



The relationship of Adversity Quotient and Personal Demographic Profile of Private Business Leaders in Egypt

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Abstract

Private sector business organizations in Egypt face different structural challenges that deter their development. Such challenges have created obstacles for business managers who are key contributors to the overall performance and achievements in business organizations. Despite application of conventional remedial measures, there is insufficient knowledge in private business organizations in Egypt about a conceptual approach that takes into consideration the relationship between the individual leader's personal qualities expressed in his personal demographic profile in terms of age, tenure, and highest level of education attained, and the degree of control over decisions and emotions in adversity times expressed in the level of adversity quotient in terms of overall score and its four dimensions namely; control, ownership, reach, and endurance (CORE). This paper tests this hypothesis that Adversity Quotient level (AQ and CORE dimensions) of a business leader is associated with his personal demographic profile (age, tenure, and highest level of education attained). The evidence collected from 85 of business leaders who are members and ex-members of the Egyptian Businessmen's Association (EBA) and the Egyptian Junior Business Association (EJB) in Egypt. The study found that, no significant relationships exists between the respondents' overall AQP and their personal demographic profile in terms of age, tenure, and highest level of education attained. However, the study found a significant relationship between the control dimension of CORE and highest level of education attained.

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This suggests that, since AQ can be learned and enhanced, Egyptian private sector business organizations should instil AQ measure in their recruiting system for hiring or promoting business managers, making them more conscious to deal with adversity which is part of their daily life. The awareness of their AQ level will create a powerful factor in inspiring others to understand their drawbacks and turning them into opportunities.

JEL Codes: Management: M10, M16

Keywords: Adversity Quotient; CORE dimensions; Personal Demographic Profile

1. Introduction

Private sector business organizations in Egypt face different structural challenges that deter their development. These challenges have arisen mainly due to political turmoil (regimes were ousted after long years of ruling), the opening of the Egyptian economy to global competition, the fall of the Egyptian stock market in 2014 which has considerably affected many organizations, the failure of business models following reckless investments, terrorist attacks and considerable levels of uncertainty and business complexities. These organizations are key drivers of competition, growth and job creation, particularly in developing economies. Such challenges have created obstacles for business managers who are key contributors to the overall performance and achievements in business organizations [1].

The manner in which these challenges are resolved is highly dependent upon the individual leader's personal qualities expressed in his personal demographic profile as well as the leader's degree of control over decisions and emotions expressed in the leader's level of adversity quotient. The leader in a business organization has responsibilities and accountability. Several studies [2,3,4] show that the leaders' position is critical to the organizational development and performance growth of their organizations as well as the development of their followers, since the leader is usually the main driving force that sustains the welfare of the organization.

2. Problem Statement

The Egyptian private business sector is in need to measure and strengthen the thoughts of its leaders and managers, especially those in high rank positions, and establish their achievements. Surpassing any adverse events in life will lead a business leader to a better way of understanding a problem, thus making more accurate decisions. In order to achieve this goal, there is a need for a measurement tool for private business organizations to evaluate the capacity of their current leaders and higher management, as well as potential recruits, to remain focused and strong in times of adversity.

Currently, there is a lack of existing knowledge in private business organizations in Egypt about an applicable approach that takes into consideration the relationship between the individual leader's personal demographic aspects and the degree of control over decisions and emotions. In addition, there is insufficient knowledge about the most appropriate methodology for a well robust measurement of the leader's capacity to deal with day-to-day adverse situations.

This study was conducted to investigate the relationship of Adversity quotient Profile (AQP) and personal demographic variables of current and previous members of the Egyptian Businessmen's Association (EBA) and the Egyptian Junior Business Association (EJB). Specifically, the study answered the following questions:

1. What is the level of AQ in terms of overall and along the four CORE dimensions of the business leader respondents in this study?
2. What is the personal demographic profile in terms of age, tenure, and highest level of education attained of the business leader respondents in this study?
3. How significant is the relationship between the AQ (overall and CORE dimensions) and the personal demographic profile in terms of age, tenure, and highest level of education attained of the business leader respondents in the study?

3. Research Hypothesis

To answer problem statements number 3 the researcher has formulated the following hypothesis:

H1. There is a significant relationship between AQP (overall and CORE dimensions) and the personal demographic profile of Egyptian business leaders in private sector business organizations.

