Abstract

Purpose – The purpose of this paper is to draw a map of the general features of epistemological and critical concerns in contemporary Islamic philosophy. This study will not be confined to the domain of academic philosophy or to those who are professionals in the field of philosophy.

Design/methodology/approach – The paper adopted the critical rational approach in dealing with contemporary Islamic philosophy in the Arab world. The scope will include scholars from different fields of epistemology who tried to present a “vision” of the attitude that should be adopted in facing the challenges of the age and the problems of the nation on the epistemological level or the political, economic and social levels.

Findings – There is a need for a philosophy of action and progress rather than a philosophy that is based on abstract ideas and theories and of words/rhetoric. The ethics required to accomplish this ought to identify the attributes of the citizen who can reach self-actualization through legitimate means based on a progress agenda with theoretical and philosophical foundations.

Research limitations/implications – Because a critical rational approach can be dealt with from different perspectives, this paper will adopt the classification of the principal intellectual trends: the reformist, secular and liberal.

Practical implications – This paper covers a long time span to determine whether the philosophical projects have been effective.

Originality/value – This paper, which criticizes the philosophic projects that are theoretically unsound and that do not address real social problems (like poverty), argues the need for a philosophy of progress and action. This will lead to devising an agenda that addresses the challenges the society is facing and to finding alternative and creative solutions resulting in development.

Keywords Egypt, Epistemology, Philosophy, Islamic philosophy, Religion, Reform, Secular, Secularization, Arab philosophy, Liberal

Paper type Research paper

It is risky, no doubt, to design a critical, epistemological map of contemporary Islamic philosophy. Although philosophy was initiated more than two thousand years, there are differences in specifying the definition of the term. The problem is compounded when one deals with contemporary Arab thought and/or Islamic philosophy. Is it thought pure and simple, or profound enough to count as philosophy? This assumes that intellectual activity is relegated to a lower level than that of philosophy and that philosophy is different from thought. Is creativity in philosophy confined to presenting integrated philosophical systems
in the Western sense? Or does philosophy cover theoretically based intellectual accounts even if the presenter does not belong to the formal discipline of philosophy? Is it imperative to have definitive answers to ontological, epistemological and axiological questions? Or does giving an in-depth answer to the problems and challenges of the time qualify the agent to enter the heavenly domain of philosophy? Should there be answers to issues such as colonialism, dependence, backwardness, despotism, the relation with the other (especially the west), attitude towards minorities, relation between state and religion, unity whether on the national or Islamic levels, the form of government, the relation between science and religion and attitude towards tradition. And finally, is the thought or philosophy that has been produced in this part of the world Arab or Islamic?

Some of these problematic issues are genuine while others are not, despite their domineering impact on some scholars in the field of philosophy. In order not to digress in tracing the theoretical foundation of these problematic issues, such is the wont of those scholars, so fond of reaching the foundations, and lose themselves among peripheral issues, let us focus on a procedure capable of showing the distinction required. Thus, it will be possible to draw a map of the general features of epistemological and critical concerns in contemporary Islamic philosophy. Such a term means every and each attempt made, real or not, presented as a response to the challenges of our age, and defined as having its origin in the so called “the shock of modernity” in the nineteenth century. In this paper, the study will not be confined, therefore, to the domain of academic philosophy, or to those who are professionals in the field of philosophy. The scope will be broad to include those from different fields of epistemology who managed to present a “vision” of the attitude that should be adopted in facing the challenges of the age and the problems of the nation on the epistemological level or the political, economic and social levels.

However, this procedural step reveals other problems facing all those who tried such an epistemological task: should this be accomplished by classifying intellectual trends? Or across generations or research schools? Or by adopting western methods of classification? Or should the discussion be confined to those who have intellectual projects?

As this issue can be dealt with from different perspectives, this paper will adopt the classification of the principal intellectual movements/trends: the reformist, secular and liberal. Others may suggest a different classification; and perhaps problems of interconnections and overlapping of different movements might emerge. Some might argue about which trend certain figures belong to, especially when some trends are difficult to classify. Solving this problem involves a procedure as well by resorting to the more general features or the most prevalent feature.

If the classification into trends (reformist, secular and liberal) does not fit some of those who have contributed to academic philosophical efforts, another angle of vision will inevitably impose itself. This will involve the exposure of generations of scholars of philosophy and then the proponents of the western schools.

Among all these, there are some who have been able to present a complete, or almost complete, philosophical vision; while some have been able to construct an “intellectual project”, conforming to reform in real life. Hence, the next step will be contemplating the philosophical visions and intellectual projects of these thinkers. As this paper covers a long time span (more than two centuries), there are various points of view, but with the limited space of this paper, it is necessary to indicate that serious attempts have been made to reach a vision that is conclusive and comprehensive. There will also be a diagnosis and critical evaluation of the current state of affairs. Making use of this critical analysis, with an awareness of the history of ideas, there will be an attempt to find a way out of the current problems of this era.
The evolution of contemporary Islamic philosophy
Arab philosophy went into a state of hibernation for four centuries after Ibn Khaldun (1332-1406). It is not true that this period started after Al-Ghazali’s (1058-1111) attack against philosophers in his book *Incoherence of the Philosophers*. Islamic philosophy continued to develop after this and reached its peak with Averroes (1126-1198) and Ibn Khaldun (1332-1406). Al-Ghazali’s attack was only directed against Greek theology and their Muslim followers such as Al-Farabi (870-950) and Avicenna (980-1037) among others. His attack was not against logic, physics and astronomy. He focused his attack on the attitudes of these particular philosophers, but not against philosophy itself as an intellectual activity.

Islamic philosophy remained in a dormant state until early in the nineteenth century and then reemerged with the shock of modernism instigated by the advent of Napoleon to Egypt in 1798. It was in Egypt that the call for resurrecting Islamic philosophy started, since it was the first country to enjoy political independence from the Ottoman Empire. This awakening took place under the influence of figures such as Head of Al-Azhar, Sheikh Hassan Al-Attar (1776-1835) and then his student Al-Tahtawi (1826-1831) who went to France as a member of an Egyptian educational expedition (1826-1831). In addition, there were Mubarak (1823-1893) and Jamal El-Deen Al-Afghani (1827-1897) who spent some time in Egypt from 1871 until 1879, and his student Sheikh Muhammad Abdu (1849-1905).

The points of interest that engaged contemporary Islamic philosophy started to shift away from those of the past: traces of time immemorial, the word of God, God’s essence and attributes. The concerns shifted, and these were imposed by the shock of the modernity: the renaissance, relation between religion and the state, unity whether national or Islamic, the form of government, relation between religion and science, relation with the west, etc. The rise of fundamentalism, leading to dogmatism, resulted in the utter failure of contemporary Arab thought to give appropriate answers to these concerns.

A great deal of commotion stirred the modern era in the Muslim world. This age witnessed shaking the foundations of all the constants, principles and rules that used to govern the Arab-Islamic intellectual, political, social and economic life for a long time. The changes were brought about by the influence of the Western colonial invasion, the sharp divisiveness of the Arab nation, political reversals, the clash among cultural figures resulting in factions: a modern reformist group, a liberal party, a secular faction, a sectarian strife, the sharp tension between the new and the old, science and religion, Arab nationalism and the Islamic alliance, and all the rest of the feuding dichotomies which prevailed in the nineteenth century and are still holding the area in their grip until today. In this context Al-Afghani emerged in the nineteenth century as a genuine innovative thinker within the framework of modern Islamic history. He was a precursor of the new liberal spirit which endeavored to present theoretical and practical answers to the enormous challenges of the time. The greatest answer presented by Al-Afghani was “Islamic unity” to face colonialism. This unity was a form and synthesis of contradictions. Facing all the binary divisions of his time (progress/backwardness, science/religion, old/new, pan-Arabism/pan-Islamism), he used the same synthesis of contradictions which sought to overcome the antitheses to create a dialectical synthesis where the parts lose their identity in the whole. This was all meant to face the colonial challenge and to block the path of western orientalism in order not to reinforce these contradictions to serve its own divisive ideology. Al-Afghani set out to accomplish “two goals: first, to fuse all contradictions, and second, to test these contradictions in their historical context to see how far they are held in opposition to one another, and how far they can coexist without conflict in order to have peaceful development. This is truly a policy that welcomes dialogue and mutual recognition, and rejects denial, despotism and exclusion of the other” (Belqaziz, 1992, pp. 78-9).
One of the features of Al-Afghani’s synthetic project, in response to the divisive dualities and contradictions of the age, revolved around solving the duality of progress/backwardness and science/religion to repudiate the accusations against Islam. He realized then that the epistemological discourse of the western political dominance would inevitably lead to the cultural hegemony of the west over the Arabs and the Muslims unless this is faced with an epistemological containment and intellectual refutation of the theses of the western orientalist discourse.

Al-Afghani feared the orientalist invasion as much as he feared political dominance. Although Al-Afghani and Al-Tahtawi before him, focused on the apparent primary features of orientalism by means of refutation, modification and correction, he did not discredit it altogether (Al-Mussawi, 1933, p. 53). Because some Western orientalist philosophers, such as Ernest Renan, criticized and condemned Islam because of the state of Muslims, Muslim intellectuals, such as Al-Afghani, regarded distinguishing between Islam and Muslims as vital[1]. Muhammad Abdu followed the footsteps of Al-Afghani in writing a detailed response to Gabriel Hanotaux. In his debate with Lord Cromer, Muhammad Rashid Reda did likewise. While these responses implicitly acknowledged the importance of science and knowledge for a civilized nation and the necessity of freedom for life, they primarily provided proof that the original Islamic sources are just and applicable if assessed without reference to the actual condition of the Arab Islamic community.

Because the debates at the end of the nineteenth century were centered around justifications by Western politicians to civilize and modernize the colonies, such justifications were based on comparisons and underestimating the other, exemplified in the Arab Islamic culture. This is especially the case because the nineteenth century witnessed the emergence of Aryan racist conflicts that were accompanied by interpretations of evolutionary ideas of the survival of the fittest. The reformists, therefore, had to go beyond mere correction of concepts to arguing against the opponents, using the grounds and methodology of these opponents. Some reformists, however, did not regard the orientalists as opponents. Al-Kawakbi (1975, pp. 1854-1902), for instance, with all his strong nationalist leanings, considered them as in search of the truth and as motivated to go on a journey to acquire knowledge because of their appreciation of the Arab Islamic thought. He cites Wilfred Scawen Blunt (1840-1922) and other similar orientalists (308-311), ignoring political pro-imperialist orientalism.

The efforts of Al-Afghani, Muhammad Abdu and Muhammad Rashid Reda, among other reformers, were not concerned with responding to orientalists except in so far as they touched upon issues related to Islam or politics. They implicitly separated political orientalism from scientific and religious orientalism. They, therefore, distinguished between Renan and Daniel Kimon and the politicians who followed them such as Hanotaux, Cromer and Balfour, on the one hand, and philosophers who oppose imperialist thought such as Gustave Le Bon, Herbert Spencer and Max Muller, on the other.

The reformist trend continued to develop after Rashid Reda and others, and diverged into various trends that were contradictory – dogmatic fundamentalism, moderate Islamism and open-minded Islamism. Some of the latter figures who adopted an intellectual attitude and had theoretical bases (without assessing them in this context and without discussing their divergent views) are Sayyed Qutb, Khalid Muhammad Khalid, Al-Ghazali, Al-Messeiri, Al-Qaradawi, Hweidi, Al-Bishri, Seif Abdel Fatah, Radwan Al-Sayyed and others.

Despite the ardent defense of Islam which the reformist trend adopted, they categorically refused to relinquish references to modernity. This attitude was embraced by different reformists in different degrees. At the lowest degree, there was at least acceptance of modernity in using technology, but intellectual modernity has always been a quandary.
Most of the writers who belong to the first group of reformists who represent this trend, did not have a coherent philosophical framework. And unfortunately the reformist trend was carried out by some mediocre writers who used flowery rhetoric and were merely writing in the defense position, responding to attackers. When one of these changed his position, he got engaged in offensive discourse, and was thus characterized as being feeble in adopting a theory (a trait that prevails in the discourse of most liberal and secular writers). They were specifically lacking an epistemological basis, and in general they did not have a thorough grounding in philosophy. In many cases, the religious reformist discourse even lacked the theoretical religious foundations.

At the opposite end of the reformist trend stood secularization which came to the fore in the east at the beginning of the nineteenth century. It basically came to Egypt, Turkey, Syria, Lebanon and then to Tunisia followed by Iraq at the end of the century. The rest of the Arab World became familiar with secularization in the twentieth century.

Secularization was introduced to Egypt with the advent of Napoleon. In his History, Al-Jabarti referred to secularization in the section about the events of the French Expedition to Egypt. Although he did not use the term secularization, he used words that alluded to it. The term was first used in the Arab world by Ilias Buqtur in his Arabic-French Dictionary in 1827. Khedive Ismail who admired the west introduced the French legal system to Egypt in 1883. His desire was to turn Egypt into a part of Europe. At that time, and until 1791, laws in Muslim India were based on the Islamic legal code, the sharia. Gradually, the British planned to eradicate this legal and it was abolished in the mid-19th century. The laws based on Islamic sharia were abolished in Algeria following the French occupation in 1830. In Tunisia, the French legal code was introduced in 1913. Secularism was established in Turkey after Mustafa Kamal Ataturk ended the Islamic caliphate; and started to spread in different degrees in most governments of the Muslim world[2].

The most important figures of secularization are Shibli Shemmayel, Butrus Al-Bustani, Adeeb Ishaq, Yacub Sannoua, Khalil Saada, Antoun Saada, Ahmed Fares Al-Shedyaq, Farah Antoun, Ismail Mazhar, Kunstantin Zoreiq, Gibran Khalil Gibran, Abdel Aziz Fahmi, Ali Abdel Raziq, Michel Aflaq, Sukarno, Suharto, Mustafa Kamal Ataturk, Gamal Abdel Nasser, Murad Wahba, Abdallah Al-Arawi, Nasseeq Nassar, George Tarabishi, among others. It is observable that secularism can at times coexist with socialism and nationalism as in the case of both Gamal Abdel Nasser and Michel Aflaq. It can also coexist with liberalism in the case of Taha Hussein; with a special way of understanding Islam as in the case of Ali Abdel Raziq (Hourani, 1997, p. 280), among others. Secularization can also have an affinity with atheism as in the case of Ismail Adham who wrote Why I am an Atheist, published in 1926; and Qabil Adam, who wrote Mustafa Kamal Ataturk and had leanings towards atheism and radical secularism. Another example is Kamal Al-Kelani who reverted back from atheism. As for Ismail Mazhar, who published a magazine entitled Ages/Eras in 1928, he wrote both about his atheism, and about reverting to Islam. In its early issues, his magazine promoted atheism, attacking religion, the Arabs, Arabism and accusing the Arab mentality of stagnation and degradation (Mazhar, 1926, p. 142 and Al-Helw, 2006). Some secularists in the Arab world, such as Ali Abdel Raziq, retracted their secularist positions either totally or partially.

Secularization has taken two forms in modern Arab thought. The first form adopted a radical firm stance in thinking about the universe, politics, society and economy, in a manner that recognizes only human reason, excluding religion and theology, i.e. a materialist position. Using philosophic terms, this first form adopted the “relative and rejected the absolute” – a trend that reached its theoretical peak with Wahba (1999, pp. 467-468) and its practical peak with Ataturk (1881-1938). Ataturk joined the Committee of Union and
Progress which forced Sultan Abdel Hamid to issue the Turkish constitution in 1908. He also played a role in the coup against the Ottoman Sultan in order to declare the Turkish Republic, and follow the secular footsteps of the modern European republics. Atatürk abolished both the Islamic Caliphate on 3rd March 1924 and the use of Islamic sharia in courts. Declaring Turkey a secular state, he secularized the government and education.

Secularism, in its limited political economic form, is the “separation of state and religion.” In such a case, it is not possible to think of the relative, changeable and temporary political affairs in relation to absolute religious doctrines. It leaves to religion the domain of morals and values and the practice of rituals which are matters confined to the relationship between man and his Creator. Among the most important figures who voiced these views in the Arab region was Farah Antoun (1874-1922), the Lebanese journalist who immigrated to Egypt in 1897. Influence by the ideas of the French philosopher Ernst Renan, he ardently defended secularism. He debated with Muhammad Abdu arguing that religion is confined to affairs of the hereafter, but the responsibility of the affairs of this world is borne by governments. He claimed that religion restricts the freedom of thought and action, using unchangeable rules which religion considers as revelation. On the other hand, civilized governments do not restrict any freedom, dealing with people on equal footing through revoking the barriers that stand between the different sects and factions. He argued that the good of people requires removing the ban jurisprudents impose on creativity and the acts of the human intelligence, which are the source of any refinement and development. Based on his erroneous premises, he concludes, “there is no real civilization, tolerance or justice without equality; there is no security, safety, freedom, science, philosophy or progress in the country without separating the civil power from the religious power” (Antoun, 2011, pp. 152-160).


In a different context, secularism in the west is not merely a trend like the one in the Arab world; it is rather a characteristic of a western style of life and a feature in all the trends, such as Marxism and western capitalism, which separate politics and all other aspects of life from religion. It is also a characteristic of many philosophical schools, such as Hegelianism, empiricism, materialism, existentialism, pragmatism, positivism, deconstructionism, etc.[3]

However, secularism definitely has numerous facets and dozens of guises with various synthetic combinations in practical application. Some of these combinations use religion in a political, pragmatic way in order to control the masses.

The secularisms of some Arab regimes today are actually eclectic synthetic secularisms, which try to contain the Islamic trends either through repression, political concession and conciliation or avoidance of initiatives that may be in conflict with these trends. This is apparent in the secularisms of Iraq, Syria, Egypt, Algeria and Yemen. However, secularism in Tunisia is somehow radical despite the use of a few containment methods, oscillating between leniency and violence, with the Islamic trends. Lebanese secularism has clear features despite Lebanon’s sectarian structure involving various religious and sectarian communities. The secularism of the successive governments is a mere political construction that aims at establishing stability and balance between different feuding factions. Apart from this political construction, secularism is also evident in non-Islamic trends, that is, with the Christian groups as well as the nationalist, Marxist and westernized trends. It is also conspicuously prevalent in art and the larger sector of the media.

As for the style of life of the people, secularism is present in different degrees in the Arab countries to match the degree of piety of the people who vacillate between superficial piety
and genuine religious commitment in belief and manners. The layperson sometimes displays a strange synthesis of secularism and strong religious inclinations. This reflects contradiction because of the desire to respond to the Islamic revival and westernization at the same time.

Secularists claim that secularism is equivalent to freedom, equality and justice, but this is not the case with religion. However, the history of secularism itself proves it is not true on both the theoretical and practical levels in both the west and the Islamic world. Hobbes’s secularism is that of a country with a despotic ruler. This is similar to the secularism of Machiavelli because they both rejected the rule of the will of the people. John Locke’s secularism is that of capitalism since its basic principles and aims serve the private property of the capitalist class at the expense of the other classes. When this type of secularism flourished, it led to the evolution of global imperialism—thus secularism and imperialism go hand in hand.

On the practical level, most governments of the Arab and Islamic world are despotic dictatorships which severely restrict all freedoms, especially freedoms of beliefs and political views. Examples are the secularisms of Atatürk in Turkey, Habib Bourguiba in Tunisia, Saddam Hussein in Iraq and Nasser in Egypt. In the west, the USA is the closest model of the country that Locke portrayed. Thus when it is run by the Republicans, it presents the worst inhumane example of world imperialism in the Middle East, Africa and Asia.

