Oman, Lebanon, Egypt, Iraq, Jordan, Libya and Palestine. It consists of 21 multiple choice questions which cover blood donation perceptions over five areas; background information, knowledge level of blood donation, attitude towards blood donation, motivational factors and means of exposure to blood donation. A total number of 223 surveys were received over two weeks, and out of these 179 were useable. This constitutes a 7% response rate which was appropriate for this particular project.

## **5.2 Correlations**

The bi-variate correlations table ( see appendix, Table 1, p. 178) shows the relationships between variables, in this case between the questions that were presented to the PSF Middle-East employees of the region. The table therefore presents the significance of the relationships between pairs of item variables, where all variables consist of just one question item rather than several items, which is standard academic practice research, but is not necessary for this specific study. Firstly, the Kendall's tau correlations are examined. These are represented in the top half of the correlations table. Significant correlations to the study are indicated by yellow shade.



#### Q 1 associated with Q4

The first correlation in the Kendall's tau table is the correlation found between Age and Blood donor status; question one and question four. The correlation is significant at the 5% level ( $\tau = -.14, p < .05$ ). This indicates that there is a relationship between age and blood donor status and that the relationship is negative. Hence, it can be assumed that as age increases the blood donor status decreases. The blood donor status refers to question 4 of the survey, where participants were presented with three possible responses to the question, "Have you ever donated blood?". These included, "Yes", "No" and "Not eligible". The correlation of the age and blood donor status variables, suggests that as age increases, blood donor status decreases which implies that the "Yes" response is less likely to be chosen. Thus, it can be concluded that PSF Middle-East employees of higher age are less likely to donate or be able to donate blood. This finding is also consistent with expectations where individuals of higher ages tend to be non-donors or are non-eligible to donate.

#### Question 5 associated with Question 6

Awareness of blood donation conditions and the frequency of blood donation appears to be positively correlated at the 5% level of significance ( $\tau = .17, p < .05$ ). This suggests that as awareness regarding blood donation increases, the frequency at which a participant donates blood increases as well.

#### Question 2 associated with Question 15

Similarly, there is a positive relationship between health status check-up as a motivating factor and gender ( $\tau = .18, p < .05$ ) and suggests that more males are motivated by a health check-up to donate blood than females. Similarly, studies also suggest that the opportunity to check on health through blood donation can be motivating factor to blood donation. It seems that PSF Middle-East employees would be motivated by this factor; PSF Middle-East male employees more so than PSF Middle-East female employees.

#### Question 4 associated with Question 21

Moreover, the gender variable is also positively related to participation at the next PSF Middle-East event variable. The result is significant ( $\tau = .16, p < .05$ ) and similar to the correlation between gender and the health check-up as a motivating factor variable, it suggests that more males are willing to participate at the next PSF Middle-East blood donation event than females. Studies on blood donation also imply that blood donors are more often males than females.

#### Question 4 associated with Question 2

The table also shows several other correlations present between other pairs of item variables at the 1% level. For example, gender and blood donor status ( $\tau = .33, p < .01$ ), which indicates that males are more likely to be blood donors than females. This finding is also reflected in the studies, where it has been shown that males have a higher tendency to be blood donors than females.

#### Question 4 associated with Question 5

Also significant at the 1% level is the relationship between the blood donor status and frequency of blood donation ( $\tau = .19, p < .01$ ). It shows that the more aware individuals are of blood donation, the more they are likely to regularly donate blood.

#### Question 4 associated with Question 6

The relationship between blood donor status and the awareness of blood donation variables is highly significant ( $\tau = .35, p < .01$ ). These figures indicate that this is a highly significant correlation and similar to the variables discussed previously, there seems to be a positive relationship between awareness and blood donor status. PSF Middle-East employees who are more aware of blood donation are more often blood donors than employees who were less informed and aware of blood donation. Hence, it can be concluded that awareness is a highly important factor in relation to blood donation.

#### Question 21 associated with Question 4

The participation of employees at the next PSF Middle-East event variable is positively correlated with blood donor status ( $\tau = .24, p < .01$ ). It shows that more donors are willing to

participate at the next PSF Middle-East blood donation event than are non-donors. However, it has also been argued that an increased awareness could encourage non-donors to donate blood and so this could be a prospective step for PSF Middle-East.

#### Question 15 associated with Question 21

Lastly, there is a positive significant relationship between the participation of PSF Middle-East employees at the next event and health status as a motivating factor ( $\tau = .20, p < .01$ ). Hence, it can be assumed that perhaps if there was a health check-up involved with the next blood donation event at PSF Middle-East, employees will be more motivated to donate blood.

The Spearman's Rho correlations show similar figures to the Kendall's tau correlations, but with a decrease of .001 with some variables and slight increases in the correlation coefficients of some variables as well. Taking into account these minor differences, the results of both correlation tests produce the same findings.

In conclusion, the correlation tests have illustrated the significant associations between some of the item variables. Some correlations are higher significance than others and these differences should be taken into consideration. The correlations significant at the 1% level include the correlation between gender with blood donor status variables; blood donor status with participation at the next PSF Middle-East blood donation event; and the correlation between health status check-up as a motivating factor with participation at the next PSF Middle-East blood donation event.

From these findings, we can see that health status check-up as a motivating factor is a worthwhile idea for PSF Middle-East employees and so it is suggested that collaboration with a blood donation centre or hospital can be examined. It is possible that some blood donation centres or hospitals would be willing to provide this in exchange for blood donation. Additionally, in regard to the relationship between blood donor status and the participation of employees at the next PSF Middle-East event it could also be related back to the idea of health status checkups as a motivating factor.

		<b>Correlations</b>							
		<b>Age</b>	<b>Gender</b>	<b>Blood donor status</b>	<b>Frequency of blood donation</b>	<b>Awareness of blood donation conditions</b>	<b>Importance of knowing intended use of blood</b>	<b>Health status check up as motivating factor</b>	<b>Participation at the next PwC blood donation event</b>
<b>Kendall's tau_b</b>	<b>Age</b>	1.000							
	<b>Gender</b>	0.799	1.000						
	<b>Blood donor status</b>	0.042*	0.000*	1.000					
	<b>Frequency of blood donation</b>	0.096	0.164	0.005**	1.000				
	<b>Awareness of blood donation conditions</b>	0.291	0.714	0.001**	0.011*	1.000			
	<b>Importance of knowing intended use of blood</b>	0.825	0.883	0.875	0.857	0.369	1.000		
	<b>Health status check up as motivating factor</b>	0.939	0.017*	0.869	0.474	0.178	0.230	1.000	
	<b>Participation at the next PwC blood donation event</b>	0.831	0.033*	0.001**	0.259	0.171	0.632	0.007**	1.000
<b>Spearman's rho</b>	<b>Age</b>	1.000							
	<b>Gender</b>	0.800	1.000						
	<b>Blood donor status</b>	0.042*	0.000**	1.000					
	<b>Frequency of blood donation</b>	0.094	0.165	0.006**	1.000				
	<b>Awareness of blood donation conditions</b>	0.293	0.715	0.000**	0.011*	1.000			
	<b>Importance of knowing intended use of blood</b>	0.826	0.883	0.875	0.858	0.370	1.000		
	<b>Health status check up as motivating factor</b>	0.940	0.016*	0.870	0.475	0.179	0.231	1.000	
	<b>Participation at the next PwC blood donation event</b>	0.832	0.032*	0.001**	0.260	0.172	0.633	0.007**	1.000

**Table 1. Correlations table**

### 5.3 Cross-tabulations

Based on correlation results discussed above, cross-tabulations of the variables have been produced to examine findings further. Only significant results at least at the 1% level were selected, since these tests assume a normal distribution which is not the case for this dataset.

#### Question 4 x Question 2

Table 2A (see appendix, p. 182) illustrate the findings for the first set of item variables. From the cross-tabulation of blood donor status and gender, we can see that 43 % of the blood donors are males whereas 14% of blood donors are females. Additionally, we can see that 17 % of non-donors are male compared to 18% of females. Again this implies that blood donors tend to be males rather than females. 9% of the 179 respondents are non-eligible to donate blood; out of these 2% are male compared to 7% females. This could be due to the fact that women actually have more restricting factors to blood donation such as pregnancy, breastfeeding and menstruation constraints.

The Pearson Chi-square test (see appendix, Table 2B, p. 182), also conducted through the cross-tabulation test, shows that there is an association between these two variables. We can assume that these variables are not independent and that gender and blood donor status are related in some way ( $\chi^2 = 25.56, p < .01$ ).

Hence, we can assert that there seems to be a relationship between blood donor status and gender and that they are strongly associated with each other.

#### Question 6 x Question 4

The second item variable pair to be examined through the cross-tabulation test are the blood donor status variable and the awareness of blood donation conditions. Table 3A (see Appendix, p. 183), shows the relationship between these variables. From the 179 respondents we can see that 67% claim that they are aware of blood donation conditions. 45% of the group aware of blood donation conditions are blood donors, whereas 15% are non-donors and 7% are not eligible to donate.

On the other hand, from the group unaware of blood donation conditions, 12% are donors, 20% are non-donors and 2% are not eligible to donate blood. This is also evident when examining the group which is unaware of blood donation conditions, 20% of non-donors are unaware of the blood donation conditions in comparison to 12% of donors and 2% of non-eligible participants. Thus we can see that there is a relationship between blood donor status and awareness of blood donation conditions.

The Pearson Chi Square test (see Appendix, Table 3B, p.183) indicates that there is a significant relationship between the two item variables ( $\chi^2 = 22.50$ ,  $p < .01$ ). This suggests that there is a highly significant relationship between the two item variables and that they are associated. It appears to be the case that more blood donors tend to be aware of blood donation conditions than non-donors.

#### Question 4 x Question 21

As perceived from the correlation analysis, there seems to be a relationship between the blood donor status variable and participation at the next PSF Middle-East blood donation event. Table 4A (see Appendix, p. 184) presents the cross-tabulation between these two variables. 53% of the employees who are blood donors are willing to participate at the next PSF Middle-East blood donation event whereas only 4% of the employee blood donors prefer not to. This suggests that almost all of the blood donors in this sample of PSF Middle-East employees are willing to participate at the next event. On the other hand, 29% of the employees who are non-donors are willing to participate at the next blood donation event; this is a promising figure as it shows that some non-donors are willing to give blood at the next blood donation event.

Table 4B (see Appendix, p.185), illustrates the Pearson Chi square test correspondent of these variables, ( $\chi^2 = 12.65$ ,  $p < .01$ ). These values show that these variables are strongly related and so there seems to be an association between blood donor status and the participation of employees at the next PSF Middle-East event.

## 5.4 Summary statistics of the responses to the survey

### 1. Age

Most of the respondents chose the second option in response to question 1 of the survey. The 25-35 years is the most common age range among the 179 respondents; 55% of respondents are of this age range.

25% of respondents are of the 25 years or less age range, whereas 13% are of 36-45 years and 7% are of 46 -55 years. There are no respondents of 56 years of age or more.

		<b>Age</b>			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25 years or less	44	24.4	24.6	24.6
	25 - 35 years	99	55.0	55.3	79.9
	36 - 45 years	23	12.8	12.8	92.7
	46 - 55 years	13	7.2	7.3	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 2. Age**

## 2. Gender

62% of the respondents from this PSF Middle-East employees sample are male whereas 39% are female.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	110	61.1	61.5	61.5
	Female	69	38.3	38.5	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 3. Gender**

## 3. Nationality

Most of the respondents are Middle-Eastern (48%), followed by Asian respondents (35%) and European respondents (13%). Only 1% of respondents were Gulf Nationals and only 2% were of other nationalities. As the survey was sent out to PSF regional offices it was expected that a large number of respondents would be Middle-Eastern.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Asian	63	35.0	35.2	35.2
	European	24	13.3	13.4	48.6
	Gulf national	2	1.1	1.1	49.7
	Middle Eastern	86	47.8	48.0	97.8
	Other	4	2.2	2.2	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 4. Nationality**



4. Blood donor status

*Question 4 “Have you ever donated blood?”*

More than half of the respondents had donated blood (blood donors); 56% of the total respondents.

35% have not donated blood (non-donors) and 9% are ineligible to donate blood.

**Blood donor status**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	101	56.1	56.4	56.4
	No	62	34.4	34.6	91.1
	Not eligible	16	8.9	8.9	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 5. Blood Donor Status**

5. Frequency of blood donation

*Question 5 “How often do you donate blood?”*

39% of respondents never donate blood, 27% chose the “Other” option this could be that they donated once and didn’t donate again or that they donate less regularly than the options provided in the survey.

21% of respondents donate blood annually whereas 12% of respondents donate semi-annually and 1% donate monthly.

**Frequency of blood donation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Monthly	2	1.1	1.1	1.1
	Semi-Annually	21	11.7	11.7	12.8
	Annually	38	21.1	21.2	34.1
	Never	70	38.9	39.1	73.2
	Other	48	26.7	26.8	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 6. Frequency of blood donation**

6. Awareness of blood donation conditions

*Question 6 “Do you know under which conditions you can or cannot donate blood?”*

The majority of respondents chose “Yes” with only 34% of respondents selecting the “No” option.

**Awareness of blood donation conditions**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	119	66.1	66.5	66.5
	No	60	33.3	33.5	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 7. Awareness of blood donation conditions**

7. Eligibility factors of blood donation

*Question 7 “ Please select any of the following factors that you think would be important in determining whether you are qualified or eligible to donate blood. (Please tick ALL those items that apply)”*

a) Age

53% of respondents believe that age is an important factor, whereas 48% believe that age is irrelevant in blood donation. Almost half of the sample believe age to be a determining factor in blood donation eligibility.

**Age factor**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	85	47.2	47.5	47.5
	Yes	94	52.2	52.5	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 8A. Age Eligibility Factor**

b) Gender

With this factor, the majority of respondents (87%) do not believe gender to be an important or relevant factor to blood donation.

**Gender factor**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	155	86.1	86.6	86.6
	Yes	24	13.3	13.4	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 8B. Gender Eligibility Factor**

c) Health status

The majority of respondents believed health status to be important in blood donation eligibility. 94% of the sample selected this factor, whereas only 6% of the respondents do not think it is an important factor.

**Health Status Factor**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	10	5.6	5.6	5.6
	Yes	169	93.9	94.4	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 8C. Health Status Factor**

d) Weight factor

56% of respondents believe weight to be a determining factor in blood donation, while 44% do not.

**Weight Factor**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	78	43.3	43.6	43.6
	Yes	101	56.1	56.4	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 8D. Weight Eligibility Factor**

e) Illicit drug use

The majority of the sample; 83% of respondents believe that this is an important factor whereas 17% do not think it is important in regard to blood donation.

**Illicit Drug use factor**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	30	16.7	16.8	16.8
	Yes	149	82.8	83.2	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 8E. Illicit Drug use Eligibility Factor**

f) Pregnancy

Most of the respondents, 74% believe this factor to be important in determining blood donation eligibility and 26% think it is not relevant to blood donation.

**Pregnancy Factor**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	46	25.6	25.7	25.7
	Yes	133	73.9	74.3	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 8F. Pregnancy Eligibility Factor**

g) Menstruating women

The majority of respondents, 61% believe that this factor is not important whereas 39% believe that it is.

**Menstruating Women Factor**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	109	60.6	60.9	60.9
	Yes	70	38.9	39.1	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 8G. Menstruating Women Eligibility Factor**

h) Infectious disease carrier

Most respondents selected this factor; 86% believe it to be important. On the other hand, 15% do not think it is important.

**Infectious disease Factor**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	26	14.4	14.5	14.5
	Yes	153	85.0	85.5	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 8H. Infectious Disease Eligibility Factor**

The most selected factor among respondents is the health status factor, followed by the infectious disease carrier factor. The least selected factor is the gender factor.



8. Mostly associated idea with blood donation

*Question 8 “From the choices below which one mostly comes to mind when you hear the word blood donation?”*

54% of respondents selected “Blood banks” while 22% selected “Hospitals”. These are the mostly selected options. 20% selected “Accidents” and only 5% selected “Blood disorders”. It was anticipated that more respondents would select blood disorders, due to blood disorders such as Thalassemia being very common in the region.

**Mostly associated idea with blood donation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Blood disorders	8	4.4	4.5	4.5
	Accidents	35	19.4	19.6	24.0
	Hospitals	40	22.2	22.3	46.4
	Blood banks	96	53.3	53.6	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 9. Mostly associated idea with blood donation**

9. Perception of procedure

*Question 9 “What do you think of the blood donation procedure?”*

Most respondents (70%) selected “Safe”, and 16 % selected “Hygienic”. These were the most frequently selected responses. The “Painful” and “Stressful” options were almost equally selected with 11% and 12% of responses. This shows that there is a mostly positive perception regarding the blood donation procedure.

**Perception of procedure**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Safe	109	60.6	60.9	60.9
	Hygienic	29	16.1	16.2	77.1
	Painful	20	11.1	11.2	88.3
	Stressful	21	11.7	11.7	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 10. Perception of procedure**

10. Importance of knowing intended use of blood

*Question 10 “Do you find it important to know where your blood is going after your donation?”*

59% of respondents selected “Yes”, whereas 41% did not find this factor important.