4. Literature Review

This section gives the reader an overview of different contributions in literature which includes (1) Adversity quotient (AQP and CORE dimensions), (2) Personal demographic factors in terms of age, tenure, and highest level of education attained.

4.1 Adversity Quotient Profile and CORE Dimensions

Adversity Quotient (AQ) is defined as the capacity of individuals to deal and respond to the adversities of life such as stress, and difficulties. The author in [3] defined it as "the science of human resilience". Furthermore, Stoltz provided theories on AQ on how to resolve challenges and strive to overcome them so as not to affect deeply what the individual will accomplish in his work and towards life.

By understanding the concept of AQ we can better understand how individuals react to challenge and adversity in all aspects of their lives. In fact, the way individuals respond to adversity is a strong indicator of the ability to succeed in many endeavors. But AQ is much more than a measure. It contributes a vital piece to what is becoming a grand unification theory of human behavior, drawing from nearly four decades of wisdom and scientific research from some of the world's top thinkers.

There are four CORE dimensions that make up AQ: Control, Origin and Ownership, Reach, and Endurance. These dimensions point out what individuals need to work on in order to raise their overall AQ. In the following paragraphs, these dimensions will be defined and interpreted according to [3].

Control; It measures the degree of control that individuals perceive they have over adverse events [3]. It is a strong gauge of resilience and health (Retrieved from www.peaklearning.com). Those with higher AQs simply perceive greater control over life's events than do those with lower AQs. As a result, they take more action which results in more control.

Origin and Ownership; According to [3], this dimension asks two questions: Who or what was the origin of adversity? And to what degree do I own the outcomes of the adversity? The lower the individual's origin score, the more likely he is to blame himself, beyond the point of the blame being constructive. On the other hand, the higher the origin score, the greater the tendency to consider other external sources of the adversity putting the individual's own role into perspective. Ownership measures the extent to which individuals hold themselves accountable for improving a situation. It is a strong gauge of accountability and likelihood to take action (Retrieved from www.peaklearning.com). The higher the individuals' ownership score, the more they own the outcome, regardless of the cause. The lower the ownership score, the more individuals disown the outcome, regardless of their cause.

Reach; It is the perception of how far-reaching events will be. It is a strong gauge of perspective, burden and stress level (Retrieved from www.peaklearning.com). This dimension asks the question: How far will the adversity reach into other areas of my life? Lower AQ responses allow the adversity to expand into other facets of life. The lower the R score, the more likely individuals will regard events as catastrophic. On the other hand, the higher the R score, the more individuals may limit the reach of the problem to the event at hand. Individuals with high R score effectively compartmentalizes or contains the reach of the adversity, thus making them feel more empowered and less overwhelmed [3].

Endurance; the author in [3] defined it as the perception of time over which good or bad events and their consequences will last or endure. It is a strong gauge of hope or optimism (Retrieved from www.peaklearning.com). It asks two related questions: How long will the adversity last? And how long will the cause of the adversity last? People with a high score on this dimension, may view success as enduring, if not permanent. Likewise, individuals may consider adversity and its causes as being fleeting and temporary. The difference is that low AQ people tend to see the adversity as a permanent state, while high AQ people perceive the adversity as a temporary condition [3].

After reviewing the literature, it is evident that although some scholars believe that the AQ level of a business leader is linked to specific personal demographic factors, others contradict this, and different concepts of AQ have been employed in different studies, making direct comparisons virtually impossible. Gaps and unanswered questions remain. Data from demographic profile studies were presented to show that possible link. There was no single narrow evidence for all occasions or for certain traits; rather, the whole leader is needed for optimum productivity.

4.2 Demographic Profile

Demography theory as per the author in [5] suggests that attributes such as age, tenure, occupation, gender, and level of experience are compositional characteristics that influence interpersonal and group dynamics. Support for this theory comes from studies that find that the personal characteristics of leaders exerted an influence on the outcomes and successes of an organization [6,7,8].

Also, demographic variables such as gender, age, tenure, and educational level have been used to predict many of the leader's behaviors, including effectiveness [9,10], communication style [11], decision making [12,13], productivity [14,15], participation [16,17], conflict style [18,19,20], success [21,22,23], and power [24].