The secularist intellectuals call for freedom, but they do not practice this freedom. They turn into despots once they take over the management of any cultural institution, by excluding all other intellectual trends. They even exclude fellow secularists when they differ with them in opinion.

Secularists also overlook, or ignore, that the state in Islam is a civil state where the ruler can be right or wrong. Abou-Bakr, who was chosen as a Caliph by a committee of the wise elders and the general approval of the Muslim public, said on that occasion, “I was made your ruler while I am not the best among you. If I do well, help me; if I do wrong, direct me to the right path (Al-Seyouti, 1952, p. 69).”

None of the first four Caliphs of Islam claimed he represented divine power. Islam does not support the theocratic state that bases its authority on the divine, which was the case in medieval Europe where the Church had both temporal and spiritual powers. In the long history of Europe, some kings claimed to rule by divine right, which is rejected by Islam. The government in Islam has civil authority limited by human rights and principles of freedom and justice. It was not a theocracy that is governed in the name of God. The son of one ruler was once brought to justice for transgressing the rights of an ordinary person. What Caliph Omar told Amr Ibn Al-As, the then ruler of Egypt, is memorable: “How could you treat people as slaves while they were created as free spirits” (Al-Misri et al., 1996, p. 290). Civil rights, including freedom, are a foundation on which the civil society is built in Islam. Highlighting the principles of transparency and the right of mutual control of public affairs, without infringements on privacy and individual rights, are clearly established in the principle of “urging people to do right and prohibiting them from doing wrong.” Islamic scholar Ibn Taymiyya approved the saying, “God assists a just state even if it is one of non-believers, and renounces the unjust state even if it has believers” (2019, p. 63).

It is clear that secularists flagrantly generalize when they pass general judgments on religions without discrimination. One of these is they make no distinction between Islam and Christianity. They ignore the fact that Islam does not have a special status for preachers or jurisprudents. Islam only recognizes religious scholars who are sources and references to those who would like to inquire about religious affairs. They only advise without any
imposition, or this is how it should be[4]. It is the ruling powers that created religious institutions to give their regimes legitimacy.

Secularists claim that there is a conflict between science and religion since religion contradicts science while secularism supports it. They thus project a European problem to the Islamic scene, and hence devise a European solution. The conflict between science and religion has a long history in the European context, but in the case of Islam, the conflict does not exist. The Qur'an itself regards the study of the universe and natural science as a religious duty, an imperative. As for the arguments concerning certain practices, these are exceptional cases that were never as serious as those of Catholic Christianity in the history of Europe. In Islam, the rise of the class of preachers does not constitute a religious authority comparable to that of the clerics in the Church. The anti-religious secular orientalist movement reveals the role played by secularism in accusing Islam of backwardness which stands in the way of scientific advancement without grounds or decisive proof. Their judgment is the result of using an inappropriate analogy which postulates that if Christianity impeded scientific progress in the west, Islam, similarly, impeded scientific progress in the east (Rodinson, 2007, p. 57)[5].

The third trend is liberalism which started with Al-Tahtawi. (2011, pp. 1801-1873). He praised liberalism in his book The Extraction of Gold or an Overview of Paris (1834) where he presented the Parisian life with its French culture, customs and values. Like Lewis Awad, (1887) some regard this book as the foundation of a trend in the Egyptian social and political thought in the nineteenth century (250-280). He also translated the French constitution issued in 1814, which he called la Charte after the French, and the Human Rights document among other documents which advocate liberal values and principles. Late in his life in 1869, Tahtawi published The Methodology of Egyptian Minds with Regard to the Marvels of Modern Literature (Shukri, 1983, p. 152). He definitely paved the way for the liberal trend in modern Egyptian thought (Hanafi, 1988, p. 51 and Barakat, 1984, p. 401); hence, he is the founder of Egyptian liberalism (Tahtawi 152).

Ali Mubarak (1979, pp. 1823-1893) continued Tahtawi’s efforts in translation and education. He contributed to the emergence of the so-called modern civil education that went parallel to religious education run by Al-Azhar (Mubarak, 1979, pp. 105-186). He managed to introduce Egyptians to new aspects of life in France in his novel [The Science of Religion] which he wrote around 1858.

It would not be accurate to insert Al-Afghani and Abdu in the context of Egyptian liberal thought despite the fact they had ideas focusing on freedom. Their ideas are more relevant to fit the Islamic context[6].

Qasim Amin is one the main landmarks in the long journey of the development of liberal thought because of his ideas on The Emancipation of Women (1899) and The New Woman (1900) (Al-Zarkali, 1992, p. 184). Another landmark is Ahmed Lutfi Al-Sayyed (1872-1963) whose intellectual project excluded Islam as a source of legislation and a frame of reference. His interest in Islam was merely concerned with the moral and ethical side and as a phase in the development of the Egyptian character (Al-Zarkali, 1992, p. 200; Hanafi, 1988, p. 148; Shurkri 238-237). He showed fervent admiration for Greek philosophy and translated some of the works of Aristotle whom he lovingly termed “our master Aristotle may God bless him” (Al-Naggar, 1975, p. 208). Al-Sayyed was described by the liberals of his time as “the Teacher of our Generation” – the generation which studied under him in the newspaper Al-Gareeda and at the Egyptian University (Al-Naggar, 1988, p. 208).

Another prominent figure in the realm of liberal thought was Fahmi (1973, pp. 1886-1958). He studied in Paris where he obtained a PhD in 1913 with a dissertation entitled La Condition de la Femme dans la Tradition de L’Islamisme, [The Status of a Woman in the
Islamic Traditions] under the supervision of Lucien Lévy-Brühl (1857-1939). The dissertation included sharp criticism of the conditions of women in the Islamic society, and more importantly, the stance of Islam in relation to women. He adopted the historical critical approach, free from commitment to the sacredness of revelation, using the methodology of the orientalists in interpreting the texts of the Qur’an and the Prophet’s traditions. However, Fahmi later reviewed a great deal of his older convictions and showed an understanding of facts about Islam after freeing himself from the influence of the orientalists. He started to express this new position in his writings in the late twenties of the twentieth century in newspaper articles and in his various intellectual activities (Fahmi, 1973, pp. 20-21; Al-Ansari, 1999, p. 21; Al-Haj, 2000, pp. 507-508).

A staunch liberal, Heikal (1951, pp. 1888-1956), is also an ardent defender of Islam. He found no contradiction in supporting the two trends. He was a supporter of this conciliatory attitude in the thirties of the past century. Provoked by a missionary attack at the time, Heikal firmly stood against it. His articles on Islam appeared on the pages of the liberal newspaper, Al-Sayassa (Politics), together with the articles of Moheb El-Deen Al-Khateeb and Sheikh Mahmoud Shaltout. Heikal, a prolific writer, published The Life of Muhammad (1932-1935) and In the Home of Revelation (1936). He openly expressed deep disappointment in the western civilization and policies and in the possibility of the success of Western culture in the Arab and Egyptian environment (Heikal 272-3, Al-Nagar 9-43 and 353 and Al-Moa’asassa, 1980, pp. 97-106).

Hussein (1987, pp. 1889-1973) is the most prominent advocate of liberalism during that period. He can also be classified in the secularist context because of his strong ties with Ahmed Lutfi Al-Sayyed and the Liberal Constitutional Party, as well as his shift to the politics of the Wafd Party in the early 30s. Hussein devoted all his intellectual, literary, academic and political efforts to serve the Western liberal thought which he espoused. He spent all his life advocating liberal concepts and values and was engaged for a long time in the battle between the old and the new, especially in his book في الشعر الجاهلي On Pre-Islamic Poetry. He published The Prophet’s Life in 1933 at the time Heikal published his study of the Prophet’s biography, but he did not revert from his liberal thought as Heikal did. Taha Hussein said that this book was a literary study among others which presented a picture of the old Arabic literature to the young as food for weary souls. He added:

I would like them to know that reason is not everything and people have other faculties which need nourishment and satisfaction too. These accounts and events may not appeal to the mind and may not be accepted by logic and do not follow the scientific method, but they appeal to people’s hearts, feelings, emotions, imagination and inclination to be gullible. This is because people need a place to rest in order to be secluded from the hardships of life. What makes people enjoy such accounts is the element of entertainment when life is hard. But there is a big difference between using these accounts to address the mind, claiming that these are facts supported by scientific proof according to research methodology, and using them to address the heart and feelings as a means to stir desirable feelings and suppress bad motives, to help people to pass their time and bear the burdens of life and cost of living. (Hussein, 1987)

In 1937, Hussein published The Future of Culture in Egypt which was the clearest expression of his intellectual project based on westernization and pure secularization. His book From Afar presented a secular view of the relation between the triad of religion, science and politics where he stressed the secularity of the Egyptian state[7].

Both a liberalist and secularist like Taha Hussein, Ismail Mazhar (1891-1962) brought up the idea of forming a “Peasant Party” in 1929. This Party was based on a liberal program with vague socialist undertones, aiming at solving the problems of the Egyptian peasants.
He presented the idea to the Leader of the Nation, Nahas Pasha, Head of the Wafd Party, who ignored the idea (The Program of the Peasant Party, 1965, pp. 146-152).

As for Abbas Mahmoud Al-Aqqad (1889-1964), he was a prominent liberal Islamist, who expressed the intellectual political ideas of the Wafd Party. He was an advocate of the liberal democratic movement, defending freedom while standing staunchly against the communist and socialist trends of his time. Although he was an unswerving advocate of the liberal thought of the Wafd Party, he later differed with the views of the Party and abandoned it. He accused it of making compromises in its liberal democratic ideas. Al-Aqqad was never an advocate of blind westernization.

For Aqqad, liberalism meant the application of the principles of democracy, freedom and human rights. This did not conflict with his idea of Islam. He used a rational approach to deal with Islamic issues. He adopted a rational methodology that depended on proof and applied a rigorous solid style. He, thus, became one of the staunchest defenders of Islam, its systems and political figures in the twentieth century.

This is not strange because some analysts described liberalism as “an ideology that is prone to different interpretations; it has a thousand facets” (Ezzat, 2004). It sometimes allies its forces with secularism to the point of assimilation, and sometimes it reconciles itself with some Islamic trends in the form of the so-called liberal Islam.

Liberalism maintained its presence in the area until it suffered from retreat in the 1950s and 1960s under the pressure of the domineering impact of socialism and Marxism on the intellectual life in the Arab region at the time of Gamal Abdel-Nasser. Once again, however, liberalism reemerged in the late 1970s with the appearance of the New Wafd Party and the new liberal guises that the old socialists and Marxists took. They adopted the same tactics and demeanor of the new class, namely the self-described “intellectual class” – an illusive concept which allows free mental manipulation in different circumstance. Many names emerged at this point on the liberal scene. For instance, Saad El-Deen Ibrahim called for a liberal civil society and a liberal state, sometimes mimicking the American model and sometimes following the British example, based on a constitutional monarchy.

A strong liberal Islamic movement was also quite visible among an emerging generation which adhered to an Islamic frame of reference with a liberal interpretation. This new generation believed in democratic plurality, partisan competition, representative government, human rights, dialogue between civilizations and market economy, without giving up the Qur'an and the traditions of Prophet Muhammad. At the same time, it did not give up the civil constitutional democratic state.

Islamic philosophy in the academic domain
The first appearance of modern academic philosophical studies in the Muslim world occurred with the establishment of the Egyptian University (now Cairo University). Professor of Islamic philosophy at this university, Sheikh Mustafa Abdel-Raziq, later became Head of Al-Azhar. His book Preface to the History of Islamic Philosophy played a crucial role in clarifying the fact that Islamic philosophy is an eminent creative endeavor, which is not simply a traditional domain confined to the philosophy of Al-Kindi, Al-Farabi, Ibn Sina (Avicenna), Ibn Tufayel, Ibn Baja and Ibn Rushd (Averroës), who fell under the influence of Greek philosophy. Islamic philosophy, as he sees it, includes Islamic jurisprudence (أصول الفقه). He is absolutely justified since jurisprudence is the field of knowledge that focuses on the philosophy of law with all the exemplary criteria of philosophy. Muslims were genuine thinkers in this field more than they were in the other traditional fields of philosophy. Indeed, their creative contribution in jurisprudence cannot be compared to their contributions in any other philosophical domain. Those who do not
regard jurisprudence as a philosophic area of study did not simply read enough in this field of knowledge and shamefully confuse it with the study of fiqh, religious rules.

Abdel-Raziq was able to establish the first research school (조사 Q该校) which was a turning point in the history of Islamic scholarship in the Muslim world. With this school, philosophy became a formal academic field of knowledge. The most famous prominent figures were Mustafa Helmi, Abu Al-Ela Afifi, Ahmed Fuad Al-Ahwani, Osman Amin, Ibrahim Bayouni Madkour, Ali Sami Al-Nashar, Muhammad Abdel Hadi Abu Reida, Muhammad Ali Abu Rayyan, Tawfiq Al-Taweel, Naguib Mahmoud (who abandoned philosophy to literary creativity) and Abdel Rahman Badawi. They may all, except for Mahfouz and Badawi, be classified as reformists who are the disciples of Mustafa Abdel-Raziq, himself a disciple of Muhammad Abdu, a disciple of Al-Afghani. This reveals that there is a bond between the evolution of philosophical scholarship in the Muslim world and the Islamic reformation. These figures contributed to various studies in the field of Islamic philosophy, spiritual life, Sufism, Islamic scholastic theology, methodology of Islamic thinkers, Islamic criticism of the Aristotelian logic and all the history of philosophy since the Greek era until modern times.

This first school of pioneers at Cairo University was followed by the Azhar school which was established by Muhammad Al-Bahayy (former Head of Al-Azhar), Abdel Haleem Mahmoud and Muhammad Abdel Rahman Bissar (former Head of Al-Azhar). Then there is the Dar Al-Oloum school formed by Mahmoud Qassim.

A third generation followed and comprised Zaki Naguib Mahmoud, Yahya Hweidi, Murad Wahab, Sami Al-Dorubi, Badie Al-Kassem and Adel Al-Awwa – who belong mostly to Cairo University.

A fourth generation of thinkers followed. These were influenced by various disciplines but they all contributed to philosophy: Zakariya Ibrahim, Abu Al-Wafa Al-Taftazani, Hassan Hanafi, Fuad Zakariya, Sadeq Jalal Al-Azm, Muhammad Aziz Lahbabi, Al-Jabri, Al-Arawi, Rushdi Fakkar, Arkoun, Tizini, Muruwa, Samir Amin, Anwar Abdel Malek, Muhammad Ahmed Khalaf Allah, Imam Abdel Fattah, George Tarabishi, Nadeem Al-Bitar, Borhan Ghalion, Haleem Barakat, Muta Safdi, Radwan Al-Sayyed, Hesham Djaït, Muhammad Al-Talebi, Hesham Sharabi, Edward Said, Hadi Al-Alawi, Ali Al-Wardi, Nasseef Nassar, Ali Harb, Abdel Amir Al-Assaam, Ahmed Sobhi, among others. Beside this group, there is also another which only teaches philosophy.

A generation or more of professors of philosophy in the Arab world followed. They were mostly immersed in professional academic scholarship, presenting robust or frail research. Some present work that comprises research and creative theorizing and some have the status of thinkers with intellectual projects, but as most of their work is still in the formative state, this reference will suffice.

Some figures from among those – and others from outside the Arab world, Iran, for example – went beyond the academic domain and presented a philosophy, an integrated vision or an intellectual project. Some attempted to accomplish intellectual independence, while others were merely an extension of Western trends.

Extensions of Western trends in the Islamic world
As a result of the deteriorating conditions which the Islamic nation suffered from, there was a wave during which the Arabs were under the influence of any trend that came from the west. Thus, pragmatism, Marxism, existentialism, logical positivism, structuralism, deconstruction and contemporary hermeneutics entered the Islamic world. Many books about these trends were translated in addition to all the research papers conducted on them. They also have had a tremendous effect on the philosophical visions and stances of a number of thinkers.
The followers of pragmatism were Ahmed Fuad Al-Ahwani and Zaki Naguib Mahmoud in the second stage of his development and Muhammad Abid Al-Jabri. They extended its influence in different degrees; Al-Ahwani sympathized with it and reconciled it with Islam. In his study of pragmatism, he used a method of “presentation and accurate delineation” (Al-Ahwani, 1987, p. 14). For emotional reasons, he abstained from criticism. In his book *John Dewey*, Al-Ahwani states that “during his centenary it is not appropriate to direct arrows of criticism at him, especially when this book is not long enough to include both a review and criticism. Whoever wishes to read a criticism of his school can read Crosser’s book *The Nihilism of John Dewey*” (Al-Ahwani, 1987, p. 10). With this, Al-Ahwani thinks he said something new; and adds, “In writing about him, we adopted a new approach [...]. It is preferable to make the man the center of his philosophy. First, the focus is on his life and biography, and then various aspects. He is portrayed as an educator, a philosopher, a revolutionary against traditional philosophy, a moralist and a sociologist” (Al-Ahwani, 1987, p. 11). For Al-Ahwani, this is innovative. He adds, “I use Dewey’s own expressions in most cases as he himself used to complain because of those who convey his doctrines inaccurately. I hope I have succeeded in presenting his work with precision” (14).

The influence of Dewey reached its peak when Al-Ahwani attempted to reconcile his ideas with Islam. Al-Ahwani said that Dewey’s ideas “are not new to us in the east as Islam is the religion of humanity; it is the religion of science which opens the way for development and growth and calls for theoretical thinking and contemplation” (14). Thus, Al-Ahwani provides two examples of what many beginners and advanced researcher do in the Muslim world. Writing involves accurate presentation and honest reporting, and for some Islamists, it turns into the reconciliation of a western school or thinker and Islam.

Zaki Naguib Mahmoud followed a similar route despite his prominent position in scholarly work in the field of philosophy. Clearly he belonged to the school of logical positivism as his book *Positivist Logic* showed. This is reiterated in A *Position Regarding Metaphysics*, which was previously titled *The Myth of Metaphysics*. This book gives a clear presentation of the ideas of logical positivism, but because Mahmoud was subjected to serious criticism, he changed the title to alleviate the effect[9]. During the first phase of his intellectual development, Mahmoud introduced and established logical positivism in the Muslim world as a flagrant extension of western logical positivism. This doctrine aimed at benefiting from scientific achievements and incorporated views and additions to the old positivism, e.g. logical analysis of language and the use of mathematical logic (Simon, 1963). Mahmoud said, “Since the condition of things in the world of reality is the field of scientific research, the scientific approach is described as positivist” (60). “So if a current situation engages the interest of the researcher, these are in fact the phrases or words of a language. In this case, the term “position” here is logical, which means that logical positivism is a linguistic expression of a tangible material reality chosen according to the laws of empirical science” (Mahmoud, 1974, p. 60).

This is the image of logical positivism with which Mahmoud started the first phase of his intellectual life. However, more than once I heard Professor Mahmoud confirm that he gave up this positivism. He was even enraged in his later years when he was described as a logical positivist, especially when, in the second half of his career, he broadened his horizon of knowledge through studying the Islamic and Arab heritage. He realized that positivism confines the mission of philosophy and science to a narrow view – that of linguistic analysis.