**Importance of knowing intended use of blood**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	105	58.3	58.7	58.7
	No	74	41.1	41.3	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 11. Importance of knowing intended use of blood**

11. Concerns and fears regarding blood donation

*Question 11 “What are your fears/concerns regarding blood donation?” (Please tick ALL those items that apply)”*

a) Stress/pain of procedure

73% of respondents actually selected “No”; only 27% of respondents selected this concern.

**Fear of stress/pain of procedure**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	130	72.2	72.6	72.6
	Yes	49	27.2	27.4	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 12A. Fear of stress/pain of procedure**

b) Fear of impact of health after procedure

Similarly to the stress/pain factor, 70% of respondents selected “No”, while 30% were concerned with this factor.

**Fear of impact of health after procedure**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	126	70.0	70.4	70.4
	Yes	53	29.4	29.6	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 12B. Fear of impact of health after procedure**

c) Safety and hygiene of procedure

In contrast to the two previous factors, 77% of the respondents are concerned with this factor. Only 24% of respondents did not have concerns regarding this factor.

**Concern of safety/hygiene of procedure**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	42	23.3	23.5	23.5
	Yes	137	76.1	76.5	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 12C. Concern of safety/hygiene of procedure**

d) Lack of information on intended use of blood

30% of respondents were concerned over this issue whereas, 70% did not regard this factor as a concern.

**Concern of lack of information on intended use of blood**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	125	69.4	69.8	69.8
	Yes	54	30.0	30.2	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 12D. Concern of lack of information on intended use of blood**

The most common concern among respondents is the factor of safety and hygiene of the procedure. 46% of responses contributed to the safety/hygiene factor, the other factors all received responses of less than 20%.

12. Deciding factor to donate blood

*Question 12 “What made you decide to donate blood?”*

The most common selection is “Sympathy towards those in need”; this was selected by 53% of respondents. 30% of respondents selected the “I have never taken part in blood donation before” option and 5% selected “Obligation to family or friend”. Only 3% selected the “Chance to check on your own health” option.

None of the respondents selected the “Rewards” option and 11% selected the “Other” option. Literature has shown that blood donation in exchange for rewards is not very popular and so this result was expected.

**Deciding factor to donating blood**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sympathy towards those in need	94	52.2	52.5	52.5
	Obligation to family/friend	8	4.4	4.5	57.0
	Chance to check on your health	5	2.8	2.8	59.8
	I have not taken part in blood donation before	53	29.4	29.6	89.4
	Other	19	10.6	10.6	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 13. Deciding factor to donating blood**

13. Motivating factor to donate blood

*Question 13 “What would motivate you most to donate your blood?”*

The majority of respondents (70%) selected the 1<sup>st</sup> option; “Sense of good deed and helping others” whereas 18 % selected the “Friend/relative in need”.

14% chose the “Giving back to the community” response; this option was also expected to be popular among respondents. Recognition is the least common motivating factor with only 1% of responses. 3% are motivated by the health status check-up and only 2 % selected the “Other” option.

**Motivating factor to donate blood**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sense of good deed and helping others	109	60.6	60.9	60.9
	Friend/Relative in need	33	18.3	18.4	79.3
	Giving back to the community	25	13.9	14.0	93.3
	Recognition	2	1.1	1.1	94.4
	Getting information regarding your own health status	6	3.3	3.4	97.8
	Other	4	2.2	2.2	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 14. Motivating factor to donate blood**

14. De-motivating factor to donate blood

*Question 14 “What would de-motivate or discourage you (the most) from donating your blood?”*

The poor condition of one’s own health was the most discouraging factor among the employees with 39% of the responses. The distance /location of the blood donation and behaviour of staff were both chosen by 19% of respondents each. 17% of the respondents selected the pain/stress of procedure and only 2% selected “Not being recognized for you participation”.

**De-motivating factor to donate blood**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Pain and stress related to the procedure	31	17.2	17.3	17.3
	Poor condition of your own health	70	38.9	39.1	56.4
	Distance/location of the blood donation	34	18.9	19.0	75.4
	Behaviour of staff in charge of the procedure	34	18.9	19.0	94.4
	Not being recognized for your participation	4	2.2	2.2	96.6
	Other	6	3.3	3.4	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 15. De-motivating factor to donate blood**



15. Health status check-up as a motivating factor

*Question 15* "Would you be motivated to donate blood if you knew that it would also allow you to check-up on your health in general?"

85% of employees selected "Yes", indicating that the majority of respondents would be motivated to donate blood by this factor. Only 15% did not find the health status check-up to be a motivating factor.

**Health status check up as motivating factor**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	152	84.4	84.9	84.9
	No	27	15.0	15.1	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 16. Health status check up as motivating factor**

16. Type of blood donation

*Question 16* "Which of the following describes the most common type of your blood donation?"

More than half of the respondents (64%) are voluntary donors. 30% have not taken part in blood donation before, 6% mostly donate to friends/family and (less than) 1% are commercial donors. None of the 179 respondents are paid donors.

**Type of blood donation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Voluntary	114	63.3	63.7	63.7
	Obligation to friend/family	11	6.1	6.1	69.8
	Commercial	1	.6	.6	70.4
	I have not taken part in blood donation before	53	29.4	29.6	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 17. Type of blood donation**

17. First heard of blood donation

*Question 17 “How did you first hear of blood donation?”*

As expected, due to the high number of blood disorder cases in the region, 50% first heard of blood donation through family/friend in need. 18% heard of blood donation through hospitals and 16% through television. 10% of respondents heard of blood donation through PSF Middle-East and only 6% heard of blood donation through the radio.

**First heard of blood donation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Friend/Relative in need	90	50.0	50.3	50.3
	Hospital	33	18.3	18.4	68.7
	Radio	11	6.1	6.1	74.9
	Television	28	15.6	15.6	90.5
	PSF Middle-East	17	9.4	9.5	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 18. First heard of blood donation**

18. Preferred method to hear of blood donation

*Question 18 “What is your most preferred method to hear about blood donation?”*

The most common preferred method among the PSF Middle-East employees of the region is through seminars or educational programs (27%). This is closely followed by the SMS messages method with 25% and social networks with 24%. The radio and television are the least preferred methods with 7% and 18% of responses.

**Preferred method to hear of blood donation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Radio	12	6.7	6.7	6.7
	Television	32	17.8	17.9	24.6
	SMS messages	44	24.4	24.6	49.2
	Through social networks (Facebook etc.)	42	23.3	23.5	72.6
	Seminars/Educational programs	49	27.2	27.4	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 19. Preferred method to hear of blood donation**

19. Exposure to blood donation

*Question 19 “At which of the following places have you ever been exposed to or learned of blood donation? (Please tick ALL that apply)”*

a) School

More than half of the employees have been exposed to blood donation at school (53%) while 48% of employees have not been exposed to blood donation at school.

**Exposure to blood donation at school**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	85	47.2	47.5	47.5
	Yes	94	52.2	52.5	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 20A. Exposure to blood donation at school**

b) University

62% of PSF Middle-East employees have been exposed to blood donation through university, 38% of the employees have not.

**Exposure to blood donation at university**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	68	37.8	38.0	38.0
	Yes	111	61.7	62.0	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 20B. Exposure to blood donation at university**

c) Workplace/office

Similarly to responses received with exposure at university, 63% of employees have been exposed to blood donation at work.

**Exposure to blood donation at workplace/office**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	66	36.7	36.9	36.9
	Yes	113	62.8	63.1	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 20C. Exposure to blood donation at workplace/office**

d) Community

58% of employees are exposed to blood donation through their community whereas 43% are not.

**Exposure to blood donation from the community**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	76	42.2	42.5	42.5
	Yes	103	57.2	57.5	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 20D. Exposure to blood donation from the community**

e) Commercial Centres/Shopping malls

Only 24% of employees have been exposed to blood donation at shopping malls compared to 77% who have not.

**Exposure to blood donation at commercial centres/shopping malls**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	137	76.1	76.5	76.5
	Yes	42	23.3	23.5	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 20E. Exposure to blood donation at commercial centres/shopping malls**

The workplace/office has been most often selected by the employees in response to this question, commercial centres/shopping malls are the least selected response. Less than 1% selected the “Other” option.

20. Preferred place to donate in the future

*Question 20 “If you wanted to donate blood again or in the future, where would you prefer to donate?”*

The most popular preferred location to donate blood among the employees is a blood donation centre. 44.1% of employees prefer blood donation centres. The second mostly preferred place to donate blood is the workplace with 37% of responses. The private and public hospitals are the least preferred locations, 16% prefer to donate at a private hospital whereas only 3% prefer to donate at a public hospital.

**Preferred place to donate in the future**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Workplace	66	36.7	36.9	36.9
	Private hospital	28	15.6	15.6	52.5
	Public hospital	6	3.3	3.4	55.9
	Blood donation centre	79	43.9	44.1	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 21. Preferred place to donate in the future**

21. Participation at the next PSF Middle-East blood donation event

*Question 21 “When your office is going to organize a blood donation event, and the national Blood Transfusion Centre will come to your office to facilitate the blood donation, would you participate in this event and donate your blood?”*

87% of PSF Middle-East employees are willing to participate at the next blood donation event, whereas only 13% would not feel so inclined.

**Participation at the next PSF Middle-East blood donation event**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	155	86.1	86.6	86.6
	No	24	13.3	13.4	100.0
	Total	179	99.4	100.0	
Missing	System	1	.6		
Total		180	100.0		

**Table 22. Participation at the next PSF Middle-East blood donation event**



## 5.5 ANOVA tests

ANOVA tests for questions that allow for multiple selections have been performed to analyse whether there are any significant differences between the means for donors and non-donors. These questions include question 7, 11 and 19.

The ANOVA test performed for question 7 (The factors affecting blood donor eligibility), shows some significant differences between the donor and non donor groups in relation to their beliefs regarding eligibility factors. The ANOVA test found that in relation to the age factor, the donor and non donor groups differ in beliefs at the 10% level ( $F(2, 176) = .596, p = .092$ ) (see appendix, Table 12, p. 197). The results show that the significance is not very great but exists nonetheless. On the other hand, donor and non donor beliefs seem to differ more significantly in regard to the weight factor, ( $F(2, 176) = 4.434, p = .013$ ) (see Appendix, Table 12, p. 197). It is significant at the 5% level and considerably higher than was found between groups regarding the age factor. Moreover, the ANOVA test shows a significant difference between donor and non donor groups of the survey in relation to the Illicit drug use factor, ( $F(2, 176) = 3.267, p = 0.040$ ) (see Appendix, Table 12, p. 197). The significance is at a 5% level and can be interpreted as suggesting a significant difference between the opinions of the donor and non donor groups

Regarding the fears/regards of participants on blood donation, the ANOVA test performed for question 11, revealed significant differences between donor and non donor groups. There is a significance at the 1% level between donor and non donor groups regarding the concern of the pain/stress of the blood donation procedure ( $F(2, 176) = 5.418, p = 0.005$ ) (see Appendix, Table 13, p. 198). Additionally, the ANOVA test has shown a 5% level of significant difference between donor and non donor concerns regarding the impact of health after the blood donation procedure ( $F(2, 176) = 3.564, p = 0.030$ ) (see Appendix, Table 13, p. 198). Hence, it can be seen that out of the concerns presented in the questionnaire, donor and non donor groups concerns are significantly different in relation to the fear of the impact on health after the blood donation procedure and the fear of stress/pain of the procedure.

The ANOVA test performed for question 19 (Exposure to blood donation), found a significant difference between the donor and non donor groups in relation to being exposed to blood donation at places other than the options presented in the questionnaire at the 1% level ( $F(2, 176) = 5.342, p = 0.006$ ) (see Appendix, Table 14, p. 199). This option is the only one in question 19 where there is a significant difference between the sample groups studied in the survey.

As the ANOVA tests have found significances at the 1%, 5% and 10% levels, post-hoc tests were performed to enable further analysis to find out which groups differ. Post-hoc tests using Tukey's HSD were performed on the items for questions 7, 11 and 19. Mean score differences for the following questions were found to be significant and thus are supported: Q7 Weight Factor (Mean Diff  $-.23443$ , Sig. =  $0.009$ ), Q11 Fear of stress/pain of procedure (Mean Diff  $-.23124$ , Sig. =  $.004$ ) and Q19 Other place (Mean Diff  $-.06250$ , Sig. =  $0.005$ ) (see Appendix, Tables 15-17, pp. 200-204).

## **5.6 Major implications of the findings of the survey:**

- Based on the survey, it seems that many employees would like to learn more about blood donation, especially through educational programs and seminars. This could be arranged with the Thalassemia centre in Dubai who often send a group of professionals/educators to companies that are interested in blood donation initiatives. It could be possible to collaborate and hold an educational lecture or seminar for employees to increase blood donation awareness.
- The findings also suggest that many employees (44%) prefer to donate at blood donation centres, perhaps it could be possible to send employees to blood donation centres or even hold the blood donation event there, perhaps it would also facilitate the procedure as blood donation equipment and staff would not need to come to the offices and set up. However, if this would be too distracting from work for employees, the workplace (37%) was the second most preferred location to donate blood so it would still be preferred by many employees.
- The survey revealed that most employees (66%) have never or do not donate blood regularly. Perhaps awareness regarding the causes or initiatives that call for blood donation could be increased. Short seminars or programs regarding the blood donation causes or initiatives undertaken by PSF Middle-East can be promoted so employees feel more involved and understand where their blood is going and how their donation will save lives.

It is interesting to see that the majority of employees would be motivated to donate blood if a health status check-up was included in the blood donation. If this is implemented at future events, more employees may decide to donate blood. A collaboration with the Dubai Thalassemia centre or the Blood donation centre could perhaps allow for health check-ups to be made when collecting blood.

## 5.7 Dubai Thalassemia centre – Interview

A one hour interview was conducted with a Thalassemia specialist of the Dubai Thalassemia Centre. Below is a summary of the questions and replies during the interview. Below is a record of the interview questions and the participants' replies.

1- Throughout the experience of the centre with organizations and their CSR initiatives, is there any particular suggestion or ways to help enhance CSR support towards Thalassemia?

- Increased financial and moral support for the centre and patients. Financial support represents financial donations or cheques presented to the centre, whilst moral support includes volunteer work or employees coming in to visit patients.
- Blood donations/drives. As blood transfusions are a crucial part of treating Thalassemia patients, blood drives are very important and are a great way to support Thalassemia patients as they actually provide patients with much needed blood. It is also exceedingly important as the patients need blood transfusions monthly.
- Direct financing to the centre to help and provide for patients. As much as The Thalassemia centre needs blood donations, financial support is also very important as the patients also need expensive medications. It also gives the centre a chance to invest funds in creating facilities for the patients. For example, the centre recently created a recreational space for the patients.
- Sponsoring patients for trips, education or training. This consists of sponsoring Thalassemia patients for education or leisure. Some organizations sponsor groups of Thalassemia patients for leisurely trips. Some patients also find it hard to find a job due to their conditions and so organizations that offer jobs and training are very supportive to them.

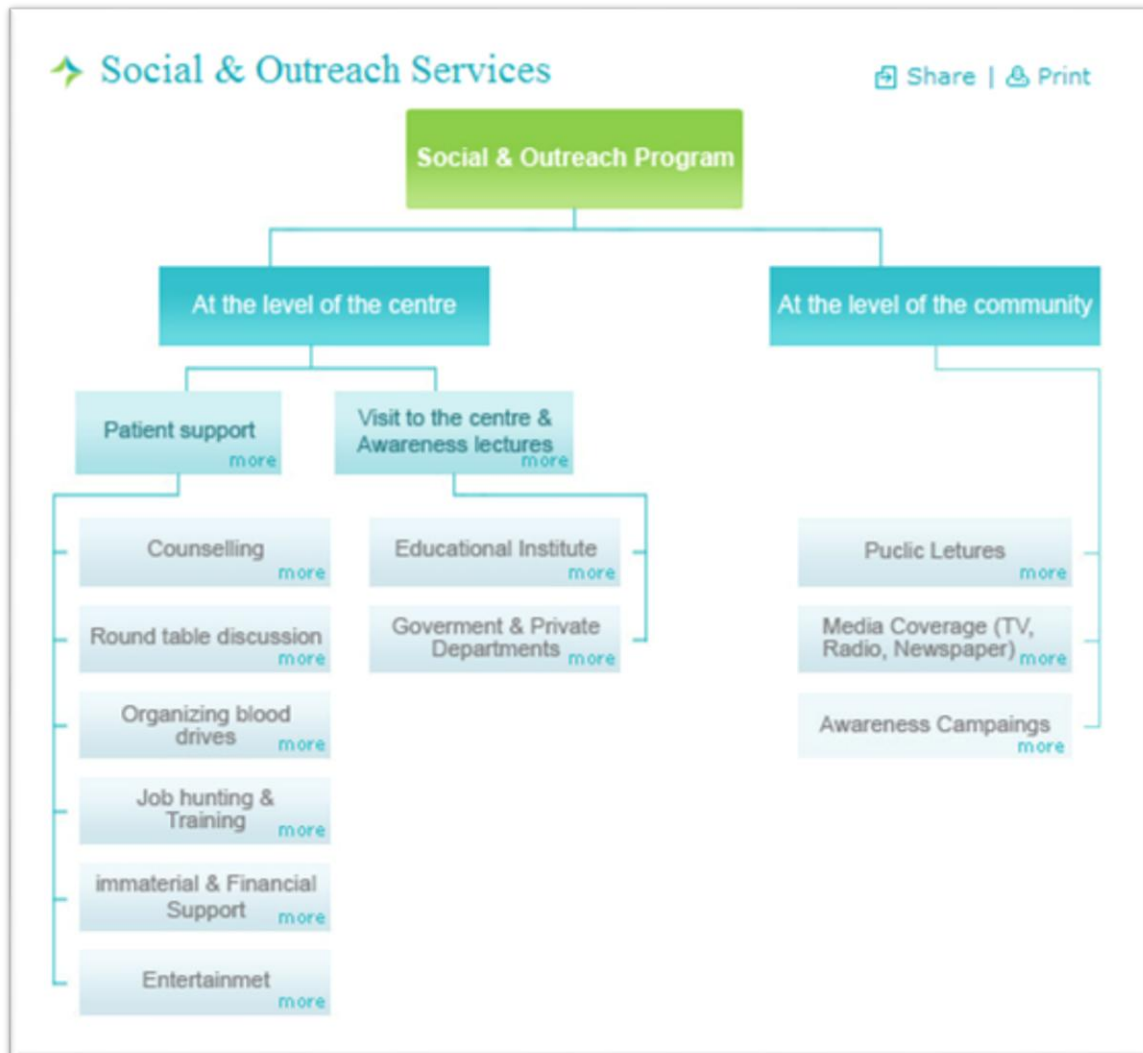
2- What is the process of collaboration between the centre and the potential organizations?