Several studies examine the relationship between demographic characteristics and AQ, these studies found contradicted results regarding the influence of demographic profile factors on one's level of AQ. For example, [25,26,27,28,29].

5. Research Variables

Independent Variable:

For the present study, personal demographic profile (in terms of age, tenure, and highest level of education attained) are the independent variables.

Dependent Variable:

In this study the AQP of the leaders (in terms of overall and CORE dimensions' scores) are the dependent variables

6. Research Methodology

This section describes the general methods of research, research design of the study, the research sample and demographic description of participants, data collection instruments, the research process and the statistical treatment of the data.

6.1 Research Design

The main purpose of this research is to explore the relationship between adversity quotient along its four CORE dimensions and business leaders' demographic profile in terms of age, tenure and highest level of education attained in the context of Egyptian private sector organizations in Egypt. The researcher used the descriptive-correlational type of research in this study. The descriptive method was used in determining the demographic profile of the business leaders and managers in terms age, tenure, and level of education attained, and their adversity quotient level along the four CORE dimensions: Control, ownership, reach, and endurance. The correlational method was used in determining the significance of relationship between adversity quotient and personal demographic profile.

6.2 Research Sample and Demographic Description of Participants

The present paper is interested in investigating AQP and personal demographic characteristics at EBA and EJB in Egypt. This is why the population studied involves all categories of business i.e. manufacturing, service, and not-for-profit organizations. The distribution of the research population is presented in below Table 1.

Table 1: Distribution of the sample size of selected members of EBA and EJB

Association	Population	Sample size	%
Current member of EBA	73	19	22%
Previous member of EBA	55	17	20%
Current member of EJB	94	37	43%
Previous member of EJB	49	12	15%
Total	271	85	100%

As a result a total of 271 business leader respondents opened the link to participate in this study, but not all of them completed the survey. From those who opened the link (271), only 85 respondents completed the survey successfully, which represents 31.3 percent from the final targeted sample. From the current members of EBA, amounted to about 22%, previous members of EBA amounted to about 20%, EJB current members 43%, and EJB previous members about 15%.

6.3 Data Collection Method

The present study has adopted the questionnaire method for collecting primary data necessary for the study. The questionnaire list is interested in recognizing AQ and personal demographic profile factors at Egyptian business organizations. The data of the questionnaire have been collected by contacting employees through a special electronic link that was provided to business leader members in both the EBA and the EJB. The questionnaire list involved two types of questions. The first type is related to recognizing demographic information of the participants, and the second type detects AQ profile. Data collection took two months. Replies were 31.3 %, 85 lists out of the 271 distributed which can be considered as moderate level of participation. This is due to the severe political and economic turmoil that Egypt experiencing and also because of the non-supportive culture of academic researchers in Egypt.

6.4 Instrumentation

The researcher utilized two instruments to obtain data for the current study. To gather information from current and previous members of EBA and EJB concerning their personal demographic profile, the demographic data sheet was designed by the researcher, and Stoltz’s Adversity Response Profile (ARP) 8.1 was used to measure the level of adversity quotient of the respondents.

6.5 Research Process and Statistical Treatment of the Data

The researcher sought the permission of the secretary general of both EBA and EJB to administer the demographic data checklist, and ARP to the members of the institutions. After approval of the request, the researcher personally administered and retrieved the questionnaires from the target respondents. For the electronic questionnaire, the research provided respondents with a special link to access the survey. The gathered data were classified, encoded and summarized. Then, the researcher analyzed and interpreted the findings of the study following the sequence of the problems enumerated earlier in this study with the help of a statistician.

The following statistical tools and techniques were used to ensure the valid and systematic presentation, analysis and interpretation of data: Frequency and percentage, arithmetic mean, and to test for the significance of the relationship between AQ and personal demographic factors, the researcher utilized the Chi Square test.