Mahmoud was also deeply influenced by the analytic philosophy which is evident in his book *Towards a Scientific Philosophy* – an influence which stayed with him for a long time. Sometimes, he sided with pragmatism and his partiality towards this school was obvious in

If Mahmoud gave up logical positivism, he did not give up pragmatism even when his interest in Arab thought started. In his book *Renewal of Arabic Thought* (1974), he changed his approach of dealing with the tradition from the position of the logical positivist to that of the pragmatist. His pragmatist approach only valued “action and application, and the criterion is what we live by, what can be fused in people’s life as they live it. If I find in the life of the ancestors what can be of use to me today in the form of a method of building houses, paving roads, running the economic life with its agriculture, industry or trade, words or phrases to verbalize what people want to express today, I revive this type of tradition. The rest has to stay in its grave for the historians who wish to study that” (Mahmoud, 1958, p. 18).

What proves that Zaki Naguib Mahmoud adopted the pragmatic approach, although he does not explicitly acknowledge this, is his development of the renewal approach through:

Taking from the tradition of the ancestors what we can practically and scientifically apply today in a manner that represents an addition to our modern methods. Every system devised by the ancestors which was followed by a more successful one, was inevitably cast away and became the domain of historians. In other words, the culture of our ancestors or our contemporaries is simply ways of living. If the ancients had a system that is useful for us in our current living conditions, we can put it to good use and, thus, revive it as part of our legacy. What has no practical value is what we discard with no regrets. We take the same position towards the culture of our contemporaries in Europe and America. (Mahmoud, 1958, 18)

The most important problem for Mahmoud is how to convert from the culture or words to the culture of science, technology and industry. He believes that this will not happen by reverting to old traditions but through directing attention to “Europe and America to absorb from their sources what they can give and what we can accept and assimilate” (Mahmoud, 1974, p. 82).

Pragmatism had advocates in the later generations of thinkers with intellectual projects. Muhammad Abid Al-Jabri had several varied methodologies derived from the Western philosophical doctrines of Kant, Freud, Bachelard, Althusser or Foucault, in addition to some ideas by Marxism (Al-Jabri, 1988, p. 12). Many dealt with how he made use of structuralism specifically, but they did not notice that in his book *Contemporary Arab Discourse*, he also used the pragmatic methodology with a number of other methods in his own way through merging and synthesizing. His pragmatism is evident in the fact that he did not regard these concepts as molds, but as “working tools” in a way that rendered them “productive” concepts. He said, “They are work tools which should be used in each subject in a way that makes them productive, otherwise they should be given up. What is the value of any concept if it is going to be mentioned as mere decoration?” (Al-Jabri, 1988, p. 12). This is really and truly the pragmatic doctrine. In “practical application what is useful is what ought to be functional” (Al-Jabri, 1988, p. 11). However, Al-Jabri denies his pragmatic tendency, and asks “Do we adopt a certain pragmatic or procedural tendency?” And the answer is, “No” (Al-Jabri, 1988, p. 12).

In the forefront of the thinkers who are under the influence of Marxism are Mahmoud Amin Al-Alim, Sadeq Jalal Al-Azm, Hussein Muruwa and Al-Tayyed Tizini. The last two presented complete projects based on their Marxist views, while the first contributed a few scattered criticisms and partial positions on this issue or that; one time in philosophy and another in literature or politics.

Existentialism found its greatest representatives in the Arab world in the figure of Abdel Rahman Badawi (1917-12002) with his special understanding of this doctrine and his
exceptional originality as an Arab existentialist philosopher. His existentialism developed with his M.A. thesis on the *Problem of Death in Existentialism* which he wrote under the supervision of Lalande and then Moiré in 1941 and in his PhD dissertation *Existentialist Time* under the supervision of Taha Hussein in 1943. Existentialism was in vogue in the 1960s and 1970s among some intellectuals and even among some young people who only understood it superficially. They admired the ideal of freedom to lead a life of pleasure, love and promiscuity, and ignored the fact that existentialist freedom entails responsibility and commitment.

Osman Amin’s philosophy, which he called internalism, can be traced back to the influence of the Cartesian philosophy and some Western intuitionist trends, in addition to socialism. His internalism is founded on a spiritual principle based on the Qur’an and the Prophet’s traditions, which gives his work its distinctive feature. His work seeks the internal and goes beyond the external, through a combination of mind and heart, knowledge and mystic experience. He sees his internalism as a philosophy which resorts to the past to review it and moves towards the future to prepare for it. As for Western rationality, it extended its influence through thinkers like Badie Al-Kasm. His doctrine is based on the philosophy of proof which he developed in his PhD dissertation *The Idea of Proof in Metaphysics* (Geneva University).

Structuralism had a great influence not only on Arab philosophy but also on literature. Among the first two to write about it was Abdel Wahhab Gaafar in his book *Structuralism between Science and Philosophy* and Zakariya Ibrahim’s *The Problem of Structure*. The Moroccan writers were especially interested in it, and this is evident in Al-Jabri’s book *The Structure of the Arab Mind* as well as in others.

Although the European enlightenment started early in the eighteenth century, it resounded in the twentieth century in the Muslim world[10]. This does not pose a problem except that there is no awareness of the historicity of concepts and their contextual specificity in addition to the nature of the cultural differences and the dissimilar natures of the relevant challenges and opponents. The enlightenment is a European philosophical movement which confirms the natural law and the principle of natural rights, human rights, using reason as the ultimate criterion and rejecting the authority of the feudal system and the Church because they fight science. It uses reason and empirical methods, depending on Newton’s scientific methodology (Blackburn, 1996, p. 120). Politically, the enlightenment movement sought to liberate the traditions of political practices to enable participation in public life. Socially, it sought to establish values, laws and rules without reference to religious beliefs (Al-Tereiki, 2003, p. 214). The judiciary was restructured without the influence of the ecclesiastic system, to primarily base the political system on the principle of citizenship (Oliver and Hater, 1994, p. 12 ff.). The justification for establishing the state is self-contained and is not imposed from above; they are derived from and articulated by the masses, i.e. the citizen.

The aspects of this extended definition can be observed in varying degrees and with many differences in the works produced during the enlightenment by Arab secularists, be they positivists, Marxists, socialists or existentialists. They are also apparent in the ideas of some politicians such as Atatürk, Bourguiba and secularist partisan politicians.

The enlightenment tendency also exists but with different denotations in the ideas of some Islamists who claim that the real Islam has the best methodology of the enlightenment. Islam aims at liberating people from submission to any other power but God. This is what is meant by to lead people out of the darkness to the light. Islamic enlightenment thus confirms principles of freedom, human rights, equality and justice with an Islamic frame of reference.
This is clear in Al-Ghazali, Fahmi Hweidi, Abdel Wahhab Al-Messeri, Seif Abdel Fattah and Tariq Al-Beshri.

This movement is not related to the group of “revisionists” who raise the slogan of enlightenment to justify their erroneous and arbitrary interpretations of the Qur’an and traditions (Sunna). These do not follow the objective rules of text exegesis, especially with the texts that contradict their views in issues related to government, politics, economics and women. Sometimes, they dismiss the traditions and justify their views with groundless reasons that have nothing to do with historical criticism or the methodology of text analysis.

The position of such thinkers is explained by a defeatist approach in facing the west: first surrendering to European enlightenment, and now to contemporary hermeneutics. Contemporary hermeneutics found advocates in the Arab world in three forms:

First, there is a trend which simply translates and conducts casual research of a hagiographic nature.

Second, another trend tries to apply the new hermeneutics, in one of its western forms, to Arabic texts.

Third, a trend sought to analyse the text of the Qur’an according to its understanding of Western hermeneutics, mimicking what was done to the Bible, committing a methodological error, using analogy as the main device. Western hermeneutics has its own nature which it acquired through its conflict with the heritage of ecclesiastical exegesis. This heritage has developed in its relation to the Bible in a manner that is different from the heritage of the Arab interpretation of the Qur’an. Furthermore, the Qur’an has its own special nature which is different from that of the Bible. Therefore, the Arab hermeneutic thinkers slipped into the error of using the device of analogy with all its risks, thus creating an undisciplined revisionist position. This revisionist hermeneutics showed in different guises and degrees in Ahmed Subhi Mansour, Gamal Al-Banna, Muhammad Said Al-Ashmawi, Muhammad Shahrur among others.

Several other Western trends were applied in the Muslim world, but it is beyond the scope of this paper to cover all of them. An example is phenomenology, which has influenced some figures, such as Hassan Hanafi who has his special way of applying it. He added to phenomenology other trends from the west and Arab sources, which will be dealt with later.

Another group of thinkers, who are difficult to classify, merged their study of Western philosophical thought with their concern with current issues, people’s interests and participating in on-going events.

**Intellectual projects involving tradition and renewal**

Some modern Arab thinkers presented a philosophy or an intellectual vision instead of simply conducting academic research, such as Osman Amin, Abdel Rahman Badawi, Youssef Karam, Zaki Naguib Mahmoud, Murad Wahba, Rene Habashi, Badie Al-Kasm, Yahya Hweidi, among others. There are also those, living or recently deceased, who had intellectual projects such as Adonis, Tizini, Mahdi Aamel, Hassan Hanafi, Al-Jabri, Arkoun, Muruwa, George Tarabishi, Muta Safdi, Hesham Djait, Hesham Sharabi, Al-Messeri, Muhammad Hussein Fadl-Allah, among others. There are thinkers who belong to the eastern part of the Muslim world in Malaysia, India, Pakistan and Iran. Without reference to their disciplines, there is, for instance, Muhammad Iqbal, Ahmed Khan, Ameer Ali, Muhader Muhammad, Waheed Khan, Al-Sayyed Muhammad Baqer Al-Sadr, Abdel Karim Seroussi, Muhammad Mojtahid Shebstri, Mohssen Kedever, Mustafa Malikan, Hashem Aghagri, Heidar Muhammad Kamel Hob-Allah, Jawadi Amely, Sadiq Larijani, Mosbah Al-Yazdi, Muhammad Taqqi Jaafari, Muhammad Al-Sayyed Tabtaba’ei, Ammed Wa’azi, Sadr Ed-
Deen Taheri, Al-Sayyed Mahmoud Al-Hashemi, Baqer Al-Irawani, Muhammad Ali Al-Taskheeri, Nasser Makarem Al-Sherazi, Al-Hakimi, Mahdi Al-Mahrizi, Ahad Qaramalki among others. Since the subject and context of the paper cannot allow for dealing with them all and as the efforts of some were viewed previously, some examples of those who have what is known as intellectual projects will be referred to.

The project Adonis focused on was to reread the tradition, which is one of the first attempts to do this. In the early 1970s, he published his PhD dissertation entitled *The Fixed and the Changeable: Research in the Arabs as Followers and Innovators*, in which he dealt with the matrix of the Arab culture as a construct of the foundational structure of the Arab society. He analyzed the sources; established their theoretical origins; dealt with the shock of modernity in relation to the power of the religious heritage; then addressed the shock of modernity in relation to the power of the poetic heritage. He attributed the foundation of the movement of modern Arabic poetry in the relation between the genuinely native and the foreign elements as the regulator of the duality of the fixed and the changeable or following and innovation. He said that in the heritage, there are “cultural products which are varied to the point of contradiction. So it is not proper to view the tradition as the origin or the essence of the whole, but one should study a particular cultural product” (Adonis, 1973, p. 228). This cultural product is under the influence of the dualities: following and inventing, the fixed and the changeable, the positive and the negative. A positive example is both Umro’ Al-Qays and Amr Ibn Abi Rabi’a. Their poetry established the erotic or permissive propensity in Arabic literature. Their poetry acquired a special status because it dealt with taboo-breaking ideas (Adonis, 1973, p. 215). They also wrote about rejecting those in positions of power and calling for change. In the same manner, he deals with the ideological trends where he includes those who are among the negative group, i.e. the fixed position, Ibn Hanbal, Al-Ghazali and Ibn Taymiyya. In the positive category, i.e. those who call for change, rejecting the fixed positions, he mentions the historical Islamic trends: Al-Murji’a, Al-Jahmiyya, Shia and Sufism. Adonis seems to have forgotten that the genuinely native and the foreign are both essential to progress. If there is no dialectic interaction between them, no change is possible. He also seems to forget that invention from scratch is not possible since no one can be inventive in all aspects of one’s thought. Invention is not absolute, but involves an element of following/tradition depending on the individual. Both fixedness and changeability are two positions that coexist. If it were not for the tension between them, progress would not be possible. For him, some of those who represent fixedness are Al-Ghazali and Ibn Taymiyya. But in my point of view, they at times represent changeability. Al-Ghazali’s inventiveness appears in his work in the field of philosophy with critical tendencies: he focuses on proof rather than on gnosis before he turned to Sufism. Even then he had an innovative tendency as shown in his book *The Revival of Religious Sciences*. When he started to become a Sufi, his inventiveness showed in his methodological doubt which was a landmark in the history of this method. Ibn Taymiyya displayed inventiveness in his personal creative contributions to jurisprudence and politics. This inventiveness is obvious by philosophical criteria in his criticism of Aristotelian logic on an empirical basis.

In the context of contemporary intellectual projects, Hassan Hanafi’s project attempted to solve the dilemma of the contemporary and the traditional. In 1980, he published *Tradition and Innovation* – his most important book which establishes his philosophical project based on a criticism of the orientalist methodology. He replaced the methodology of the orientalists by others and put forth his vision of how these methodologies should be, linking them with national objectives, such as linguistic innovation, content analysis and the change of the cultural environment. Therefore, Hanafi’s works have three directions. First, there is his
position on the old tradition with the following books: *From Dogma to Revolution*, *From Following to Inventiveness*, *From Text to Reality*, and *From Annihilation to Survival*, among other works. Second, there is his position on the western tradition including the books: *Introduction to Occidentalism*, and *Current Issues*, to which his PhD. dissertation can be added (written in the 1960s). Third, there is his position on reality or the theory of interpretation – a front on which his efforts were scattered in various books and articles. Hanafi’s project, as he likes to classify it himself, is within the framework of the Islamic left. He issued a magazine under this title as well – *Islamic Left* (Only the first issue saw the light of day). Hanafi explained the features of this trend in his paper “What does the Islamic Left Mean?[11]”

However, the classification of Hanafi as part of the Islamic left is not accurate because his project dialectically synthesizes different trends: Marxism, liberalism, rationalism, gnosticism, fundamentalism, secularism and modernism. As for the methodology he adopts, he shifts between Husserlian phenomenology, historical dialectics, structuralism, deconstruction, pragmatism and analytical philosophy. This is on the intellectual level, but on the purely academic level, Hassan Hanafi is undeniably an authority on the history of philosophy.

If Hanafi represents a dialectic synthesis of several doctrines and methodologies on the one hand, Al-Tayyeb Tizini on the other hand represents one trend, namely historical materialism. He sought to reinterpret the Islamic tradition in “an attempt to create a new vision of Arab thought since its inception up to the current period.” The objective is to move from “tradition to revolution” passing by the “Qur’anic text” and what he called “the early Muhammadan Islam,” theology and medieval Arab philosophy. In his interpretation, he adopted the method of historical materialism which is based on a purely materialistic view of society and history – a Marxist-Leninist view which sees the social historical process in terms of material factors. Thus, it seeks to reveal the materialistic basis of social life and discover the laws that govern its development. It, thus, studies the general laws of social development and how they appear in the historical behavior of the people. It further considers the relation between the economy and production – the determining factors behind all social and historical development (Hanafi, 1967, pp. 17-18). They indeed affect all forms of human consciousness and thinking, together with the features of civilization, religious, scientific and cultural activities (Marx, 1987, pp. 30-31).

In the same context, there is Hussein Muruwa’s intellectual project which searched for materialist tendencies in the Islamic and Arab philosophical tradition. He meant to prove that “the revolutionary powers in the Arab liberation movement have a distinguished present laden with the future which is different from the past-laden present of the backward powers [...]. They have their own tradition which is distinct from that of the other powers” (Muruwa, 1981, p. 24).

The reading of the tradition by Tizini and Muruwa is simply an eclectic reading which is based on Marxizing the Arab history, i.e. adding a Marxist flavor to the tradition. They project materialistic concepts on Arab history in an arbitrary interpretation by using concepts derived from the context and development of the European history. They apply these concepts to Arab history and its development, interpreting history according to Marx’s analysis of what he called the “Asiatic mode of production.” This proves that Tizini and Muruwa fell in the trap of Eurocentrism even when they claim to attack it.

In his intellectual project, Muhammad Abid Al-Jabri made it a point to criticize the Arab mind to reveal its structure and development. He used several methodologies derived from the modern humanities and the Western schools, especially the French. He followed Kant, but on a different level, because he believed it is a necessity to criticize reason to establish
the modern Arab renaissance. He said, “The basic and dangerous point of weakness in the project of the modern Arab renaissance is that Arabs did not known or were not aware that the weapon of criticism should be preceded and accompanied by the criticism of weapon. They have ignored the criticism of reason.” He claimed that his methodology in reading the tradition is based on “scientific research of a mind that created a certain culture, the Arab Islamic culture, and which was also formed by it” (Al-Jabri. *The Structure of the Arab Mind*). Therefore, Al-Jabri emphasized that “the special nature of the cultural and social environment is responsible for the establishment of a specific thought” (Al-Jabri. *The Structure of the Arab Mind*). He argued that one of the essential methodological pivotal elements is “formal overlapping of thought as a tool and thought as content” (Al-Jabri. *The Structure of the Arab Mind*). Nevertheless, he used tools borrowed from outside his cultural realm. Al-Jabri uses Lalande’s historical method to understand reason and to distinguish between a “forming” reason and a “formed” one (Al-Jabri. *The Structure of the Arab Mind*). Moreover, he used the concept of the epistemological unconscious which is derived from the ideas of Jean Piaget (Al-Jabri. *The Structure of the Arab Mind*). He also used structuralism and the old pragmatic method, which sees concepts not as final molds, but merely as “work tools that should be used in different contexts in the manner that renders them productive” (Al-Jabri, 1988, p. 12). He also used some of the ideas of Kant, Freud, Bachelard, Althusser and Foucault, and nothing stopped him from using some Marxist ideas, or borrowing the method of deconstruction (Al-Jabri, 1988, p. 11). Muhammad Abid Al-Jabri had numerous and varied methodologies derived from Western philosophies, that is to say, from outside the “cultural realm of the Arabs,” although he claimed otherwise. One of the most important results he has achieved is distinguishing three epistemological systems in the Arab culture: expression, gnosis and proof, with the aim to prove that the Moroccan mind excelled over the eastern Arabian mind in depending on proof rather than gnosis.

Thus, Al-Jabri’s methodology is an eclectic one, which led to partiality, separating Morocco from the east in the Arab World. Al-Jabri seems to have forgotten that not all Moroccan thinkers base their work on proof, and not all eastern Arabs are immersed in gnosis. On each side there are representatives of his three systems. In addition, there are single thinkers on either side, who combine in their intellectual makeup all three forms: expression, gnosis and proof, such as Al-Farabi, Avicenna, Al-Ghazali and Ibn Khaldun. Do we consider Ibn Arabi and Ibn Sabeen, with their gnostic philosophy, as eastern? Was Abu Al-Barakat Al-Boghdadi, with his rational philosophy, a Moroccan? Cannot we see that Al-Suhrawardi, the most prominent mystic, does not oppose the validity of rationalist method of proof?

