DETERMINANT FACTORS OF RADICALIZATION AMONG ARAB UNIVERSITY STUDENTS*

Arap Üniversite Öğrencileri Arasında Radikalleşmeye Yol Açan Faktörler

Diab M. El-BADAYNEH**

Khawla ElHASAN***

Abstract

The purpose of this study was to explore prevalence and the determinants factors of radicalization among the college students. A sample of 2709 university students was selected from Kuwait, UAE, KSA, Oman, Jordan, Tunisia, Morocco, Lebanon, Egypt, Gaza, and Palestine. A questionnaire was developed based on the literature review as a research tool. Findings showed an alarming signs of the prevalence of the general and violent among university students.

Three major determinants of radicalization were: (1) **Personal factors**: age, religion, religion effect, religious compliance, anger, fear, internet use, cheating in the exam, low self-control, and use of force. (2). **Family factors**: Family size, number of employed persons in the family, father's education, mother's education, and mother's job. (3). **Societal factors**: State, nationality, feeling equity, feeling pride, life satisfaction, and life stress events. Findings raised the attention to the university environment threat and security's vulnerabilities. Moreover, it calls the attention to the take in account encountering radical beliefs dissemination among university students. Security policies are needed to prevent hijacking the university by radicalism, and transiting the university as incubator for radicalization and path to terrorism. Policy and preventive measures are discussed.

Keywords*: Radicalization, Arab Universities, College students, Policy Implications

Öz

Bu çalışmanın amacı üniversite öğrencileri arasında radikalleşmeye neden olan faktörleri ve radikalleşmenin yaygınlığını anlamaktır. Kuveyt, Birleşik Arap Emirlikleri, Umman, Ürdün, Tunus, Fas, Lübna, Mısır ve Filistin'den 2709 kişilik bir örneklem üzerinde bu çalışma gerçekleştirildi. Literatür taramasına dayalı olarak bir anket geliştirildi. Ulaşılan bulgular üniversite öğrencileri arasında yaygın ve ciddi bir radikalleşme seviyesini göstermektedir. Bu çalışmaya dayalı olarak radikalleşmenin arkasında üç farklı etmen olduğu tartışılmaktadır: İlk olarak, yaş, din, dini etki, dinin hükümlerine uyma, öfke, internet kullanımı, sınavda kopya çekme, kendine güven seviyesinin düşüklüğü ve şiddet kullanımı gibi **bireysel faktörler** dikkate alınmıştır. Bunun yanısıra, ailenin büyüklüğü, ailede kaç kişinin çalıştığı, babanın eğitimi, annenin eğitimi ve annenin işi gibi **ailevi faktörler** göz önüne alınmıştır. Son olarak da devlet, milliyet, eşitlik algısı, onur duygusu, yaşamdan memnuniyet ve yaşam stresi gibi potansiyel etmenlere değinilmiştir. Makalede üniversite öğrencileri arasında radikal görüşlerle yüzleşilmesi gerektiğine dikkat çekilmekte, üniversite kampüslerinin radikalleşme sarmalına kapılmaması için polislere görev düştüğüne değinilmektedir.

Anahtar Kelimeler*:* Radikalleşme, Arap Üniversiteleri, Üniversite Öğrencileri, Politika Önerileri

Introduction

Events in the Arab world since 2011 have demonstrated the ability of young Arab people to initiate action and catalyze change. Arab youth showed their importance as agent of change and their abilities to express their interest and feelings toward social strains and conditions, and its demands for change. Stains that youth have suffered have rooted in the marginalization, Poverty, unemployment, lack of participation, lack of democracy and freedom. Two views to the Arab youth contributions in the Arab spring, one view sees it as a glimmer of hope for a new renaissance that would lead the region towards a better future, whereas others (especially deep state) considered it a seditious influence dragging the region into chaos and jeopardizing its future. Since 2011, youth and their concerns and issues have placed on the top Arab policy and security priorities. On the regional level, the League of Arab States has placed youth issues at the top of development priorities, conducting numerous regional studies and orga-

nizing, in Cairo in 2013, the Youth Arab Summit. **On the international level,** United Nations Development Program has published five reports out of 24 reports were on Arab countries. Most of the UN system have centered on analysis of the situation of youth in education, employment, health care and participation in public life, encouraging governments in the region to formulate national youth policies and monitoring the progress of Arab countries towards achieving goals and targets in youth development. (AHDR, 2016: 7)

Higher Education in the Arab World

Higher learning is deeply rooted in the history and societies of the Arab Middle East. After the seventh century and the Islamization of the Arab world, local religious schools known as madrasa became the main institutions of higher learning in the Middle East. (Makdisi, 1999) During the same period, other institutions of the Arab world such as hospitals, libraries, observatories, and private homes known as "academies" undertook the development of the nonreligious sciences, inspired by the ancient Greeks. The most famous of these academies was the *Beit al Hikma* (House of Wisdom) in Baghdad, where numerous fields within the sciences (astronomy, physics, mathematics, medicine, chemistry, geography) flourished until the sixteenth century. By the dawn of the Italian Renaissance, the knowledge cultivated within these disciplines and others had been translated, and transmitted to Europe through Italy and Spain. (Vincent, 2009: 2).

Higher education in Arab countries is considered recent. In the past decades, most Arab students used to study mainly at few Arab universities spread in the Arab world in addition to universities in Turkey, Pakistan, India, Europe and USA. In 1940 there were only ten universities in the MENA countries, by 2000 there were 140 such institutions and by 2007 their number had reached 2601—two-thirds of which were founded after the 1980s. Last to participate in this academic boom have been the GCC countries. Eight universities were operating in Saudi Arabia in 2003, but at least 100 additional universities and colleges have been created there since, and the country's annual budget for higher education has reached $15 billion, for 23 million inhabitants. The United Arab Emirates and Qatar have established 40 foreign branches of Western universities over the same period. (Vincent, 2009: 1).