- Through meetings offered by the centre to induct education seminars or visits. The seminars can take place either at the centre or by a specialist visiting the organization. Education seminars are offered free of charge and are usually followed up by some form of support on the organizations part.
  - MOU between the parties; partnerships such as exclusivity for one year or events. The centre and potential organizations can arrange and agree on a series of events that suit both parties.
  - Coming up with a schedule of events. The centre and organization can work together to create a schedule or event for the Thalassemia cause, for example events can be arranged on International Thalassemia day.
  - Moral support. Employees can volunteer to visit patients and provide emotional support; many Thalassemia patients are prone to depression as their condition may leave them feeling weak and so they feel isolated. Visits remind them that they are not forgotten and are still part of society.
  - Donate financial support. Funds are needed to provide medications and cater to patients needs.
  - Companies volunteer to offer jobs, training, scholarships etc. to patients. This is appreciated by the patients who have found it hard to find jobs or continue their education.
- 3- Are there any ways that organizations could improve or get more involved with this cause, and what are the suggestions?
- Direct programs to help patients through the centre/society. This includes creating ways of supporting patients at the centre or society, by volunteering or donating.
  - Prevention programs by educating employees. This can be done through educational seminars to spread knowledge on Thalassemia. Directly: employees help improve the quality

of life for the patients through financial or moral support. Indirectly: Prevention by awareness.

- More companies can get involved, international companies would be especially good. The more companies involved the greater the awareness and the greater the support to patients.
  - Companies can sponsor patients operations. This is very important to some Thalassemia patients as operations can be very expensive. For example; Bone marrow transplants can cure severe cases of Thalassemia, however they are extremely expensive and hard to afford.
  - More companies contribute financial support. Funds are important as they give the centre the freedom to acquire what is needed for the patients.
- 4- Are there any suggestions to CSR research that can be done for a short term project (3 months) with an organization for the Thalassemia cause?
- Research on organizations in the region; categorization. Categorizing which organizations are supporting the Thalassemia cause as it would be useful for the centre to know. Additionally, categorizing the organizations through their descriptions such as international or local companies etc.
  - Creating a program with the organizations and the centre for CSR and Thalassemia. This includes creating an event or collaboration between the centre and an organization to support Thalassemia through CSR.

The following table summarizes the types of support that patients can receive from the centre as well as the community.



**Figure 8. Social and Outreach Program** (Dubai Thalassemia Centre, 2010).

## 6. Discussion

### 6.1 Findings

The results derived from the data analysis have shown support to perspectives regarding blood donation presented in the literature. This case study has also revealed that blood donation is an important and active CSR initiative in the Middle-Eastern region, as it has been identified and adopted by many local and global corporations across the region. The case of the PSF Middle-East blood donation project identifies the need for increased awareness regarding blood donation and contributes to the cause. This data analysis will provide a better understanding of perceptions regarding blood donation that can be undertaken and included in upcoming CSR blood donation initiatives such as blood drives.

Previous studies have found that there are some factors which can be identifying characteristics of blood donors. The results of the data analysis have produced similar findings. The literature has suggested that age, gender and nationality, knowledge and education level, donor type, motivating factors, preferences to blood donation location, exposure level and cultural and religious factors all appear to act as determinants of blood donor profiles.

#### *Age*

Results have shown that more than half of the PSF Middle-East employees involved in the study, are of 25 – 35 years (55%). These findings are similarly to the study conducted by Abdel Gader et al. (2011), where most of the participants who were blood donors were of the age of 30 years or less. Additionally, in the study of Abdel Gader et al. (2011) it was found that more than a quarter of non-donors were restricted from blood donation due to age. Thus, the findings of the survey reflect the ideas proposed in the literature on blood donation as well as expected findings as most of the respondents to the survey belong to the younger age groups. Moreover, it is clear from the statistical analyses ( see Appendix Table 1, p.178) and in particular the correlation between age and blood donor status that there is a strong negative relationship between age and blood donor status, ( $\tau = -.14, p < .05$ ). The results suggest that as age increases, the less likely an



individual could or would donate blood. It can be assumed that employees or participants of older ages are more likely to not donate blood or be ineligible to donate blood.

### *Gender and nationality*

Other characteristics suggested by studies as determinants of blood donor profiles are gender and nationality. According to studies, gender and nationality are believed to be distinguishing characteristics of individuals less willing to donate blood (Boulware, 2002; Al-Drees, 2008). The statistical analyses of the PSF Middle-East results (see Appendix Table 1, p.178), have shown that gender in particular seems to be a very highly significant feature of blood donors, with gender and blood status correlated at the 1% level ( $\tau = .33$ ,  $p < .01$ ). The finding indicates that males are more likely to be blood donors than females, equally research finds that donors are more likely to be men than women (Chliaoutakis et al. 1994). Hence, it can be assumed that gender is an important feature of blood donor profiles. Although in this study some female non donors are less willing to donate blood due to the pain and stress of the procedure, it must also be noted that females are more restricted from blood donation than males due to pregnancy and menstruation limitations. Both the data analyses and literature review seem to suggest that blood donors are more commonly male than female.

### *Knowledge and education level*

Knowledge and education level is also addressed by the literature reviewed. Research has shown that donors have a more positive attitude towards blood donation than non donors, (Abdel Gader et al., 2011). The authors also propose that awareness and education are key ways of establishing and changing perceptions towards blood donation (Abdel Gader et al., 2011). Additionally, Chliaoutakis et al. (1994) also found that blood donation was correlated with knowledge regarding blood donation. Thus, studies imply that the knowledge level of donors regarding blood donation is perhaps higher than non donors, and that the knowledge of blood donation may influence to some extent their decision in becoming blood donors. Cross-tabulations between blood donors status and awareness of blood donation conditions (see Appendix Table 5B, p.187), shows a significance at the 1% level, ( $\chi^2 = 22.50$ ,  $p < .01$ ). The majority of blood donors

(79%), claim that they are aware of blood donation conditions, whereas less than half of the non donors (44%), claim the same. It is interesting to see that most of the participants non-eligible to donate blood (75%) also claim that they are aware of blood donation conditions. Perhaps, non eligible participants have acquired their knowledge regarding blood donation through trying to donate blood or because they are aware of the conditions that leave them ineligible to donate blood. These results reflect the ideas found in the literature review, as they illustrate that awareness or education level is related to blood donor status, and that it appears that blood donors are more aware and knowledgeable of blood donation than non donors.

Moreover, statistical analyses have also been used to examine the perceptions of donors and non donors regarding blood donation eligibility factors. Cross tabulations between the eligibility factors related to blood donation and blood donor status show that, more donors regard age as not important in qualifying for blood donation (52%) whereas most of the non donors believe that it is an important factor (63%).

The cross-tabulation between blood donor status and perceptions of employees regarding the role of age in blood donor eligibility (see Appendix Table 6B, p.188), appears to be significant, ( $\chi^2 = 4.78, p < .10$ ). Considering the gender factor, most of the donors, almost 89% of them believe that gender is not important, on the other hand most of the non donors (81%) also believe that gender is irrelevant to blood donation. Health status is believed to be important by the majority of both donors (95%) and non donors (94%) of the sample. The greater percentage of donors (53%) believe that weight is not important, whereas the greater percentage of non donors (71%) believe that weight is important. Illicit drug use is considered by the majority of both the donor and non donor groups as important. Additionally, cross tabulations between the eligibility weight factor related to blood donor status (see Appendix Table 7B, p.189), seems to be significant at the 10% level, ( $\chi^2 = 4.78, p < .10$ ). Similarly, the illicit drug use factor (Table 8B, p.190) also appears to be significant through the cross tabulations at the 10% level, ( $\chi^2 = 6.41, p < .10$ ). The majority of both donors (89%) and non donors (77%) also believe that illicit drug use is an important factor when qualifying for blood donation. Pregnancy is also selected by the majority of both donors (77%) and non donors (69%) as a determining factor in blood donation qualification. The menstruation factor was selected as not important by both donor (62%) and

non donor (60%) employees, whereas the infectious disease carried factor was selected as important by both groups with frequencies of 89% donors and 79% non donors. This shows support of the literature to some extent, as it seems that donors are well informed of eligibility factors, however in this study non donors as well seem to be highly knowledgeable of the factors as well. Overall, this sample of PSF Middle-East employees seem to be well informed on blood donation eligibility factors.

### *Frequency of blood donation*

In relation to these implications, it was expected that the frequency of blood donations is also positively related to the knowledge and education level, also emphasizing the importance of awareness. Hence, based on previous studies and implications from the literature, it was expected that the more knowledgeable a donor is on blood donation, the more often he/her would donate blood. In comparison with the results from the PSF Middle-East employees, the statistical analyses has shown that indeed frequency of blood donation and the knowledge/education level are strongly correlated at the 5% level, ( $\tau = .17$ ,  $p < .05$ ) (see Appendix Table 1, p.178). The results are in parallel to the implications of the literature, but also show that the frequency of blood donation is, in addition, strongly related to knowledge and education. Therefore, it can be assumed that knowledge and education not only determines the attitude towards blood donation as well as the status of a donor but also the frequency of donation. The results show that knowledge/education level and blood donation are related and that the higher the knowledge/education level the more regular the donation.

### *Donor type*

Donor type is another factor that is addressed in both the literature and statistical analyses. The literature suggests that the most common types of donation are either direct or voluntary, while paid and autologous donations are less common. Due to the high number of blood disorder cases in the region, it was expected that most donors in this study would also either be direct or voluntary, as it would be likely that many donations are to family/friends in need. The data analysis has produced results that support these expectations as well as the studies reviewed. Voluntary donation is the most dominant type of donation in this study, representing 64% of the

participants. Similarly, Abdel Gader et al. (2011) have also identified the donors of their research as both voluntary and direct donors, with the majority being voluntary donors.

In the case of the PSF Middle-East employees, 64% of the sample were voluntary donors, compared to 6% direct donors and 1% commercial donors. None of the sample of employees are paid donors and 30% are not blood donors. These results are in agreement with the expectations of this study and the previous studies on blood donation.

### *Motivating factors*

From the literature reviewed, it has been understood that there are certain drivers or reasons behind donating blood. These drivers include, a sense of helping others, helping a friend/relative in need, helping the community, obtaining information about one's own health (check-up) and recognition or rewards. Studies have also examined and identified de-motivating factors related to blood donation, including pain and stress related to blood donation, poor health conditions, distance or location of blood donation, behaviour/professionalism of blood donation staff and fears such as hygiene and safety of the actual procedure. Al Drees (2008) and Chilaoutakis et al. (1994) both believe that the de-motivating factors are mostly associated with blood donation by non donors. This implies that donors would mostly associate with the motivating factors of blood donation, this was an expectation that is in agreement with the results derived from the statistical analyses of this study.

The cross tabulation tests between blood donor status and motivating factors have shown that, more blood donors (56%) than non donors(35%) have selected motivating factors. A sense of good deed and helping others is the most selected motivating factor and it is chosen by more non donors (66%) than donors (57%). However, the second factor, "Friend/Relative in need" was expected to be the most chosen option due to the widespread of blood disorder in the region, this expectation was based on the literature where Chliaoutakis et al. (1994) found that family and friends in need were the most common driver behind blood donation. Thus, in contrast to expectations, the sense of good deed and helping others is the most popular selection amongst both donors and non donors. These options were expected to be popular but it was expected that the friend/family in need would be the most common motivational driver to blood donation in

the sample, based on the previous studies reviewed and the because of the region of the study. Moreover, cross-tabulations (see Appendix Table 9B, p.192) between blood donor status and motivating factors are significant at the 10% level, ( $\chi^2 = 19.05$ ,  $p < .10$ ).

It is interesting to see that more non donors than donors selected health-check up as a motivating factor; 8% of donors compared to only 1% of donors selected this option. This could prove to be a valuable insight into the area of motivating non donors to donate blood. This could be studied by PSF Middle-East as its implementation could increase the number of blood donors at future blood drives. It is a worthwhile finding to be examined in relation to blood donation and CSR initiatives, as it could increase the success rate of blood donation related CSR initiatives.

Complimentary health check-ups are also acknowledged as drivers to blood donation by Abdel Gader et al. (2011) and Chilaoutakis et al. (1994). Correlations between the participation of PSF Middle-East employees at the next event and health status as a motivating factor (see Appendix Table 1, p.178), result in a positive significant relationship ( $\tau = .20$ ,  $p < .01$ ). This is a very interesting finding, as the authors mentioned also identify the chance to check-up on one's own health as a factor motivating employees to donate blood and so it can suggested that perhaps if there was a health check-up involved with the next blood donation event at PSF Middle-East, employees will be more motivated to donate blood.

As for de-motivating factors, it was expected that more non donors would select the pain and stress related to the procedure than donors who would be more used to the procedure. Results from the statistical analyses are in support of these expectations, as more non donors (29%) selected this option than donors (11%). Similarly, Chilaoutakis et al. (1994) and Al-Drees (2008) also identify fears related to the procedure as a discouraging factor for non donors. The poor condition of one's own health is the most common selection between both groups of non donors (34%) and donors (40%); this seems to be a rational and logical selection as it makes sense that one would be discouraged to donate blood if one's own health is poor. It is understandable that it is the most popular selection from the list of de-motivating factors. Cross-tabulations (see Appendix Table 10B, p.194) between blood donor status and de-motivating factors are significant at the 1% level, ( $\chi^2 = 26.95$ ,  $p < .01$ ). This indicates that there is a relationship

between de-motivating factors and blood donors status as Al-Drees (2008) and Chilaoutakis et al. (1994) have proposed.

### *Preferences to blood donation location*

Potential blood donors and regular donors have preferences as to the location of blood donation. The literature suggests that most individuals would be prepared to visit blood donation centres whereas others might prefer the blood donation procedure to take place at their workplace/office or home (Abdel Gader et al., 2011). The findings from the analysis are similar to the findings reported in the literature as the two most popular selections to the preferred location of blood donation are indeed blood donation centres (44%) and the workplace (37%). It was assumed when reviewing the literature that perhaps donors would be mostly those who are prepared to go to blood donation centres to donate blood whereas non donors would prefer that the procedure be brought to them either at work or at home. However, the results are in contrast with the assumption as it appears that with donors the workplace is the most popular selection (49%) whereas non donors more often chose the blood donation centre as the preferred location (55%). This could be due to the fact that non donors consider it safer and more hygienic to donate blood at a blood donation centre rather than at the workplace.

Donors on the other hand would already be comfortable with procedure and sure of its safety and hygiene and since they are willing to donate blood the workplace would seem to be the most convenient option. This is a very interesting finding as it gives positive support to the blood drive initiatives being carried out by PSF Middle-East, employees do prefer to donate at the workplace and so the location and setting up of the blood donation serves the initiative and at the same time is convenient for employees. Hence, these results are consistent with the findings in the literature, but there is a disagreement with the assumption made prior to the study. Additionally, cross-tabulations between blood donors status and preference to blood donation location are significant at the 1% level, ( $\chi^2 = 17.86, p < .01$ ), (see Appendix Table 11B, p196). This result supports the studies examined in the literature review, as we can see that donors and non donors have slightly different preferences regarding blood donation location.