As for Muhammad Arkoun, his project attempted to apply the western reading of the Bible to the Qur’an, ignoring the different contexts and the nature of each book. He meant to prove “the historicity of Islamic Arab thought,” and to criticize the traditional readings of texts so that one can begin to think of that which is beyond human thought, i.e. religious phenomenon (Arkoun 18 ff.), to break the dogmatic mindset (Arkoun, 1992, p. 12 ff.). The old way of thinking will be replaced by “the imposition of an active worldly culture capable of being assimilated and used by living powers that are active in the society” (Arkoun, 1995, p. 15). He used modern hermeneutics and linguistics together with most modern methodologies in the humanities, especially depending on concepts derived from Foucault and Levy Strauss’s structuralism and Derrida’s deconstruction, among other concepts (Arkoun, 1995, p. 63).

Arkoun believed that anthropology is the only science that provides the necessary and suitable clues to discover different cultures and doctrines. He also argued that exegetes,
scholars and the early Islamic theologians refrained from dealing with the vast horizons that the Qur’an opens. If we read the Qur’an according to the methodology of the history of religions, which he claims we have not done yet, we will have broader horizons. He rightly emphasizes the fact that there is a difference between the Qur’an and efforts of Islamic scholars in writing the books we read now. From these books, we derive images of Islam based on their own interpretation—an interpretation that changes with the change in the historical, cultural and political conditions. Thus, there should be a distinction between the Qur’an as an independent entity and the interpretation of Islam as a historical phenomenon. We have to understand the Qur’an that opens horizons for contemplation, thinking, in-depth erudition and the use of reason. Here, he strongly urges that we should turn towards the western social sciences which will give us the mental tools and the research methodologies and problematics that should improve our ways of thinking. Therefore, he calls for the adoption of modern systems of thought rather than restrict ourselves to the material aspects of modernity which further deepens out backwardness[12].

Towards the future
This is an age with divergent routes for the contemporary Arab thought which exhausted its energy in searching for a theoretical philosophy. It is torn between tradition and modernity, and while it could not retrieve its tradition, it is not coping with the modern age. It actually failed in facing contemporary challenges. The most obvious proof is the condition of the Arab nation now and the deplorable condition of the Muslim world. This may also be evident in the fact that all the efforts exerted by the contemporary Arab and Muslim thinkers do not have any impact on reality, which means that they float in a space of abstract intellectual structures detached from historical reality, lacking the philosophy of action. Therefore, there is a need for a philosophy of action and work, not of words and contemplation. There is a need for a philosophy of progress, and hence a philosophy of ethics, but not the moral principles of abstract philosophical theories. There should be morals that can be applied—an ethics of progress.

The philosophical doctrines of the modern Islamic and Arab thinkers have not yet put forth an explanation of the means and practical mechanisms that can lead to a real awakening. They were immersed in theoretical polemics without setting an ethics of progress. The ethics of progress is not simply the scientific values and moral principles, such as objectivity, honesty, avoidance of personal and psychological predispositions, verification and deferring judgment until a definite proof has been established, accuracy, etc. The required ethics ought to show how man can realize such attributes in himself, how to act spontaneously in his practical life, and how to reach self-actualization through legitimate means that acquire their legitimacy from a progress agenda with theoretical and philosophical basis, acknowledged by public consciousness.

The contemporary philosophical reality is in a crisis exacerbated by the fact that religion, despite its extreme importance, has acquired a confusing position as a result of the modern cultural and intellectual variables. Contemporary man is torn between two extremist trends which dominate the current debate in different contexts: the extreme secularists and the extreme religionists. In this dilemma, the contemporary person is confused as to what to choose. It is a dilemma because there is no third choice. This third solution is not possible without setting deep the principles of critical thinking and the dominance of moderate rationality. Hence, there is a necessity for adjusting the position of contemporary Arab thinking towards rationality, and consequently towards philosophy. Philosophy teaches rational thinking, productive contemplation, accurate interpretation and constructive
criticism. It allows us to formulate questions and deal with the problems of our nation from
different perspectives. Why not? Philosophy is the mirror of the age. It is, nevertheless, not a
mere understanding of the world; it is additionally a continuous effort to change it to the
better. Thus, there is a change from contemplation to action where philosophy turns from a
discipline of interpretation into one of change of the self, society, laws, economy and politics.
This can be achieved through the appropriate methodology that enables us to criticize our
history, ourselves and our time. Consequently, there will be a shift towards the future on the
basis of principles and values which conform to our historical aspirations for the realization
of the national project of democratization. This will result in establishing the values of
originality and progress at the same time, and widening the scope of participation and
human rights. It will be possible to build the self in a modern way through establishing a
third path that is neither secularist nor “salafi” (pertaining to the ancients) by means of a
new reading of the sources that involves a synthesis of rationality and spirituality. This is
what the new philosophy of religion that we have been trying to launch since the 1980s of
the twentieth century will try to accomplish. It started to develop with the first two Arabic
books on the philosophy of religion written objectively and methodologically published at
the beginning of the 1990s in the twentieth century, namely, *The Reasonable and the
Unreasonable in Religions* and *An Introduction to the Philosophy of Religion*.

Notes

1. See an extended analysis of the dialogue between Renan and Al-Afghani on the relation between
Islam and science in Mohamed Othman Elkhosht’s *Islam, Positivism and Orientalism*, Cairo,

2. See the second edition of *Contemporary Encyclopedia of Religions and Sects*.

3. Al-Messeiri distinguishes between partial secularism and comprehensive secularism. The partial
one gives a partial view of reality as it does not deal with the comprehensive and epistemological
dimensions. It is not comprehensive, so it argues for a separation of religion and just politics, and
perhaps economics as well. This is expressed as “separation of religion and state.” This partial
view ignores the other dimensions of life, and does not deny the existence of absolutes, the moral
absolute imperatives, or metaphysics. It can be described as “moralistic secularism” or
“humanistic secularism.” As for comprehensive secularism, it is a comprehensive view of reality
that tries quite vigorously to neutralize religion, the absolute values and all metaphysical aspects
of life. This view gives rise to theories based on the material aspect of the universe, considering
materialistic knowledge as the only measure of ethics; and that man is dominated by the
materialistic nature not the spiritual one. Thus, it is also termed “natural materialistic
secularism.” See Al-Messeiri. (2002). *Partial Secularism and Comprehensive Secularism*, Cairo,
Dar Al-Shorouq, 2002, vol. 2 pp 219-220, and vol. 2 pp 471-472. The difference between the so-
called “partial secularism” and “comprehensive secularism” is the difference between two
historical periods in defining secularism. It was first confined to political and economic domains,
but some humanistic and Christian values were still there, but, with the deep infiltration of the
influence of the state and its institutions in the daily lives of the individuals. The secularist state
became the only agent that forms a comprehensive view of man’s life without reference to

4. “If ye realize this not, ask of those who possess the Message.” The Qur’an, XVI, 43. And “Nor
should the Believers all go forth together: if a contingent from every expedition remained
behind, they could devote themselves to studies in religion, and admonish the people when
they return to them, that thus they may learn to guard themselves (against evil).” The Qur’an,
IX, 122.


10. Emerging in the seventeenth century, the Enlightenment was termed the Age of Enlightenment in most common books of history, but there is a difference over determining the date and the place of enlightenment. For more details see: Muhammad Sabila, *Modernism and Postmodernism*, Morocco, Tobqal Publishing, 2nd ed., 2007, p. 44.


References


Shukri, G. (1983), "Renaissance and the Fall in Modern Egyptian Thought, Al-Dar Al-Arabiya Lelketab, Cairo.


Further reading


Elkhosht, M.O. (2007), "Islam, Positivism and Orientalism, Nahdat Misr, Cairo.

Corresponding author

Mohamed Othman Elkhosht can be contacted at: Dr.Khosht@gmail.com

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com
Using co-creating mass-customisation and innovation climate for enhanced value
Empirical investigation in international modular jewellery market

Heba Mohamed Adel
Faculty of Management Sciences,
October University for Modern Sciences and Arts (MSA), 6th October City, Egypt, and

Raghda Abulsaoud Ahmed Younis
Business Administration Department, Faculty of Commerce, Cairo University, Egypt

Abstract
Purpose – This paper aims to study the impact of innovation climate (IC) on co-creating modular mass-customisation (CMMC) in terms of cost effectiveness, volume effectiveness, responsiveness, product modularity and collaborative assembly. Additionally, this research paper investigates the effect of IC and CMMC on the value to customer (VC) in a modular jewellery emerging market that includes international companies.

Design/methodology/approach – After conducting a comprehensive literature review, the authors suggested a conceptual framework and examined it using mixed methods approach. In addition to qualitative focus groups, questionnaires were filled – across five-point Likert scale format – through 63 depth interviews carried out with subject-matter-experts working at 14 international organisations in the Egyptian modular jewellery market. SmartPLS software was used for structural equation modelling analysis.

Findings – Results showed that CMMC positively and significantly affects VC. Furthermore, IC positively and significantly affects both CMMC and VC.

Practical implications – Recent industrial developments that can be observed in such international modular jewellery sector can be enhanced by the empirical evidence of this research regarding the importance of developing IC for more creative manufacturing approach of modular mass-customisation and better VC.

Originality/value – To the best of our knowledge, it is the first empirical study that investigates the relationship between CMMC, IC and VC in a unique jewellery market, which recently generated high customer involvement in the assembly/reassembly processes. Conceptually and empirically, it consolidates and adds to the literature of production and operations management (mass-customisation), organisational studies and innovation science (organisational climate for innovation) and applied social sciences.

Keywords Customer value, Innovation climate, Product modularity, Co-creating mass-customization, Collaborative assembly, Jewellery market, Creative product designs

Paper type Research paper
1. Introduction
As customers’ needs change, competitive intensity increases requiring companies to evolve its manufacturing strategies in order to cope with that continuous change (Huang et al., 2010; Jitpaiboon et al., 2013). One of these evolved functional strategies is mass-customisation, which can integrate the best of two manufacturing approaches; namely customisation and mass production (Ulrich et al., 2003; Comstock et al., 2004; Kamrani et al., 2012). In other words, it provides product variety on a large scale along with succeeding to maintain cost efficiency (Huang et al., 2010; Murat Kristal et al., 2010; Jitpaiboon et al., 2013). However, mass-customisation without innovation in the process and products will not be able to sustain customer delight (Huang et al., 2010). Thus, organisations need to create an innovation climate (IC), which is an internal environment that motivates its human resources to exchange innovative ideas about creative products/services/processes in order to promote its performance and maintain a sustainable competitive advantage (Shanker et al., 2017). After conducting a comprehensive review to the literature of production and operations management, organisational studies and innovation science, many studies (Karlsson, 2002; Blecker and Abdelkafi, 2006; Huang et al., 2010; Fogliatto et al., 2012; Jitpaiboon et al., 2013; Wang et al., 2016; Liu et al., 2018) were found to be investigating the mass-customisation approach in different industries other than the jewellery market (e.g. computers, electronics, automobile, furniture, food and beverage and textile). Some other researchers studied the important role of developing an internal organisational climate for supporting innovation (Worren et al., 2002; Panuwatwanich et al., 2008; Chan and Liu, 2012; Oke et al., 2013; Popa et al., 2017; Shanker et al., 2017). Besides, very limited number of studies examined the mass-customisation (MC) – only in terms of cost efficiency, volume effectiveness, and responsiveness – and innovation as constructs in the same research model. For example, Liu et al. (2018) studied these two constructs but as separate mediators between the absorptive capacity-business performance relationship. From a generic manufacturing perspective, Gunday et al. (2011) studied the effect of different types of innovation (organisational, marketing, process and product) on the production performance (in terms of volume, speed and cost) generally not related to MC strategy. In terms of modularity dimension, Worren et al. (2002) and Salvador and Villena (2013) explored the relationship between product modularity and innovation. However, there is a lack of studies that investigated the relationship between the IC, co-creating modular mass-customisation (CMCMC) – in terms of cost effectiveness, volume effectiveness, responsiveness, product modularity, and collaborative assembly – and value to customer (VC) in a creative jewellery market, which recently generated higher customer involvement in the assembly/reassembly and remix processes of its product modules/charms. According to Tu et al. (2001) and Abdallah and Matsui (2008), value to the customer (VC) is the degree to which products offered by an organisation can benefit and satisfy its customers. Therefore, the authors of this research were encouraged to study this relationship in such unique evolving market.

Concerning the modular jewellery sector, different reasons inspired the authors to select it for the empirical part of the current research. First, there are contemporary industrial developments that can be observed in the international modular jewellery sector related to the creative manufacturing approach of modular mass-customisation. For example, according to the interviews conducted with subject-matter-experts (SMEs) working at Swarovski, Pandora and other international companies in Egypt, the jewellery products are now designed/produced in the form of modules/charms to enhance customer involvement in the assembly/reassembly processes. Through this creative mass-customised approach of the jewellery remix collection, each customer can choose a standard base unit of a necklace/bracelet and can enjoy a personalised jewellery experience by assembling charms and mixing them together in various changing combinations (e.g. different jewellery types, sizes,
stone colours and shapes) to match each customer’s taste. Second, regarding the Egyptian jewellery market, the ancient Egyptians have been known since 5000 B.C. by their unique and creative gold products and other precious metals (Industrial Modernisation Center, 2007). Currently, the Egyptian modular jewellery market includes reputable international companies producing and selling in Egypt and having skilled human assets with low labour cost, and their exports are increasing to different countries (e.g. the UK, Turkey and Saudi Arabia) (The Egyptian-British Chamber of Commerce, 2016; General Organisation for Export and Import Control, 2018). For example, the value of exports of Egyptian jewellery as well as precious stones have been raised by 37 per cent from $248m in 2017 to $339m in 2018 (General Organisation for Export and Import Control, 2018).

The next sections of this research paper are arranged as follows. Section 2 provides a comprehensive review of the relevant literature on CMMC, IC and VC. As for the research methodology, Section 3 proposes the conceptual framework and discusses the mixed methods approach with the data collection methods used in this study. Regarding the nature of the selected manufacturing sector, Section 4 presents a holistic picture of the modular jewellery market of a creative emerging Egyptian economy. Then, Section 5 discusses the findings of the quantitative data analysis using PLS-SEM. Consequently, Section 6 encapsulates the main conclusions, limitations and practical implications of this research.

2. Literature review
From a multidisciplinary perspective, the authors in this paper consolidated the relevant literature on production and operations management, organisational studies and innovation science to discuss the relationships between the research variables: CMMC, IC and VC. This paper critically discusses the previous studies that investigated these constructs in addition to generating a new streamline of research that explores the relationship between IC, VC and CMMC with higher level of customer involvement in the assembly and reassembly processes.

2.1 Co-creating modular mass-customisation and customer value
Based on a comprehensive review of the literature of production and operations management, the authors found that many studies (Karlsson, 2002; Piller et al., 2004; Blecker and Abdelkafi, 2006; Dellaert and Dabhoktar, 2009; Huang et al., 2010; Fogliatto et al., 2012; Jitpaiboon et al., 2013; Wang et al., 2016; Liu et al., 2018) have investigated the mass-customisation approach in different industries (e.g. computers, electronics, automotive, furniture, food, beverage, textile and apparel and footwear). However, the CMMC, as a construct, was considered in the literature as three separate factors: mass-customisation capability, modular design or product modularity, and co-creating/collaborative customer assembly. But for this unique industry, after carrying out the qualitative interviews in the modular jewellery market, CMMC approach was found to be regarded empirically as one construct instead of dealing with it as three independent factors. These three factors can be traced in the literature as follows. First, mass-customisation strategy was defined as the ability of offering product variety on a large scale along with succeeding to maintain cost efficiency (Huang et al., 2010; Murat Kristal et al., 2010; Jitpaiboon et al., 2013; Zhang et al., 2015). It merges the best of two manufacturing approaches; namely customisation and standardization/mass production (Ulrich et al., 2003; Comstock et al., 2004; Kamrani et al., 2012). The mass-customisation capability was operationalised by some scholars in terms of cost efficiency, volume effectiveness, and responsiveness. For example, Tu et al. (2001) pointed out that these three dimensions are crucial for the implementation of mass-customisation in any company. Moreover, Tu et al. (2001) concluded its direct positive effect on the VC, which they defined as the degree to which the products offered by organisations...
can benefit and satisfy its customers. With different empirical findings, Squire et al. (2004) tested the same relationship between mass-customisation and VC but argued that mass-customisation can increase VC for only specific markets/customers. Therefore, the authors of this research paper detected mixed reported findings in the previous literature, that represent a gap for the current study as well as future research as suggested by Squire et al. (2004). Second, product modularity, the modular design is one technique for the mass-customisation approach, in which products are designed in the form of modules/components that are flexibly assembled/exchanged (Karlsson, 2002; Tu et al., 2004; Abdallah and Matsui, 2008; Heizer et al., 2017; Viana et al., 2017; Stevenson, 2018). This product modularity or modular design tactic satisfies both organisational functions, production and operations management in addition to marketing, because it saves manufacturing costs better than the customisation approach and augments customer delight more than the standardisation strategy (Duray, 2002; Heizer et al., 2017; Stevenson, 2018). Yet, Ahmad et al. (2010) addressed the importance of effective synchronisation between these two organisational functions in addition to the R&D to ensure that the product modules satisfy customers’ needs. By this means, product modularity can facilitate the assembly/reassembly processes conducted by customers according to their unique preferences/tastes. Thus, modular product design can lead to unlimited number of varied and individualised products (Bask et al., 2011). Heizer et al. (2017) gave examples on the successful implementation of that technique in different sectors such as the automotive and fast food industries. Yet, Abdallah et al. (2009) asserted that such approach cannot be suitable for all kinds of products and markets.

As for the jewellery sector, the continuous involvement of customer in the reassembly/remixing processes even after the purchase of the product creates an innovative environment for greater VC with diverse individualised experiences. This brings us to the third factor, which is customer involvement in the assembly process (i.e. collaborative assembly). Prior authors (Duray et al., 2000; Choy and Loker, 2004; Tu et al., 2004; Abdallah and Matsui, 2008) contended that the level of customer involvement in the different phases of production process (e.g. assembly) is considered as a required dimension in the effectiveness of mass-customisation and the personalised value received by each customer. The customer engagement in the phases of the production process was also pinpointed in the literature by the term co-creating mass-customisation (Loet et al., 2017). With different levels of customer involvement, Gilmore and Pine (1997) shaped four types for mass-customisation (collaborative, adaptive, cosmetic and transparent) that were pointed out later by other studies (Da Silveira et al., 2001; Comstock et al., 2004; Bask et al., 2011) that described the manufacturing approach used in specific industries. In the modular jewellery industry, the mass-customisation strategy is used as a blend of the collaborative and adaptive approaches. Through collaborative mass-customisation, each customer specifies her needs from diverse modular jewellery types, charms’ shapes and colours and then collaborative assembly of the chosen bracelets/necklaces modules are done at the store. Afterwards, adaptive mass-customisation can be conducted later by each customer in terms of the remix and reassembly of extra jewellery modules/charms resulting in infinite shapes of assembled jewellery products. Regarding the relationship between the research factors, Abdallah and Matsui (2008) within one research model assessed the impact of product modularisation and customer involvement in the production process as one factor on mass-customisation and VC. They asserted that product modularity together with customer involvement are two important factors for maintaining a comprehensive approach towards mass-customisation that enhances the distinctive experience of each customer. However, there is a lack of empirical research assessing the relationship between IC, VC and CMMC especially in a unique modular jewellery industry with high level of customer involvement in
the assembly and reassembly processes. Thus, the findings of this paper can contribute conceptually and empirically to this research area.