7. The findings

This section presents, analyzes, and interprets the data gathered from the survey questionnaire which focused on the relationship between the adversity Quotient and personal demographic profile of business leaders in private sector business organizations who are previous and current members of EBA and EJB in Egypt. The findings of the study are organized into three parts. The first part describes the personal demographic profile of the respondents in this study. The second part illustrates the adversity quotient profile of the business leader respondents as measured by the following dimensions: control, ownership, reach, and endurance and overall AQP. The third part establishes whether the adversity quotient profile overall score and CORE dimensions of the business leader respondents are significantly related to their personal demographic profile in terms of age, tenure and highest level of education attained.

1. What is the personal demographic profile of the respondents in this study in terms of age, tenure, and highest level of education attained?

A data set of 85 observations was used in the analysis. A Likert scale was used in the questionnaires of the current research. In management studies, it is very common to treat a Likert scale as an interval scale rather than an ordinal one to be able to conduct different statistical analysis from managers to CEOs or presidents of their companies.

Table 2 below displays the demographic description of this group. For these business leaders, out of the total number of respondents, 34 (40%) are from the manufacturing sector and 42 (49.4%) from the service sector; the remaining nine (10.6%) are from the other sectors (for example non-for profit organizations). This ensures an encouraging distribution of the data around the main business sectors in Egypt. Exactly 42 (49.4%) are on the top managerial level (CEO/president), 19 (22.4%) are on the level of division director, and 24 (28.2%) are on the level of department manager. Age groups were split as follows: 34 (40%) belong to the 25-39 age group, 47 (55.3%) are 40-55, and only four respondents (4.7%) are above 55. Concerning gender, out of the total number of respondents, 69 (81.2%) are male business leaders and 16 (18.8%) are female. For the tenure or length of service in the organization, only 22 (25.9%) have between three and five years of experience, 27 (31.8%) have

six to 10 years of experience, and 36 (42.4%) have more than 10 years' experience. Education levels were split evenly between BA degree 35 (41.2%), and MBA degree 35 (41.2%), while 15 (17.6%) have a doctoral degree. The total sample (85) respondents is relatively a small sample, however, it was considered representative for both organizations.

Table 2: Demographics of the respondents in the study (N= 85)

Description	N	%
Type Of Business		
Manufacturing	34	40
Service	42	49.4
Other	9	10.6
Position/Title		
CEO/President	42	49.4
Division Director	19	22.4
Department Manager	24	28.2
Age Group		
25-39	34	40
40-55	47	55.3
56-70 and above	4	4.7
Gender		
Male	69	81.2
Female	16	18.8
Tenure/Length of Service		
3-5	22	25.9
6-10	37	31.8
More than 10	36	42.4
Highest Education Attained		
BA Degree	35	41.2
MBA Degree	35	41.2
Doctoral Degree	15	17.6
Total	85	100%

The above Table 2 shows that, most of the respondents in this study are business leaders and decision makers with higher ranking positions as CEO, president, vice president, and division director. Thus, being a business leader and decision-maker tends to fall on the higher-ranking positions in Egyptian business organizations. Furthermore, the findings indicate that, most business leader respondents are in the middle age, when most individuals have settled in their careers. This was found to be consistent with the findings of [30], on leadership styles and behavior, compared with older workers, the researcher found that younger workers feel more comfortable in fast changing environments and more willing to take risks and consider new approaches. They also operate with more energy and intensity, and have a greater capacity to generate enthusiasm in others. In

matters concerning gender in Egyptian business organizations, there is a domain of males (81%) for high level positions. This indicates that, in the Egyptian business culture including Egyptians' values, beliefs, and way of thinking, higher ranking positions as managers and leaders are dominated by males. Two third of the respondents (63%) tend to fall in the range of six years of experience and above. This implies that, to be assigned as a business leader in Egyptian business organizations you must have gained at least six years of practice and above. This is supported by the study of authors in [31], who concluded that, in the area of managerial effectiveness, managers must have a mutual understanding of the skills and responsibilities necessary for other managers across similar and different organizational levels and functions. This can be gained by practicing different skills over time. Finally, more than half (59%) of the respondents have higher education levels ranging between master degree and doctoral degree. This implies that, a higher educational level is essential for business managers in Egyptian private business organizations in order to be assigned in higher-ranking positions. The result further indicates that, it is strongly believed among Egyptian business leaders that a higher level of education will result in better performance in their jobs. The researcher finds this belief consistent with the idea of authors in [32] that, educational development of effective leadership is crucial for performance and success in business organizations.