There has been tremendous growth in higher education in the Arab world since the last years of the twentieth century. Student enrollment has jumped from roughly 3 million students in 1998/99 to about 7.5 million students

in 2007/08, while the number of universities has grown almost three-fold in the same time period. Higher education in the region has also trended toward increased privatization, though considerable differences occur between countries; Bahrain, Lebanon, Oman, Palestine, and the UAE have the highest percentage of students enrolled in private universities (above 50 percent), while Iraq, Libya, Morocco, and Sudan have the lowest percentage of enrollment in private universities (20 percent or less) (Bhandari and El-Amine, 2012). The number of Arab universities expanded from 233 universities in 2003 to about 286 universities in 2006, of which 153 governmental and 133 private. The number of students was about 4,400,000 and the number of faculty staff members 183000 of whom 78% humanities and 22% scientific. In 2013 the numbers rose to more than 600 universities and a round 11 million students and 250,000 faculty members. (Arab Universities Union, 2016).

Two-thirds (around 70%) of the new universities founded in the Arab Middle East since 1993 are private, and more and more (at least 50) of them are branches of Western, mostly American universities. (In 2008 even the most state-centered country, Saudi Arabia, whose government runs eight public universities, accepted the founding on its soil of two private universities and of numerous new private colleges. Three places of especially flourishing academic activity are Qatar, the UAE, and Saudi Arabia. Each of these countries, however, has followed a distinct pattern of academic development; together, they also exemplify three degrees of state control over higher education. In Qatar, funding is mainly governmental, through the Qatar Foundation: Since 2003, Qatar's Education City has welcomed at least 8 universities (6 American, 2 Australian), and more are to come. Qatari funding tends to cover the bulk of the construction costs, but foreign universities remain private institutions. (Mill, 2009)

Education systems throughout the region are hindered by low quality, irrelevancy and inequity. General teaching university characterized by poor research; redundancy of the most attractive disciplines, resulting in the demonetization of these disciplines; the related increase in graduate unemployment; the "brain drain" of the most skilled; and the unavailability of vocational training are among the principal structural problems associated with Arab higher education. (Adams and Winthrop, 2011). University environment is a fertile ground for radicalization and recruitment of radicals. Students population is typically young, marginalized, fragile, anomic, with socio-psychological crises and easy to influenced. Radicalization of youth is becoming one of the serious threats to the international security.

Arab Youth

There are 200 million young people in the Middle East and North Africa. They represent either the region's biggest dividend, or its biggest threat. Theoretically, they supposed to be a social capital and economic power in these states, however, the matter of fact is not, they live under a sever strains and pressures of social demands. They consider a security threat with their maladjustment to strains produced by poverty and unemployment and lack of democracy and freedom The International Labor Organization believes up to 75 million young people alone are jobless in the Arab world (ASDA, 2016: 5). Youth consist of over 32% of the population of the Arab region. The Arab world comprises 20 countries and territories as designated by the Arab League. Youth between the ages of 15 and 29 years old represent over 100 million of the current population (Lancaster, 2009). Arab world has a combined population of around 422 million people, over half of whom are under 25 years of age. There are 22 Arab states (10 Africa and 12 Asia). According to UNESCO, the average rate of adult literacy (ages 15 and older) in this region is 76.9% (UNESCO, 2014).

A high concern about the importance of youth in human development came from the UNDP, (2016) by publishing the Arab Human development report (2016) on Arab youth, and argues that young people is a key resource and catalyst for change in the region. It concludes that Arab states can achieve a huge developmental leap and ensure durable stability if they put the empowerment of their youth at the top of their urgent priorities and harness their energy to advance development processes. The report calls on Arab states to adopt a new development model that focuses on enhancing the capabilities of young people, unleashing their energy and expanding the opportunities available to them, thus allowing them more freedom to shape their futures, and contributing actively to development in their societies and countries. (AHDR, 2016: 7).

Empirical literature review

The Arab Human report (2016) asserts that today's generation of young people is more educated, active and connected to the outside world, and hence have a greater awareness of their realities and higher aspirations for a better future. However, young people's awareness of their capabilities and rights collides with a reality that marginalizes them and blocks their pathways to express their opinions, actively participate or earn a living. As a result, instead of being a massive potential for building the future, youth can become an overwhelming power for destruction. (AHDR, 2016: 7).

In a recent review of the growing body of literature on the radicalizing the youth, it was found that empirical studies suggest that youth bulges are associated with an increased risk of political violence. However, governments to some extent are able to reduce this risk through the provision of better opportunities for young people, primarily by providing education. The level of secondary education appears to have a clearly pacifying effect on large youth bulges in low and middle income countries, although the effect appears to be contingent on structural economic factors (Urdal, 2012). Radicalization is variously blamed upon exposure to ideology, victimization, alienation, socialization, social networks, the internet, deficiencies in family bonds, trauma, relative social and economic deprivation, and 'cultures of violence' (Bjorgo and Horgan 2008; 2012 Dalgaard-Nielsen 2008; Juergensmeyer 2003; McCauley and Moskalenko 2008; Silber and Bhatt 2008; Wiktorowiz 2005, cited in Brown & Saeed, 2015: 1953)

There is a knowledge gap with regard to the influence of education on the onset or the prevention of radicalization. Schools and families are underappreciated sources of informal social control and social capital and therefore the gap should be closed. If there is a better understanding of the effect of education, policy as well as interventions can be developed to assist parents and teachers in preventing radicalization (Pels and de Ruyter, 2012).

Empirical research has indicated that the level of education of radicalized youngsters and adults does not have a strong influence on (prevention) of radicalization (Silke, 2008). Among radicalized persons, one can find well-educated persons as well as those without a diploma. It may therefore not come as a surprise that in the U.S. for instance, where radicalization and particularly terrorism receive a lot of scientific and political attention, education is hardly included in an attempt to counter radicalization (Webber, 2011). However, the education youngsters receive from their parents and in schools includes much more than academic level.

Despite concerns raised over the extant understanding of radicalization, the UK's current strategy considers radicalization as a cause for state concern. It aims to counter radicalization at different levels and stages including interrupting the 'process of radicalization' for individuals who show signs of being radicalized (HMG 2011a,: 8). The UK counterterrorism strategy, CONTEST, specifically in the Preventing Violent Extremism (PREVENT) section, views the signs and causes of radicalization as disenfranchisement, a search for identity at times of crisis, increasing religiosity and religious symbolism, implicitly some form of psychological weakness, and

a connection with others holding such beliefs, including through virtual networks. It is also seen to be identifiable at particular locations, including mosques, hospitals, schools and universities (HMG 2011b: 65, 85, 108; HMG 2013, cited in Brown & Saeed, 2015: 1954)

Research also showed that authoritarian parenting may play a significant role. Similar research among Muslim families was not found. While raising children with distrust and an authoritarian style are prevalent, the impact on adolescents has not been investigated. The empirical literature we reviewed does not give sufficient evidence to conclude that democratic ideal in and an authoritative style of education are conducive to the development of a democratic attitude (Pels, and de Ruyter, 2012).