2.2 Innovation climate and customer value
Innovation is a crucial pillar that enables organisations to survive, change and improve their performance in a competitive market especially during challenging times (Liao et al., 2007; Tejeiro Koller et al., 2017; Younis, 2019). It helps firms in delivering the required value to their customers by flexibly adapting to new market changes via introducing new products or improving the current ones (Wang et al., 2016). Wang et al. (2016) view innovation as the new employment of knowledge and approaches, which can produce developed processes or products for the purpose of achieving stakeholders’ delight. Scholars (Dambiski Gomes de Carvalho et al., 2017; Younis, 2019) advocated that innovation should be investigated in terms of its fruitful outcomes, as well as its inputs (i.e. factors that support innovation such as the organisational climate). In this paper, IC is regarded as the internal organisational environment that motivates human resources to exchange innovative ideas about creative products or processes to promote its performance and maintain a sustainable competitive advantage (Warren et al., 2002; Shanker et al., 2017). As a construct, IC was studied in the literature from different perspectives. Some studies (Van der Vegt et al., 2005) regarded IC as the common interpretation of employees regarding the rewarded activities by their organisations, which can lead to new ideas for improvement. Similarly, Chan and Liu (2012) contended that IC can be considered in terms of human resources’ perceptions of the extent to which their institutions are supporting innovation. For example, organisations should provide their HR with the needed financial and nonfinancial resources in order to incentivise them to be creative (Chan and Liu, 2012; Silva, 2014). With the aid of giving specific examples, Parry et al. (2009) regarded IC as the internal organisational environment that allows its human capital to work freely while providing them with the time needed to generate creative ideas. Sarros et al. (2008) added that the type of leadership together with the organisational culture will promote the IC.

At both individual and organisational levels, Rui and Kun (2016) conceptualised this term by the working environment that affect the individual as well as the institutional innovative performance. Following the same streamline of research, Jha (2017) and Shanker et al. (2017) elaborated on the important role of IC in elevating the innovative behaviour and psychological empowerment (i.e. at an individual level). In addition, it boosts the company’s innovative performance and degree of innovativeness (i.e. at an organisational level) (Chan and Liu, 2012; Kmieciak et al., 2012; Wang et al., 2016; Cai et al., 2017; Popa et al., 2017; Shanker et al., 2017). Besides, Chen et al. (2010) and Cai et al. (2017) addressed the IC capability in fostering and exchanging new ideas/strategies for both product and process innovation. Regarding its relationship with the VC, Panayides (2006) and Kim et al. (2012) pinpointed the role of innovation capability in boosting the firm’s responsiveness towards meeting unique demands via new product/market development; thus, enhancing value delivered to customers. Also, Gunday et al. (2011) reported the positive impact of innovation not only on production and financial organisational performance but also on the competitive market performance. Building on these studies, this paper investigated the IC according to the perceptions of subject-matter-experts (SMEs) in the modular jewellery companies about the IC practices held by their institutions, which can lead to innovative process/product and enhanced VC.

2.3 Innovation climate and co-creating modular mass-customisation
As for this research paper, we suggest that IC promotes the CMMC approach in terms of cost effectiveness, volume effectiveness, responsiveness, product modularity, and collaborative
assembly. To the best of our knowledge, there is a lack of studies that investigated in one research model the relationship between IC, CMMC (in terms of CE, VE, MCR, PM and CA) and VC especially in a creative jewellery market, which recently generated high customer involvement in the assembly/reassembly processes of its product modules. Yet, the relationships between IC and one or more dimensions of CMMC (cost effectiveness, volume effectiveness, responsiveness, product modularity, and collaborative assembly) were measured independently in a number of different studies. First, very limited studies examined the relationship between mass-customisation – only in terms of cost efficiency, volume effectiveness, and responsiveness – and innovation as constructs in the same research model. For example, Gunday et al. (2011) studied the effect of different types of innovation on the production performance (in terms of volume, speed and cost) generally not related to MC strategy. Second, in terms of modularity dimension, Worren et al. (2002) and Salvador and Villena (2013) explored the relationship between product modularity and innovation. Worren et al. (2002) suggested that IC augments both the creativity of modular design process and the innovativeness and variety in products. These product modules can be shared and assembled together easily, quickly and efficiently to form different products with unique features delighting various customers' needs (Wang et al., 2014). Also, Chen et al. (2010) and Cai et al. (2017) addressed the IC capability in fostering and exchanging new ideas/strategies among the employees for enhancing both product and process innovation. Third, regarding IC relationship with responsiveness, Panayides (2006) and Kim et al. (2012) pinpointed the role of innovation capability in boosting the firm’s responsiveness towards meeting unique demands via new product/market development; thus, enhancing value delivered to customers. Building on the above-mentioned studies, the authors of this paper proposed the three main hypotheses (as shown in Table I) that describe the relationships between the research variables (IC, CMMC and VC) in a creative international modular jewellery market.

3. Research methodology

As for the research variables and its measurement items, the authors relied on the scales used in the previous literature. First, the independent variable (i.e. IC) was assessed through a scale developed by Oke et al. (2013) and used later by Popa et al. (2017). Second, the dependent variable (i.e. VC) was operationalised using the measurement-items adopted from Tu et al. (2001). Third, the mediating variable (i.e. CMMC) was measured in terms of five dimensions: cost effectiveness (adapted from Tu et al., 2001, 2004; Huang et al., 2008), volume effectiveness (adapted from Tu et al., 2001, 2004), responsiveness (adapted from Tu et al., 2001), product modularity (adapted from Tu et al., 2004), and collaborative assembly (adapted from Duray et al., 2000; Tu et al., 2004). Concerning the suggested conceptual framework, Figure 1 illustrates the relationship between CMMC, IC and VC. Table I summarises the research main variables, its conceptualisation, and related hypotheses.

The purpose of this research is to study the impact of IC on CMMC in terms of cost effectiveness, volume effectiveness, responsiveness, product modularity, and collaborative assembly. In addition, it investigates the effect of IC and CMMC on the VC within the international companies operating in the Egyptian modular jewellery market. The target population encompasses 16 international modular jewellery companies operating in Egypt. All these sixteen companies were contacted, first through emails then direct visits, and fourteen of them agreed to participate (i.e. 87.5 per cent response rate) via 63 SMEs from their product management and production and operations management departments. Due to the lack of a formal list to our target population, the authors used snowball sampling or
chain-referral technique – as recommended by Illenberger and Flötteröd (2012) – to identify these companies through depending on the referrals/competitors suggested/recognised by the initial group of respondents, who are pioneering this new industrial approach (e.g. Swarovski and Pandora SMEs).
Following Mangan et al. (2004); Collis and Hussey (2014) and Creswell (2014), the authors of the current study used the methodological triangulation mixed methods approach. The following qualitative and quantitative data collection methods were applied to overcome the limitations resulted from depending on only one technique and enhance the gains of investigating thoroughly the research topic from different angles (Mangan et al., 2004; Collis and Hussey, 2014; Sekaran and Bougie, 2016):

- For testing the research hypotheses, 63 questionnaires (quantitative primary data collection method) were filled – across a five-point Likert scale format – by SMEs working at the product management and production and operations management departments within 14 international organisations in the Egyptian modular jewellery market. Appendix presents the questionnaire’s measurement items used in this study and filled through face-to-face interviews. Before data collection, as advocated by Hair et al. (2014a), depth interviews were carried out with 10 SMEs at these companies to verify the face or content validity of the measurement scale.

- 63 personal face-to-face interviews (qualitative primary data collection technique) were conducted with those aforementioned SMEs at these 14 companies in order to deepen the authors’ comprehension about the relationship between research variables. Based on these in-depth interviews, the authors developed Figure 2 that depicts the co-creating mass-customisation and IC practices of the international modular jewellery market in Egypt, which can be considered as one of the contributions of this research.

- Two qualitative focus groups with the Head of Inclusive and Creative Economies Programme in the British Council and seven industry and academic experts in the field of handicrafts, product design, and production and operations management. Throughout these focus groups, fruitful discussions took place that helped the authors to develop comprehensive understanding about the nature and the future of the creative industries (including the modular jewellery sector) inside the emerging inclusive economies like Egypt.

Figure 2.
The co-creating mass-customisation and IC practices of modular jewellery market in Egypt
The qualitative group discussions and individual presentations that took place at the British Council Conference of “Developing Inclusive and Creative Economies” helped the authors to critically reflect on the reviewed literature and in shaping the conceptual framework. This conference involved representatives from the British Council, Egyptian Ministry of Trade and Industry, Federation of Egyptian Industries, Egyptian Industrial Modernisation Centre, and Goethe Institute for the Middle East and North Africa in addition to industry experts in the field of handicrafts especially jewellery manufacturing.

Secondary data available about these international companies operating in the modular jewellery market in Egypt (Pandora, 2017; Swarovski, 2018) facilitated the identification of their practices concerning co-creating mass-customisation and IC.

As pointed out by Wong (2013) and Hair et al. (2014b) for the multivariate data analysis related to business research of small sample sizes, the authors of this study carried out the partial least squares (PLS) approach to structural equation modelling (SEM) technique using SmartPLS software to examine the relationships between the research variables.

4. International modular jewellery entrepreneurs in a creative emerging economy

The current growing interest of various international organisations to operate in the Egyptian emerging market can be observed in many different sectors (e.g. higher education) (Adel et al., 2018) not only in the jewellery industry. Regarding the Egyptian jewellery market, the ancient Egyptians have been known since 5000 B.C. by their unique and creative gold products and other precious metals (Industrial Modernisation Center, 2007). Currently, the Egyptian modular jewellery market includes reputable international companies producing and selling in Egypt and having skilled human assets with low labour cost, and their exports are increasing to different countries (e.g. UK, Turkey and Saudi Arabia) (The Egyptian-British Chamber of Commerce, 2016; General Organisation for Export and Import Control, 2018). For example, the value of exports of Egyptian jewellery as well as precious stones have been raised by 37 per cent from $248 million in 2017 to $339 million in 2018 (General Organisation for Export and Import Control, 2018). Worldwide, there are contemporary industrial developments that can be observed in the international modular jewellery sector related to the creative manufacturing approach of modular mass-customisation. For example, according to the interviews conducted with SMEs working at Swarovski, Pandora and other international companies in Egypt, one of the interviewees reported that:

The jewellery products are currently designed and produced in the form of modules/charms to enhance customer involvement in the assembly/reassembly process. Through this creative mass-customised approach of the jewelry remix collection, each customer can choose a standard base unit of a necklace/bracelet and can enjoy a personalised jewellery experience by assembling charms and mixing them together in various changing combinations (e.g., different jewellery types, colours and shapes) to match each customer’s taste. Also, companies in this sector added charms of the symbols of astrological signs and alphabet to enhance its customisation ability. Furthermore, each customer can control the size of the jewellery product connecting the modules together forming bracelets or necklaces or belts according to their changing needs.

Figure 2 gives a picture of the main co-creating mass-customisation and IC practices employed at the international modular jewellery market in Egypt, which can be regarded as one of the contributions of this research. These practices were identified based on:
5. Data analysis, findings and discussion

As advocated by Wong (2013) and Hair et al. (2014b, 2017b) for the multivariate data analysis related to business research of small sample sizes, the authors of this paper carried out the partial least squares (PLS) approach to SEM technique using SmartPLS software (V.3.2.8) to examine the relationships between the research variables. This approach is preferred by researchers to analyse small sample sizes ($n < 100$), complex models and non-normal data (Hair et al., 2014b, 2017b). For this research, the model fit was tested and its values (SRMR: 0.045; NFI: 0.805; Chi-square: 498.3777; d_ULS: 0.770; d_G1: 2.248; d_G2: 1.785) are found to be within the accepted range suggested by Hair et al. (2017a).

Following Hair et al. (2014a), depth interviews were carried out before data collection with 10 experts at the international jewellery companies to verify the face or content validity of the measurement scale. Afterwards, the convergent, discriminant and nomological validity were assessed and verified for this research. First, the convergent validity was measured and confirmed after

- Checking the weights of the standardised loadings;
- Measuring the average variance extracted (AVE) for each construct, and
- Computing the reliability estimates (Hair et al., 2014a).

As presented in Figure 3, the standardised loading for each measured item was found to be significant and greater than 0.7. Besides, the value of the AVE for each construct exceeds 0.5 (as shown in Table II). Further, two reliability measures were calculated and both of them (composite reliability [CR] and Cronbach’s alpha) yielded values >0.7. Based on these results, the existence of sufficient convergence was confirmed (Malhotra, 2010; Hair et al., 2014a) and the outer model validation was supported (Hair et al., 2017b). Second, the discriminant validity was assessed through comparing the square root of each construct’s AVE with every correlation between two constructs (Hair et al., 2014a). Table II verifies that the square root of each AVE is greater than the correlation among any two constructs. Hence, the discriminant validity was also verified for the research variables.

Third, the nomological validity was assessed and verified through testing the research hypotheses to make sure that there are logical correlations between the constructs of the proposed model (Hair et al., 2014a). For testing the research hypotheses, the bootstrapping method with 5000 samples was carried out via using SmartPLS software as it is a suitable method for small sample sizes (Preacher and Hayes, 2004). The authors tested the direct effects in the model before and after adding the mediation path to the research model. Table III demonstrates the path coefficients between the main constructs in addition to the
significance of each relationship. In regard to testing the first hypothesis, the relationship between IC and VC was found to be positive and significant \((\beta = 0.347, 95\text{ per cent confidence level, } p\text{-value} < 0.05)\). Thus, the first hypothesis was supported (i.e. IC creates an internal organisational environment that supports innovation, which promotes VC). Concerning examining the second hypothesis, the relationship between IC and CMMC was found to be positive and significant \((\beta = 0.915, 99.9\text{ per cent confidence level, } p\text{-value} < 0.001)\). Consequently, the second hypothesis was supported. In other words, it is important to develop IC for more creative manufacturing approach of modular mass-customisation. IC generates new ideas for producing various creative products modules efficiently that enhance customer involvement in the remix process. Finally, this creative CMMC approach will maximise each customer’s personalised experience and perceived value. This finding was supported by accepting the third hypothesis (i.e. CMMC-VC relationship is found to be positive and significant, \(\beta = 0.510, 95\text{ per cent confidence level, } p\text{-value} < 0.05\)). In addition, the mediation effect was also tested using the bootstrapping method as was suggested by

### Table II.
Summary of the measurement results

<table>
<thead>
<tr>
<th>Constructs</th>
<th>IC</th>
<th>CMMC</th>
<th>VC</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC</td>
<td>0.9</td>
<td>0.924</td>
<td>0.874</td>
</tr>
<tr>
<td>CMMC</td>
<td>0.824</td>
<td>0.84</td>
<td>0.949</td>
</tr>
<tr>
<td>VC</td>
<td>0.81</td>
<td>0.764</td>
<td>0.9</td>
</tr>
<tr>
<td>AVE</td>
<td>0.945</td>
<td>0.982</td>
<td>0.978</td>
</tr>
<tr>
<td>CR</td>
<td>0.922</td>
<td>0.981</td>
<td>0.972</td>
</tr>
</tbody>
</table>

Notes: The square roots of AVE are presented in italic; also, significance is at the level of \(p < 0.001\)
prior researches (Preacher and Hayes, 2004; Zhao et al., 2010; Nitzl et al., 2016). Results presented in Table III reveal that CMMC mediates the IC-VC relationship (i.e. the indirect effect after adding the mediation path was found to be significant, $\beta = 0.467$). Specifically, the mediation type in this research model can be characterised by being complementary partial mediation (i.e. as indirect effect IC-CMMC-VC is significant, direct effect IC-VC is also significant, and the total effect is positive) (Zhao et al., 2010; Nitzl et al., 2016; Hair et al., 2017a). Furthermore, the VAF value was computed to ensure our mediation type. It determines the degree to which the VC’s variance is being explained by the mediation (Nitzl et al., 2016). Our VAF value is 0.578 lies between 0.20 and 0.80 (i.e. a typical partial mediation) (Nitzl et al., 2016). In summary, the international modular jewellery companies when incentivise their employees to exchange and communicate new ideas about creative products/processes/modules will enhance the value delivered to their customers through boosting the capabilities of their CMMC approach.

6. Conclusions, limitations and implications

The purpose of this research paper was to study the impact of IC on CMMC in terms of cost effectiveness, volume effectiveness, responsiveness, product modularity, and collaborative assembly. Furthermore, it investigated the effect of IC and CMMC on the VC in a modular jewellery emerging market that includes international companies. After conducting a comprehensive literature review, the authors suggested a conceptual framework and examined it using mixed methods approach. In addition to qualitative focus groups, questionnaires were filled –across five-point Likert scale format– through 63 depth interviews carried out with SMEs working at 14 international organisations in the Egyptian modular jewellery market. Since, the focus of this research was on the co-creating mass-customisation and IC practices carried out by the international organisations operating in the Egyptian modular jewellery market. Hence, the authors chose only those companies who are producing modular jewellery products in Egypt. The population size of that sector was found to be small, which can be considered as a limitation to this research. However, as advocated by Wong (2013) and Hair et al. (2014b) for business research of small sample sizes, the authors used the partial least squares (PLS) approach to SEM technique to overcome this limitation. Hair et al. (2014b), after scanning the prior business research literature that used PLS-SEM technique, found out that

<table>
<thead>
<tr>
<th>Path</th>
<th>Beta value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct effects without adding the mediation path in the model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IC $\rightarrow$ VC</td>
<td>0.815</td>
<td>0.00</td>
</tr>
<tr>
<td>CMMC $\rightarrow$ VC</td>
<td>0.525</td>
<td>0.01</td>
</tr>
<tr>
<td>IC $\rightarrow$ CMMC</td>
<td>0.915</td>
<td>0.00</td>
</tr>
<tr>
<td>Direct effects after adding the mediation path in the model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IC $\rightarrow$ VC</td>
<td>0.347</td>
<td>0.047</td>
</tr>
<tr>
<td>CMMC $\rightarrow$ VC</td>
<td>0.510</td>
<td>0.01</td>
</tr>
<tr>
<td>IC $\rightarrow$ CMMC</td>
<td>0.915</td>
<td>0.00</td>
</tr>
<tr>
<td>Indirect effect after adding the mediation path in the model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IC $\rightarrow$ CMMC $\rightarrow$ VC</td>
<td>0.467</td>
<td>0.001</td>
</tr>
<tr>
<td>Total effect after adding the mediation path in the model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IC $\rightarrow$ VC</td>
<td>0.813</td>
<td>0.00</td>
</tr>
<tr>
<td>VAF value (ratio of indirect-total effect)</td>
<td>0.578</td>
<td></td>
</tr>
</tbody>
</table>

Table III.
The direct, indirect and total effects in the model
large number of studies especially in the field of management that used this approach for data analysis due to their small sample sizes reported high degree of statistical power. Accordingly, SmartPLS software was used for SEM analysis in this research. Results showed that CMMC positively and significantly affects VC. Moreover, IC positively and significantly affects both the CMMC and VC. To the best of our knowledge, it is the first empirical study that investigated these relationships in a unique jewellery market, which recently generated high customer involvement in the assembly/reassembly processes. Recent industrial developments that can be observed in such international modular jewellery sector can be enhanced by the empirical evidence of this research regarding the importance of developing IC for more creative manufacturing approach of modular mass-customisation and better VC. Conceptually and empirically, our paper consolidates and adds to the literature of production and operations management (mass-customisation), organisational studies and innovation science (organisational climate for innovation) and applied social sciences. In addition, this article can be beneficial to the modular jewellery manufacturers operating globally because our research hypotheses were being tested in the international companies at that sector. In summary, the findings of this research article have various practical managerial implications to communicate to the leaders and operations managers in that evolving sector. First, employees should be provided with enough time and financial/non-financial resources to increase their abilities in generating and exchanging creative ideas for developing innovative products and processes. Second, employees should be encouraged to work in diversely talented groups to facilitate creative and constructive communication among them. Third, always make sure that human resources are assigned with challenging tasks that trigger an environment of creativity and incentivise their problem solving skills. Fourth, human assets should be appreciated and compensated for their creative practical ideas to sustain a continuous process of improvement. Fifth, continue generating new ideas for producing creative products modules to enhance customer involvement in the remix process and maximise each one’s personalised experience. Sixth, the continuous improvement of IC and MC practices while being cost effective will support the innovation pillar of the country’s strategy of sustainable development. Worldwide, academics and researchers are recommended to direct their future empirical studies towards investigating the creative IC and CMMC practices implemented at other evolving sectors and contemporary innovative industries.