2. What is the level of AQ in terms of overall and along the four CORE dimensions of the business leader respondents in this study?

The researcher computed the percentage from the raw data of the leaders' adversity quotient and its four CORE dimensions; control, ownership, reach, and endurance. Table 3 below presents the percentage of the leaders' adversity quotient with its four CORE dimensions.

As shown in Table 3, the overall AQ of most respondents (92%) fall in the average level. The result implies that business leaders' respondents usually have a greater interest in every aspect of their lives and they have good potential to maintain the status quo, but they prefer to operate within their comfort zone when adversity strikes, and when facing more significant setbacks, they tend to lose confidence and may suffer fearing that further obstacles will arise. In a business environment characterized by constant change especially due to the current political events and economic recession in Egypt. Work conditions may become even more difficult and the challenge now is how business leaders can handle adversity and become stronger from it.

Of the 85 respondents, the control score was average in 71 respondents (83.5%), the largest distribution was the average ownership score with 78 respondents (91.8%). The ownership score was followed by reach average score with 68 respondents (80%). The lowest in terms of the number of respondents was the endurance score with only 65 respondents representing 76.5% of the total sample. The result implies that, respondents are having average range for all four CORE dimensions of adversity quotient.

To confirm the above results, Table 4 facilitates as the basis of discussion of the mean scores of the AQP and CORE dimensions. The comparisons of computed and standard mean scores of control, ownership, reach, endurance and total AQP are discussed.

Table3: AQP overall and CORE dimensions percentage (N= 85)

Description	N	%
AQP OVERALL		
Low	4	4.7
Average	79	92.9
High	2	2.4
CONTROL		
Low	7	8.2
Average	71	83.5
High	7	8.2
OWNERSHIP		
Low	6	7.1
Average	78	91.8
High	1	1.2
REACH		
Low	14	16.5
Average	68	80
High	3	3.5
ENDURANCE		
Low	20	23.5
Average	65	67.5
High	0	0
Total	85	100%

It can be noticed from Table 4 that, the Control dimension which measures the degree of control a person perceives over adverse events, the majority of the answers of the respondents belong to mid-range level of AQ Control dimension with mean score of 30.90. The mean score reflects that respondents perceive that Egyptian business leaders can be partially in control of bad events depending on the complexity of adversities they might be facing. This further implies that respondents may not easily give up in the face of adversity but may find it difficult to be in control if the situation worsens.

The Ownership dimension which measures the extent to which a person holds himself accountable for any adversity and the necessary contribution for improving the situation. The above table shows that the majority of

the answers of the respondents belong to the mid-range level of the Ownership dimension, with mean score of 28.67. It shows that the respondents may believe as if they are the causes of adversities their systems are facing, but possessing a certain level of accountability. This means they have the tendency to focus on the aspect of the adversity in which they believe they are the direct causes but may not be willing to take part on the larger aspect. Thus, making their contribution for improvement of the situation is limited.

Table 4: AQP and CORE dimensions mean scores (N= 85)

Control (C)	High (38-50)
	Average (24-37)
	Low (10-23)
	C computed mean=30.9 (Average)
	C Standard mean =41
Ownership (O)	High (38-50)
	Average (24-37)
	Low (10-23)
	O computed mean=28.67 (Average)
	O Standard mean =45
Reach(R)	High (38-50)
	Average (24-37)
	Low (10-23)
	C computed mean=28.15 (Average)
	C Standard mean =32
Endurance (E)	High (38-50)
	Average (24-37)
	Low (10-23)
	E computed mean=25.85 (Average)
	E Standard mean =36
AQP total Score	AQP computed mean=113.57 (Average)
	AQP Global Standard mean =154

The Reach dimension which is the perception of how far the adversity reaches into other areas of life. The majority of the answers of the respondents belong to the middle range with mean score of 28.15. It shows that respondents face adversity as somewhat specific and limited. But, in some cases, adversity reaches other areas

of life making bad results worse than they expected.