It is important to pay attention to two aspects of education in families and schools, namely the content of the education children and students receive as well as the style with which parents and teachers raise and educate children and students. On one hand, Radical or extremists parents and teachers (instructors) aim to transmit radical ideology, thoughts and actions to children and students directly or vicariously. Children and students will be influenced by radical-driven education they receive and will adopt that. On other hand, children and students will be democratic, effective citizen, and respecting others if they raised in a democratic families and schools. Preventing radicalization and extremism among students by educating children respecting the rights of others and tolerating beliefs, religions that are different from their own (Davies 2009; Webber, 2011). More important is the style of parenting and teaching method. Authoritarian style of parenting and teaching is characterized by strict obedience and lack of explanation of the rules students should follow and comply (Baumrind, 1966). Such style will produce radicalization. However, critical thinking, negotiation will prevent radicalization (Hansen, 2001; Westheimer and Kahne 2004; Pels and de Ruyter, 2012).

On the macro level, the relationship between human development, peace, corruption and terrorism incidents in the Arab World from 1970 through 2007 showed a negative relationship between the total number of terrorists; incidents and fatalities and human development value; human poverty; average gender inequality. Findings also present a significant negative relationship between peace index and the total number of terrorists, and incidents. All measures of corruption: freedom from; control of corruption & corruption perception index were significantly correlated with the total number of terrorists; incidents and fatalities. A positive relationship was found between unemployment and the number of terrorists; incidents and

fatalities. A positive significant relationship between terrorists' incidents and Arab youth unemployment, and Arab Youth share of unemployment. Moreover, findings show that total number of terrorists; incidents and fatalities do vary according to the human development index (HDI) level (high, medium and low development). ANOVA analysis has shown significant differences in terrorists incidents, fatalities and injuries, according to human development levels Significant differences have been found in freedom from corruption; control corruption, and corruption perception according to human development levels (Al-badayneh, 2009)

Fearing future terrorism among Jordanian university students reveal that students concerned 42% that they fear to be victim future terrorist attack in Jordan themselves, or a friend or relative. Also students are worried that there will be another terrorist attack on Jordan soil, region and global in the near future with average of 5.4 (54%), 5.3(535), and (60%) respectively. Factor analysis produced three factors explaining 63.9% of the variance, the first factor explained (personal threat) 41.9%% of the variance, the second factor (national threat) explained 14% of the total variance and the third factor (external threats "regional and global") explained 7.8% of the variance. Al-Badayneh, Al-khattar, and Al Hassan, (2011)

Al-badayneh, argue that university is under radicalization risk. The university as incubator for radicalization showed the average percentage of the prevalence of the radical beliefs was 64.4% among the university students. Radical beliefs like martyrdom, unity by force, hatred & jihad were highly prevailed among university students. Findings raised the attention to the university security and encountering radical beliefs dissemination among university students. Security policies are needed to prevent hijacking the university by radicalism, and transiting the university as incubator for radicalization and path to terrorism. Al-Badayneh, (2011).

Political participation is another factor in radicalization research. The impact of political affiliation, political participation and life satisfaction on radicalization among university students showed a significant impact of political affiliation, political participation and life satisfaction on religious, political and violent radicalization among university students. Significant impact was found in the impact of the political participation and life satisfaction on religious radicalization. Political affiliation was found significant on political radicalization. Moreover, Political affiliation was found significant on violent radicalization. Finally, life satisfaction was found significant on political radicalization. Al-Badayneh, Al Hassan, and Almawajdeh (2016).

Radicalizing Arab university students becomes a global emerging threat. Factor analysis produced five factors explaining 45% of the total variance of radicalization. The first factor labeled "political radicalization" explained 18.5% of the variance, the second factor "religious radicalization" explained 12.7%, the third factor "violent radicalization" explained 6.4% of the variance, the fourth "group radicalization" accounted for 4%, and the fifth factor "social radicalization" only accounted for 3% of the total variance. Significant differences in student radicalization were found according to the geographical region of the university (North, Center and South). However, no significant differences were found in radicalization as it relates to gender, and type of college (i.e., Humanities vs. Pure Sciences). Al-Badayneh, Khelifa and Al Hassan, (2016).

The relationship between religious behavior and radicalization among Arab youth reveals some implications for terrorism recruitment and de-radicalization. A significant relationship between religious behavior and college student's radicalization (social, religious, political, violent, and personal radicalization) was found. A strong significant relationship exists between all types of radicalization and each religious commitment: prayer (with exception to personal radicalization), and religious impact on individual's life (with exception to political radicalization). Religious attitudes have significant impact on developing radical behavior and actions. Social injustice and strains foster the identification and development of radical attitudes. The threat of radicalization is not limited to uses of violence or the threat of its use, but it may also be the driving force of other forms of detrimental impact on society. Religious behavior impacted general radicalization. social radicalization religious radicalization political radicalization violent radicalization (F=, a= .002.2710) and group radicalization.

Almost all predictors of religious behavior have a significant impact on each type of radicalization Radicalization of students' beliefs and thoughts can be seen as a semi zeroorder belief, students' beliefs and radical ideas transmitted to them by their parents, teachers, colleagues and social network. Radicalization developed in incubators like family, school, and universities within smaller groups where bonding, peer pressure, and indoctrination gradually changes the individual's view to a radical view. Implications for Terrorism Recruitment and de-radicalization includes but not limited to: Youth recruitment, preventing radicalism in the University environment, terrorism recruitment, and De-radicalization to the vulnerable and at risk university students. Al-Badayneh, and Al Hassan, (2016).