References


## Appendix

<table>
<thead>
<tr>
<th>Construct/item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor (1). IC (adopted from Oke et al., 2013)</strong></td>
<td></td>
</tr>
<tr>
<td>IC$_1$</td>
<td>Our organisation provides time and resources for employees to generate, share, and experiment with innovative ideas/solutions for new products/process</td>
</tr>
<tr>
<td>IC$_2$</td>
<td>Our employees are working in diversely skilled work groups where there is free and open communication among the group members</td>
</tr>
<tr>
<td>IC$_3$</td>
<td>Our employees frequently encounter non-routine and challenging work that stimulates creativity</td>
</tr>
<tr>
<td>IC$_4$</td>
<td>Our employees are recognised and rewarded for their creativity and innovative ideas</td>
</tr>
<tr>
<td><strong>Factor (2). Cost effectiveness (CE) (adapted from Tu et al., 2001, 2004; Huang et al., 2008)</strong></td>
<td></td>
</tr>
<tr>
<td>CMMC$_{CE1}$/CE$_1$</td>
<td>Our capability of offering product variety without increasing cost is high</td>
</tr>
<tr>
<td>CMMC$_{CE2}$/CE$_2$</td>
<td>Our capability of setting up for a different product at low cost is high</td>
</tr>
<tr>
<td>CMMC$_{CE3}$/CE$_3$</td>
<td>Our capability of customising products based on customer needs at low cost is high</td>
</tr>
<tr>
<td><strong>Factor (3). Volume Effectiveness (VE) (adopted from Tu et al., 2001, 2004)</strong></td>
<td></td>
</tr>
<tr>
<td>CMMC$_{VE1}$/VE$_1$</td>
<td>Our capability of customising products on a large scale is high</td>
</tr>
<tr>
<td>CMMC$_{VE2}$/VE$_2$</td>
<td>Our capability of customising products while maintaining a large volume is high</td>
</tr>
<tr>
<td>CMMC$_{VE3}$/VE$_3$</td>
<td>Our capability of offering product variety without sacrificing overall production volume is high</td>
</tr>
<tr>
<td><strong>Factor (4). Mass-customisation responsiveness (MCR) (adapted from Tu et al., 2001)</strong></td>
<td></td>
</tr>
<tr>
<td>CMMC$_{MCR1}$/MCR$_1$</td>
<td>Our capability of responding to customization requirements quickly is high</td>
</tr>
<tr>
<td>CMMC$_{MCR2}$/MCR$_2$</td>
<td>Our capability of translating customer requirements into technical designs quickly is high</td>
</tr>
<tr>
<td>CMMC$_{MCR3}$/MCR$_3$</td>
<td>Our capability of changeover to a different product quickly is high</td>
</tr>
<tr>
<td><strong>Factor (5). Product modularity (PM) (adopted from Tu et al., 2004)</strong></td>
<td></td>
</tr>
<tr>
<td>CMMC$_{PM1}$/PM$_1$</td>
<td>Our products use modularised design</td>
</tr>
<tr>
<td>CMMC$_{PM2}$/PM$_2$</td>
<td>Our products share common modules</td>
</tr>
<tr>
<td>CMMC$_{PM3}$/PM$_3$</td>
<td>Our product features are designed around a standard base unit</td>
</tr>
<tr>
<td>CMMC$_{PM4}$/PM$_4$</td>
<td>Product modules can be reassembled into different forms</td>
</tr>
<tr>
<td>CMMC$_{PM5}$/PM$_5$</td>
<td>Product feature modules can be added to a standard base unit</td>
</tr>
<tr>
<td><strong>Factor (6). Collaborative assembly (CA) (adapted from Duray et al., 2000; Tu et al., 2004)</strong></td>
<td></td>
</tr>
<tr>
<td>CMMC$_{CA1}$/CA$_1$</td>
<td>Customers can select features from listings</td>
</tr>
<tr>
<td>CMMC$_{CA2}$/CA$_2$</td>
<td>Customers can assemble a product from components in stock</td>
</tr>
<tr>
<td>CMMC$_{CA3}$/CA$_3$</td>
<td>Customers are involved in rearranging product modules to suit their needs</td>
</tr>
<tr>
<td><strong>Factor (7). VC (adopted from Tu et al., 2001)</strong></td>
<td></td>
</tr>
<tr>
<td>VC$_1$</td>
<td>Our customers are satisfied with the quality of our products</td>
</tr>
<tr>
<td>VC$_2$</td>
<td>Our customers are satisfied with the features that our products provide</td>
</tr>
<tr>
<td>VC$_3$</td>
<td>Our customers are loyal to our products</td>
</tr>
<tr>
<td>VC$_4$</td>
<td>Our customers refer new customers to purchase our products</td>
</tr>
<tr>
<td>VC$_5$</td>
<td>Our customers feel that we offer products with high value</td>
</tr>
</tbody>
</table>

### Table A1.

The questionnaire’s measurement items

**Corresponding author**

Heba Mohamed Adel can be contacted at: hadel@msa.eun.eg

For instructions on how to order reprints of this article, please visit our website: [www.emeraldgrouppublishing.com/licensing/reprints.htm](http://www.emeraldgrouppublishing.com/licensing/reprints.htm)

Or contact us for further details: permissions@emeraldinsight.com
Deterring violent non-state actors: dilemmas and implications

Raghdha Elbahy
Cairo University, Cairo, Egypt

Abstract

Purpose – This paper aims to address the limitations of classical deterrence theory in dealing with violent non-state actors (VNSAs).

Design/methodology/approach – The study uses qualitative methods.

Findings – It suggests that two measures must be applied; the first one is to rephrase the assumptions of the theory towards a broader definition. The second one is to theorize certain approaches for deterring VNSAs which shall remain a key component in, but not the cornerstone of, national security strategies.

Originality/value – In the aftermath of 9/11 attacks and US war on terrorism, the need arose to “revisit” the “Deterrence Theory” to address several changes such as rogue states, cyber threats and VNSAs, especially after the end of the Cold War, when the theory was originally developed. The recent research on VNSAs relates to the fourth wave of deterrence, which highlights its proper role in a new security environment.

Keywords Deterrence theory, Terrorist groups, Deterrence by denial, Deterrence by punishment, Triadic deterrence, National security strategies, Deterrence by delegitimization, Transitional organized crime, Rogue states, Weapons of mass destruction, Global war on terror

Paper type Research paper

1. Introduction

Deterrence, as a leading theoretical framework during the Cold War (Levine and Levine, 2006), has been subject to criticism (Arie, 2016). Deterrence, and other terms such as assured destruction and massive retaliation, have become politically incorrect and lost respectability. The idea that the survival of Europe and the USA had depended on destroying dozens in retaliation for a nuclear attack was considered as immoral (Ece, 2004).

Deterrence has been largely neglected, both in confronting the so-called state-terrorism and also in response to threats from non-state terrorists (Ece, 2004). New opponents render deterrence a more complicated issue. These opponents include near-peer competitors, like China; regional states like Iran or North Korea; and non-state actors. It is difficult to assume that each set of actors will have the same reaction to deterrent threats.

Cyberspace poses a major challenge for deterrence (Iasiello, 2013; Libicki, 2009; Lotrionte, 2013; Lynn, 2011; Orji, 2014; Wilner, 2011). Military force is of limited utility in deterring cyber threats. A military response to espionage or crime would be a strange departure from the international law regarding the use of force (Lewis, 2010).
Many scholars believe that in the absence of a conflict among super powers, Deterrence Theory has lost much of its value. Deterrence Theory is less used in dealing with rogue states or terrorist groups in a manner that requires readjusting deterrence as a theory and a policy (Paul, 2009).

Terrorist groups and other violent non-state actors (VNSAs) have gained a great attention, especially after the 9/11 attacks, US invasion of Iraq and the war on terrorism. In recent years, terrorism perpetrated by VNSAs has become in the forefront of international politics. Terrorist groups – in some cases – have engaged in provocative activities, which triggered off international conflict and interstate wars (Utka, 2006).

The paper investigates the drawbacks of Deterrence Theory in terms of explaining new forms of behavior. The main question it tries to answer is:

**Q1.** What are the limitations of classical Deterrence Theory in dealing with VNSAs?

To answer this question, the study explores deterrence in the bipolar and unipolar international systems. Then, it briefly describes the emergence of deterrence as a prominent theory against VNSAs. Next, it outlines a number of predicaments that undermine this pattern of deterrence. Later, it concludes that the key conditions of the theory do not apply to VNSAs. Finally, the study rephrases the assumptions of the theory towards a broader definition and theorizes certain approaches for deterring VNSAs.

### 2. Deterrence in the bipolar and unipolar international systems

There is no consent among literatures on a specific definition of deterrence (Huth and Russett, 1993; D’Arcy and Herath, 2011). Probably, the most prominent and frequent definition is of Alexander L. George and Richard Smoke, who both define it as “The persuasion of one’s opponent that the costs and/or risks of given course of action he might take outweigh its benefits” (George and Smoke, 1974). Alternatively, “it is a theory of defense that uses the threat of force to deter or prevent another party from doing something”. (Colby, 2007)

The Deterrence Theory is based on several assumptions: first, states are rational actors that depend on the cost-benefit analysis in their decisions. The first assumption reflects that the theory focuses on nation-states (Paul, 2009), and excludes other non-state actors. Second, as for deterrence to succeed, the deterrent must target the adversary’s high-value items. This requires the good understanding of the adversary, along with its culture, strategy, capabilities and conditions. Third, the adversary must believe that the deterrent state will use its military power to carry out a retaliation threat (Gray, 2010). Fourth, the effectiveness of deterrence increases if the adversary perceives the red lines, which will lead to the implementation of deterrent threat. This perception requires good communication among adversaries. There is no use to surprise the adversary with an unforeseen retaliation, in a time just an apparent signal may deter a certain action in the first place (Writs, 2012).

Deterrence has been a standard practice in international politics, and a key component in the super powers strategies. Its importance increased after the possession of nuclear weapons when the possibilities of a massive war mounted during the Cold War. The absence of a major war between the USA and the Soviet Union reflected the success of deterrence (Morgan, 2012). War became unthinkable and irrational as the cost of war was exorbitant (Zagare, 2004).

By the end of the Cold War, it seemed that deterrence had become something from the past. Since then, the rise of the rogue states, VNSAs and the cyber threats (Brenner and Clarke, 2010; Deadening, 2015; Elliott, 2011; Geers, 2010; Glaser, 2011; Stevens, 2015) has highlighted the continuous need for deterrence, but how?
Some scholars argue that our understanding of deterrence during the period of Cold War is still valid as the bases of deterrence are still the same. The core of deterrence revolves around managing threats and controlling others’ behaviors without fighting them. However, compared to the Cold War period, the objectives of deterrence have differed, as well as the targeted adversary, the context, and the ability to deter.

In the context of the Cold War, deterrence has worked mainly between the USA and the Soviet Union, the major poles in the international system. The primary goal of deterrence was preventing a nuclear war between the two parties (Cimbala, 2012).

As the Cold War ended, the actors addressed by deterrence included: rogue states, VNSAs, and others. This influenced the deterrence objectives, strategies and methods, which vary from one actor to another according to the targeted adversary.

Therefore, the statement that deterrence needs reconsideration is not surprising. The starting point is to recognize that the Cold War concepts have reflected certain circumstances and contexts that have dramatically changed. Deterrence, that has been highly effective against the Soviet Union in the past, may not be effective in addressing future adversaries (Payne, 2003).

Deterrence Theory – in this context – experiences a “renaissance” after nearly 20 years of relative neglect since the collapse of the Soviet Union. The theory expanded its scope of interest to include terrorism, extremism, transitional organized crime and cyber threats. In the early 1990s, doubts had been shed on deterrence, and new methods had been explored to expand and apply the theory differently, especially after 9/11 and the US war in Afghanistan in 2001 (Wilner, 2014). Amid the contemporary debate, many experts have focused on how to deter VNSAs, while attaching less attention to its appropriateness in the first place.

3. The emergence of deterrence against violent non-state actors

Contemporary research and studies indicate that deterring VNSAs can be located in the frame of the fourth wave of deterrence research (Lupovici, 2010; Knopf, 2010), which sheds light on the appropriate role of deterrence now, and investigates untraditional prospects to deter rogue states and terrorism (Knopf, 2012). In other words, theorists and experts are trying to “update” or “revisit” deterrence based on its classical foundations to address the threats posed by VNSAs (Telleen, 2008).

Generally, non-state actors can be divided into two major categories: peaceful and violent. The first category is “the most numerous”. They abide by international law, and they include non-governmental organizations, international religious organizations, MNCs and transnational diaspora groups. There is no need to deter such actors, contrary to violent ones such as international criminal organizations, terrorist groups and rebel groups, the main target of deterrence (Blackburn et al., 1996).

Many scholars have argued that the US’ strategy based on deterrence and containment is no longer appropriate for deterring VNSAs. In addition, terrorists who sacrifice their lives to carry out a suicide attack would not be deterred easily, by any threat of retaliation. Accordingly, the US military doctrine has changed from deterrence to preemption.

The 9/11 attacks have revived the fears of a “nuclear holocaust”, in case terrorists or extremist movements get hold of mass destruction weapons. In Afghanistan, structural designs of mass destruction weapons have been found in underground hideouts of Al-Qaeda (Malik, 2003). In addition, in the mid-1990s, Tokyo witnessed a “Sarin Gas attack” by “Aum Shinrikyo” on “Tokyo subway line” (Cilluffo and Kupperman, 1997) to widely disseminate destruction and mess, believing that the consequent imbalance and disorder may result in the collapse of the political and social regime. This is a shining example to follow regarding
the possibility of VNSAs to possess weapons of mass destruction in a manner that affects
countries and societies alike (Bowen, 2004).

Up till September 2001, most experts have thought that nuclear terrorism (Levi, 2004;
Medalia, 2005; Todd, 2009) is not a significant danger. While others believed that the
potentials of nuclear terrorism are extremely small compared to the most common forms of
terrorism (Jenkins, 1975; Kamp, 1994; Sprinzak, 1998).

However, after 9/11, terrorism and organized crime have become alarming possibilities,
especially for the USA (USA Government, 2006). They have become the most dangerous
threats to the national security. Therefore, deterring them resulted in larger and partial
shifts in security studies and international relations. Since then, many writings on
deterrence of VNSAs have accumulated. Thus, new theories, concepts and forms of
deterrence have been suggested (Wilner, 2014).

Deterrence has emerged as a significant strategy to counter both conventional and
nuclear terrorism, due to their potentially devastating consequences on the one hand, and
the context within which terrorist groups operate on the other hand.

The USA has already embarked on a variety of strategies and policies that aimed to
undermine and prevent terrorism; the most important were the counter-proliferation
policies, to stop the spread of nuclear technology and materials to VNSAs as well as
governments.

Other strategies have focused on eliminating terrorist threats, particularly through
counter-terrorism operations amid the “global war on terror”. In addition, the National
Strategy for Combating Terrorism (Raphael, 2007), issued by the Bush Administration in
2007, considered deterrence as an important tool to prevent the use of nuclear weapons by
terrorists. It suggested new measurements for deterrence that must include deterrence of
terrorists as well as their supporters.

However, there are considerable limitations on the strategy of counter-terrorism; it relies
on the offensive military force, so it cannot be employed as a long-term strategy, due to its
high costs. It is too difficult to defeat terrorism by “targeting” the perpetrators given the
transnational nature of terrorism. Without addressing the root causes of terrorism, counter-
terrorism strategy solely shall remain inadequate.

It is practically impossible to prevent all terrorist attacks, even when reliable intelligence
information indicates a possible attack in the near future. Just as Robert Art clarifies,
“defense is first if defense has failed or has not been possible, deterrence shall have the
second priority”. Given the above-mentioned characteristics of the new environment, it is not
surprising to suggest deterrence (Telleen, 2008; Byman, 2003; Gilles, 2004/2005; Art, 1980;
Smith, 2007).

4. Why is it difficult to deter violent non-state actors?
It is difficult to deter VNSAs for multiple reasons that can be summarized as follows:

First, there is no single approach to be applied to VNSAs, due to their variances. They
vary in their motivations and characteristics. In addition, we cannot equate the international
criminal organizations with terrorist or rebel groups. However, the study of terrorist groups
has had the greatest attention.

It is difficult to evaluate and determine the objectives and ideologies of VNSAs as they
are incompatible. They are composed of distinct factions that have multiple political
objectives. Groups like Al-Shabaab and Boko Haram have witnessed internal disputes
among its factions with respect to the goals to be achieved, specifically, whether to focus on
the Western States. The state of uncertainty about the ideological composition of VNSAs
hampers the ability to adapt a collective response towards what they face (Lonardo and Tyso, 2016).

Second, it is difficult to deter actors who are willing to sacrifice their lives, for religious and ideological motivations, that make suicide an acceptable and even necessary action. This renders terrorism “a way of life”; in other words, exposure of the members of these groups to gross losses shall not result in individuals’ refraining from joining the said groups. This can be envisaged considering the privileges that these groups provide such as power and wealth.

Third, deterrence may not be the ideal choice to confront VNSAs, because deterrence and eradication do not fit together. The US failure to eradicate terrorist groups led to deterrence. Moreover, destroying or eradicating any terrorist groups would not result in the elimination of terrorism, given the difference between the two. Without addressing the underlying the reasons behind that phenomenon, and fighting thoughts and behaviors that nourish terrorism, deterring any terrorist group – in fact – will prove ineffective.

Fourth, there are numerous types of terrorists. During the Cold War, deterrence was confined to the two super powers. However, terrorism includes several groups with different tools, and without a unified leadership in some cases. Terrorism is not one block, and it is not feasible for only one theory to apply to the different terrorist groups (Davis and Jenkins, 2002).

Fifth, the effectiveness of deterrence varies according to the nature of the targeted actor. Understanding how deterrence worked throughout the Cold War era is no longer useful. Unlike States, VNSAs do not exercise sovereignty over a given territory; however, they seek to undermine the legitimacy and credibility of the State by threatening its ability to exercise sovereignty over its own territory. Even if possible to deter a country by threatening its ability to control its territory, yet this represents a major dilemma in the relationship between the State and VNSAs. It is often possible for VNSAs to deter States but not vice-versa.

Sixth, VNSAs lack major strength positions that can be targeted easily. For a state, targeting the capital, political leadership or the military forces will affect its national security, public well-being, and decision-making process. As the state’s territory can be easily targeted and “held at risk”, it becomes possible to deter and control a nation. However, it is difficult to locate VNSAs or determine their strategic valuable assets due to their transnational nature (Kusman and Lawson, 2001).