The Endurance dimension, the perception of time over which good or bad events and their consequences will last. It is revealed in the above table that, the majority of answers of the respondents belong to the middle range, with the lowest mean score of 25.85 among the four CORE dimensions. It implies that the respondents handle adverse events and their causes as somewhat enduring. Whenever they are confronted with major challenges, they have somewhat the capacity to do what is required to carry on. However, there may be other worse situations that make them tend to lose resolve if the outcome worsens.

The overall AQP profile was computed, the majority of the respondents fall on average with the total mean of 113.57. The result implies that Egyptian Business leaders in private sector business organizations usually have a relatively average potential in dealing with every aspect of their lives. But interpretation means that, the participants sometimes perceive these events as beyond their control and that there is little, if anything, they can do to prevent them or limit their damages.

3. How significant is the relationship between the AQ (overall and CORE dimensions) and the personal demographic profile in terms of age, tenure, and highest level of education attained of the business leader respondents in the study?

The overall adversity quotient profile to demographic profile:

Table 5 below shows that the researcher tested all hypotheses derived from H1 concerning the significant relationships between AQP overall score and the personal demographic profile (in terms of age, tenure, and educational attainment) of Egyptian business leaders. These are quantitative and qualitative variables in nature, requiring the Chi-square test.

Table 5: The relationship of overall AQP and demographic profile (chi-square test).

H1	Relationship	Chi-square	P-value	Decision
H1.1	AQ and Age	2.4	0.64	Fail to reject H ₀ : No relationship at α=0.05
H1.2	AQ and Tenure	3.0	0.54	Fail to reject H ₀ : No relationship at α=0.05
H1.3	AQ and Highest Education Attained	0.91	0.92	Fail to reject H ₀ : No relationship at α=0.05

H1.1 shows that the Chi value for the significant relationship between AQP overall score and age is 2.40 with a probability value of 0.640 which is greater than the level of significance at 0.05. Therefore, the null hypothesis that there is no significant relationship between AQP overall score and age is accepted. It means that, AQP

overall score and age of the respondents are not significantly related. The result implies that regardless of age, Egyptian business leaders have the ability to handle and overcome difficult situations they might encounter in their positions. This result is consistent with the study conducted by the author in [27] whose study focused on investigating the relationship of personal characteristics, leadership styles, and job satisfaction to AQ of academic heads of selected state colleges and universities in Manila, the Philippines.

The researcher found that there was no significant relationship between age and the AQP overall score of the respondents. The researcher concluded that the age of the respondents is not a factor that can determine the ability of a person to face challenges in difficult times. However, the result contradicts the findings of the study conducted by the author in [25] which showed that older employees had a higher AQ compared to that of the younger employees. This opens the area for further research.

In H1.2, the computed Chi-square for the significant relationship between AQP overall score and tenure is 3.0 with a probability value of 0.540 which is greater than the level of significance at 0.05. Therefore, the null hypothesis that there is no significant relationship between the AQP overall score and tenure of the respondents is accepted. The result implies that Egyptian business leaders are not allowing tenure or length of service to be a barrier for handling adversity in difficult times. This result was supported by the author in [26], as his study found that the demographic profile variables including tenure or length of service were not significantly related to the AQ overall profile of the respondents.

In H1.3, the Chi value for the significant relationship between AQP overall score and highest level of education attained is 0.91 with a probability value of 0.920 which is greater than the level of significance at 0.05. Therefore, the null hypothesis that there is no significant relationship between AQP overall score and highest level of education attained is accepted. It means that the AQP overall score and highest level of education attained of the respondents are not significantly related. The result shows that the degrees earned by the respondents have no influence on their level of determination when performing a good job amidst the difficulties that they or their system is experiencing. The result further indicates that Egyptian business leaders and managers will continue their struggle for good performance when facing adversity and challenges in the work place regardless of their level of education or degree earned. The result is consistent with the author in [29], as his study revealed that, no significant relationship was found between demographic profile including level of education attained and AQ of the respondents.

CORE dimensions to demographic profile:

Table 6 shows that in order to test H1.4 for the significant relationship between the control CORE dimension and age, the computed Chi-square was 2.4 with a probability value of 0.65 which is greater than the level of significance at 0.05, therefore, we accept the null hypothesis finding no significant relationship between control dimension and age. This implies that, Egyptian business leaders believe that they can attain certain outcomes and remain able to predict and control events in difficult times regardless of their age.