Method

Sample. A sample of 2709 university students from Kuwait, UAE, KSA, Oman, Jordan, Morocco, Tunisia, Lebanon, Egypt, Gaza and Palestine, of whom 42.7% males and 57.3% females. More than two-third (82.9%) of the Participants report that they have 1-3 employed family members. AT the same time more two third (79.9%) of the sample reports they have 1-3 family member unemployed. This reflects the large family size in the Arab world. More over 4% of fathers and 34% of mothers are unemployed. Most parents are educated (90%) with different levels of education. Most participants (93%) pray, comply to the religion rules and do not behave against my religion beliefs.

Research tool

A questionnaire has been developed based on the previous research and on Aspar Radicalization scale (KSA). The questionnaire is consisted of demographic information, familial information, social variables, feeling of justice, equality and national pride. Also it contains religiosity variables, use of force, criminality, violence and life stress events and low self-control. And finally radicalization scale (44 items). A scale has been developed using factor analysis.

Validity and reliability. Construct validity is estimated A construct validity of the scale was estimated by the calculating the correlation between radicalization scale and Low self-control scale and found a positive significant relationship (0.705, α= 0.000), Another estimates by the relationship between life satisfaction and radicalization. it was expected a negative relation and it was a significant negative relationship (-117 α=0.00). a sign of validity of the scale. A Reliability of the scale is strong and was estimated by Cronbach's alpha and was 0.947.

Findings

General Strains

Participants reported a vary levels of strains started with the death of beloved ones (11.7%), divorce (22.4%), chronic disease (24.2%), unemployed beloved one (20.1%) and Social, financial or legal family crises (14.3%). Students reported a high level of positive feelings regarding justice (80%), equality (85%), pride (95%), life satisfaction (90%). At the same time, they expressed a high negative feelings anger (91%), fear (77%). A round 80% of students reported being victims of violence. At the same time around (77%) of students reported acting one type of violence, and more than

half (51%) of the sample reported participating in a fight. Criminality was measured by cheating in the exam. Students reported 38% cheated in the exam to get a better grade. Students used power to gain some personal goals in (57%) of the sample.

Prevalence of Radicalization

Findings of the present study showed an alarming average percentage of the prevalence of the radical beliefs was found **(57.3%)** among the university students. The most radical beliefs and thoughts were about the group commitment and taboos such as "the rape of a girl from my religion as the rape of my sister"; "the offend to a man of my religion is offend to my father"; and the centrism of the religion "religious law should be the sole source of authority" and grievance the "Muslim is treated unjust in this world". Also one fascism statement ranked high "Students should learn to obey all types of authority". Another group commitment statement was ranked high "the trial of a young man of my religion is a trial for my brother".

Violent Radicalization

Factor analysis revealed 24 violent beliefs with an average percentage of the prevalence of the violent radical beliefs of (38.2%) with standard deviation of 9.47 among the university students (Table 1). The highest item was the " believe that the martyrs in the name of God revives religion 60.3%", "I think jihad is the only way to preserve the religion 53.6%", "I think it's the duty of every individual to jihad even if the government does not agree 48.8%" "In my country, women should do not have equal rights with men 48.8%), "Injustice must be removed from Muslims societies by jihad", "I think change and political reform comes through strength", "I think that the unification of the nation can only be by force", "A female with an intimate relationship outside the marriage should be killed", "We must prevent other people from other doctrines from reaching senior positions", "Converting Person from Islam deserves to be killed", "No room for a difference in anything (political, social or religious) in my country"

Table (1) Rank and Percentage of each violent radical statement

#	#	**Radical statement**	**Agree**	
			#	**%**
6	10	I believe that the martyrs in the name of God revives religion	1615	60.3
7	11	I think jihad is the only way to preserve the religion.	1439	53.6
8	12	I think it's the duty of every individual to jihad even if the government does not agree	1311	48.8
2	3	In my country, women do not have equal rights with men	1300	48.6
25	43	Injustice must be removed from Muslims societies by jihad	1196	44.6
18	25	I think change and political reform comes through strength.	1185	44.2
21	28	I think that the unification of the nation can only be by force.	1184	44.1
23	37	A female with an intimate relationship outside the marriage should be killed.	1155	43.0
12	17	We must prevent other people from other doctrines from reaching senior positions	1147	42.7
13	18	Converting Person from Islam deserves to be killed.	1137	42.3
17	24	No room for a difference in anything (political, social or religious) in my country.	1097	40.9
3	4	I believe in the exclusion of the non-religious teachers from our schools.	1048	39.0
14	19	I think that the jihadist groups glories of the nation	1037	38.6
11	15	Each of the non-Muslims are enemy of Islam	997	37.0
22	29	There is nothing wrong to use violence to suppress your opponents	964	35.8

19	26	I refuse the dialogue with my political opponents	937	35.0
5	6	We must encourage young people to read books and articles that promote jihad.	938	34.9
16	21	Jihadist groups must be supported with money and fighters	909	33.8
20	27	I use impolite language with those who disagree with my views.	906	33.8
24	41	Non-Muslim should not stay in Muslim society	823	30.6
10	14	All non-Muslims must be expelled from Muslim countries	715	26.6
9	13	No right of non-Muslims to practice their religion in my country, even in their homes.	685	25.5
4	5	The curriculum must include hatred of non-Muslims	650	24.2
15	20	Those involved in terrorism activities must be released from the Arab prisons	648	24.1
1	2	In my country, victimized women of honor crimes (rape) must be killed	635	23.6

Factors of radicalization

Factor analysis used to determine the factors behind the radicalization of students. First testing the suitability of the data to use factor analysis. KMO & Bartlett's Test of Sphericity[1] is a measure of sampling adequacy that is recommended to check the case to variable ratio for the analysis being conducted. KMO & Bartlett's test used to accept the sample adequacy (.952) is acceptable while the KMO ranges from 0 to 1, the world-over accepted index is over 0.6. and chi-square =31893.556 and significant at sig=0.000 For Factor Analysis to be recommended suitable, the Bartlett's Test of Sphericity must be less than 0.05. Communalities indicate the amount of variance in each variable that is accounted for. Initial communalities are

---

1   The Kaiser Criterion is said to be reliable when: a) the averaged extracted communalities is at least more than .70 and when there are less than 30 variables, or b) the averaged extracted communalities is equal or above .60 and the sample size is above 250 cases (Field, 2009).

estimates of the variance in each variable accounted for by all components
or factors. Extraction communalities are estimates of the variance in each
variable accounted for by the factors.