### *Exposure level*

This factor relates to how information regarding blood donation was acquired among the PSF Middle-East employees. This is an important factor in the study as it shows how the perceptions of blood donation were created and also show how deep these perceptions are. It also gives insight to how employees would prefer to hear of blood donation. Within the study conducted by Al-Drees (2008) it is found that most participants found out about blood donation through newspapers or television. Chliaoutakis et al. (1994) found that only 2% of their sample were influenced to donate blood by the mass media. Nonetheless, these are interesting findings that suggest that the media is a means of informing individuals of blood donation. However, in comparison to results in this study, radio and television were the least preferred means to hear of blood donation, and educational seminars were the most preferred among all PSF Middle-East employees of the sample (27%). SMS messages (24%) and social networks (23%) were also highly preferred amongst employees. This is interesting as it shows that other means of media such as the messages and social networks are more preferred than the somewhat older methods of radio and television. This could be positive in terms of CSR blood donation initiatives as it shows that the more recent and technological methods are more popular. The “Triple Effect Project” which was introduced by PSF Egypt and is planned to be extended to other offices of the region, works to increase awareness regarding blood donation and health. There already is a Facebook account representative of this project created by PSF Egypt, and so these findings could imply that the project is being promoted through the most popular and preferred method of exposure of PSF Middle-East employees.

Moreover, PSF Middle-East can also explore other popular social networks such as Twitter that could be of use for future blood donation CSR initiatives carried out by PSF Middle-East. It is also worth noting that the messages and social network options would be less expensive than the television and radio options, this is a positive aspect for both the organization and CSR. Additionally, results from the survey have shown the majority of employees have been exposed to blood donation at their workplace/office (63%), this again could be another indication of PSF Middle-East CSR efforts being invested in the right direction. The second most popular place is university (62%), this implies that most PSF Middle-East employees are aware of blood donation from a young age, and so they are likely to be open to blood donation.

### *Cultural and religious factors*

While reviewing the studies conducted in the blood donation literature, it became apparent that there are also cultural and religious norms associated with blood donation. Depending on religion and culture, blood donation seems to be either supported or condemned. Abdel Gader et al. (2011) imply that religion can act as a driver to the decision to donate or not donate blood. These factors were not examined or mentioned in the survey as it could be regarded as offensive and unnecessary by participants, and so it was extremely interesting to see that a few participants mentioned religion somewhere throughout the survey. Although these factors were not considered in the survey, the fact that they were mentioned in the “Other” option boxes shows that they are indeed motivating factors to blood donation. One PSF Middle-East employee stated “Rewards from Allah” as the answer to question 12, “What made you decide to donate blood?” this answer suggests that this individual's religion, in this case; Islam influenced him/her to donate blood. Moreover, another PSF Middle East employee stated “Church” in response to question 19 of the survey which examines the place of blood donation exposure. This response also suggests that religion, in this case Christianity, has played a role in this individual's awareness of blood donation.

Hence, the religious and cultural factors perhaps also play a part in the shaping of individual's perceptions regarding blood donation. As mentioned earlier in this study, it must be acknowledged that an individual member of a religion that condemns blood donation could actually be a blood donor despite religious restrictions. Additionally, an individual from a religion that encourages and calls for blood donation could possibly never donate blood. Thus, this is a sensitive and difficult subject to examine but it is an interesting dimension of blood donation factors to review.

In summary, we can see that almost all the factors discussed above seem to be identifying characteristics of donors and non-donors. The studies examined in the literature, as well as the results derived from this study suggest that these factors are related somehow to blood donor status. It is also evident from these factors that perceptions regarding blood donation differ between donors and non-donors, and so PSF Middle-East is enabled to see the difference and create initiatives that can aim to target both donors and non-donors as potential participants at



future CSR blood donation related activities. Understanding the participants and what their perceptions of blood donation are could increase the success rate or the number of participants at upcoming events. The differentiating characteristics could also help to identify where donors and non-donors differ, giving PSF Middle-East a chance to alter or influence the difference to help the cause of blood donation. For example, where a knowledge gap has been identified between donors and non-donors, PSF Middle-East can try to increase awareness through educational programs.

## **6.2 Limitations of the case study:**

There were some limitations to the case study that were anticipated and some which occurred during the course of the study.

### **6.2.1 Prior –study limitations:**

The main limitation to the study, is the design of the questionnaire. The design and format of the questionnaire were selected to fit PSF Middle-East's requirements. In this case, before creating both the PSF Dubai and the PSF Middle-East questionnaires, meetings were set up where the design and format of the questionnaire was discussed. The questionnaire was then designed according to the meeting guidelines, in this case it was important to PSF Middle-East that the questionnaire was online with a multiple choice format. PSF Middle-East was also involved with the questions and options within the questionnaire; all these elements were designed to meet PSF Middle-East requirements and approved by PSF Middle-East. Over the period of designing the questionnaire, the questionnaire was constantly checked by PSF Middle-East and edited until it exactly met PSF Middle-East's needs. The different versions of the questionnaire are presented and discussed in the methodology chapter. Moreover, as the questionnaire was to be sent out to all 2,500 PSF Middle-East employees over the Middle-Eastern region, it was of vital importance that the questionnaire was tailored to fit PSF Middle-East's needs and this was taken into account in this study.

Hence, the questionnaire has been designed to satisfy the needs of the client in this case study; PSF Middle-East. However, in terms of analyzing data and using analytical software, perhaps a questionnaire with a Likert scale would have enabled for more tools to be used and further analysis of the data collected.

Nevertheless, in this case it was important to satisfy the client, which is globally known organization and that the study sample was very large. It is understandable that a questionnaire sent out to 2,500 employees over the offices of the Middle-East needs to be designed in a way that meets the organization's requirements. In the end result, it seems that the findings are valuable to this organisation and indeed other PSFs when designing blood donation CSR events, yet a Likert scale attitude questionnaire might have given even more insight.

### **6.2.2 Limitations during the course of the study:**

During the course of this case study, the main limitations were also related to the questionnaire. As mentioned in the methodology chapter, the launch of the questionnaire was delayed by more than a month due to a few reasons. Initially, the questionnaire was set to be issued in mid-August but was delayed until the 24<sup>th</sup> of October. This was firstly due to the decision of the PSF Middle-East team to delay the launch until after the summer to ensure that many employees as possible could take the survey as many were away on annual leave. Additionally, it also happens to be that this year the holy month of Ramadan starts in the middle of the summer and so this was taken into account as well. Moreover, as it was later decided that questionnaire would be extended to other Middle-East based PSF Middle-East offices, the approval process took some time and thus this also contributed to the delay of the launch of the questionnaire. It took more than 2 weeks for the questionnaire to be approved by all relevant parties such as regional managers, and the questionnaire was sent out to the managers on the 20<sup>th</sup> of September. Some more time was needed for the questionnaire email to be designed and approved as well, this included attaching logos and such details which was handled by the marketing team. Moreover, a regional letter which was created by Ms. Jackson also needed approval by regional managers.

## **7. Conclusions, Recommendations and Suggestions for future research**

### **7.1 Conclusions**

In conclusion, this study examines CSR in the Middle-East and the blood donation initiative in particular. The collaboration with PSF Middle-East has resulted in examining the perceptions of PSF Middle-East employees regarding blood donation. Moreover, PSF Dubai has recently implemented a blood drive as a CSR initiative and plans to make it a permanent and regular event. Thus, findings of this study could be of value as they provide insight into how PSF Middle-East employees regard blood donation and how PSF Middle-East can perhaps use these findings to further improve blood drives or any blood donation related initiatives. PSF Egypt is also involved in “The Triple Effect Project” which is also related to blood donation, health and awareness, and so the survey findings could also prove to be useful for the project. Blood drives are to be adopted as CSR initiatives by most PSF Middle-East offices in the region, including the United Arab Emirates, Saudi-Arabia, Qatar, Bahrain, Kuwait, Oman, Lebanon, Egypt, Iraq, Jordan, Libya and Palestine.

The statistical analyses conducted throughout this study, have shown that most of the PSF Middle-East employees that participated in this study (56%) are blood donors, whereas only 34% are not and 9% are ineligible to donate blood. Hence, most employees seem to be blood donors and also have a positive outlook on blood donation, and so it can be assumed that the blood donors are ready to donate at the workplace, in this case the PSF Middle-East office and that PSF Middle-East blood drive initiatives should be successful. Additionally, 86% of the whole sample stated that they would donate at the next PSF Middle-East blood drive event whereas only 14% declared that they would prefer not to. Moreover, the majority of blood donors from the sample selected the workplace as the most preferred location to donate blood. These figures are encouraging and at the same time reassuring, as they suggest that the PSF Middle-East blood drive initiatives will be positively received by the employees and contribute to the blood donation cause at the same time.

Overall, there seem to be positive perceptions regarding blood donation from blood donor employees, on the other hand non donor employees have expressed fears and concerns mostly regarding the procedure. The majority of employees (27%) also express an interest in learning about blood donation through educational seminars, and so this can be an opportunity to better inform employees of blood donation and address misperceptions regarding the procedure.

## **7.2 Recommendations**

### *Recommendations for PSF Middle-East*

Firstly, based on the results of the data analysis, it is recommended that PSF Middle-East offices in the Middle-East provide or conduct educational programs/seminars to increase awareness and to clear up misperceptions regarding blood donation. A large group of employees (27%) in the sample show interest in learning about blood donation through educational seminars, implementing this idea could increase the knowledge level of blood donation amongst employees which in turn could increase the number of participating employees at next blood donation event.

In the case of PSF Dubai, it is suggested that collaboration with the Dubai Thalassemia Centre or the Dubai blood donation centre be established. From the interview conducted with the director of The Thalassemia Centre in Dubai, it was understood that educational seminars could be set up in organizations and so this is a venture worthwhile considering. It could potentially resolve misperceptions and encourage more employees to donate blood at the next event or blood drive.

Secondly, as “Social networks” is also a highly preferred method of learning of blood donation amongst employees, perhaps PSF Middle-East offices can consider social media and establish some form of communication with employees. It is also worth noting that, as we are in a highly technological age, where social media networks are becoming increasingly popular, it is suggested that PSF Middle-East offices review this dimension and establish some form of social media to represent PSF Middle-East’s CSR initiatives. PSF Egypt have a “Facebook” page dedicated to the “Triple Effect Project” as well as a YouTube video which explains the initiative. These are great endeavours as they enable PSF Egypt to communicate with the increasingly “techno-savvy” population of today. Additionally, the majority of the employees in the sample (52%) are

of younger ages and so social media could be a great way of attracting them and getting them involved with CSR initiatives. Moreover, social media is also a great means of interacting with the public and informing them on what CSR activities are being undertaken by PSF Middle-East as well as increasing the scope and awareness of the initiative. In a way, social networks can even promote an organization's image through enabling the public to be constantly aware of what CSR initiatives are being adopted. Social networks can even attract awareness to causes and involve the public in initiatives, hence social networking could prove beneficial to PSF Middle-East in terms of positive media as well as beneficial to PSF Middle-East employees as they will be constantly gain publicity and so awareness levels will be increased. It is recommended that PSF Middle-East, consider creating a Twitter account, where updates on any CSR initiatives are posted and anyone in general can read them as well as employees. It is a simple and extremely fast way of informing the public of any PSF Middle-East CSR related news. Possibly, two profiles can be created, one for PSF Middle-East CSR activities and another for PSF Middle-East in general, or perhaps one profile can be created that would deliver any PSF Middle-East related news. It is worth noting that so far, PSF Canada and PSF USA both have Twitter profiles, where they constantly update the public with PSF Middle-East related information. It is believed that creating something similar for PSF Middle-East for general information or for CSR initiatives would be beneficial to all parties of PSF Middle-East; the organisation itself, the PSF Middle-East employees and the championed causes/initiatives.

Finally, it is suggested that PSF Middle-East later consider expanding its blood donation related CSR activities. For example, a fund-raising event can be initiated to raise finances for blood disorders which are very common in the Middle-East. Blood donations are highly appreciated as they are vital in saving lives, however there are some medications and treatments as well that are also involved with blood disorders. Thus, a fund-raising event would help provide some funds to blood disorder causes. In terms of PSF Dubai, this event can be implemented through collaboration with the Thalassemia blood donation centre, which have valuable experience in terms of these events and how they can be set up. It is also worth noting that any blood or financial donations made to the Thalassemia cause are posted on the centre's website and organisations are usually recognized for their thoughtful donations and help. Moreover, as 84% of employees would be motivated to donate blood if a health check-up is included, it is proposed

that PSF Middle-East examine the matter, and perhaps collaborate with a blood donation centre to provide health check-ups for employees who donate blood.

*Recommendations for other organisations operating in MENA countries*

In relation to other organisations in MENA countries, similar suggestions are proposed. Primarily, organisations are encouraged to adopt blood donation causes as CSR initiatives if they have not already done so, as the MENA region itself is one of the regions where blood disorders are most common. Adopting a locally and regionally important cause would benefit the organizational image, as it would show that organisations are involved with the community. The blood donation cause will also benefit greatly from as much support as possible; as with blood donations they usually contribute to saving lives.

Additionally, organisations in MENA countries can establish collaboration with a local blood donation centre, as PSF Dubai and Egypt did, to help support the cause and understand ways in which the cause can be supported. This collaboration would also help the organisation to adopt the blood donation initiative as a permanent or regular part of their CSR activities, which again reflects the organisation's involvement with the community as well as supporting the cause. Having regular contact with a blood donation centre will also facilitate the process of organising blood donation events, etc.

It is suggested that organisations that have not set up or implemented blood drives yet, take the opportunity of introducing their employees to blood donation through educational programs/ seminars. These can be established through collaboration with a blood donation centre in line with the previous suggestion. This would be a great way of easing any unknown fears and concerns regarding blood donation that employees may have. In a way, it can be regarded as a pre-blood donation activity where employees are prepared for and informed about blood donation and the procedure involved. This could increase the number of participating employees as well increase knowledge and awareness levels on blood donation.

MENA based organisations should also consider social networking, as this is a concept that is becoming increasingly popular. It opens communication channels with the general public in a

much faster way, where news related to the organisations can be posted instantly and read by as many individuals as possible. Employees might also like this interaction and be encouraged to participate and feel more involved with future CSR initiatives of any kind.

Finally, MENA based organisations are also recommended to create feedback programmes for any CSR blood donation events carried out. This can be regarded as a post-blood donation event activity, where participating employees are encouraged to give feedback on the event and share their thoughts; in turn CSR officers can review the feedback and use it when designing future events. Additionally, non-participating employees could also be included in the feedback programme, as to provide insight to why they have not participated and addressing their concerns so that perhaps they could get involved in the next event. It should be noted that this recommendation could be applied to any CSR initiatives and not only blood donation. They are specifically mentioned with blood donation here as, the case discussed involves blood donation as a CSR initiative.

#### *Recommendations for Government policy makers and CSR consultants*

Based on the results of the statistical analyses, non donors seem to have the most fears and concerns regarding blood donation. This being noted, it is recommended that Government policy makers increase regulation on blood donation procedures; to ensure that they are 100% safe and hygienic. This is a great issue that needs to be addressed, and increased regulation that would guarantee the safety of the procedure would possibly substantially increase the number of blood donors. Moreover, government policy makers could observe the demand for blood throughout the country and work with blood donation centres, hospitals, the public and organisations to supply the needed blood. A steady blood supply is crucial and this step could aid in obtaining an efficient supply of blood that can cater to the demands and needs of society.

The safety of the blood donation procedure should be addressed and promoted by government policy makers as well as CSR consultants. Many individuals may not be informed about whether the procedure is safe or not and so are discouraged to donate blood. Steps should be taken towards increasing the knowledge and awareness levels of the public regarding blood donation in general; better informed individuals are more likely to give blood, as shown by this study. CSR consultants can take steps toward better informing employees on the safety of the procedure,

whereas government policy makers can work towards increasing public awareness regarding the matter.

Perhaps surveys can be conducted by health institutions and government policy makers to examine the current knowledge and awareness levels of society regarding blood donation. After assessing these dimensions, steps can be drawn up to increase awareness, as there would be an idea of where there is a knowledge gap or what society needs to be better informed about. CSR consultants can also work on collecting similar data from employees in order to address any issues they have regarding blood donation.

As the data analysis also reveals that the idea of health check-ups would motivate the majority of employees (84%) to donate blood, it is proposed that government policy makers examine this concept and perhaps work on enabling some kind of health check-up when blood donations are carried out.

*Recommendations for employees:*

Employees are encouraged to take an interest in CSR initiatives and activities undertaken by the organisation. These activities need as much participation and involvement as possible to be successful and stimulate change. Employees that are unsure about initiatives or even CSR activities, are encouraged to conduct some background research themselves, just to be better informed and so that they can commit fully to an initiative. The research is not suggested to be extensive or complex, but just involving learning some general information regarding an initiative. The information can also be obtained by contacting the CSR department and perhaps discussing a certain cause or initiative. Also, if social networking was implemented, employees could actually use this opportunity and check the organizations profile for any information regarding a cause.

Employees are encouraged to also address their own fears and concerns regarding blood donations and procedures. Employees can actually visit blood donation centres to assure themselves of the safety and hygiene of procedures. Moreover, employees are recommended to participate in feedback programmes as it is a means of having their opinions heard and their



needs addressed. Informing the organisation of any suggestions or feedback allows for improvement and greater success at events, and so employee's participation in feedback is crucial.

