The Relationship between University Students’ Perceptions of Terrorism and Academic Specializations

Hamza Mohammad Da’san

Social Researcher, Master Degree,
The University of Jordan, Aljubeiha, Amman 11942, Jordan

Rula Odeh Alsawalqa

Associate professor, Department of Sociology,
The University of Jordan, Aljubeiha, Amman 11942, Jordan

DOI: https://doi.org/10.36941/jesr-2021-0096

Abstract

By conducting a set of quantitative surveys, this study aimed to detecting the correlation between Jordanian University students’ perceptions of terrorism and a variety of demographic variables. The results revealed that the majority of students viewed terrorism as the most heinous crime, and is never justified, and that terrorists are hard-core criminals, separatist groups that want to weaken the unity of the country. Therefore, they should be treated as traitors and punished as they pose a threat to national interest, and the safety and security of citizens. While a few of student indicated that there are some terrorist activities’ as a repercussion of repressed needs and the demands of society, it should however be managed and the violations committed by states against their nationals be confronted with the aim of eliminating injustices to vulnerable citizens. Most students believe that poverty and material deprivation are of the most prominent causes of terrorism. They also stress the necessity of providing food security and optimal life for citizens to limit the spread of the phenomenon of terrorism and achieve societal solidarity to save human lives and stability of communities. Furthermore, the results confirmed that there are no academic specializations, age, sex, academic level, and monthly income statistically significant differences in perceptions of the terrorism among university students.

Keywords: Terrorism, Education, University education, SMAT, Jordan

1. Introduction

Terrorism is considered a complicated multi-faceted phenomenon and is an increasingly threatening global challenge; of which acts, and practices are committed by groups not representing the people nor acting on behalf of them through disruptive, dictatorial, and dominant practices, since terrorists have illegal objectives (AL-Hasan, 2008). Oxford dictionary defines terrorism as the use of terror to achieve political goals (Al-Zubaidi & Al-Helo, 2015), while article 1 of the Arab Convention on the Suppression of Terrorism of 1998 defined it as each act of violence or threat of any purposes or justifications; which
occurs for implementing an individual or joint criminal project, and aims at terrifying people by hurting them or making their lives, freedoms or security subject to risk, causing damage to the environment or one of the public or private facilities and properties or occupying them, or making any of the national resources subject to risk (Al-Sawalqh, 2019).

Often the term “terrorism” tends to affirm the intention of terrorists who cause terror and fear among a targeted public rather than the harms caused (Krueger & Malec’kova, 2003). According to White (2020), terrorism is generally defined as "a form of politically motivated violence and intimidation, using communication strategies to amplify its intended effect of causing terror" (p.8: vii). It also, means “premeditated, politically motivated violence perpetrated against noncombatant targets by subnational groups or clandestine agents, usually intended to influence an audience” (Krueger & Malec’kova, 2003: p 120). On the other hand, Brents & Mshigeni (2004) points out that terrorism is one of many tactics potentially used by any social movement to achieve political ends.

The concept of terrorism is applied to a large variety of groups with different goals and origins. Terrorists are not irrational actors; they may follow their own rationalities based on extremist ideologies or specific terrorist logics. The extremist ideologies of a secular or religious nature are often adopted as a consequence of political or personal reasons (Borum, 2003: p 5)

Terrorism may be an individual or collective act, and its scope may be national, regional or international, while it has varied means and mechanisms such as using different forms of violence, explosives and car bombs, assassinations and abduction, sabotage of the significant and active political and economic entities, tunnels, bridges, hotels, embassies and transportation stations. Terrorism appears in different forms stemming from its motives or means used by the terrorist whether individual or group; as it might be a doctrinal terrorism that is resulting from ideologizing religious texts for serving a certain class interest behind that ideologization, or even resulting from the extremism that results in excluding holders of contrary doctrines or ideologies, in addition to the ideological terrorism which is a type of terrorist acts that are committed before violent acts, and means an ideology that is believing in not respecting the others’ opinion while preventing them from their right of the freedom of expression and doctrine, where it restricts mindsets and freedoms such as racism, sectarianism, atonement, violation to human rights, dictatorial policies and violation to women’s rights. Biological terrorism falls under intellectual terrorism and means intentionally spreading viruses, bacterial, toxic, and harmful factors that result in human, animals or plants illness or death (Al-Sawalqh 2019, Tauzend 2014, Anderson 2018).