Table 2 factor analysis

	Communalities	Initial	Extraction
1	Killing the raped woman	.393	.388
2	Use of impolite Language with opponents	.376	.348
3	Use of violence with the opposition	.450	.468
4	Reform by force	.531	.619
5	Excluding non-religious teacher	.588	.663
6	Woman Victimized honor crime must be killed	.457	.453
7	injustice of Muslims must be removed	.546	.559
8	refuse the debate with opponents	.570	.582
9	Prevent other religious doctrines in society	.591	.619
10	Inequality of the rights of women to men	.502	.489
11	Unification by force	.529	.570
12	Converted religion must be executed	.567	.583
13	No room for differences	.497	.499
14	Killing the woman with intimate affaire outside the marriage	.477	.522
15	Hatred of non-Muslims	.434	.428
16	Non-Muslim must be expelled from society	.461	.437
17	Supporting jihadi groups in all means	.595	.643
18	Jihadist groups restore the glory of the nation	.318	.340
19	Jihad saves religion	.487	.462
20	Jihad is an obligation	.567	.610
21	Martyrdom revives religion	.412	.368
22	Hatred of non-Muslims	.382	.394
23	No room for differences	.432	.446
24	Rejection of Dialogue	.468	.431
25	Use impolite language	.504	.501

Table 3 Eigenvalues

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	10.387	41.547	41.547	9.896	39.585	39.585	7.853
2	1.513	6.052	47.600	1.025	4.099	43.684	7.365
3	1.367	5.468	53.067	.896	3.585	47.269	6.027
4	1.087	4.346	57.414	.604	2.416	49.686	6.075
5	.988	3.954	61.367				

Factor analysis revealed four factors explained 57% of the variance on the youth's radicalization. the first factor explained 41.5% and labeled use of force; the second factor explained 6% and labeled exclusion; the third factor explained 5.5% and labeled support jihadist and the fourth factor explained 4% and named intolerance with others.

Four main factors were found in the violent radicalization scale, there as follows:

Use of force. Violent radical beliefs were concentrated in this factors on the uses of force with others (opponents, women, non-Muslim,) and social change. Targets in general are the "outside" and the "others". Non-group members, non-Muslim, and women are the most vulnerable target for radicalization. Honor crimes (killing victimized raped women) using the force with opponents, reform by force, and exclusion of non-religious teachers…etc.

Exclusion. Rejecting others internally and externally. Radical statements on this factor included: rejection of gender equal rights, killing converted Muslim, no room for differences, hearted of non-Muslim.

Jihad. Radical beliefs were high on this factor in general, supporting jihadist's groups, Jihadi groups bring the glory of the Umah, Jihad conserves the religion, jihad is obligation and Martyrdom revives religion.

Intolerance Others. Radical beliefs about others relatively low, starting with group centrism, non-muslin are enemy of Islam and expelling them from Muslim countries   and finally, rejecting the right of non-Muslim to practice their religion

Table 4 Factors

		Factor 1	Factor 2	Factor 3	Factor 4
1	Killing a woman with illegal intimate relation	.744			
2	Impolite language	.647			
3	Use of force with opponents	.605			
4	Reform by force	.601			
5	Exclusion of non-religious teachers	.484			
6	Killing the raped women	.411			
7	Lifting the grievance of Muslims	.407			
8	Rejection the dialogue	.341			
9	Prohibition of other religious factions	.333		.328	
10	Unequal rights of men and women		.608		
11	Unification by force	.303	.594		
12	Killing converted Muslims		.566		
13	No room for differences		.531		
14	Teaching Jihad		.384		
15	Hated of non-muslim		.357		
16	non-Muslim should not stay in Muslim society	.320	.336		
17	Support jihadi groups			.704	
18	Jihadi groups bring the glory of the Umah			.660	
19	Jihad conserves the religion			.516	.311
20	Jihad is obligation			.502	.483
21	Martyrdom revives religion			.300	
22	Expelled non-Muslim from Muslim society				.724
23	No rights for non-Muslim	.427			.543
24	Non-Muslim is enemy				.517
25	Release terrorist from Muslim prisons		.313		.357

Extraction Method: Principal Axis Factoring.

Rotation Method: Promax with Kaiser Normalization.

Rotation converged in 19 iterations**.**

Determinants of University Students' Radicalization

Regression analysis reveals many determinants of student's radicalization. All determinants of radicalization explained 64.7% of the variance on radicalization and were significant (F=161.203α=000).

Regressing demographic, personal, social and environmental variables on university students' radicalization reveals a multiple relationship (R=.807) and that these variables explained 64.7% of the variance on university students' radicalization.

Table 5 ANOVA Table regressing Independent Variables on radicalization total Score

source	**Sum of Squares**	df	Mean Squares	F	Sig
Regression	**3581431.614**	31	115530.052	161.203	.000[b]
Residual	1918541.697	2677	716.676		
Total	5499973.311	2708			

There major determinants of radicalization were: (1) Personal factors: age, religion, pray, religion effect, religious compliance, anger, fear, internet use, cheating in the exam, low self-control, and use of force. (2). Family factors: Family size, number of employed persons in the family, father's education, mother's education, and mother's job. (3). Societal factors: State, nationality, feeling equity, feeling pride, life satisfaction, and life stress events (figure).