In H1.5, the computed Chi-square for the significant relationship between control dimension and tenure is 1.4

with a probability value of 0.830 which is greater than the level of significance at 0.05. Therefore, the hypothesis that there is no significant relationship between control and tenure of the respondents is accepted. The result implies that Egyptian business leaders focus on what they can do to deal with the adversities instead of focusing and complaining about the issues that are beyond their control. Whether the business leader has long experience or none, he can maintain a can-do attitude even when challenges are overwhelming.

Table 6: The relationship of AQ CORE dimensions and demographic profile

H1	Relationship	Chi-square	P-value	Decision
H1.4	Control and Age	2.4	0.65	Fail to reject H ₀ : No relationship at $\alpha=0.05$
H1.5	Control and Tenure	1.4	0.83	Fail to reject H ₀ : No relationship at $\alpha=0.05$
H1.6	Control and Highest Education Attained	10.35	0.035	<u>Reject H₀: There is a linear relationship at : $\alpha=0.05$</u>
H1.7	Ownership and Age	1.3	0.85	Fail to reject H ₀ : No relationship at $\alpha=0.05$
H1.8	Ownership and Tenure	3.5	0.46	Fail to reject H ₀ : No relationship at $\alpha=0.05$
H1.9	Ownership and Highest Education Attained	7	0.136	Fail to reject H ₀ : No relationship at $\alpha=0.05$
H1.10	Reach and Age	5.8	0.21	Fail to reject H ₀ : No relationship at $\alpha=0.05$
H1.11	Reach and Tenure	6	0.19	Fail to reject H ₀ : No relationship at $\alpha=0.05$
H1.12	Reach and Highest Education Attained	1.3	0.85	Fail to reject H ₀ : No relationship at $\alpha=0.05$
H1.13	Endurance and Age	1.3	0.50	Fail to reject H ₀ : No relationship at $\alpha=0.05$
H1.14	Endurance and Tenure	3.8	0.14	Fail to reject H ₀ : No relationship at $\alpha=0.05$
H1.15	Endurance and Highest Education Attained	1.414	.249	Fail to reject H ₀ : No relationship at $\alpha=0.05$

In H2.6, the computed Chi-square for the significant relationship between control dimension and highest level of education attained is 10.35 with a probability value of 0.035 which is less than the level of significance at 0.05. Therefore, the hypothesis that there is no significant relationship between control CORE dimension and highest level of education attained of the respondents is rejected. The result implies that Egyptian business leaders struggle to remain focused and stable in the face of adversity. According to the author in [33], control is the extent to which someone perceives that he can influence whatever happens next. It determines resilience, health, and tenacity. It asks the question: How much control do you perceive you have over an adverse event? Actual control in a given situation is nearly impossible to measure. The result further indicates that Egyptian business leaders possess self-confidence and a positive self-image, developing communication skills, and the capacity to manage strong feelings and impulses in difficult times; this is due to their high level of knowledge and education. To overcome the challenges of an ever-changing environment, it becomes important for business

leaders to be highly educated and to possess the necessary skills to be successful despite adversities.

The role of education, therefore, is not just to impart knowledge and skills that enable the beneficiaries to function as socio-economic agents of change in society, but also to impart values, ideas, attitudes, and aspirations important for performance development. However, this finding is contradicted by several recent studies, for instance, the author in [28] concluded that there was no correlation found between AQ and the demographic profile of the respondents, and the author in [29] whose study did not find a significant relationship between the respondents' level of education and AQ.

Table 6 shows the computed Chi-squares for the significant relationship in the following hypotheses, H1.7 to H1.15. The Chi-square probability values were, 0.850, 0.460, 0.136, 0.210, 0.190, 0.850, 0.50, 0.140, and 0.249, respectively, these were all found to be greater than the level of significance, 0.05. Therefore, the researcher accepts the null hypotheses that there is no significant relationship among these variables when tested. This implies that ownership, reach, and endurance are not significantly related to any of the demographic profile variables in this study: Age, tenure and highest level of education attained. It can be concluded that ownership, reach, and endurance are not affected by age, tenure or the level of education of the respondents. The results of the above imply that, although Egyptian business leaders have an average level of AQP and CORE dimensions, they tend to perceive adversity events as somewhat enduring, and endeavor not to allow this to become an obstacle for achieving organizational objectives.