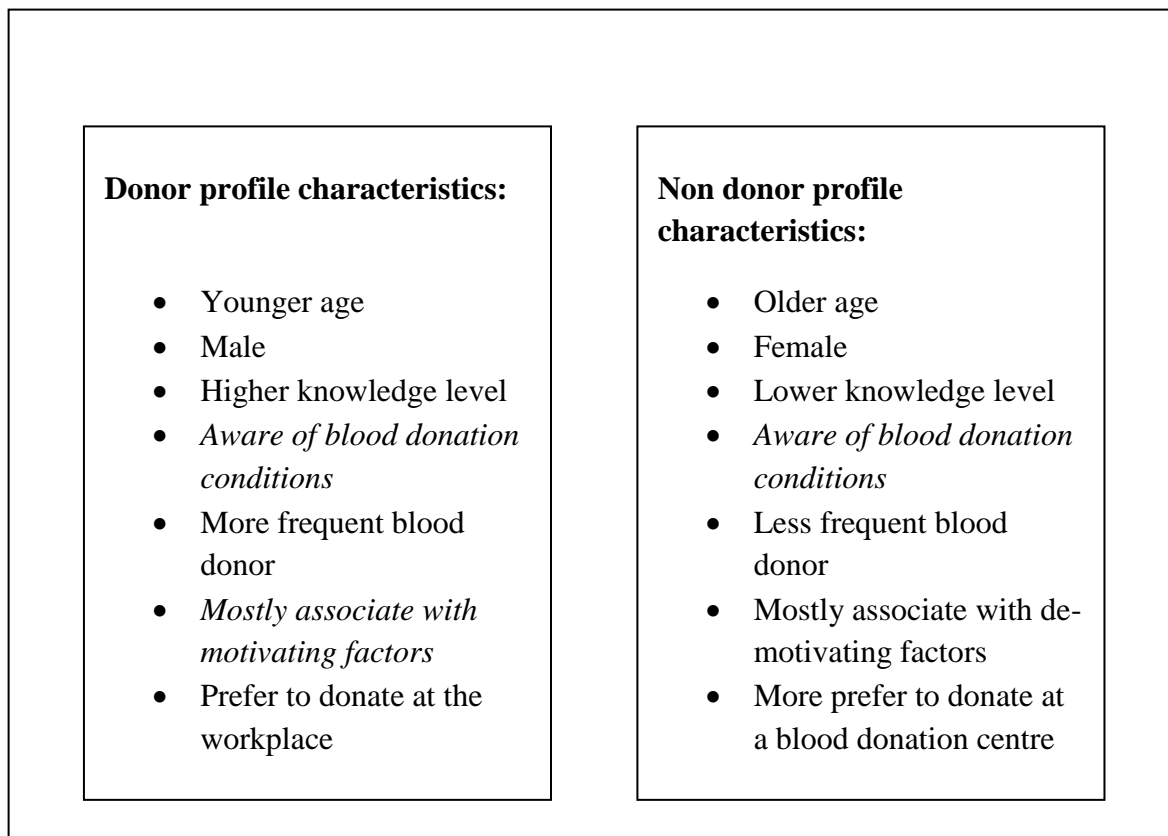
### **7.3 Suggestions for future research**

#### Suggestions for academics

Academics can review the idea of CSR in MENA countries and examine the development of CSR over recent years. This would provide an outlook on how CSR is growing in developing countries and how far behind it is from CSR in western countries. The types of CSR activities adopted by MENA countries could also be examined and compared to those in western countries; it would be interesting to see if MENA based organizations are more involved in causes that are regional or international organisations.

Furthermore, it is suggested that perceptions of employees regarding blood donation are further examined by academics, perhaps within other organisations. This would enable for comparisons between findings of this study and other studies, and provide more insight on the concept of blood donation and different perceptions. If possible and in agreement with the organisation, a Likert scale attitude based survey can be conducted and sent out to employees. This could provide more insight on donor and non donor profiles. Research can be conducted on the relationship between social networking, CSR and organizational performance. It would be extremely interesting to see if there was a relationship and the extent of the effect of social networking on organizational image and performance.

Below is a diagram illustrating the donor and non-donor profile characteristics which were found significant at the 1% or 5% level. The items significant at the 10% level are also included and can be identified in italics.



**Figure 9.** Diagram of significant donor and non-donor profile characteristics found in the study

Suggestions for practitioners (CSR consultants, government officials, CSR offices in organisations)

Government officials can collect information, for example via survey, regarding perceptions of employees on the blood donation procedure. This is a concept that they can act upon once results are analysed. The findings can then be used in future steps when increasing awareness regarding the cause. CSR consultants and CSR offices in organisations can conduct research on pre and post CSR activities that involve employees. This could perhaps provide a guideline to organisations on ways to introduce initiatives and ways to collect feedback. This would be interesting and useful research to organisations and in general.

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## **Appendices:**

### **Appendix 1:**

#### **CSR related research proposal**

Dear Mr. Roberts,

Following our meeting last month regarding PSF Middle-East's CSR initiatives, I have done some research on the Thalassemia cause. I have approached the Dubai Thalassemia Centre and the Arabia CSR network. I would like to propose some research on collaborations between these organizations and PSF Middle-East.

The Dubai Thalassemia Centre is the first centre of its kind in the Middle-East and the only Thalassemia centre in the GCC region. Due to the increasing number of Thalassemia cases in this region especially, collaboration with the centre would be a great opportunity for PSF to uptake CSR. It is a very prominent issue in the region and so continual support for this cause would be greatly contribute to the objectives of the cause. The centre's vision and mission are as stated below:

Vision:

“Thalassemia Centre commits to excellence by providing a professional world Class Care for patients with Thalassemia combined with effective programs to eradicate Thalassemia in the region.”

Mission:

- “Provide professional and high quality care for patients with Thalassemia.
- Play an essential role in the fully-integrated health- care system featuring the full continuum of care provided by DOHMS.

- Extensive screening, counselling and prevention policies, to reduce the number of newborn affected with Thalassaemia and eventual eradication.”

On the other hand, The Arabia CSR network is a network that has been created to focus on efforts towards CSR in the Middle East. It is a network that organizations can join through requesting a membership proposal. The details of the proposals were not given to me as I am an individual however organizations would get a document stating the membership details and benefits. The membership requires an annual fee of AED 20,000 and as I understood it involves publicity for the organizations support. The aims and objectives of the network are listed below:

- “To demonstrate commitment to the global sustainable development agenda
- To contribute to the national initiative for sustainable development in the UAE
- To position the UAE as a leader in Business Excellence and CSR in the region
- To promote the voluntary adoption of CSR policies and practices among businesses in the region
- To showcase examples of best practice CSR activities undertaken by corporate organizations and public sector enterprises
- To identify benchmarks and key indicators of sustainable growth
- To develop a national databank of CSR case studies to boost research into CSR
- To develop a network for liaison and partnerships with entities that are engaged in CSR programs at national, regional and global levels”

As per our last meeting, I believe that PSF Middle-East hosted a blood drive for on the 26th of May. After visiting the centre and seeing how crucial blood donations are to the patient I really appreciate and respect PSF Middle-East’s efforts towards this cause. I also would like to say that even though PSF Middle-East has recently taken up the Thalassaemia cause, another initiative regarding Thalassaemia can be organized, as I have mentioned before it is really a prominent cause and the more support there is the more effective.

After visiting the centre and interviewing the coordinator, it seems that many options are available to further champion a cause and it doesn't have to be the blood drive which has already been taken up by PSF Middle-East recently. However, blood donations are crucial to this disease and so as much blood drives as possible are greatly appreciated and needed by the patients. Below is a summary of various ways to further support the Thalassemia cause:

- Through meetings offered by the centre to induct education seminars or visits. These can be either at the centre or a specialist visiting the centre or an exchange of both. They are also free of charge.
- MOU between the parties, partnerships such as exclusivity for one year or events.
- Coming up with a schedule of events, (International Thalassemia day, May 8th).
- Moral support. Employees can volunteer to visit patients and provide emotional support.
- Donate financial support. (Cheques etc.)
- Companies volunteer to offer jobs, training, scholarships etc. to patients.

From the interview I also understood that financial support is very much needed, not only for the centre to provide facilities or additional services for the patients but for the medicine itself. The medicine required by the patients is quite expensive, the number of patients seems to increase and more medicine is needed.

The education seminars offered by the centre are also very important as they help raise awareness which is vital to this cause. The more people aware of this disease the less the chances of it spreading, people understand what it is and are more keen to be tested for treatment or prevention purposes. At the end of the day this helps maintain a healthy society that can work and perform well. The awareness also motivates people to donate blood as they understand how crucial it is to the survival of Thalassemia patients.

In conclusion, I would like to propose three different options:

- A mutual relationship between PSF Middle-East and the DTC (Dubai Thalassemia centre) can be established. There can be an ongoing collaboration between the two organizations for events that champion the Thalassemia cause.
- Referral of clients. As PSF Middle-East has many clients who also are willing to further their CSR, PSF Middle-East can refer other organizations to the centre. This way the cause is greatly spread. It would really increase the awareness and CSR towards Thalassemia. The more organizations that get involved the more support to the cause.
- Broaden PSF Middle-East's involvement with this cause in the community. This can be through the various ways mentioned earlier and not just the blood drive.

I personally feel that a fund raising event hosted by PSF Middle-East would be great, additionally perhaps clients of PSF Middle-East can be invited to partake in the event to raise funds for Thalassemia; they can even be invited to donate funds. The centre can use the funds raised as needed, it usually also holds an event at the centre whenever funds or services are donated to the centre in the name of the organizations as appreciation. The event is also published on their website and also involves media coverage. I believe this would be a great option as it involves the last two points mentioned above and could also eventually lead to a mutual relationship between PSF Middle-East and the DTC.

These are the ideas I have thought of so far, however any suggestions or ideas are greatly welcomed and appreciated. I hope that PSF Middle-East is willing to further extend its support for Thalassemia again, it really is a cause that needs championing especially in this region.

I look forward to discussing the various options and possibilities with you and your colleagues in PSF Middle-East. May I suggest that we arrange a meeting at your offices in Emaar Square some day and time to be agreed with you occurring in early June? In our meeting we can move towards identifying a CSR project brief which benefits your organisation and facilitates planning mutual outcomes relating to my MSc dissertation in Project Management.

Thank you,

Meera

## Appendix 2

Blood donation Feedback program questionnaire designed for PSF Middle-East. This is the first questionnaire that was created for PSF Dubai by request of the CSR managers. It was created to collect feedback from PSF Middle-East employees regarding the first ever blood drive event that occurred a month before. The survey was created on the 12<sup>th</sup> of June 2011.

Dear Sir/Madam,

It would be greatly appreciated if you could take some time to fill out this survey, it will be used to collect primary data for a feedback programme on the blood drive held by PSF Middle-East on the 26th of May.

The survey consists of two parts:

1. General Information
2. Aspects of the blood drive

Thank you,  
Meera, Researcher.

**1.**

### **1. Part 1: General Information.**

**Age:**

25 years or less

25 – 35 years

36 – 45 years

46 – 55 years

56 years or more

[Reset](#)

2.

Gender:

Male

Female

[Reset](#)

3.

Nationality:

UAE national

Asian

Middle-Eastern

European

American

[Reset](#)

Other

4.

Marital status:

Single

Married

[Reset](#)

5.

Were you a blood donor at the event?

Yes

No



If not please give the reason below if possible:

[Reset](#)

6.

If you were not a donor at the event would you try to take part the next time?

Yes

No

[Reset](#)

If not, please give the reason below:

7.

Part 2: Aspects of the Blood drive

This section relates to your personal opinions on different aspects of the blood drive.

Please give your opinion below.

How did you find the safety of the blood donation?

8.

How did you find the service of the blood donation?

**9.**  
**How comfortable did you find the setting and designated area for blood donation?**

**10.**  
**How appropriate did you find the pre blood donation medical questionnaire?**

**11.**  
**Was there anything in particular that you liked about the blood drive?**

**12.**  
**Was there anything in particular that you disliked about the blood drive?**

**13.**  
**Would you be interested in donating blood again at the next blood drive?**

**14.**  
**Is there any aspect that would like to see improved at the next blood drive?**

< Finish Survey >

### **Appendix 3**

#### **Email from PSF Dubai:**

Mon, Jul 11, 2011 at 9:19 AM

Dear Meera

PSF Middle-East have recently run blood donation campaigns in Saudi Arabia and Egypt

I thought one way you may want to increase the number of survey respondents was by asking people in each of our offices in Saudi/Egypt for feedback using the same questionnaire that you used in UAE

If you think this is a good idea, please liaise direct with Ms. Jones, copied above, as she is the project manager in our Egypt office for our blood donation campaigns. Please start by sharing the link to the questionnaire you prepared for us in the UAE, and Ms. Jones (and her counterpart in Saudi) can assess whether it's appropriate for their offices

Kind regards

#### **Email to PSF Egypt:**

Dear Ms. Jones,

As suggested by Mr. Roberts, I think it is a great idea to share the survey created for PSF Dubai regarding their last blood drive campaign with PSF Egypt and Saudi Arabia.

It is an online survey that consists of 15 questions regarding the blood drive. The survey also aims to collect data about why some employees did not participate and if they would next time. So, the inputs of all the employees who did and did not participate in the event are welcome and valuable.

Below is the link to the survey;

[http://kwiksurveys.com?u=Blood\\_drive\\_feedback](http://kwiksurveys.com?u=Blood_drive_feedback)

I hope that you find it appropriate for use in your offices.

Thank you,

Meera

**Email from PSF Egypt:**

From: Juliette.Legrande@eg.psf.com

Date: Tue, 19 Jul 2011 12:59:33 +0200

Dear Meera,

I received your contact information from Ms. Jones. My name is Juliette Legrande and I am responsible for the health part in the blood donation project (Triple Effect Project) at PSF Egypt.

We would like to link blood promotion with health promotion and for this we are busy with developing health incentive packages, which include all kind of health related workshops and programs to educate employees about how to live a healthy lifestyle. Further we try to set up a collaborating with PSF UK, because they are quite far professionalised/ developed with their health strategy and have a lot of health programs/ workshop & services for their employees, so we can definitely learn a lot from them.

In order to set up a good blood donation campaign, we started by doing a research to find out what people think about blood donation, their knowledge level about blood donation, find out what the barriers are and what could people motivate to donate.

Ms. Jones informed me that you've developed a questionnaire about blood donation for the blood drive in PSF Saudi Arabia. I think this is a great initiative and liked Peter suggested, we should definitely try to collaborate on this part and share the questionnaire in order to create a larger data amount. For this I've a few questions, suggestions for you:

Could you please inform me about your role and how you get involved in this blood donation research? So that I have some background info about you and know with who I work:)

In the attachment you can find my questionnaire, I started with doing interviews, but with regard of the efficiency of doing research an online questionnaire is much more efficient. Do you think we can adjust the questionnaire a little, combine our questionnaire and make a new one? Have you made this questionnaire yourself and can more people get entrance to the data? For example that I can also see the answers/data?

My idea is to set up an online questionnaire and approach with this questionnaire all the PSF Middle-East offices in the region and ask if they want to collaborate/ share this questionnaire.

In this case we can extend the scale of the research and create a deep understanding of the knowledge level, barriers about blood donation of the PSF Middle-East employees in the region.

We can track if there are differences and then provide the results to the offices. When they are going to run blood drives in their offices, they can use this info for setting up their blood campaigns.

For your information, the goal of our project in the future is to extend the "triple effect project" to the region and the final stage to enroll this project on a globally level.

In this case, the questionnaire can be an introduction to the people of our project, and follow up the questionnaire with running the blood drives/ campaigns.

Besides setting up and implementing the questionnaire, are you also responsible for writing a report on the findings? Because I would like to try to find a student who can use this research as part of his graduation project, write a small thesis on blood donation in Egypt/ the region. Do you know students who are willing and eager to do this? And in the case this research is part of your study, would you like to extend your report and share the results with us?

I am looking forward to your response and please let me know your thoughts about my suggestions.

Maybe it is good to set up a Skype meeting so we can discuss these points together and define how we are going to execute this idea?

Thank you in advance.

## Appendix 4

The first version created of the PSF Middle-East employees blood donation perceptions questionnaire.

# Survey on the perceptions of PSF Middle-East employees regarding blood donation.

Dear Sir/Madam,

It would be greatly appreciated if you could take some time to fill out this online survey. This survey is designed to collect primary data for a research to the perception and behaviour about blood donation of PSF Middle-East employees in the Middle East Region. This research is part of the 'Triple Effect', a blood donation program initiated through the Mansour Charity Foundation, the charity arm of PSF Cairo. The goal of this blood donation program is to engage PSF Middle-East employees in the blood issue in the Middle East and motivate them to donate their blood through implementing and facilitate blood drives within the PSF Middle-East offices.

For your information:

- Your participation in this questionnaire is strictly anonymous.
- The results of this research will be presented in a report. The report will be distributed (delivered) to each respondent.

We are looking forward to receive your answers,

Thank you in advance,

The Triple Effect research team,  
Meerah Ahmed Al-Reyaysa & Juliette Legrande.

1. **Age:**

25 years or less

25 – 35 years

36 – 45 years

46 – 55 years

56 years or more

[Reset](#)

2.

**Gender:**

Male

Female

[Reset](#)

3.

**What is your nationality?**

4.