Figure 1 determinants of radicalization

Personal Facotrs	Familial Factors	Societal Factors
• Age • Religion • Pray • Religion effect • Religous complience • Anger • Fear • Internet • Cheating • Low self-control • Use Force	• Family size • # of employed • Father's education • Mother's education • Mother's jo	• State • Nationality • Feeling Equity • Feeling Pride • life satisfation • life stress events

Table 6 ANOVA analysis

Model	Unstandardized coefficients		Standardized coefficients	t	sig	Correlations		
	B	St. Error	Beta			Zero-order	Partial	part
(Constant)	118.636	9.340		12.702	.000			
state	.684	.135	.071	5.064	.000	-.021	.097	.058
religion	-16.731	1.104	-.193	-15.154	.000	-.333	-.281	-.173
age	-2.378	.369	-.084	-6.438	.000	-.331	-.123	-.073
nationality	.849	2.047	.005	.415	.678	.061	.008	.005
family size	1.582	.341	.067	4.646	.000	.306	.089	.053
gender	1.503	1.090	.016	1.378	.168	.127	.027	.016
Number of Employed in the family	-1.893	.444	-.055	-4.264	.000	-.026	-.082	-.049
Number of unemployed	-.177	.527	-.005	-.336	.737	.355	-.006	-.004
Number of friends	.077	.060	.016	1.283	.199	-.035	.025	.015
Father's Education	2.681	.495	.075	5.414	.000	.199	.104	.062
Mother's Education	1.462	.468	.044	3.128	.002	.141	.060	.036
Father's Job	-.780	.531	-.018	-1.469	.142	-.059	-.028	-.017
Mother's job	1.915	.429	.054	4.464	.000	-.041	.086	.051
Victim of Violence	-2.365	1.477	-.022	-1.601	.109	.067	-.031	-.018
Violence Perpetrator	.635	1.416	.006	.449	.654	.102	.009	.005
Pray	3.717	.715	.073	5.196	.000	.265	.100	.059
Fight	1.169	1.181	.013	.990	.322	.108	.019	.011
Equal rights	.419	.615	.011	.680	.496	.006	.013	.008
Justice	-2.051	.640	-.048	-3.205	.001	-.063	-.062	-.037
Bride	-3.095	.693	-.061	-4.467	.000	-.148	-.086	-.051
Satisfaction	-3.332	.597	-.072	-5.586	.000	-.148	-.107	-.064
Religious effect	3.272	.699	.068	4.681	.000	.137	.090	.053
Compliance with religion	-4.929	.649	-.106	-7.597	.000	-.073	-.145	-.087
Anger	-3.424	.646	-.068	-5.296	.000	-.162	-.102	-.060
Fear	2.389	.590	.055	4.047	.000	-.010	.078	.046
Internet	-5.162	.730	-.085	-7.069	.000	-.202	-.135	-.081
Cheat	-3.075	1.134	-.033	-2.712	.007	-.099	-.052	-.031
Use Force	-2.679	1.188	-.029	-2.255	.024	.160	-.044	-.026
Family Problems	1.581	1.185	.016	1.334	.182	.074	.026	.015
Life Stress Events	.876	.422	.028	2.078	.038	.010	.040	.024
Low self-control	3.481	.083	.614	41.789	.000	.703	.628	.477

Discussion

Youth and youth as a national resource and power in the Arab society has gained a high level of political and security concern. Looking at youth as playing a vital roles in human development and human security. Most important as a catalyst for change and social immunization against major social problems (poverty, violence and crime). Youth has become a mean and a goal for Human development. Educated and health youth will have less family size than their parents, higher marriage age, healthy kids and social investment that prevent them from involving in radicalization and terrorism. They can alleviate poverty. Education is the main path of achieving progress in human development among youth. Education is the best investment in empowering youth in society.

Today, Arab region faces a disastrous situation: more than 13 million children, or 40 percent of the 34 million school-age children, are not attending school in the countries affected either directly or indirectly by armed conflict. (AHDR, 2016, p. 171) With the harsh economic and social strains on youth, one can imagine what path youth might take in a world of widespread of drugs, human trafficking, violence, crime, radicalization and terrorism. Youth are pushed to unacceptable paths to accomplish their personal goals where all other venues are blocked.

The purpose of this study was to explore prevalence and the determinants factors of radicalization among the college students. Findings showed an alarming sign of the prevalence of the general and violent among university students. There major determinants of radicalization were: (1) **Personal factors**: age, religion, pray, religion effect, religious compliance, anger, fear, internet use, cheating in the exam, low self-control, and use of force. (2). **Family factors**: Family size, number of employed persons in the family, father's education, mother's education, and mother's job. (3). **Societal factors**: State, nationality, feeling equity, feeling pride, life satisfaction, and life stress events. Findings can be interpreted in the light of General strain theory, when people experience 'collective strains' that are: (a) high in magnitude, with civilians affected; (b) unjust; and (c) inflicted by significantly more powerful others, including 'complicit' civilians, with whom members of the strained collectivity have weak ties. Radicalization might be thus explained in terms of strains similar to Agnew's (1992, 2001, 2002, & 2010) theoretical explanation of terrorism. Drawing a parallel to Agnew's theory, collective strains increase the likelihood of radicalization, but they do not lead to terrorism in all cases. General strains produce negative feelings such as fear, anger and aggression and negative feelings can lead to criminal ideation. (Agnew,1992, 2001, 2002, 2010)

Social strains and exclusion ignited uprisings across many Arab countries in late 2010 and early 2011, causing some to descend into social and political instability and deep economic uncertainty. Young people have not been recognized as legitimate agents of change, nor have they been empowered to fulfill this responsibility (AHDR, 2016: 170). Socially and psychology isolated and strained young youth turn to extremism in they seek for identity, acceptance and purpose. This can be seen on a macro level for instance, in 2014 alone, the region accounted for almost 45 percent of all terrorist attacks worldwide. These attacks claimed the lives of more than 21,000 people (START, 2015).

Factor analysis revealed four factors explaining the Arab youth's radicalization. These factors are: use of force; exclusion; support jihadists and   intolerance with others. These factors represent the macro picture in the Arab world. As stated in the Arab Human Development report (2016), that youth in the Arab region are struggling to attain full social and economic inclusion in their societies. The exclusion of youth is pervasive throughout the Arab region (AHDR, 2016, 170). no Arab country is among the countries with positive per capita GDP growth and high levels of voice and accountability. The participation of young people in formal institutionalized political processes in the Arab region is among the lowest worldwide There are significant roadblocks to fostering the progress of youth human development. The hobbled process of development exposes youth to the harsh effects of exclusion. This failure of Arab countries is leading young people to form negative perceptions of society and the future and providing a fertile ground for radical thinking and radical action among youth. (AHDR, 2016: 172).

To elevate such stains, youth needs to enhance their capabilities and expanding their opportunities by providing them good and relevant education along with health, justice and equality. Any successful policy should engage youth as partners and receivers (targets).   Strains and 'grievances' are a major cause of radicalization, violent radicalization and terrorism and should be alleviated from youth's life (Albadayneh, Khaliefa, and Alhasan, 2016; Al-badayneh, Al-Assafeh, and Albahri, in press).