Terrorism can occur in wealthy and poor countries, in democracies or authoritarian states (Borum, 2003). The most prominent motives behind terrorism represented in economic deprivation; i.e. in situations of poverty and inequality inside the country, social factors such as the spread of financial and administrative corruption, lack of education that leads to intellectual exploitation by extremists, deteriorated healthcare and health services, social exclusion, absence of social justice, and political factors related to political violence and deprivation, reduced political participation and lacking political freedom especially in the semi-open societies (partial democracies), return of counter-revolutionary waves and former regimens with their autocratic aspects, oppressive features and vengeful desires, which paves the way for practicing terroristic acts (Al-Sawalqh 2019, Krieger & Meierrieks 2011). Some psychologists found understanding terrorism in terms of political and group dynamics and processes rather than terms of individual ones, and concern in the meaning of individual subconscious fear of death and personal significance, may help to explain some aspects of terrorist actions and people’s reactions because of it (DeAngelis, 2009). Borum (2003: p5) indicates that there is a set of preconditions and precipitants for the emergence of various forms of terrorism, Therefore, terrorism has no single root cause or a common set of causes.

The multiplicity of the motives causes or preconditions of terrorism, and the diversity of terrorist activities, have an impact on the different perceptions and attitudes of the public regarding terrorism. Several factors have played a prominent role in directing public opinion on terrorism. Abdullah et al. (2012) found that the ethnicity and religiosity have important bearings toward political violence and terrorism, and gender, race, religion, and occupation play a part in determining perception on acts of
terror. Based on the structural equation model, Ekici & Akdogan (2020) found that the external powers and religion are the major factors in the formation of terrorism perceptions. Freis-Beattie (2020) argues that the US public’s fear of terrorism is not just a fear of violence but instead reflects racial tensions and anxieties in a rapidly changing world.

Usually, terroristic groups look for supporters among the educated youth at schools and universities; for being open to exchanging opinions and conversations while refining intellect after formation. Krueger & Malec’kova (2003) indicates that terrorist organizations may prefer to select those who have a better education, and a high level of educational attainment can predict one’s commitment to a cause and determination, and a signal of a person’s ability to prepare for a terrorist assignment and carry it out. This imposes increased responsibility on the educational institution for confronting acts of attracting students to the terroristic groups. Quartermaine (2014) pointed out to UK Counter-Terrorism Strategy, known as Prevent (2011), which confirmed that the education system needs to include certain counter-terrorism measures into their administrative and teaching procedures. It is worth mentioning that the outburst of the global terrorism in 1968 resulted from the failure of the students’ revolution and movements spread globally in the sixties of the last century, known as the Global Youth Movement, since terroristic violence incidents along with the resulting losses increased since 1968 as a result of the emergence of some highly dangerous terroristic organizations among students, such as the Bader Meinhof Komplex (Ahmad 2018, Khalil 2002).

Education is one of the terrorism confrontation means, because of its role played in creating generations that have open intellect and aware mindsets capable to face destructive ideas spread by the terroristic and extremist groups, and because of the importance of educational curricula in raising society awareness in a way that contributes in enabling society members of avoiding terroristic and extremist groups (Kofi Annan Foundation, 2017). Hertog & Gambetta (2017) concluded having a strong relationship between the experimental scientific specializations and endeavor towards terrorism or extremism practiced by the Islamic Radical Groups. While Kurger & Maleckova (2003) concluded that focusing on education as a mean for eliminating terrorism is not actually supported by field evidence, and neither does poverty or education have a direct, causal impact on terrorism. While the study of each of Al-Sharari (2007) and Al-Thawabah and Al-Harahsheh (2009) concluded having no relation between the trends of university students and their academic specialization and year. Within the same context; the current study aims at indicating the relationship between the Perceptions of students at the University of Jordan and their academic specializations.