Such differences among States and VNSAs would make it more difficult to deter those actors. The success of any deterring strategy depends on the objectives and calculations of those actors, who cannot be definitely identified, upon designing and developing a deterrence strategy (Lowther, 2012).

Seventh, deterrence is based on a hostile relationship among adversaries. Currently, US acts as if Al-Qaeda shall use nuclear weapons to attack. However, the real intentions of Al-Qaeda are not known. It is practically impossible to deter an adversary who does not contemplate an attack. More importantly, deterrence in such a case may not only be imprudent but can be more dangerous. The threat to deter a non-existent attack may lead to provoking the adversary. Al-Qaeda may consider US threats aggressive and provocative.

In fact, an attempt to deter an enemy while oblivious of his intentions can be a double-edged weapon. As deterrence may sometimes be successful in discouraging the use of force, but it could also be the main cause of encouraging such a use (Telleen, 2008).

5. Do the conditions of deterrence apply to violent non-state actors?

Literatures fail to agree on the applicability of deterrence to VNSAs. While some scholars argue that deterrence can be applied to the VNSAs (Ece, 2004), others doubt that. The first
major trend includes three sub-trends; each could be considered as an approach for deterrence.

The first approach – in the first major trend – involves indirect deterrence, which targets third parties that facilitate terrorist acts, rather than terrorists themselves. The second approach reflects a renewed appreciation for deterrence by denial, the old concept by Glenn Snyder. The third approach entails a general trend in the fourth wave toward expanding the scope of the concept of deterrence and exploring new sources that are non-military in nature, such as “Deterrence by Delegitimization” (Knopf, 2012; Lonardo and Tyso, 2016). For example, Obama’s Administration addressed the expansion of the scope of deterrence to include not only advanced conventional weapons but also missile defense. However, deterrence has focused traditionally on nuclear retaliation (Pifer et al., 2010).

The second major trend argues that Deterrence Theory lacks clarity on the situations in which it can initially be applied. The theory offers little with regard to its applicability, leaving policymakers uncertain about when and where strategies of deterrence are appropriate.

Alexander George and Richard Smoke, for instance, stated, “Deterrence theory per se provides no criteria to indicate when a deterrence theory should be applied in foreign policy”. In addition, Robert Jervis suggested, “we still lack evidence and well-grounded arguments about the bounds of the theory and the conditions under which it applies”.

The endeavor to apply deterrence, regardless of its applicability, is potentially counter-productive, and costly. Policymakers may believe that if strategies are properly implemented, the outcome projected by deterrence theory will hold true. Yet, this belief in the power of deterring party to achieve successful deterrence on its own ignores the interactive nature of conflict as well as intrinsic characteristics of the adversary.

Thus, it is important to determine whether the deterrence strategies that aim to tackle VNSAs are successful and then rises the need for approximation of initial appropriateness. The question of whether it can deter VNSAs from attack shall be preceded by the question whether deterrence is an appropriate response. There is no doubt that the difficulty of defending against terrorism makes deterrence strategies understandably appealing. However, this does not mean that deterrence should simply be attempted without further analysis (Telleen, 2008).

The US counter-terrorism efforts are not founded on deterrence as a strategy against terrorism. Moreover, in recent years, the US began to use deterrence in its fight against international terrorism. Scholars started to study how some terrorist activities can be deterred, but they have not come to broad approaches on deterrence.

To sum up, to judge the applicability of the theory of deterrence to VNSAs, three important issues shall be addressed:

First, Rationality: many scholars have argued that terrorists, criminals and rebels are irrational. They do not follow the cost-benefit analysis while making their decisions; they are ready to bear any cost, including death, to advocate their goals. Thus, it was thought that the threat of retaliation would be incredible by nature, and inadequate (Kroenig, 2010).

But, the applicability of this condition on VNSAs is controversial; in addition, literatures do not unanimously agree on this point. Some literatures have concluded that some terrorist groups, including Al-Qaeda, follow the cost-benefit analysis and value-maximizing behavior. Thus, they can be deterred (Telleen, 2008).

Second, the nature of VNSAs: Classical deterrence theory does not apply easily to VNSAs, which vary in structures, values and communication methods. Therefore, understanding the intrinsic characteristics of each actor is essential. Some of which prevent the applicability of deterrence, such as the identification of their locations.
Third, Motivations of VNSAs: One of the most important aspects related to deterrence is the strength of the adversary’s motivations in using force or launching an attack that profoundly influences the chances of successful deterrence. The desire of these actors to challenge the status quo and their willingness to take risks, influence the chances of successful deterrence. However, the more intolerant the actor is, the less effective deterrence may be (Morgan, 2011; Telleen, 2008).

In short, deterrence may not be applicable, because it depends on VNSAs motives, which are likely to be extreme. Moreover, these groups are fanatical in their goals; are far away from ethical standards and remain impervious to negotiation and temptation.

6. Deterring violent non-state actors: implications of the theory
How can deterrence be revisited to overcome the abovementioned limitations? The study suggests two measures; the first one is to rephrase the assumptions of the theory towards a broader definition. The second one is to theorize certain approaches for deterring VNSAs.

The paper argues that for the theory to be effective against VNSAs its assumptions should be rephrased as follows:

- Both states and non-state actors can be deterred, although it is more difficult to deter VNSAs. Thus, the approaches and methods used to deter the two differ.
- Most states abide by cost-benefit analysis in their decision-making process. Terrorist leaders – on the contrary – may not have anything to lose, but at least some of their financiers and supporters have something to lose. That means using indirect ways for deterrence and breaking down the terrorist systems and networks (external suppliers, supportive populations, lieutenants, etc.) into parts.
- The military tools may adequately deter states, but not VNSAs, as the latter requires other supporting tools such as the diplomatic and economic tools.
- There is no- one size- fits- all approach for deterring VNSAs. Each case requires “situation- specific responses”.
- There are many contributing factors that affect the ability to deter VNSAs such as the context, the regional environment, the number of superpowers in the international system, the goals the terrorist groups seek to realize, counter-terrorism strategies, central leadership and territories VNSAs operate in and across.
- Deterring states may be a core strategy to achieve the deterrent goals, but deterring VNSAs is only a key component that works along with other decisive strategies.

The abovementioned assumptions require a broader concept of deterrence that should describe actions in need of military intervention, as well as the offensive and defensive capabilities needed for credible retaliation threat. The concept should analyze different ways to deter VNSAs, including direct targeting or indirect influence through a proxy actor. It means generally influencing counter-terrorism operations. Symmetric approaches, such as engaging in long-term conflicts, are ineffective.

This broader concept requires specific means to deter VNSAs, such as:
- First, heavy investment in intelligence is a must; though sharing and gathering intelligence data cannot be considered as a deterrent per se.
- Second, an effective financial campaign based on intelligence information of how VNSAs finance themselves. The financial campaign may include imposing economic sanctions, countering money laundering and undermining any use of charitable organizations.
Third, deterrence by denial: It includes the ability to prevent or minimize damage in any potential attack, thus alleviating its consequences. This requires the capacity to respond to any use of chemical and biological weapons and radiological incidents. Partly, this requires advance preparation, acquisition of vaccines, medical and regulatory measures. Further, this requires intensifying efforts to detect and intercept suspicious shipments. It aims to convince the enemy that the attack does not really fit in time, resources and efforts required (Bowen, 2002).

Fourth, deterrence by punishment: VNSAs, particularly terrorist groups, may be deterred by identifying “high-value targets”, to make the most radical leaders consider the potential costs and benefits. It could also work through targeting regimes that assist terrorism. For example, the US war in Afghanistan in 2001 sent a message that the USA and its allies have the intention, determination, and ability to punish regimes that support, harbor or tolerate Al-Qaeda.

Fifth, an effective international legal framework can strengthen the deterrence of non-state actors. Nevertheless, the currently exerted efforts are inefficient, derailing from the deterrence effectiveness. The ultimate objective of deterrence is compelling VNSAs to recognize and accept restrictions on their behaviors. Therefore, the nature of deterrence changes per the changing nature of the international community (Morgan, 2011).

Sixth, triadic deterrence, it is:

Using punishment and/or threats against a state to deter it from supporting a non-state actor, if not to compel it to stop assisting it. When does deterrence of host states succeed?

The structure of complex asymmetric conflict requires attention to the relationship between the target regime and its community. The more powerful this regime is, the more effective deterrence will be. Powerful actions against VNSAs require local institutional and political legitimacy, and territorial control, which require powerful regimes to do so.

Many conflicts in the international system today involve a state, a VNSA, and another state hosting or assisting the latter (Atzili and Pearlman, 2012). Examples include the US war on Afghanistan to eradicate Al-Qaeda (Bowen, 2004), as well as the Israeli attacks on Lebanon to fight Hezbollah (Vinson, 2015; Ganem-Rosen, 2011; Fleet, 2015), and finally India’s warnings against Pakistan (Izuyama, and Ogawa, 2003; Ghoshal, 2016; Chari, 2003) in its response to the actions of Kashmiri separatists (Atzili and Pearlman, 2012).

7. Conclusion
Deterring VNSAs requires a broad understanding of deterrence. The main focus of the theory remains unchanged, which is preventing undesirable actions. However, deterring VNSAs should include methods that transcend the traditional deterrence theory. The possibility of deterring violent ideologies, recruited militants and their supporters cannot be addressed easily by the classical theory, which focused on the sovereign nation-states.

Many VNSAs do not have the traditional assets based on the territory, which can be targeted through the threat of punishment associated with traditional state-based theory. The clear majority of VNSAs lacks a certain territory in which classical threat of retaliation could be issued. This dilemma is well known as “the return address problem”.

Instead of focusing on the values associated with the classical deterrence based on the State, sovereignty, spheres of influence and economic power, deterring VNSAs requires targeting the value system they follow, such as propaganda, operational success, strategic and tactical victory, leadership, public sympathy, social acceptance, religious motives, political legitimacy, freedom of movement, safe shelter, wealth and other physical assets.
In other words, the concept of deterrence must be re-applied in different ways that go beyond the threat of punishment and behavioral manipulation. As a result of the expansion and extension of deterrence to VNSAs, a number of coercive processes have been developed. However, these processes differ from those contained in the classical theory of deterrence that focuses on the states.

In conclusion, the classical deterrence theory may be re-applied to provide practical and empirical insights to confront contemporary threats and potential conflicts. Deterrence is a key component of national security and great power politics, but it is no longer the cornerstone of states interactions as it was during the Cold War period. Applying multi-faceted means such as the direct and indirect use of force besides non-military policies, and models to confront potential enemies and future threats may increase the effectiveness of deterrence.

References


Chari, P. (2003), Nuclear Crisis, Escalation Control, and Deterrence in South Asia, Stimson Centre, Washington, DC.


Davis, P. and Jenkins, B. (2002), Deterrence and Influence in Counter Terrorism: A Component in the War on Al Qaeda, Santa Monica, Rand Corporation, Santa Monica, CA.


Telleen, P. (2008), “Deterrence and nuclear terrorism”, Submitted To the Faculty of The School of International Service of American University in Partial Fulfillment of The Requirements For The Degree of Master of Arts In International Affairs, US.


Further reading

Corresponding author
Raghda Elbahy can be contacted at: Elbahy.raghda@feps.edu.eg

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com
School educational policy in Egypt: societal assessment perspective
M.A. Zaki Ewiss, Fatma Abdelgawad and Azza Elgendy
Cairo University, Cairo, Egypt

Abstract
Purpose – Educational policy is crucial to society. Its process is related to political, economic and cultural variables. Nevertheless, there is a paucity of research in the field of applied social sciences, about how educational policies help to achieve societal objectives and welfare. This study aims to assess the concept and features of school education in Egypt during 1990-2017.

Design/methodology/approach – Secondary data were collected using governmental reports and educational institutional reports and assessed through specialized focus groups.

Findings – Results showed that, despite the multiplicity of strategies to reform the educational system, achievements and outcomes of educational processes are modest, and the developmental status of Egypt is lower than that of other countries. Studying educational outcomes indicated that school-education suffered from the predominance of quantity over quality and a serious inability to meet requirements of new knowledge era.

Originality/value – A novel future-oriented proposal for context, ethos and reforming aspects of educational policy will be suggested.

Keywords Educational development, Educational policy, School-education, Educational strategy

Paper type Research paper

Introduction
A wealth of information about educational strategies in both developed and developing countries is available (Apple, 2003; Bell and Stevenson, 2006; Haddad and Demsky, 1995). According to Haddad and Demsky (1995), the formulation of educational policy involves seven steps as follows: analysis of the current situation, policy options generation, evaluation, decision-making, implementation, assessment and subsequent policy cycles. They stated that, policy is “an explicit or implicit single decision or group of decisions which may set out directives for guiding future decisions, initiate or retard action, or guide implementation of previous decisions.” The concept of educational policy is to support the educational system and determine its stages, e.g. systems, objectives and means of achieving these goals, to become a reference framework to guide when addressing the issues of education and its problems. It is the organized effort made to achieve certain goals, which
reflect the basic choices of the society plans. This policy should be strengthened and committed by the government (Apple, 2003). One of the key purposes of education is social transformation, by reducing social inequalities. Malik, 2012, stated that education involves not only individuals but also the society, selecting, classifying, distributing, transmitting and evaluating the educational knowledge, reflecting both the distribution of power and the principle of social contract. In a country with alarming inequities of income and opportunities, reducing the social exclusion needs to be one of the principle objectives of the policy (Malik, 2012). Educational system is supposed to ensure the right of an individual to grow in income, based on his/her excellence in education and training. To support the policy success, it is important to focus on the implementation more than the design, using a homogenous framework (OECD, 2015). Each country has its unique political, economic and institutional structures and so the educational policy will differ according to the social, cultural and economic contexts (OECD, 2010). It is important to specify educational policy according to the environment of each country (OECD, 2015). Once the educational policy is determined, the misjudgment of the easiness of implementation is considered as the common error in policy planning (Haddad and Demsky, 1995).

The present work forms a part of a big project aiming to introduce a proposal for education enhancement in Egypt, using modeling approach. First, for “assessment of the Egyptian’s educational policy,” there are three subsections assessing the educational policy during different periods. The outlines of the educational strategy of 2014-2030 and statistics of 2017 will be presented and analyzed. In the discussion section, vulnerability factors that negatively impact the development of education in Egypt are assessed. Finally, a novel future-oriented proposal for the context, ethos and reforming aspects of educational policy is presented.

Assessment of the Egyptian’s educational policy

During the years 1990-2000

In the nineties of the past century, Egypt presented a detailed definition of educational policy which is stated in the declaration of Mubarak and Education: A Look to the Future (Mubarak, 1992). It was defined as: “A continuous policy that is careful, harmonious and sound.” It follows the scientific method, takes the legal channels, follows the democratic methods at every stage and expresses honestly the real requirements of Egyptian people. It faces with courage and objectivity the global challenges faced by the Egyptian people (NCERD, 2001). It has been mentioned that this educational policy was formulated with the participation of the community and three main groups, which are as follows:

(1) **Formal groups**: Comprises persons or systems of a legitimate nature by their position in the official organization of the society, such as the President, the Parliament, the People’s Assembly, as well as the Shura Council, the Ministry of Education and the specialized councils.

(2) **Informal groups**: Comprises various interest groups, political parties and public opinion.

(3) **External power**: It is one of the most important new-world economies and it has various implications on the educational policy’s objectives.

Although, the educational policy was defined in the above-mentioned declaration, it did not fulfill the expected outcomes. During this period, the Ministry of Education developed a comprehensive plan for the advancement of education in Egypt, integrated in response to the growing needs and cost. Education of children in different stages was below the required level for them as individuals. Egypt as a pioneer country in the region stated that there is an
Educational crisis. This crisis was reflected in schools, among teachers, students and in the curricula. Studying educational outcomes indicated that school education was suffering from the predominance of quantity over quality and from serious inabilities to meet the requirements of a new knowledge era (NCERD, 2001). A new vision for the development of education was declared by the Minister of Education at that time (Dr Hussein Kamel Bahaeddin). It focused on the achievements and the measures taken to implement its objectives. The most important educational objectives were determined as follows: preparing a good citizen, developing the productive capacity of the Egyptian people, deepening loyalty and belonging to the homeland and formation of a generation able to excel in scientific research. Education is a national security issue; it has military, economic and political pivots.

**Investment in education**
In 1992, Mubarak Declaration (Mubarak, 1992) emphasized the following:

- Investment in education is a public issue and that education must be adequately funded.
- First source provided by the government in the public budget, and the second is the initiative of the private education institutions.
- Investment in education is not a humanitarian or charitable issue.
- The Egyptian family is not burdened with additional burdens.
- Defining a policy of informed education in a democratic framework.
- It follows the scientific method, takes legal channels or adopts democratic methods at every stage, expresses honestly the real requirements of the Egyptian people and bravely confronts the global challenges facing the society.
- In a democracy framework, everyone must be given the opportunity to express their views and participate in decision-making for education (NCERD, 2001).

**Educational crises**
The declaration pointed out that education in Egypt is going through major crisis because of the economic conditions experienced. The aspects of this crisis are related to the following:

- **School buildings**: More than half of the existing schools do not comply with any standards for maintenance of human dignity.
- **Teachers**: Egyptian teachers suffer from low salaries, inadequate medical insurance and lack of training and continuous education to upgrade their professional capabilities.
- **Curricula**: Generally speaking, curricula design, contents and tools are outdated. No clear philosophy of improvement by additions or omissions of parts of these contents where applied during the given period of study.

Unfortunately, the educational policy of the 1990s did not explain why the Ministry of Education failed in the 1970s and 1980s to overcome these problems. The 1980s witnessed three ministers of education; each offered an educational policy to develop education, but in the 1990s, the features of educational plan focused on the following:

- rationalization of cost-free education;
- full cost-free education in basic education as the mainstay of national security;
cost-free for the committed student who makes the efforts required, achieves continuous success, and thus the government does not sponsor students’ failure; students who joined private education in basic education are not acceptable to receive cost-free education at the secondary or university level; successful students obtain cost-free reward at all educational levels; the contribution of capable and business people to finance education; and graduate studies should be with expenses.

Introducing technology and modern methods of education
The interest in technology and modern methods in the educational system raises the quality and facilitate the arrival of modern technology to all students in various places as follows:

- **Achieving the homogeneity between different education types**: It should be allowed to move easily from one type of education to another; to facilitate graduate students of technical education to join higher institutes and universities; and to facilitate every student who dropped out from education to have another chance.

- **Return of school feeding**: 52 per cent of students in basic education suffer from anemia and 20 per cent of these have vitamin deficiencies. According to the well known correlation between malnutrition and difficulties in learning capabilities the above mentioned figures are negatively reflected on educational outcomes of Egyptian generations.

- **Care of talented students**: The talent students should be taken care of. It is worth noting that the Egyptian government dedicated a day to celebrate talented students and to honor their successful scientific and educational innovations.

- **Encouraging the role of the private sector in the field of education**: At all levels of education, establishment of private schools and institutions must be awarded license.

In the years from 1993 to 1999, following the Mubarak Declaration (Mubarak, 1992), the Ministry of Education continued to issue annual reports, including several principles such as introduction of advanced technology and diversification of knowledge sources, education for all (EFA), use of global expertise, continuous development of curricula, providing opportunities for business and private sectors’ participation, professional development and rehabilitation of teachers and attention to those with special needs. The political discourse has begun to take on another curve, showing the achievements of the new policy. The Ministry placed several legislations and procedures to achieve its objectives. The most important are the following:

1. Comprehensive educational plan was developed, using the new education technology through two parallel tracks; horizontal track involved deploying the necessary equipment, multimedia, advanced science laboratories and reception halls to broadcast educational channels in all educational stages and the vertical track involved upgrading the equipment available in schools (NCERD, 2001).