**Marital Status:**

Single

Married

[Reset](#)

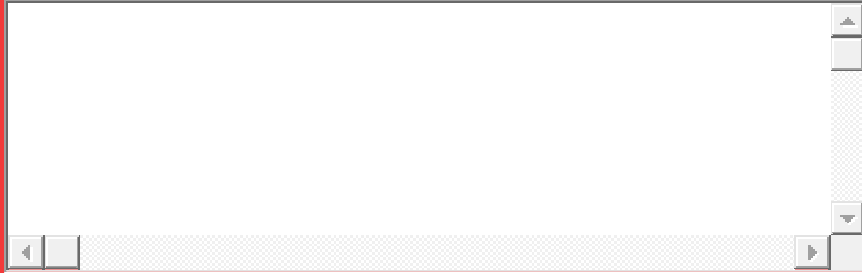
5.

**What are the first things you think about (come to your mind) when you hear the word blood donation?**

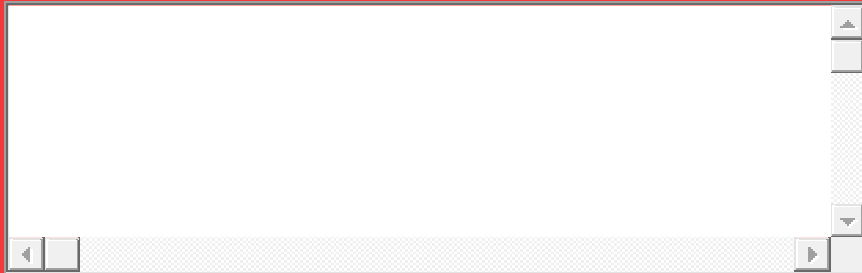
6.



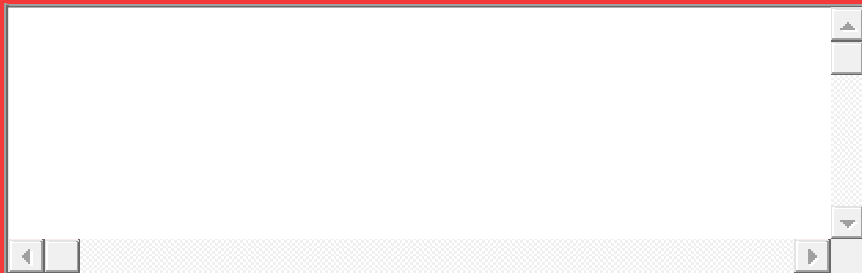
**6. When did you hear of blood donation for the first time and in which situation?**

An empty text input field with a white background and a thin grey border. It features a vertical scrollbar on the right side and horizontal scrollbars at the bottom, indicating it is a multi-line text area.

**7. What do you know about the blood donation procedure, please outline below.**

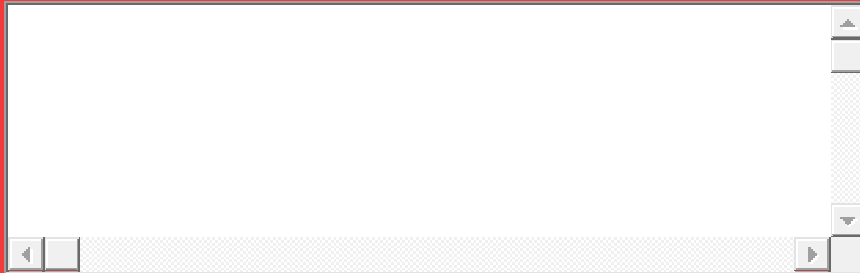
An empty text input field with a white background and a thin grey border. It features a vertical scrollbar on the right side and horizontal scrollbars at the bottom, indicating it is a multi-line text area.

**8. Do you find it important to know where your blood is going to after your donation?**

An empty text input field with a white background and a thin grey border. It features a vertical scrollbar on the right side and horizontal scrollbars at the bottom, indicating it is a multi-line text area.

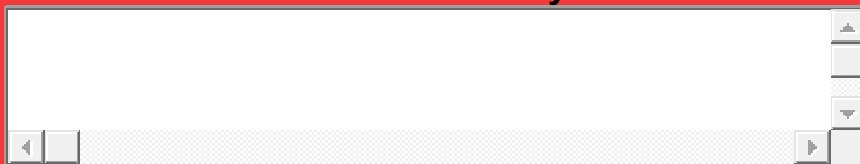
**9.**

**9. Do you know under which conditions you can or cannot donate blood?  
Please outline below.**

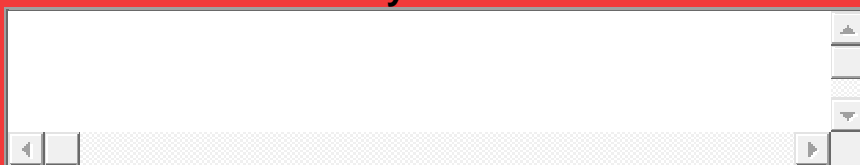
An empty rectangular text input box with a white background and a thin grey border. It features a vertical scrollbar on the right side and horizontal scrollbars at the bottom.

**10.  
Have you ever donated blood?**

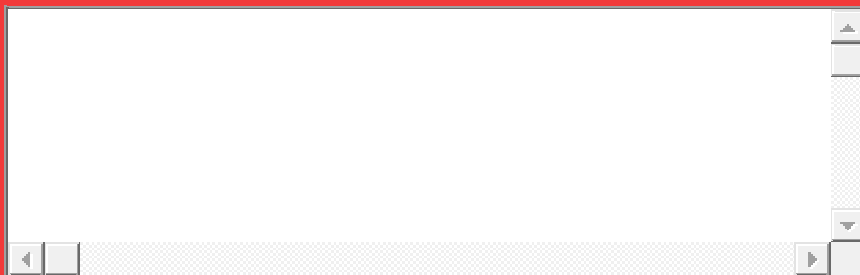
**Yes? Please outline what made you donate blood below.**

An empty rectangular text input box with a white background and a thin grey border. It features a vertical scrollbar on the right side and horizontal scrollbars at the bottom.

**No? Please outline why not below.**

An empty rectangular text input box with a white background and a thin grey border. It features a vertical scrollbar on the right side and horizontal scrollbars at the bottom.

**11.  
What could motivate you to donate your blood?**

An empty rectangular text input box with a white background and a thin grey border. It features a vertical scrollbar on the right side and horizontal scrollbars at the bottom.

**12.**

**12. Are you a regular blood donor, yes or no?**

**If yes, please specify how often you donate blood and the reasons why you donated your blood.**

**If no, please specify the reasons why you don't donate regularly.**

Next >>

**Thank you for your time and feedback**

## **Appendix 5**

### **Feedback on the first version of the questionnaire.**

Hi Meera,

I've had some feedback from Ms. Jones and Ayman (csr manager).

About the questionnaire, Ms. Jones just had the concern with the boxes that people maybe not give their answers because it maybe takes too much time when you make a questionnaire with open boxes. But I think that when we give them the answers, presented in a. b. c. d. answer, we are going to provide them the answers while we just want to have their own vision and measure their knowledge level, so what do you think?

We should come up with a good follow up strategy to push for a high response rate, send them weekly reminders, can we do that automatically from the website of the questionnaire, is there such an application? or are we dependent for this on the PSF Middle-East department?

But in general the questionnaire is approved, exact the concern of the boxes and you can send only the questionnaire for a check to Peter or your supervisor you work with at PSF Middle-East. Who is actually guiding you at PSF Middle-East and what is his/her role, is she/he from the CSR department in Dubai?

We only have to wait with sending the letter, I will discuss the letter tomorrow with Ayman, because we are not quite sure if we are just doing the research, or going to present this research as part of the Triple Effect and introduce the project to the PSF Middle-East offices, or that we maybe want to wait with this part.... I have tomorrow a meeting with my manager, so I let you know!

Further Ms. Jones advises us to wait with launching the questionnaire and letter after Ramadan, because many PSF Middle-East offices are closed now or half manned and many people are travelling.

The planning would then be to approach the offices in the first week of September, then we have to wait for their approval and then we can launch the questionnaire around 18 September....., maybe if PSF Middle-East offices respond very positive, we can fasten the process between getting approval and launch the questionnaire.

Last thing: Iraq, Kuwait, Lebanon, Palestine, this are the PSF Middle-East offices of which I miss the email addresses, I will try to find these through the PSF Middle-East webportal. Do you maybe have the number of Peter for me? I will phone him and explain him about our Triple

Effect, I think it is better to first introduce and explain to him personally the Triple Effect and afterwards mail him. We definitely need him, because he is the CSR manager of the region:

Okee this was the update, come back to you tomorrow if our letter is ok to send out or that my manager wants to wait with launching Triple Effect in the region.

Sincerely,

Health Promotion Manager

Juliette Jackson

## Appendix 6

The second version created of the PSF Middle-East employees blood donation perceptions questionnaire.

# Survey on the perceptions of PSF Middle-East employees regarding blood donation.

Dear Sir/Madam,

It would be greatly appreciated if you could take some time to fill out this online survey. This survey is designed to collect primary data for a research to the perception and behaviour about blood donation of PSF Middle-East employees in the Middle East Region. This research is part of the 'Triple Effect', a blood donation program initiated through the Mansour Charity Foundation, the charity arm of PSF Cairo. The goal of this blood donation program is to engage PSF Middle-East employees in the blood issue in the Middle East and motivate them to donate their blood through implementing and facilitate blood drives within the PSF Middle-East offices.

For your information:

Your participation in this questionnaire is strictly anonymous.

The results of this research will be presented in a report. The report will be distributed (delivered) to each respondent.

We are looking forward to receive your answers,

Thank you in advance,

The Triple Effect research team,  
Meera Ahmed Al-Reyaysa & Juliette Legrande.

**1.  
Age:**

25 years or less

25 – 35 years

36 – 45 years

46 – 55 years

56 years or more

**2.  
Gender:**

Male

Female

**3.  
Nationality:**

A. Asian

B. European

C. Gulf national

D. Middle-Eastern

E. Other

**4. Marital Status:**

Single

Married

**5. From the choices below which one mostly comes to your mind when you hear the word blood donation?**

A. Blood disorders

B. Accidents

C. Hospitals

D. Blood banks

**6. How did you first hear of blood donation?**

- A. Friend/Relative in need**
  - B. Hospital**
  - C. Radio**
  - D. Television**
  - E. Other**
- 

**7. What do you think of the blood donation procedure?**

- A. Safe**
  - B. Hygienic**
  - C. Painful**
  - D. Stressful**
- 

**8. Do you find it important to know where your blood is going to after your donation?**

- A. Yes**
  - B. No**
- 

**9. Do you know under which conditions you can or cannot donate blood?**

- A. Yes**
- B. No**

**10. Have you ever been asked to donate blood?**

- A. Yes**
- B. No**

**11. Have you ever donated blood?**

- A. Yes**
- B. No**



**12. How often do you donate blood?**

- A. Monthly**
  - B. Semi-Annually**
  - C. Annually**
  - D. Never**
  - E. Other**
- 

**13. What would motivate you(the most) to donate your blood?**

- A. Sense of good deed and helping others**
- B. Friend/Relative in need**
- C. Giving back to the community**
- D. Recognition**

**More choices**

---

**14. What are your fears/concerns regarding blood donation?**

- A. Stress/pain of procedure**
- B. The impact on your health after the procedure**
- C. Safety and hygiene of procedure**
- D. Not enough information regarding the intended use of your blood**

**15. Would you donate blood again or in the future?**

- A. Yes**
- B. No**

**Thank you for your time and feedback**

## Appendix 7

The third version created of the PSF Middle-East employees blood donation perceptions questionnaire.

# Survey on the perceptions of PSF Middle-East employees regarding blood donation.

Dear Sir/Madam,

It would be greatly appreciated if you could take some time to fill out this online survey. This survey is designed to collect primary data for a research to find out the knowledge, behaviour and perception regarding blood donation of PSF Middle-East employees in the Middle East Region. This research is part of the 'Triple Effect', a PSF Middle-East blood donation and health promotion program and also it will help Meera Ahmed Al-Reyaysa in collecting data for her dissertation. The findings of this survey will be used to improve the awareness and promotion materials of the blood donation program. Further, the goal of this blood donation survey is to introduce the Triple Effect in the PSF Middle-East offices in the region and engage PSF Middle-East employees in the blood issue in the Middle East. Your honest answers in this survey will help us better understand what people know, think and do in regard to blood donation.

For your information:

Your participation in this questionnaire is strictly anonymous.

We are looking forward to receive your answers,

Thank you in advance,

Meera Ahmed Al-Reyaysa & Juliette Legrande.

**1.  
Age:**

25 years or less

25 – 35 years

36 – 45 years

46 – 55 years

56 years or more

**2.  
Gender:**

Male

Female

**3. Nationality:**

A. Asian

B. European

C. Gulf national

D. Middle-Eastern

E. Other

**4. Have you ever donated blood?**

A. Yes

B. No

**5. How often do you donate blood?**

A. Monthly

B. Semi-Annually

C. Annually

D. Never

E. Other

**6. Do you know under which conditions you can or cannot donate blood?**

- A. Yes**
- B. No**

**7. Please select which of the following factors are of importance in the decision if you are qualified or eligible to donate blood?**

- A. Age**
- B. Gender**
- C. Health status**
- D. Weight**
- E. Illicit drug use**
- F. Pregnancy**
- G. Menstruating woman**
- H. Infectious disease carrier**

**8. From the choices below which one mostly comes to your mind when you hear the word blood donation?**

- A. Blood disorders**
- B. Accidents**
- C. Hospitals**
- D. Blood banks**
- E. Other**

---

**9. What do you think of the blood donation procedure?**

- A.Safe**
- B.Hygienic**
- C.Painful**
- D.Stressful**

---

**10. Do you find it important to know where your blood is going to after your donation?**

- A.Yes**

**B.No**

---

**11. What are your fears/concerns regarding blood donation?**

- A. Stress/pain of procedure**
- B.The impact on your health after the procedure**
- C.Safety and hygiene of procedure**
- D.Not enough information regarding the intended use of your blood**

**12. What made you decide to donate blood?**

- A. Sympathy towards those in need**
  - B. Rewards**
  - C. Obligation, being asked by family/friend**
  - D. Chance to check on your health**
  - E.Other**
- 

**13. What would motivate you(the most) to donate your blood?**

- A. Sense of good deed and helping others**
- B. Friend/Relative in need**
- C. Giving back to the community**
- D. Recognition**
- E. Getting information regarding your own health from the blood donation**
- F. Other**

**14. Which of the following describes the most common type of your blood donation?**

- A. Voluntary**
  - B. Paid**
  - C. Obligation to friend/family**
  - D. Commercial**
  - E. Other**
-

**15. How did you first hear of blood donation?**

- A. Friend/Relative in need**
- B. Hospital**
- C. Radio**
- D. Television**
- E. Other**

**16. If you wanted to donate blood again or in the future, where would you prefer to donate?**

- A. Workplace**
- B. Private hospital**
- C. Public hospital**
- D. Blood donation centre**
- E. Other**

**17. When your office is going to organize a blood donation event, and the National Blood Transfusion Centre will come to your office to facilitate the blood donation, would you participate in this event and donate your blood?**

- A. Yes**
- B. No**

## **Appendix 8**

**The fourth and final version created of the PSF Middle-East employees blood donation perceptions questionnaire.**

# **Survey on the perceptions of PSF Middle-East employees regarding blood donation.**

Dear Sir/Madam,

It would be greatly appreciated if you could take some time to fill out this online survey. This survey is designed to collect primary data for a research to find out the knowledge, behaviour and perception regarding blood donation of PSF Middle-East employees in the Middle East Region. This research is part of the 'Triple Effect', a PSF Middle-East blood donation and health promotion program and also it will help Meera Ahmed Al-Reyaysa in collecting data for her dissertation. The findings of this survey will be used to improve the awareness and promotion materials of the blood donation program. Further, the goal of this blood donation survey is to introduce the Triple Effect in the PSF Middle East offices in the region and engage PSF Middle-East employees in the blood issue in the Middle East. Your honest answers in this survey will help us better understand what people know, think and do in regard to blood donation.

For your information:

Your participation in this questionnaire is strictly anonymous.

We are looking forward to receive your answers,

Thank you in advance,

Meera Ahmed Al-Reyaysa & Juliette Legrande.

**1.**

**Age:**

25 years or less

25 – 35 years

36 – 45 years

46 – 55 years

56 years or more

[Reset](#)

**2.**

**Gender:**

Male

Female

[Reset](#)

3.

**Nationality:**

Asian

European

Gulf national

Middle-Eastern

Other

[Reset](#)

4.

**Have you ever donated blood?**

Yes

No

[Reset](#)

5.

**How often do you donate blood?**

Monthly

Semi-Annually

Annually

Never

Other

[Reset](#)

6.

**Do you know under which conditions you can or cannot donate blood?**



Yes

No

[Reset](#)

7.

Please select any of the following factors that you think would be important in determining whether you are qualified or eligible to donate blood. ( Please tick ALL those items that apply)

Age

Gender

Health status

Weight

Illicit drug use

Pregnancy

Menstruating woman

Infectious disease carrier

[Reset](#)

8.