2. Research Questions

Three research questions were developed to guide the research process, they are:

RQ1: What are the attitudes of the University of Jordan students towards terrorism?

RQ2: Are there statistically significant differences in the mean perceptions for the University of Jordan students on the (SMAT) according to academic specializations?

RQ3: Are there statistically significant differences between the perceptions of students at the University of Jordan towards terrorism with each of the following variables: (age, sex, academic level, monthly income)?

3. Methods

3.1 Research Design

A quantitative research approach was used to collect and analyze the data, which was gathered from Stratified random samplings electing respondents using a questionnaire that was self-administered. The questionnaire included demographic questions (students’ academic level, academic specializations, age, sex, monthly income). Results were obtained and analyzed to providing insight for future studies.
3.2 Participants

As shown in Table 1, the study participants were male and female University of Jordan B.A students. Their ages ranged between 18 and 26 years, during the 2019–2020 Academic level. A stratified sample was selected which reached (400) students.

Table 1: Demographics of the sample

| Demographics          | Categories | N  | %  |
|-----------------------|------------|----|----|
| Sex                   | Male       | 200| %50|
|                       | Female     | 200| %50|
|                       | Total      | 400| %100|
| Age                   | 20-21      | 125| 31.3%|
|                       | 22-23      | 199| 49.8%|
|                       | 24-26      | 76 | 19.0%|
| Academic discipline   | Scientific | 200| %50.0|
|                       | Humanities | 200| %50.0|
| Academic year         | First      | 64 | 16.0%|
|                       | Second     | 73 | 18.3%|
|                       | Third      | 55 | %13.8|
|                       | Fourth     | 208| %52.0|
| Monthly income JD     | Under 750  | 237| %59.2|
|                       | 751-1,000  | 80 | %20|
|                       | 1,001-1,250| 11 | %2.8|
|                       | 1,251 and over | 72 | %18|

3.3 Measure

We used The Scale Measuring Attitude towards Terrorism (SMAT) developed by Sanyal (2018), consisting of 40 items. Participants rated each item using a five-point Likert scale (ranging from (strongly disagree) to 5 (strongly agree), the values of the arithmetic means will be treated as follows with regards to the quintuple gradation: 3.67 and above is high, 2.34 - 3.66 is medium, and 2.33 and below is low.

3.4 Data analysis

To perform the statistical analysis, we used SPSS-22 software. Descriptive statistics including frequency distribution and percentage of the data were used to present the demographic characteristics of the respondents. Pearson’s correlation coefficient was also used to measure the strength and direction of the association between items the scales. Independent Samples T Test was used to determine if there exists a significant difference between variables, and One-way analysis of variance (ANOVA). This scale Cronbach Alpha coefficient value was 0.78, there by indicating high reliability. A scale is considered reliable if the value of the latter coefficient is greater than 0.60 (Sekaran & Bougie, 2016). The skewness coefficient values for all the study’s variables were less than 1; that mean the study data were normally distributed (Hair et al., 2013). To further test this distribution, we also conducted Kurtosis tests. All the survey variables were normally distributed (Hair et al., 2013). Furthermore, the KOLMOGOROV-SMIRNOVA test’s results showed the lack of statistically significant differences for all themes (independent and dependent) at the α≤0.05 significant level that meant all the items were normally distributed. To assess construct validity, Pearson’s correlation was employed to demonstrate that the item-total correlation amongst items were found to be acceptable, as the majority of the items had good correlation with other items except for a few exceptions. The item-total correlations were found
to be within .30 to .54 and can be considered acceptable (de Vaus, 2004). Table 2 showed that.