The results further indicate that, the average level of CORE dimensions of the business leader respondents has nothing to do with their demographic profile. In some cases, they demonstrate a good inner capacity to deal with difficult situations. This may be attributed to their improved knowledge and continuous learning. The findings suggest that the level of education is considered as an investment that influences people's values, wants, and needs and makes them think and behave differently specially in difficult times. The result confirms Mitchell's (2000) findings of education as a determinant factor of effective leaders. He further suggests that, education is considered as an investment that influences people's ability to accept problems they cannot resolve.

To summarize the above, the researcher found no significant relationships exists between the respondents' overall AQP score when measured by ARP 8.1 and their personal demographic profile in terms of age, tenure, and highest level of education attained. However, the study found a significant relationship between the control dimension of CORE and highest level of education attained. Furthermore, the study found no significant relationship between ownership, reach and endurance and any of the respondents' demographic profile variables: Age, tenure, and highest level of education attained.

8. Conclusions, recommendations, and limitations of the study

The significant findings of the study provided a basis for the following:

8.1 Conclusions

1. The business leader respondents are mostly male who occupy higher ranking positions, middle aged between mid-thirties and fifty years of age. They have pursued post graduate studies, and most of them have around seven years of experience in managerial positions.
2. The business leader respondents have an average level of AQ which indicates that they usually have a greater interest in every aspect of their lives and a good potential to maintain the status quo, however they prefer to operate within their comfort zone and when facing adversity and significant setbacks, they tend to lose confidence and may fear that further obstacles will arise.
3. Age, tenure, and highest level of education attained are not significant determinants of the AQP level (and its four CORE dimensions) of the business leader respondents.
4. Age, tenure, and highest level of education attained are not significant factors in determining the levels of ownership, reach and endurance CORE dimensions of the business leader respondents.
5. The highest level of education attained is a significant factor in differentiating the level of the control dimension of the business leader respondents.

8.2 Recommendations

In light of the study's significant findings and conclusions the following recommendations are offered:

1. The study revealed that the respondent's perceived control over adversity is related to educational level. This calls for AQ training to enhance their knowledge and instill individual adversity awareness, thereby, making them more conscious to deal with adversity which is part of their daily life. The awareness of their AQ level will create a powerful factor in inspiring others to understand their drawbacks and turning them into opportunities.
2. Since AQ can be learned and improved, and due to the fact that business leaders and managers are constantly exposed to different types of pressure both internal and external, they should be encouraged to constantly review their own AQP and learn how to improve it through self-improvement activities, attending seminars, reading books, and practicing sports.
3. Human resource departments in every business organization should look for formal training in business adversity to enhance harmonious working relationships among people of the same level in the organizational structure thereby avoiding professional jealousy.
4. The development and validation of an AQ questionnaire in future research should be based on the specific characteristics of the Egyptian culture in a manner that could be easily understood and used within the frame of the Egyptian traditions and culture.

5. It is recommended that the present study be reviewed, criticized, and even replicated using more varied samples, variables, and other survey and measurement techniques to provide an opportunity for comparison of results.

6. The results of this study may be shared with business organizations in the public sector for possible follow-up studies.

8.3 Limitations of the study

The study was conducted to determine the relationship between AQ and demographic profile of Egyptian business leaders in EBA and EJB. Although their head offices are in Cairo, their members originate from all Egyptian governorates. All members belong to private sector organizations covering all sectors of different businesses in Egypt. This represented the first limitation of this study as the generalization of the research result to other countries and to the business public sector may be difficult because of the research scope only focuses on private sector business organizations in Egypt due to the political and economic adversities in Egypt which called for such study.

Finally, the second limitation is that, the present study confined the researcher to measure the AQ level of business leaders only with respect to certain demographic aspects. Activities in various co-curricular activities also help in determining the AQ level of business leaders such as leader's satisfaction, turnover and performance. However the researcher did not include these variables due to the fact that, it would not have been possible to collect such information within these adversities that Egypt is currently going through. Therefore, the researcher acknowledges that given the topic selection, the researcher is looking for relationships to support the hypotheses of the study.

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