Findings showed multiple and mutual factors producing radicalization in universities. Impacts can range from individual, family school to society at large. Radicalization is a cumulative developmental process. It cannot occur in one trigger incident. Radical families produce radical kids, with radical schools with radical curriculum will produce radical students, and finely university will continue the process unless the university applies preventive measures against radicalization. Radical Arab students is to consider a global security threat (Al-badayneh, Khaliefa, and Alhasan,

2016; Al-badayneh, Al-Assafeh, and Albahri, in press). Empowering youth requires, on the one hand, introducing changes to the political, economic and social environment that causes their exclusion. Such changes must increase opportunities for young people to engage in the spheres of official politics; stimulate a macro-economy capable of producing decent work for young people and enhancing their entrepreneurship; and entrench the principles of justice, equality and equal opportunity in society, challenging all discriminatory practices based on identity, belief, ethnicity or gender. On the other hand, youth empowerment requires serious investments in improving the basic services necessary for enhancing young people's capabilities, particularly in education, health and other social services (AHDR, 2016: 7).

Policies of Preventing radicalization among Arab university's youth requires multi-level approach (Macro-meso-micro level). National policies need a cultural, social and values immunization against radicalization by enhancing human security pillars including effective citizenship, good education, fighting poverty and unemployment, respect human rights, strengthen democracy and freedom in all aspects of life. Human security and human development immunize youth against the involvement in the process of radicalization and can divert their radical path to compliant path with social mainstream norms. Youth needs to be protected and be free from need and the fear. Youth radicalization is a multi-faceted social and security problem and needs a multi-partnership approach to prevent it.

Findings raised the attention to the university environment threat and security's vulnerabilities. Moreover, it calls the attention to the take in account encountering radical beliefs dissemination among university students. Security policies are needed to prevent hijacking the university by radicalism, and transiting the university as incubator for radicalization and path to terrorism.

References

Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. Criminology, 30(1), 47-87.

Agnew, R. (2001). Building on the foundation of general strain theory: Specifying the types of strain most likely to lead to crime and delinquency. Journal of Research in crime and delinquency, 38(4), 319-361.

Agnew, R. (2002). Experienced, vicarious, and anticipated strain: An exploratory study focusing on physical victimization and delinquency. Justice Quarterly, 19(4), 603-32.

Agnew, R. (2010). General strain theory of terrorism. Theoretical Criminology, 14, 131-153.

Adam, Karla. 2010. Radical Islam often fomented in college, The Washington Post, January 1. http://articles.washingtonpost.com/2010-01-01/world/36772205_1_islamic-society-umarfarouk-abdulmutallab-british-universities.

Adams A., and Winthrop, R. (2011). The Role of Education in the Arab World Revolutions. Opinion, June, 2011. Available at: http://www.brookings.edu/research/opinions/2011/06/10-arab-world-education-winthrop

Afifi, R. (2011) Youth as Agents of Change in UNESCO Regional Bureau for Education in the Arab States – Beirut pp 7-19 Arab Youth : Civic Engagement & Economic Participation. Beirut-Lebanon. Available at: http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Beirut/pdf/YCE%20_EN.pdf

Al-Badayneh, D, Al-khattar, A., and Al Hassan, K. (2011). Fearing Future Terrorism: Perceived Personal, National, Regional and International Threats of Terrorism in Sıddık Ekici (ed) Pp 30 – 44 Volume 90: Counter Terrorism in Diverse Communities NATO Science for Peace and Security Series - E: Human and Societal Dynamics. IOS Press Ebooks**. http://ebooks.iospress.nl/publication/25655

Al-Badayneh, D. (2009). Human Development, Peace, Corruption, and Terrorism in the Arab World Paper presented at the 1st International Symposium on Terrorism and Transnational Crime, Antalya, Turkey. Retrieved from http://ikcrsjo.org/docs/Human_Development_Terrorism-1-2010.pdf

Al-Badayneh, D. (2012). Radicalization incubators and Terrorism recruitment in the Arab world pp 1-44 in NAUSS The use of the Internet in Terrorism finance and terrorists recruitment. NAUSS, KSA. Available at: http://www.nauss.edu.sa/Ar/DigitalLibrary/Books/Pages/Books.aspx?BookId=833

Al-badayneh, D. (2016). Causes of Radicalizing Among Arab University's Students: Policy and Preventive Implications. Paper presented at the 'Radicalization, Terrorism and Universities. Turkish Police Academy in Ankara, on 8-9 November 2016

Al-badayneh, D. Al-Assafeh, R., and Albahri, N. (in press). Social Causes of Arab Youth Radicalizing. Journalism and Mass Communication, February

Al-Badayneh, D., A., Al Hassan, K. and Almawajdeh, M., (2016). The Impact of Political Affiliation, Political Participation and life Satisfaction on Radicalization Among University Students.British Journal of Arts and Social Sciences ISSN: 2046-9578, Vol.21 No.II (2016) BritishJournal Publishing, Inc. 2016 http://www.bjournal.co.uk/BJASS.aspx

Al-Badayneh, D., and Al Hassan, K. (2016). Religious Behavior and Radicalization Among Arab Youth: Implications for Terrorism Recruitment and De-radicalization. Pp 130-145 in Ekici, S., Akdogan, H., Ragab E., Ekici, A., & Warnes, R., (2016). Countering Terrorist Recrutment in the Context of Armed Counter-Terrorism Operations. IOS press. The NATO Science for Peace and Security Programe.Vol. 125.

Al-Badayneh, D., Khelifa M. and Al Hassan, K. (2016). Radicalizing Arab University Students: A Global Emerging Threat. Journalism and Mass Communication, February 2016, Vol. 6, No. 2, 67-78 doi: 10.17265/2160-6579/2016.