**Table 2: Inter-item (SMAT) Pearson correlations**

| N. Items | Pearson’s r | N. Items | Pearson’s r | N. Items | Pearson’s r |
|----------|-------------|----------|-------------|----------|-------------|
| 1        | 0.043       | 14       | 0.103       | 27       | 0.157       |
| 2        | 0.33        | 15       | 0.153       | 28       | 0.264       |
| 3        | 0.359       | 16       | 0.078       | 29       | 0.111       |
| 4        | 0.226       | 17       | 0.26        | 30       | 0.261       |
| 5        | 0.058       | 18       | 0.209       | 31       | 0.121       |
| 6        | 0.099       | 19       | 0.131       | 32       | 0.335       |
| 7        | 0.197       | 20       | 0.144       | 33       | 0.425       |
| 8        | 0.348       | 21       | 0.336       | 34       | 0.357       |
| 9        | 0.234       | 22       | 0.415       | 35       | 0.26        |
| 10       | 0.166       | 23       | 0.288       | 36       | 0.341       |
| 11       | -0.015      | 24       | 0.351       | 37       | 0.19        |
| 12       | 0.054       | 25       | 0.433       | 38       | 0.125       |
| 13       | 0.056       | 26       | 0.196       | 39       | 0.298       |
| 40       | 0.071       |          |             |          |             |

4. **Results**

4.1 *Research Question 1: What are the attitudes of the University of Jordan students towards terrorism?*

To evaluate the perceptions for the university of Jordan students towards terrorism, we measured the mean and frequency distribution of (40) items asked of Jordanian students. The finding table 3 showed that the overall mean of the sample’s attitudes towards all the items study scale (SMAT) is moderate (M=3.042; SD= 0.2396).

**Table 3: Mean and Standard Deviation of the perceptions towards terrorism Levels Among university students**

| (SMAT) Items                                                                                     | M     | SD   |
|-------------------------------------------------------------------------------------------------|-------|------|
| 1. Terrorism is never justified                                                                  | 4.46  | 1.052|
| 2. Terrorism means to finish tyranny or kill a tyrannical person, therefore it should be supported| 1.57  | 1.041|
| 3. Terrorists are misguided, unemployed frustrated youth, Govt. should consider their demand    | 2.78  | 1.326|
| sympathetically                                                                                  |       |      |
| 4. Execution of terrorists is absolutely not justified because they are always fighting in poor's | 1.88  | 1.117|
| interest                                                                                         |       |      |
| 5. Most of the terrorists are hard-core criminals. They should be punished in national interest   | 4.18  | 1.037|
| 6. Terrorist disregard constitutional right in their personal interest, therefore they should be | 4.18  | 1.035|
| treated as a traitor                                                                               |       |      |
| 7. Activities of extremists(terrorist) are exaggerated by mass media                             | 3.06  | 1.178|
| 8. Political violence is necessary for social change                                              | 2.23  | 1.021|
| 9. I keep friends of extremist ideology                                                           | 2.14  | 0.928|
| 10. On the whole, terrorists are honest                                                           | 1.82  | 0.94 |
| 11. Terrorism cannot be regarded as a rational method of dealing with the national problems       | 4.21  | 1.129|
| 12. The public will feel less secure if strong steps were not taken against terrorism             | 4.5   | 0.858|
| 13. Every terrorist irrespective of his/her offence should be punished                            | 4.16  | 1.015|
| 14. Terrorists are social misfits and are dangerous to the society, therefore it is best to execute them | 3.49  | 1.317|
| 15. It would not bother me if my friends were terrorists                                          | 1.77  | 1.219|
| 16. Any person man or woman young or old who threaten the integrity of the country should be      | 4.1   | 1.053|
| punished strongly                                                                                 |       |      |
| 17. Statistics show that terrorism is the repercussion of repressed needs and demands of society, | 3.7   | 1.176|
| it should however be handled                                                                      |       |      |
18. We cannot call ourselves civilized as long as we have terrorist activities in the country 3.17 1.184
19. Terrorism is the most heinous crime of our time 4 1.119
20. Terrorist activities hindered the routine of the people 3.5 1.187
21. Herculean task of terrorists frequently attract me 1.78 1.052
22. Terrorism may be brutal but it is the best way to streamline national policies 1.68 0.894
23. Terrorism is basically unjustified but it is necessary under the present context 1.77 0.96
24. Because terrorists are more politically conscious people their activities are rational 1.68 0.938
25. Without political violence constructive change is not possible 2.21 1.265
26. Rather than going to execute terrorists, society should try to help them through treatment 3.21 1.265
27. Terrorists are separatist groups and they want to weaken the unit of the country 3.96 1.064
28. When society sentences a terrorist, we ourselves become terrorists and thereby a vicious circle of moral culpability starts to function 2.83 1.22
29. Terrorism is worst senseless violence, it should be condemned 3.98 1.22
30. It does not make any difference to a common man whether Govt. curbed the terrorist activities or not 2.24 1.258
31. I worry a lot about terrorist activities 3.4 1.241
32. A frustrated man has right to rebel against the state 1.94 1.058
33. Later or sooner people will know about the importance of political violence, and they will gradually accept it 2.09 1.037
34. Terrorists’ ultimate goal is political, they do not harm common people 2.36 1.236
35. Mastermind behind the terrorism are foreign extremist ideology and Govt. should alarm the people 3.64 1.06
36. Terrorism is the by-product of social upheaval, so it is bound to occur in a developing society 3.42 1.11
37. Political motivation or ideology is used as rationality of behavior by terrorist, though violence is a natural phenomenon 3.88 0.95
38. I feel anguish when some people advocate the ideology of terrorists 3.86 1.122
39. A cowardly person can only support non-violence in present times 2.64 1.135
40. I firmly support the philosophy of non-violence 3..42 0.24