From the choices below which one mostly comes to your mind when you hear the word blood donation?

Blood disorders

Accidents

Hospitals

Blood banks

[Reset](#)

9.

What do you think of the blood donation procedure?

Safe

Hygienic

Painful

Stressful

[Reset](#)

10.

Do you find it important to know where your blood is going to after your donation?

Yes

No

[Reset](#)

11.

What are your fears/concerns regarding blood donation? ( Please tick ALL those items that apply)

Stress/pain of procedure

The impact on your health after the procedure

Safety and hygiene of procedure

Not enough information regarding the intended use of your blood

[Reset](#)

12.

What made you decide to donate blood?

Sympathy towards those in need

Rewards

Obligation, being asked by family/friend

Chance to check on your health

I have not taken part in blood donation before

Other (Please fill in below)

[Reset](#)

13.

What would motivate you the most to donate your blood?

Sense of good deed and helping others

Friend/Relative in need

Giving back to the community

Recognition

Getting information regarding your own health from the blood donation

Other (Please fill in below)

[Reset](#)

14.

What would de-motivate or discourage you (the most) from donating your blood?

Pain and stress related to the procedure

Poor condition of your own health

Distance/location of the blood donation

Behaviour of staff in charge of the procedure

Not being recognized for your participation

[Reset](#)

Other (Please fill in below)

15.

Would you be motivated to donate blood if you knew that it would also allow you to check up on the status of your health in general?

Yes

No

[Reset](#)

**16.**  
**Which of the following describes the most common type of your blood donation?**

- Voluntary
- Paid
- Obligation to friend/family
- Commercial
- I have not taken part in blood donation before

[Reset](#)

**17.**  
**How did you first hear of blood donation?**

- Friend/Relative in need
- Hospital
- Radio
- Television
- PSF Middle East

[Reset](#)

**18.**  
**What is your most preferred method to hear about blood donation?**

- Radio
- TV
- Television
- SMS messages
- Through social networks (Facebook etc.)
- Seminars/Educational programs

[Reset](#)

**19.**  
**At which of the following places have you ever been exposed to or learned of blood donation? ( Please tick ALL those items that apply)**

- School
- University
- Workplace/office
- Your community
- Commercial centres /Shopping malls

[Reset](#)  
Other (Please fill in below)  
  
20.  
If you wanted to donate blood again or in the future, where would you prefer to donate?

- Workplace
- Private hospital
- Public hospital
- Blood donation centre

[Reset](#)  
21.  
When your office is going to organize a blood donation event, and the National Blood Transfusion Centre will come to your office to facilitate the blood donation, would you participate in this event and donate your blood?

- Yes
- No

[Reset](#)

Next >>

Thank you for your time and feedback

Appendix: Table 1A.

Correlations

			1Age	2Gender	4Blood donor status	5Frequency of blood donation	6Awareness of blood donation conditions	10Importance of knowing intended use of blood	15Health status check-up as motivating factor	21Participation at the next PSF Middle-East blood donation event
Kendall's tau_b	1Age	Correlation Coefficient	1.000							
		Sig. (2-tailed)	.							
		N	179							
	2Gender	Correlation Coefficient	-.018	1.000						
	Sig. (2-tailed)	.799	.							
	N	179	179							
	4Blood donor status	Correlation Coefficient	-.139*	.332**	1.000					
		Sig. (2-tailed)	<b>.042</b>	<b>.000</b>	.					
	N	179	179	179						
	5Frequency of blood donation	Correlation Coefficient	.108	.096	.187**	1.000				
		Sig. (2-tailed)	.096	.164	<b>.005</b>	.				

	N	179	179	179	179				
6 Awareness of blood donation conditions	Correlation Coefficient	-.074	-.027	.250**	.174*	1.000			
	Sig. (2-tailed)	.291	.714	<b>.001</b>	<b>.011</b>	.			
	N	179	179	179	179	179			
10 Importance of knowing intended use of blood	Correlation Coefficient	-.016	.011	-.011	.012	-.067	1.000		
	Sig. (2-tailed)	.825	.883	.875	.857	.369	.		
	N	179	179	179	179	179	179		
15 Health status check-up as motivating factor	Correlation Coefficient	.005	.179*	-.012	.049	-.101	.090	1.000	
	Sig. (2-tailed)	.939	<b>.017</b>	.869	.474	.178	.230	.	
	N	179	179	179	179	179	179	179	
21 Participation at the next PSF Middle-East blood donation event	Correlation Coefficient	-.015	.160*	.238**	.078	.103	.036	.201**	1.000
	Sig. (2-tailed)	.831	<b>.033</b>	<b>.001</b>	.259	.171	.632	<b>.007</b>	.
	N	179	179	179	179	179	179	179	179
Spearman's rho	Age	Correlation Coefficient	1.000						

	Sig. (2-tailed)	.							
	N	179							
Gender	Correlation Coefficient	-.019	1.000						
	Sig. (2-tailed)	.800	.						
	N	179	179						
Blood donor status	Correlation Coefficient	-.152*	.343**	1.000					
	Sig. (2-tailed)	<b>.042</b>	<b>.000</b>	.					
	N	179	179	179					
Frequency of blood donation	Correlation Coefficient	.126	.104	.204**	1.000				
	Sig. (2-tailed)	.094	.165	<b>.006</b>	.				
	N	179	179	179	179				
Awareness of blood donation conditions	Correlation Coefficient	-.079	-.027	.258**	.189*	1.000			
	Sig. (2-tailed)	.293	.715	<b>.000</b>	<b>.011</b>	.			
	N	179	179	179	179	179			
Importance of knowing	Correlation Coefficient	-.017	.011	-.012	.013	-.067	1.000		



intended use of blood	Sig. (2-tailed)	.826	.883	.875	.858	.370	.		
	N	179	179	179	179	179	179		
Health status check-up as motivating factor	Correlation Coefficient	.006	.179*	-.012	.054	-.101	.090	1.000	
	Sig. (2-tailed)	.940	<b>.016</b>	.870	.475	.179	.231	.	
	N	179	179	179	179	179	179	179	
Participation at the next PSF blood donation event	Correlation Coefficient	-.016	.160*	.246**	.085	.103	.036	.201**	1.000
	Sig. (2-tailed)	.832	<b>.032</b>	<b>.001</b>	.260	.172	.633	<b>.007</b>	.
	N	179	179	179	179	179	179	179	179

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

**Significant findings consistent with the predicted relationship in the literature on blood donation**

**Table 2A.****Blood donor status \* Gender Cross-tabulation**

			Gender		
			Male	Female	Total
Blood donor status	Yes	Count	76	25	101
		% within Blood donor status	75.2%	24.8%	100.0%
		% within Gender	69.1%	36.2%	56.4%
		% of Total	42.5%	14.0%	56.4%
	No	Count	30	32	62
		% within Blood donor status	48.4%	51.6%	100.0%
		% within Gender	27.3%	46.4%	34.6%
		% of Total	16.8%	17.9%	34.6%
	Not eligible	Count	4	12	16
		% within Blood donor status	25.0%	75.0%	100.0%
		% within Gender	3.6%	17.4%	8.9%
		% of Total	2.2%	6.7%	8.9%
Total	Count	110	69	179	
	% within Blood donor status	61.5%	38.5%	100.0%	
	% within Gender	100.0%	100.0%	100.0%	
	% of Total	61.5%	38.5%	100.0%	

**Table 2B.****Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.557 <sup>a</sup>	2	.000
Likelihood Ratio	21.752	2	.000
Linear-by-Linear Association	21.399	1	.000
N of Valid Cases	179		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.17.

**Table 3A****Blood donor status \* Awareness of blood donation conditions Cross-tabulation**

			Awareness of blood donation conditions		
			Yes	No	Total
Blood donor status	Yes	Count	80	21	101
		% within Blood donor status	79.2%	20.8%	100.0%
		% within Awareness of blood donation conditions	67.2%	35.0%	56.4%
		% of Total	44.7%	11.7%	56.4%
	No	Count	27	35	62
		% within Blood donor status	43.5%	56.5%	100.0%
		% within Awareness of blood donation conditions	22.7%	58.3%	34.6%
		% of Total	15.1%	19.6%	34.6%
	Not eligible	Count	12	4	16
		% within Blood donor status	75.0%	25.0%	100.0%
		% within Awareness of blood donation conditions	10.1%	6.7%	8.9%
		% of Total	6.7%	2.2%	8.9%
Total	Count	119	60	179	
	% within Blood donor status	66.5%	33.5%	100.0%	
	% within Awareness of blood donation conditions	100.0%	100.0%	100.0%	
	% of Total	66.5%	33.5%	100.0%	

**Table 3B****Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.495 <sup>a</sup>	2	.000
Likelihood Ratio	22.161	2	.000
Linear-by-Linear Association	7.690	1	.006
N of Valid Cases	179		

**Table 4A**

**Blood donor status \* Participation at the next PSF Middle-East blood donation event Cross-tabulation**

			Participation at the next PSF Middle-East blood donation event		
			Yes	No	Total
Blood donor status	Yes	Count	94	7	101
		% within Blood donor status	93.1%	6.9%	100.0%
		% within Participation at the next PSF Middle-East blood donation event	60.6%	29.2%	56.4%
		% of Total	52.5%	3.9%	56.4%
	No	Count	51	11	62
		% within Blood donor status	82.3%	17.7%	100.0%
		% within Participation at the next PSF Middle-East blood donation event	32.9%	45.8%	34.6%
		% of Total	28.5%	6.1%	34.6%
	Not eligible	Count	10	6	16
		% within Blood donor status	62.5%	37.5%	100.0%
		% within Participation at the next PSF Middle-East blood donation event	6.5%	25.0%	8.9%
		% of Total	5.6%	3.4%	8.9%
Total	Count	155	24	179	
	% within Blood donor status	86.6%	13.4%	100.0%	
	% within Participation at the next PSF Middle-East blood donation event	100.0%	100.0%	100.0%	
	% of Total	86.6%	13.4%	100.0%	

**Table 4B**

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.652 <sup>a</sup>	2	.002
Likelihood Ratio	11.069	2	.004
Linear-by-Linear Association	12.080	1	.001
N of Valid Cases	179		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 2.15.

**Table 5A**

Q4x6

Blood donor status and awareness of blood donation conditions.

**Blood donor status \* Awareness of blood donation conditions Crosstabulation**

			Awareness of blood donation conditions		
			Yes	No	Total
Blood donor status	Yes	Count	80	21	101
		% within Blood donor status	79.2%	20.8%	100.0%
		% within Awareness of blood donation conditions	67.2%	35.0%	56.4%
		% of Total	44.7%	11.7%	56.4%
	No	Count	27	35	62
		% within Blood donor status	43.5%	56.5%	100.0%
		% within Awareness of blood donation conditions	22.7%	58.3%	34.6%
		% of Total	15.1%	19.6%	34.6%
	Not eligible	Count	12	4	16
		% within Blood donor status	75.0%	25.0%	100.0%
		% within Awareness of blood donation conditions	10.1%	6.7%	8.9%
		% of Total	6.7%	2.2%	8.9%
Total	Count	119	60	179	
	% within Blood donor status	66.5%	33.5%	100.0%	
	% within Awareness of blood donation conditions	100.0%	100.0%	100.0%	
	% of Total	66.5%	33.5%	100.0%	

**Table 5B**

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.495 <sup>a</sup>	2	.000
Likelihood Ratio	22.161	2	.000
Linear-by-Linear Association	7.690	1	.006
N of Valid Cases	179		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.36.

**Table 6A****Blood Donor Status\*Age eligibility factor**

			Age factor		
			No	Yes	Total
Blood donor status	Yes	Count	52	49	101
		% within Blood donor status	51.5%	48.5%	100.0%
		% within Age factor	61.2%	52.1%	56.4%
		% of Total	29.1%	27.4%	56.4%
	No	Count	23	39	62
		% within Blood donor status	37.1%	62.9%	100.0%
		% within Age factor	27.1%	41.5%	34.6%
		% of Total	12.8%	21.8%	34.6%
	Not eligible	Count	10	6	16
		% within Blood donor status	62.5%	37.5%	100.0%
		% within Age factor	11.8%	6.4%	8.9%
		% of Total	5.6%	3.4%	8.9%
Total	Count	85	94	179	
	% within Blood donor status	47.5%	52.5%	100.0%	
	% within Age factor	100.0%	100.0%	100.0%	
	% of Total	47.5%	52.5%	100.0%	

**Table 6B****Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.778 <sup>a</sup>	2	.092
Likelihood Ratio	4.823	2	.090
Linear-by-Linear Association	.139	1	.709
N of Valid Cases	179		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.60.



**Table 7A**

			Blood Donor Status*Weight eligibility factor		
			Weight Factor		
			No	Yes	Total
Blood donor status	Yes	Count	53	48	101
		% within Blood donor status	52.5%	47.5%	100.0%
		% within Weight Factor	67.9%	47.5%	56.4%
		% of Total	29.6%	26.8%	56.4%
	No	Count	18	44	62
		% within Blood donor status	29.0%	71.0%	100.0%
		% within Weight Factor	23.1%	43.6%	34.6%
		% of Total	10.1%	24.6%	34.6%
	Not eligible	Count	7	9	16
		% within Blood donor status	43.8%	56.2%	100.0%
		% within Weight Factor	9.0%	8.9%	8.9%
		% of Total	3.9%	5.0%	8.9%
Total	Count	78	101	179	
	% within Blood donor status	43.6%	56.4%	100.0%	
	% within Weight Factor	100.0%	100.0%	100.0%	
	% of Total	43.6%	56.4%	100.0%	

**Table 7B**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.587 <sup>a</sup>	2	.014
Likelihood Ratio	8.782	2	.012
Linear-by-Linear Association	4.238	1	.040
N of Valid Cases	179		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.97.

**Table 8A**

			Illicit Drug use factor		
			No	Yes	Total
Blood donor status	Yes	Count	11	90	101
		% within Blood donor status	10.9%	89.1%	100.0%
		% within Illicit Drug use factor	36.7%	60.4%	56.4%
		% of Total	6.1%	50.3%	56.4%
	No	Count	14	48	62
		% within Blood donor status	22.6%	77.4%	100.0%
		% within Illicit Drug use factor	46.7%	32.2%	34.6%
		% of Total	7.8%	26.8%	34.6%
	Not eligible	Count	5	11	16
		% within Blood donor status	31.2%	68.8%	100.0%
		% within Illicit Drug use factor	16.7%	7.4%	8.9%
		% of Total	2.8%	6.1%	8.9%
Total	Count	30	149	179	
	% within Blood donor status	16.8%	83.2%	100.0%	
	% within Illicit Drug use factor	100.0%	100.0%	100.0%	
	% of Total	16.8%	83.2%	100.0%	

**Table 8B**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.407 <sup>a</sup>	2	.041
Likelihood Ratio	6.191	2	.045
Linear-by-Linear Association	6.324	1	.012
N of Valid Cases	179		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 2.68.

**Table 9A**

4x12

Blood donor status and motivating factors

**Blood donor status \* Motivating factor to donate blood**

		Motivating factor to donate blood						Total	
		Sense of good deed and helping others	Friend/Relative in need	Giving back to the community	Recognition	Getting information regarding your own health status	Other		
Blood donor status	Yes	Count	58	18	21	2	1	1	101
		% within Blood donor status	57.4%	17.8%	20.8%	2.0%	1.0%	1.0%	100.0%
		% within Motivating factor to donate blood	53.2%	54.5%	84.0%	100.0%	16.7%	25.0%	56.4%
		% of Total	32.4%	10.1%	11.7%	1.1%	.6%	.6%	56.4%
No		Count	41	12	2	0	5	2	62
		% within Blood donor status	66.1%	19.4%	3.2%	.0%	8.1%	3.2%	100.0%
		% within Motivating factor to donate blood	37.6%	36.4%	8.0%	.0%	83.3%	50.0%	34.6%
		% of Total	22.9%	6.7%	1.1%	.0%	2.8%	1.1%	34.6%
Not eligible		Count	10	3	2	0	0	1	16
		% within Blood donor status	62.5%	18.8%	12.5%	.0%	.0%	6.2%	100.0%
		% within Motivating factor to donate blood	9.2%	9.1%	8.0%	.0%	.0%	25.0%	8.9%
		% of Total	5.6%	1.7%	1.1%	.0%	.0%	.6%	8.9%
<b>Total</b>		Count	109	33	25	2	6	4	179

% within Blood donor status	60.9%	18.4%	14.0%	1.1%	3.4%	2.2%	100.0%
% within Motivating factor to donate blood	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
% of Total	60.9%	18.4%	14.0%	1.1%	3.4%	2.2%	100.0%

**Table 9B**

**Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.047 <sup>a</sup>	10	.040
Likelihood Ratio	21.465	10	.018
Linear-by-Linear Association	.000	1	.988
N of Valid Cases	179		

a. 11 cells (61.1%) have expected count less than 5. The minimum expected count is .18.