2. Issued Law No. 8 for the year 1991 on the interest of literacy and adult education, and the General Authority for Literacy was established in 1992.

3. Importance of curriculum development to meet contemporary variables, future challenges, globalization, technological development and information flow.

4. Establishment of community schools to accommodate girls who were not covered by the educational plan and still in the age of receiving compulsory education and
those who dropped out of primary schools, as a second chance for joining the education system.

(5) Use of scientific expertise and international cooperation, to improve education and development. The most important international projects include the following:

- Basic Education Improvement Project, which was funded by the Ministry of Education with the participation of the World Bank and the European Union to gradually increase the level of education to achieve full absorption.
- Cooperation agreement to conduct joint research between Egyptian and French researchers working in research centers to improve teaching methods in Egypt.
- Cooperation with USAID in the framework of the Girls’ Education Strategy, which aims to build small schools to girls deprived of education in remote areas.
- Cooperation with UNICEF, in which community schools are known to provide distinct educational opportunities for girls (NCERD, 2001).
- Cooperation with the German side for implementation of the Mubarak–Cole project.


(7) Establishment of national network of distance education (video conferencing) linked to all governorates of the Republic to train teachers and sending teachers to external missions to improve their educational skills.

During the years 2000-2010, the educational policy was affected by the emergence of challenges that resulted from scientific and technological revolution and globalization.

Knowledge-based economy
By the end of the twentieth century, the world community entered a new society, named the knowledge society. Thus, the role of information technology as the mainstay of modern economies was growing. It became clear that the main element in advancing the process of economic development and social construction is knowledge, where development is currently based on the production, circulation and use of knowledge. The response to knowledge-based economy requires that the Egyptian educational system be a source of high levels of skills by providing high level of information and communications technology (ICT)-based education and training systems (NCERD for MOE, 2008).

Achieving quality in education
Globalization and application of free market mechanisms resulted in transformation of educational institutions into commercial institutions, so it moved to many market concepts, such as quality, excellence and creativity. The challenge facing the Egyptian society is to have a rank among developed countries. To ensure the quality of education and accreditation, the government approved the establishment of quality assurance authority in education to raise the level of educational services and establish confidence in the educational institution. Thus, the main challenge of educational systems in this decade was not only EFA but also high-quality education.
During the years 2001-2009, rapid spread of electronic systems in education

Considering the flood of information, rapid knowledge and information revolution, ICT developed new educational formats, such as virtual education, e-learning and Web-based education. As a result, in 2002, the Ministry of Education announced that the national goal of the educational policy is to teach excellence and excellence for all. This is a qualitative change in the official educational discourse content. Education for excellence requires opportunities for individuals; the attention is not only to availability but also to quality. The principles to activate the quality standards include the following:

(1) Mubarak’s strategy and education, the qualitative shift in the national education project and the application of total quality principles focused on three basic objectives:
- Continue educational infrastructure efforts by promoting education for girls, rural education and education for people with special needs, as well as literacy, teacher development, curriculum development, school textbooks, child care and child labor.
- Making a qualitative leap in education by the development of secondary education, the use of scientific methodology, the strengthening of democracy and international cooperation.
- A breakthrough in the era of technology by strengthening infrastructure, channels, educational programs, e-learning, e-government and advanced learning centers.

(2) In 2003/2004, the Ministry’s vision and direction toward the knowledge society focused on several objectives, such as continuous support of EFA infrastructure, attention to those with special needs, attention and care for talented students, optimal investment in early childhood, developing curricula and enriching educational materials, expanding the base of community participation and decentralization, expanding the use of technology and e-learning, building national standards for education and applying the academic accreditation system, literacy, sustainable professional development of workers in the field of education, emphasizing the overall quality of education in a comparative global context and supporting technical education and practical training for students.

(3) In the year 2005/2006, some measures were taken to develop the educational plan. The Strategic Policy and Planning Unit was established at the Ministry. It includes qualified cadres with the support of international expertise. It also proposes the future policies, strategic plans and programs implemented for them (NCERD for MOE, 2008).

(4) In the year 2007, The Professional Academy for Teachers was established; it is one of the bodies assisting the implementation of the National Strategic Plan for the reform of school education in Egypt. The most important documents put forward by the Ministry include the following three basic objectives for the educational process: availability and equal educational opportunities, total quality in education and efficiency of institutional systems.

(5) In the year 2007/2008, the National Strategic Plan for Education Reform had been developed by involving the national teams and representatives of the concerned ministries and representatives of the governorates through the Strategic Planning and Policy Unit of the Ministry of Education. The objectives of school education are divided into three groups:
• **First group:** Provides the main support for educational quality process to reach the expected level of performance.

• **Second Group:** Programs related to reform management systems, the institutionalization program for decentralization, the program of technological development and information systems, the program of evaluation and follow-up and the program of study buildings. It is considered the group supporting both the first group and the third group.

• **Third group:** Is related to the educational stages, such as the kindergarten development program, the basic education reform program, the secondary development program, the special education program for children with special needs and the community education program for girls and boys outside the educational system.

This was the first strategic plan of the ministry to achieve its objectives, after the establishment of the policy and strategic planning unit in the Ministry. The Ministry has begun to transform educational policies into strategic plans based on studying reality, identifying strengths and weaknesses in the educational process, examining challenges and opportunities facing Egyptian education and developing a strategic plan for the development of education. According to the World Bank Report (2013), it was stated that the number of schools accredited in the academic year 2008/2009 was 187 schools, including 164 government schools and 23 private schools.

**During the years 2010-2017**

This period witnessed several internal factors that had a great impact on the educational policy plan. The most important variables that influenced education performance are the following.

**Internal factors.** The revolution of January 25, 2011, witnessed political instability in the whole country. In this stage, a transition to meet the following challenges and demands was produced by the revolution to provide social justice, political freedom and social security.

• The instability in the society was because of the protest vigils and sit-ins, as well as the demands of the class that increased after the revolution.

• Revolution of June 30, 2013 and the establishment of a new constitution for the country (Egyptian Constitution, 2014) sets the legislative framework of the country.

• The lack of stability of educational policies because of the continuing ministerial changes, where the number of Ministers of Education from 2010 to 2016 was eight.

**Legislative frameworks.**

• In this period, a new Constitution (Egyptian Constitution, 2014) was issued.

• An amendment was made to the provisions of Articles 28 and 29 of the Education Law.

• In accordance with this amendment, obtaining a certificate of completion of general secondary education at one stage at the end of the third year will be provided.

• Ministry of Technical Education and Vocational Training were established pursuant to the Presidential Decree No. 189 of 2014 to form amended Cabinet by Decree No. 122 of 2015.

• Prime Minister Decree No. 623 of 2015 was issued by merging the Ministry of Education and Technical Education (National Center for Social and Criminological Research, 2018).
This period was characterized by instability in all areas, including political, social, economical and educational. It is worthy to mention that, this is a natural product that follows the revolutions in all countries experiencing revolutions. The educational system has been affected by instability during that period. Eight ministers have been appointed to the Ministry of Education from 2011 to 2016. Although the efforts during this era were characterized by attention to availability and quality based on decentralization, by the end of 2010, according to the (World Bank Report, 2013), the results were as follows:

- According to the Human Development Index for 2013, issued by the United Nations and Development Program (2018b), education performance of Egypt was ranked 112th out of 160 countries. The guide also pointed out that the unemployment rate in Egypt among the youth is the highest among the Arab world during 2012.
- Despite the success of educational policies, the rate of student’s retention increased before the completion of the three stages of education. The total number of dropouts from the cycle of primary education between 2010/2011 is huge.

In 2012, the illiteracy rate in Egypt reached 28 per cent of the total age group (15-35 years old) with a total of 17 million people and 40 per cent of the population aged 15 years old with a total population of 34 million.

**Strategic plan for pre-university education, 2014-2030**

Vision of the Ministry of Education (Ministry of Education, 2014) is providing human resources with growing capacity, efficiency and the highest degree of quality and professional ethics to build a society based on learning and knowledge-based economy. Mission of the Ministry of Education: To lead, manage and develop the pre-university education sector to respond to the social, economic and cultural needs of the Egyptian society with a national identity that is inseparable from global trends. Long-term goal is comprehensive development of youth while instilling the spirit of citizenship, tolerance, non-violence and understanding of the foundations of freedom and justice. Ministry has adopted three reform and improvement policies in line with the United Nations Charter on Human Rights:

1. Providing equal opportunities for the entire school-age population to enroll or complete secondary and general education with poor areas as a first priority.
2. Improving the quality of the effectiveness of the educational service by providing a contemporary curriculum, efficient employee technology, educational and non-athletic activities, an effective teacher for each child in each semester, effective leadership in each school and opportunities for professional and internal development of each teacher.
3. Strengthening the institutional structure, especially in technical schools, and building the capacity of education personnel to decentralize governance.

The strategic goals repeated the educational policies of 2000-2010 by considering availability, quality, efficiency of institutional systems and decentralization. Although, it is difficult to assess the outcomes of this policy, some important developments in the educational system are as follows:

- Establishment of the prestigious (STEM) schools in 2011, as talent and excellence are of value to their being in society.
- The number of community education schools has improved. The number of secondary schools has been increased to 4,614, including 82,964 male and 17,312 female out of a total of 100,286 students.
In 1992, establishing the community schools was supported by UNICEF. It reached 417 schools and included 11,458 pupils out of the total of 3,162 schools comprising 61,270 students.

Girl-friendly schools (945) with 23,203 students were established.

Schools for homeless children with 34 schools serving 3,299 students were established.

A total of 46 small schools (through community service organizations) were established (Education for All 2015 National Review, 2014).

There was an increase in the number of students enrolled in secondary education. In 2014, general secondary education accounted for 45 per cent of the total number of students enrolled.

Reducing the number of vocational schools to 269 schools in 2012, which represents 50 per cent of the total schools (Education for All 2015 National Review, 2014).

Findings

Educational statistics of year 2017

Referring to the available information published by the (Central Agency for Public Mobilization and Statistics [CAPMAS], 2017), the population of Egypt is estimated as 94,798,827 (approximately 95 million) inhabitants, of whom 11 million are children under the age of admission to nursery school, (50 per cent of them are females). Figure 1 represents the Egyptian population profile according to age group. It showed that 38,879,481 of the total population are children in the school age (5 to 15 years old). This value is 41 per cent of the total population. The percentage of currently enrolled school and university students is 27 per cent of the total population, which is nearly equal to the percentage of the people who never get enrolled (24 per cent) as shown in Figure 2. It was found that 6.5 million of the children were enrolled and some dropped out of school for various reasons (3 per cent of them for females and the other 3.5 per cent for males). Causes of students’ dropouts are shown in Figure 3. The highest dropout rate for students of both genders was attributed to the absence of eagerness to learn, as well as an increase in poverty among families. Other social causes are related to customs and traditions of the country where girls’ education is not important. Early marriage was considered as the main reason of female dropout, whereas work was the main reason for male dropout. Other reasons of students’ dropout were parental separation, death of one of the parents, financial constraints and difficulty in reaching schools (Figure 3).
The population percentages according to educational level are given in Table I. The total percentage of the classified population was found to be 75.3 per cent. This value indicates that 24.7 per cent of the total population of Egypt is missing as reported in the CAPMAS yearbook, 2017. From Table I, it is noticed that the illiteracy rate was found to be 19.4 per cent.

### Table I.
Showing the Egyptian educational level in the year 2017

<table>
<thead>
<tr>
<th>Educational levels</th>
<th>Population</th>
<th>% of total population*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>7,107,230</td>
<td>7.5</td>
</tr>
<tr>
<td>Preparatory</td>
<td>6,345,257</td>
<td>6.7</td>
</tr>
<tr>
<td>General/Alazhar secondary</td>
<td>4,907,930</td>
<td>5.2</td>
</tr>
<tr>
<td>Technical secondary</td>
<td>15,864,292</td>
<td>16.7</td>
</tr>
<tr>
<td>Post-secondary</td>
<td>2,245,318</td>
<td>2.4</td>
</tr>
<tr>
<td>University</td>
<td>8,435,731</td>
<td>8.9</td>
</tr>
<tr>
<td>High Diploma</td>
<td>187,768</td>
<td>0.2</td>
</tr>
<tr>
<td>Master</td>
<td>112,365</td>
<td>0.1</td>
</tr>
<tr>
<td>PHD</td>
<td>82,166</td>
<td>0.1</td>
</tr>
<tr>
<td>Illiterate</td>
<td>18,433,590</td>
<td>19.4</td>
</tr>
<tr>
<td>Literate classes</td>
<td>391,105</td>
<td>0.4</td>
</tr>
<tr>
<td>Read and write without certificate</td>
<td>7,056,381</td>
<td>7.4</td>
</tr>
<tr>
<td>Cognitive education</td>
<td>200,102</td>
<td>0.2</td>
</tr>
<tr>
<td>Grand total</td>
<td>71,369,235</td>
<td>75.3</td>
</tr>
</tbody>
</table>
cent. This value is considered the highest percentage in comparison with the values of 0.4 per cent and 7.4 per cent for illiterate and those who without holding a literacy certificate (could read and write), respectively. Concerning school education, the students’ percentage of primary, preparatory and general/Alazhar secondary were 7.5, 6.7 and 5.2 per cent, respectively. The technical secondary school graduate was showed to be 16.7 per cent, whereas post-secondary students were 2.4 per cent. Very small profile was found for the population in the higher education level. It includes 8.9 per cent university students and graduates, 0.2 per cent high degree diploma and 0.1 per cent for each master and doctorate degrees. Finally, the percentage of the cognitive education was found to be 0.2 per cent. Referring to the statistical analysis of CAPMAS yearbook 2017, these official figures reveal the serious drawback in the Egyptian education situation represented by the following:

- High percentage of unrecorded sector of population (24.7%).
- High percentage of illiteracy rate (19.4%).
- Significantly low percentage of highly qualified postgraduate candidates (0.4 %).

**Discussion and conclusion**

In education, the national goal came at the beginning of the third millennium to emphasize “education for excellence and excellence for all.” It is desired that senior leaders and executive bodies pay attention to the development of education on the lines of say and action as one of the most important achievements. Despite these numerous educational strategies and multiple reforms, the achievements and outcomes of the educational system are unsatisfactory. Factors that have negatively impacted the development of education in Egypt can be identified as follows (vulnerability factors):

- Education in the school is still traditional. The curriculum of existing subjects defies any development, and content books may be subjected from time to time to deletion or addition.
- Educational system centralized supervision of policies, curricula and public examinations.
- The Ministry of Education unified a central vision and a study plan in which the locations and time of teaching are determined.
- Education and its policies are the product of the President only. The reports indicate low profile achievements and reduction of the scientific research.
- The student enrollment increases in technical and vocational education, resulting in a huge influx of high school graduates, which cannot be absorbed in the labor market.
- Lack of university education leads to reduction of enrollment rate in secondary education to 30 per cent, and this criticized the visions adopted by the Ministry.
- The rationalization of cost-free education leads to privatization of education and increases the load on families.
- Public schools provide low-quality learning and teaching services. They are unacceptably overcrowded, and difficult to be reached by a great number of teachers and students.
- It is unreasonable that parents continue carrying their children’s educational expenses.
Many of the principles and orientations established by the educational policy have not been implemented, especially investment in education which is considered a crucial issue.

The Egyptian family has many physical and psychological burdens in public schools.

Lack of teacher training and the cost of private tutoring is a physical and psychological burden.

Parents are forced to accept the reduction of the educational quality. The Ministry has not been able to solve this problem yet.

The present situation of curricula in different levels of pre-university education is not adequate for providing the nation by well educated new generation. These curricula are not structured to offer skills for learning, critical thinking, problem solving and other important outcomes of any good education system.

Disparity between quality of education in private and public schools, educational services provided to urban and rural students, and number of students and classrooms.

Lack of accountability and transparency were found in the managerial aspects of educational institutions and great confusion in decision making processes.

A total of 85 per cent of the schools are lacking educational technology equipment.

There is an increase in the rate of illiteracy.

A novel future-oriented proposal for the context, ethos and reforming aspects is as follows:

- Revitalize the existing educational system with a view to cater to social, political and spiritual needs of individuals and society.
- Create a sense of unity and nationhood and promote the desire to create a welfare state.
- Promote national cohesion by respecting each other’s faith and religion and cultural and ethnic diversity.
- Promote social and cultural harmony, using the educational process.
- Provide and ensure equal educational opportunities to all the citizens of Egypt, and provide minorities with adequate facilities for their cultural and religious development, enabling them to participate effectively in the overall national effort.
- Develop a self-reliant individual, who is capable of analytical and original thinking, is a responsible member of the society and a global citizen.
- Aiming to encourage building dynamics, creative and responsible personality of the individuals.
- Raise individuals committed to democratic and moral values, who are aware of fundamental human rights and are open to new ideas, having a sense of personal responsibility and participation in the productive activities in the society for the common good.
- Revive confidence in the public educational system by raising the quality of education provided in government owned institutions, by setting standards for educational inputs, processes and outputs, institutionalizing the process of monitoring and evaluation from the lowest to the highest levels.
- Improve service delivery through political commitment, strengthening educational governance and management.
- Developing a consistent and integrative view of each educational sector in the frame of a whole and efficient educational policy for the future.
- Enable Egypt to fulfill its commitments to achieve the EFA goals.
- Widen access to EFA and improve the quality of education, particularly in its dimension of being relevant to the needs of the economy.
- Equalize access to education through provision of special facilities for girls and boys alike, as well as for under-privileged/marginalized groups and handicapped children and adults.
- Eradicate illiteracy within the shortest possible time through universalizing of quality elementary education coupled with institutionalized adult literacy programs.
- Enable an individual to earn honestly his/her livelihood through skills that contribute to the national economy and enable them to make informed choices in life.
- Lay emphasis on diversification from general to tertiary education to transform the supply-oriented education system to a demand-oriented one.
- Encourage research in higher education institutions that will contribute to accelerated economic growth of the country.
- Organize a national process for educational development that will reduce disparities across provinces, support coordination and sharing of experiences.

The educational policy in Egypt is presently inadequate and relies upon the emergency administration framework. It requires a complete reconsideration according to the reset of the national priorities.

References


Ministry of Education (2014), “Strategic plan for pre-university education education Egypt national project together we can providing quality education for every child foreword by his excellency
the minister of education”, pp. 1-103, available at: www.unesco.org/education/edurights/media/docs/c33b72f4c03c58424c5ff258c6f7aaee0eb58de4.pdf (accessed 7 June 2018).


Further reading


Corresponding author

M.A. Zaki Ewiss can be contacted at: mzewiss@cu.edu.eg

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com
Journal of Humanities and Applied Social Sciences

Number 1

1 Editorial advisory board

2 Contemporary Islamic philosophy response to reality and thinking outside history
Mohamed Othman Elkhosht

25 Using co-creating mass-customisation and innovation climate for enhanced value: empirical investigation in international modular jewellery market
Heba Mohamed Adel and Raghda Abulsaoud Ahmed Younis

43 Deterring violent non-state actors: dilemmas and implications
Raghda Elbahy

55 School educational policy in Egypt: societal assessment perspective
M.A. Zaki Ewiss, Fatma Abdelgawad and Azza Elgendy