Anja Dalgaard-Nielsen (2010) Violent Radicalization in Europe: What We Know and What We Do Not Know, *Studies in Conflict & Terrorism*, 33:9, 797-814

Arab Human Development Report (AHDR), (2016) Youth and the Prospects for Human Development in a Changing Reality. United Nations Development Programme, Regional Bureau for Arab States (RBAS), New York, New York, 10017, USA. www.undp.org/rbas and www.arab-hdr.org

Arab Universities Association (2016). Eurie Eurasia Higher Education Summit. February 17-19, 2016 ISTANBUL – TURKEY http://eurieeducationsummit.com/files/2016Presentations/1430-SultanAbuOrabi.pdf

ASDA'A Burson-Marsteller (2015). The 7th Annual ASDA'A Burson-Marsteller Arab Youth Survey 2015. http://www.arabyouthsurvey.com/en/home

ASDA'A Burson-Marsteller (2016). The 8th Annual ASDA'A Burson-Marsteller Arab Youth Survey 2016. http://www.arabyouthsurvey.com/en/home

Assaad R & Roudi-Fahimi F. (2007) Youth in the Middle East and North Africa: demographic opportunity or challenge?, Washington, DC: Population Reference Bureau

Baumrind, D. (1966). Effects of authoritative parental control on child behavior. Child Development, 37(4), 887–907.

Bhandari, Rajika and El-Amine, Adnan (2012). Higher Education Classification in the Middle East and North Africa, New York, NY: Institute of International Education.

Bjorgo, T. (2009).Root Causes of Terrorism: Myths, Reality And Ways Forward (Routledge, 2005); Edward Newman (2006) Exploring the "Root Causes" of Terrorism, Studies in Conflict & Terrorism, 29:8, 749-772; and USAID, Development Assistance And Counter-Extremism: A Guide To Programming (October 2009).

Bjorgo, Tore, and John Horgan, eds. (2008). Leaving Terrorism Behind: Individual and Collective Disengagement. New York: Routledge.

Brown K., E., & Tania Saeed (2015) Radicalization and counter radicalization at British universities: Muslim encounters and alternatives, Ethnic and Racial Studies, 38:11, 1952-1968, Available at: http://dx.doi.org/10.1080/01419 870.2014.911343

Charlie Edwards & Luke Gribbon (2013) Pathways to Violent Extremism in the Digital Era, The RUSI Journal, 158:5, 40-47

Dalgaard-Nielsen, A. 2008. Studying Violent Radicalization in Europe II: The Potential Contribution of Socio-psychological and Psychological Approaches. DIIS Working Paper, no 2008/3. Copenhagen: DISS.

Davies, L. (2009). Educating against extremism: towards a critical politicization of young people. International Review of Education, 55(2–3), 183–203.

El-Tawila, S. (2002).Youth in the Population Agenda: Concepts and Methodologies. MEAwards Regional Papers, West Asia and North Africa, No. 44. Cairo: Population Council.

Field, A. (2009). Discovering Statistics Using SPSS: Introducing Statistical Method (3rd ed.). Thousand Oaks, CA: Sage Publications.

Gardner, Frank. 2006. "Campus Radicals 'growing problem'." BBC News, October 5. http:// news.bbc.co.uk/1/hi/uk/5411172.stm.

Gurr, Ted Robert (1970). *Why men rebel*. Princeton, NJ: Princeton University Press.

Hansen, D. T. (2001). Teaching as a moral activity. In V. Richardson (Ed.), Handbook of research on teaching (4th ed., pp. 826–857). Washington: AERA.

Harrison, Alison. 2011. "Campus Extremism 'a Serious Problem' Say MPs and Peers." BBC News, April 28. http://www.bbc.co.uk/news/education-13223026

Juergensmeyer, Mark. 2003. Terror in the Mind of God: The Global Rise of Religious Violence. Berkeley, CA: University of California Press.

Lancaster, Pat (July 2009). "Youth: the great 21st-century challenge.". Middle East (402): 12–16.

Makdisi, G. (1990). The Rise of Humanism in Classical Islam and the Christian West (Edinburgh: Edinburgh University Press,

McCauley, C., and S. Moskalenko. (2008). "Mechanisms of Political Radicalization: Pathways toward Terrorism." Terrorism and Political Violence 20 (3): 415–433. doi:10.1080/0954655 0802073367

Mill, A. (2009). "Failure of George Mason U.'s Persian Gulf Campus Sparks Concerns about Overseas Ventures," The Chronicle of Higher Education, 55, no. 27, (March 2009).

Pels , T., and de Ruyter, D., (2012) The Influence of Education and Socialization on Radicalization: An Exploration of Theoretical Presumptions and Empirical Research Child Youth Care Forum (2012) 41:311–325. DOI 10.1007/s10566-011-9155-5

Silber, Mitchell, and Arvin Bhatt. 2008. Radicalization in the West: The Homegrown Threat. New York: Police Department. http://www.nyc.gov/html/nypd/downloads/pdf/public_information/NYPD_Report-Radicalization_in_the_West.pdf

Silke, A. (2008). Holy warriors: Exploring the psychological processes of Jihadi radicalization. European Journal of Criminology, 5(1), 99–123.

START (National Consortium for the Study of Terrorism and Responses to Terrorism). 2015**.** Global Terrorism Database. http://www.start.umd.edu/gtd/ .

UNESCO (2012). "World Arabic Language Day".18 December 2012. Retrieved 12 February 2014.

Urdal, Henrik. 2012. "A Clash of Generations? Youth Bulges and Political Violence." United Nations Population Division, Expert Paper No. 2012/1. New York. http://www.un.org/esa/population/publications/expertpapers/Urdal_Expert%20Paper.pdf .

Vincent Romani (2009). The Politics of Higher Education in the Middle East: Problems and Prospects. Middle East Brief. No.36. Crown Center for

Middle East Studies. Brandeis University. Available at: http://www.brandeis.edu/globalbrandeis/documents/MEB36.pdf

Webber, D. (2011). Education as counterterrorism tool and the curious case of the Texas school book resolution. Available at: http://works.bepress.com/diane_webber/10 . Accessed 11 June 2011.

Westheimer, J., & Kahne, J. (2004). What kind of citizen? The politics of educating for democracy. American Educational Research Journal, 41(2), 237–269.

Wikipedia, the free encyclopedia (2016). Higher Education in the Arab World https://en.wikipedia.org/wiki/Higher_Education_in_the_Arab_World

World Bank. 2008. "Youth and Unemployment in Africa: The Potential, The Problem, The Promise." December. Washington, D.C.