**Table 10A**

Cross tabulation

4x14

**Blood donor status \* De-motivating factor to donate blood**

		De-motivating factor to donate blood							
		Pain and stress related to the procedure	Poor condition of your own health	Distance/location of the blood donation	Behaviour of staff in charge of the procedure	Not being recognized for your participation	Other	Total	
Blood donor status	Yes	Count	11	40	21	26	0	3	101
		% within Blood donor status	10.9%	39.6%	20.8%	25.7%	.0%	3.0%	100.0%
		% within De-motivating factor to donate blood	35.5%	57.1%	61.8%	76.5%	.0%	50.0%	56.4%
		% of Total	6.1%	22.3%	11.7%	14.5%	.0%	1.7%	56.4%
No		Count	18	21	11	8	2	2	62
		% within Blood donor status	29.0%	33.9%	17.7%	12.9%	3.2%	3.2%	100.0%
		% within De-motivating factor to donate blood	58.1%	30.0%	32.4%	23.5%	50.0%	33.3%	34.6%
		% of Total	10.1%	11.7%	6.1%	4.5%	1.1%	1.1%	34.6%
Not eligible		Count	2	9	2	0	2	1	16
		% within Blood donor status	12.5%	56.2%	12.5%	.0%	12.5%	6.2%	100.0%
		% within De-motivating factor to donate blood	6.5%	12.9%	5.9%	.0%	50.0%	16.7%	8.9%
		% of Total	1.1%	5.0%	1.1%	.0%	1.1%	.6%	8.9%
Total	Count	31	70	34	34	4	6	179	

% within Blood donor status	17.3%	39.1%	19.0%	19.0%	2.2%	3.4%	100.0%
% within De-motivating factor to donate blood	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
% of Total	17.3%	39.1%	19.0%	19.0%	2.2%	3.4%	100.0%

**Table 10B**

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	26.952 <sup>a</sup>	10	.003
Likelihood Ratio	27.577	10	.002
Linear-by-Linear Association	1.502	1	.220
N of Valid Cases	179		

a. 9 cells (50.0%) have expected count less than 5. The minimum expected count is .36.

**Table 11A**

Q4x20

Blood donor status and preferred place to donate blood.

**Blood donor status \* Preferred place to donate in the future Crosstabulation**

			Preferred place to donate in the future				
			Workplace	Private hospital	Public hospital	Blood donation centre	Total
Blood donor status	Yes	Count	49	12	2	38	101
		% within Blood donor status	48.5%	11.9%	2.0%	37.6%	100.0%
		% within Preferred place to donate in the future	74.2%	42.9%	33.3%	48.1%	56.4%
		% of Total	27.4%	6.7%	1.1%	21.2%	56.4%
	No	Count	13	13	2	34	62
		% within Blood donor status	21.0%	21.0%	3.2%	54.8%	100.0%
		% within Preferred place to donate in the future	19.7%	46.4%	33.3%	43.0%	34.6%
		% of Total	7.3%	7.3%	1.1%	19.0%	34.6%
	Not eligible	Count	4	3	2	7	16
		% within Blood donor status	25.0%	18.8%	12.5%	43.8%	100.0%
		% within Preferred place to donate in the future	6.1%	10.7%	33.3%	8.9%	8.9%
		% of Total	2.2%	1.7%	1.1%	3.9%	8.9%
Total	Count	66	28	6	79	179	
	% within Blood donor status	36.9%	15.6%	3.4%	44.1%	100.0%	

% within Preferred place to donate in the future	100.0%	100.0%	100.0%	100.0%	100.0%
% of Total	36.9%	15.6%	3.4%	44.1%	100.0%

**Table 11B**

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.859 <sup>a</sup>	6	.007
Likelihood Ratio	16.736	6	.010
Linear-by-Linear Association	6.060	1	.014
N of Valid Cases	179		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .54.



**Table 12**

Question 7

**ANOVA Table**

			Sum of Squares	df	Mean Square	F	Sig.
Age factor * Blood donor status	Between Groups	(Combined)	1.191	2	.596	2.413	.092
		Within Groups	43.445	176	.247		
		Total	44.637	178			
Gender factor * Blood donor status	Between Groups	(Combined)	.365	2	.183	1.574	.210
		Within Groups	20.417	176	.116		
		Total	20.782	178			
Health Status Factor * Blood donor status	Between Groups	(Combined)	.009	2	.005	.088	.916
		Within Groups	9.432	176	.054		
		Total	9.441	178			
Weight Factor * Blood donor status	Between Groups	(Combined)	2.111	2	1.056	4.434	.013
		Within Groups	41.900	176	.238		
		Total	44.011	178			
Illicit Drug use factor * Blood donor status	Between Groups	(Combined)	.894	2	.447	3.267	.040
		Within Groups	24.078	176	.137		
		Total	24.972	178			
Pregnancy Factor * Blood donor status	Between Groups	(Combined)	.239	2	.119	.620	.539
		Within Groups	33.940	176	.193		
		Total	34.179	178			
Menstruating women Factor * Blood donor status	Between Groups	(Combined)	.066	2	.033	.136	.873
		Within Groups	42.560	176	.242		
		Total	42.626	178			
Infectious disease Factor * Blood donor status	Between Groups	(Combined)	.397	2	.199	1.602	.204
		Within Groups	21.826	176	.124		
		Total	22.223	178			

**Table 13**

Question 11

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Fear of stress/pain of procedure	Between Groups	2.064	2	1.032	5.418	.005
	Within Groups	33.523	176	.190		
	Total	35.587	178			
Fear of impact of health after procedure	Between Groups	1.452	2	.726	3.564	.030
	Within Groups	35.855	176	.204		
	Total	37.307	178			
Concern of safety/hygiene of procedure	Between Groups	.738	2	.369	2.069	.129
	Within Groups	31.407	176	.178		
	Total	32.145	178			
Concern of lack of information on intended use of blood	Between Groups	.047	2	.023	.110	.896
	Within Groups	37.663	176	.214		
	Total	37.709	178			

**Table 14**

Question 19

**ANOVA Table**

			Sum of Squares	df	Mean Square	F	Sig.
Exposure to blood donation at school * Blood donor status	Between Groups	(Combined)	.402	2	.201	.799	.451
		Within Groups	44.235	176	.251		
		Total	44.637	178			
Exposure to blood donation at university * Blood donor status	Between Groups	(Combined)	.262	2	.131	.550	.578
		Within Groups	41.906	176	.238		
		Total	42.168	178			
Exposure to blood donation at workplace/office * Blood donor status	Between Groups	(Combined)	.072	2	.036	.153	.859
		Within Groups	41.593	176	.236		
		Total	41.665	178			
Exposure to blood donation from the communtiy * Blood donor status	Between Groups	(Combined)	.340	2	.170	.689	.504
		Within Groups	43.392	176	.247		
		Total	43.732	178			
Exposure to blood donation at commercial centres/shopping malls * Blood donor status	Between Groups	(Combined)	.413	2	.207	1.146	.320
		Within Groups	31.732	176	.180		
		Total	32.145	178			
Other * Blood donor status	Between Groups	(Combined)	.057	2	.028	5.342	.006
		Within Groups	.937	176	.005		
		Total	.994	178			

**Table 15**

Question 7

**Multiple Comparisons**

Tukey HSD

Dependent Variable	(I) Blood donor status	(J) Blood donor status	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Age factor	Yes	No	-.14388	.08016	.174	-.3334	.0456
		Not eligible	.11015	.13369	.689	-.2058	.4261
	No	Yes	.14388	.08016	.174	-.0456	.3334
		Not eligible	.25403	.13932	.165	-.0753	.5833
	Not eligible	Yes	-.11015	.13369	.689	-.4261	.2058
		No	-.25403	.13932	.165	-.5833	.0753
Gender factor	Yes	No	-.08464	.05495	.275	-.2145	.0453
		Not eligible	.04641	.09165	.868	-.1702	.2630
	No	Yes	.08464	.05495	.275	-.0453	.2145
		Not eligible	.13105	.09551	.358	-.0947	.3568
	Not eligible	Yes	-.04641	.09165	.868	-.2630	.1702
		No	-.13105	.09551	.358	-.3568	.0947
Health Status Factor	Yes	No	.01501	.03735	.915	-.0733	.1033
		Not eligible	.01300	.06229	.976	-.1342	.1602
	No	Yes	-.01501	.03735	.915	-.1033	.0733
		Not eligible	-.00202	.06491	.999	-.1555	.1514
	Not eligible	Yes	-.01300	.06229	.976	-.1602	.1342
		No	.00202	.06491	.999	-.1514	.1555
Weight Factor	Yes	No	-.23443*	.07872	.009	-.4205	-.0484
		Not eligible	-.08725	.13129	.784	-.3976	.2231
	No	Yes	.23443*	.07872	.009	.0484	.4205
		Not eligible	.14718	.13682	.530	-.1762	.4706
	Not eligible	Yes	.08725	.13129	.784	-.2231	.3976
		No	-.14718	.13682	.530	-.4706	.1762
Illicit Drug use factor	Yes	No	.11690	.05968	.126	-.0242	.2580

		Not eligible	.20359	.09952	.104	-.0317	.4388
	No	Yes	-.11690	.05968	.126	-.2580	.0242
		Not eligible	.08669	.10372	.681	-.1585	.3318
	Not eligible	Yes	-.20359	.09952	.104	-.4388	.0317
		No	-.08669	.10372	.681	-.3318	.1585
Pregnancy Factor	Yes	No	.07873	.07085	.508	-.0887	.2462
		Not eligible	.02228	.11816	.981	-.2570	.3016
	No	Yes	-.07873	.07085	.508	-.2462	.0887
		Not eligible	-.05645	.12314	.891	-.3475	.2346
	Not eligible	Yes	-.02228	.11816	.981	-.3016	.2570
		No	.05645	.12314	.891	-.2346	.3475
Menstruating women Factor	Yes	No	-.02699	.07934	.938	-.2145	.1605
		Not eligible	-.06126	.13232	.889	-.3740	.2515
	No	Yes	.02699	.07934	.938	-.1605	.2145
		Not eligible	-.03427	.13789	.967	-.3602	.2917
	Not eligible	Yes	.06126	.13232	.889	-.2515	.3740
		No	.03427	.13789	.967	-.2917	.3602
Infectious disease Factor	Yes	No	.10077	.05682	.181	-.0335	.2351
		Not eligible	.01609	.09476	.984	-.2079	.2401
	No	Yes	-.10077	.05682	.181	-.2351	.0335
		Not eligible	-.08468	.09875	.668	-.3181	.1487
	Not eligible	Yes	-.01609	.09476	.984	-.2401	.2079
		No	.08468	.09875	.668	-.1487	.3181

\*. The mean difference is significant at the 0.05 level.

**Table 16**

Question 11

**Multiple Comparisons**

Tukey HSD

Dependent Variable	(I) Blood donor status	(J) Blood donor status	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Fear of stress/pain of procedure	Yes	No	<b>-.23124*</b>	.07041	<b>.004</b>	-.3977	-.0648
		Not eligible	-.06188	.11743	.858	-.3395	.2157
	No	Yes	.23124*	.07041	.004	.0648	.3977
		Not eligible	.16935	.12238	.352	-.1199	.4586
	Not eligible	Yes	.06188	.11743	.858	-.2157	.3395
		No	-.16935	.12238	.352	-.4586	.1199
Fear of impact of health after procedure	Yes	No	-.16927	.07282	.055	-.3414	.0029
		Not eligible	-.21968	.12145	.170	-.5067	.0674
	No	Yes	.16927	.07282	.055	-.0029	.3414
		Not eligible	-.05040	.12656	.916	-.3496	.2488
	Not eligible	Yes	.21968	.12145	.170	-.0674	.5067
		No	.05040	.12656	.916	-.2488	.3496
Concern of saftey/hygiene of procedure	Yes	No	.12823	.06815	.147	-.0329	.2893
		Not eligible	.13428	.11367	.466	-.1344	.4030
	No	Yes	-.12823	.06815	.147	-.2893	.0329
		Not eligible	.00605	.11845	.999	-.2739	.2860
	Not eligible	Yes	-.13428	.11367	.466	-.4030	.1344
		No	-.00605	.11845	.999	-.2860	.2739
Concern of lack of information on intended use of blood	Yes	No	.00048	.07463	1.000	-.1759	.1769
		Not eligible	.05693	.12447	.891	-.2373	.3511
	No	Yes	-.00048	.07463	1.000	-.1769	.1759
		Not eligible	.05645	.12971	.901	-.2502	.3631
	Not eligible	Yes	-.05693	.12447	.891	-.3511	.2373
		No	-.05645	.12971	.901	-.3631	.2502

**Multiple Comparisons**

Tukey HSD

Dependent Variable	(I) Blood donor status	(J) Blood donor status	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Fear of stress/pain of procedure	Yes	No	-.23124*	.07041	.004	-.3977	-.0648
		Not eligible	-.06188	.11743	.858	-.3395	.2157
	No	Yes	.23124*	.07041	.004	.0648	.3977
		Not eligible	.16935	.12238	.352	-.1199	.4586
	Not eligible	Yes	.06188	.11743	.858	-.2157	.3395
		No	-.16935	.12238	.352	-.4586	.1199
Fear of impact of health after procedure	Yes	No	-.16927	.07282	.055	-.3414	.0029
		Not eligible	-.21968	.12145	.170	-.5067	.0674
	No	Yes	.16927	.07282	.055	-.0029	.3414
		Not eligible	-.05040	.12656	.916	-.3496	.2488
	Not eligible	Yes	.21968	.12145	.170	-.0674	.5067
		No	.05040	.12656	.916	-.2488	.3496
Concern of saftey/hygiene of procedure	Yes	No	.12823	.06815	.147	-.0329	.2893
		Not eligible	.13428	.11367	.466	-.1344	.4030
	No	Yes	-.12823	.06815	.147	-.2893	.0329
		Not eligible	.00605	.11845	.999	-.2739	.2860
	Not eligible	Yes	-.13428	.11367	.466	-.4030	.1344
		No	-.00605	.11845	.999	-.2860	.2739
Concern of lack of information on intended use of blood	Yes	No	.00048	.07463	1.000	-.1759	.1769
		Not eligible	.05693	.12447	.891	-.2373	.3511
	No	Yes	-.00048	.07463	1.000	-.1769	.1759
		Not eligible	.05645	.12971	.901	-.2502	.3631
	Not eligible	Yes	-.05693	.12447	.891	-.3511	.2373
		No	-.05645	.12971	.901	-.3631	.2502

\*. The mean difference is significant at the 0.05 level.

**Table 17**

Question 19

**Multiple Comparisons**

Tukey HSD

Dependent Variable	(I) Blood donor status	(J) Blood donor status	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
						Lower Bound	Upper Bound	
Exposure to blood donation at school	Yes	No	.01230	.08088	.987	-.1789	.2035	
		Not eligible	.16955	.13490	.422	-.1493	.4884	
	No	Yes	-.01230	.08088	.987	-.2035	.1789	
		Not eligible	.15726	.14058	.504	-.1750	.4895	
	Not eligible	Yes	-.16955	.13490	.422	-.4884	.1493	
		No	-.15726	.14058	.504	-.4895	.1750	
	Exposure to blood donation at university	Yes	No	.07282	.07873	.625	-.1133	.2589
			Not eligible	.09097	.13130	.768	-.2194	.4013
No		Yes	-.07282	.07873	.625	-.2589	.1133	
		Not eligible	.01815	.13683	.990	-.3053	.3416	
Not eligible		Yes	-.09097	.13130	.768	-.4013	.2194	
		No	-.01815	.13683	.990	-.3416	.3053	
Exposure to blood donation at workplace/office		Yes	No	.02076	.07843	.962	-.1646	.2061
			Not eligible	-.05384	.13081	.911	-.3630	.2553
	No	Yes	-.02076	.07843	.962	-.2061	.1646	
		Not eligible	-.07460	.13632	.848	-.3968	.2476	
	Not eligible	Yes	.05384	.13081	.911	-.2553	.3630	
		No	.07460	.13632	.848	-.2476	.3968	
	Exposure to blood donation from the community	Yes	No	.08783	.08011	.518	-.1015	.2772
			Not eligible	-.02104	.13360	.986	-.3368	.2948
No		Yes	-.08783	.08011	.518	-.2772	.1015	
		Not eligible	-.10887	.13923	.715	-.4380	.2202	
Not eligible		Yes	.02104	.13360	.986	-.2948	.3368	
		No	.10887	.13923	.715	-.2202	.4380	



Exposure to blood donation at commercial centres/shopping malls	Yes	No	-.07250	.06851	.541	-.2344	.0894
		Not eligible	.09282	.11425	.696	-.1772	.3629
	No	Yes	.07250	.06851	.541	-.0894	.2344
		Not eligible	.16532	.11907	.349	-.1161	.4468
	Not eligible	Yes	-.09282	.11425	.696	-.3629	.1772
		No	-.16532	.11907	.349	-.4468	.1161
Other	Yes	No	.00000	.01178	1.000	-.0278	.0278
		Not eligible	-.06250*	.01964	.005	-.1089	-.0161
	No	Yes	.00000	.01178	1.000	-.0278	.0278
		Not eligible	-.06250*	.02047	.007	-.1109	-.0141
	Not eligible	Yes	.06250*	.01964	.005	.0161	.1089
		No	.06250*	.02047	.007	.0141	.1109

\*. The mean difference is significant at the 0.05 level.