**Total (SMAT) Score**

3.042 0.24

4.2 Research Question 2: Are there statistically significant differences in the mean perceptions for the University of Jordan students on the (SMAT) according to academic specializations?

We evaluated the statistically significant differences in perceptions of terrorism among students’ according to academic specializations through independent samples T Test. As shown in Table 4, there are no statistically significant differences in the mean perceptions of terrorism on the (SMAT) between students of different academic specializations.

**Table 4:** Independent Sample T-Test for perceptions terrorism differences in academic specializations among university student

| Academic specializations | N  | Mean | SD   | t    | df  | sig   |
|--------------------------|----|------|------|------|-----|-------|
| Scientific               | 200| 2.68 | 0.349| 1.007| 0.314| 0.000 |
| Humanities               | 200| 2.64 | 0.349| 1.007| 0.314| 0.000 |

4.3 Research Question 3: Are there statistically significant differences between the University of Jordan students’ attitudes towards terrorism with each of the following variables: (age, sex, academic level, monthly income)?

Table (5) shows that the Independent Sample T-Test showed no significant effect for sex. Also, table (6) shows, through a one-way ANOVA, that there are no age, sex, academic level, monthly income statistical significant differences in the mean perceptions of terrorism on the (SMAT) among university students.
Table 5: Independent Sample T-Test for perceptions of terrorism differences in sex among university students

| Academic Specializations | N  | Mean  | SD   | t    | sig  |
|--------------------------|----|-------|------|------|------|
| Male                     | 200| 2.695 | 0.353| 1.646| 0.101|
| Female                   | 200| 2.638 | 0.324|      |      |

Table 6: ANOVA Results of the demographic variables

| Variable               | Variance | Sum of Squares | F   | Mean Square | T    | Sig.  |
|------------------------|----------|----------------|-----|-------------|------|-------|
| Age                    | Between Groups | 1.593          | 8  | 0.199       | 1.757| 0.084 |
|                        | Within Groups  | 43.413         | 383| 0.113       |      |       |
|                        | Total       | 45.005         | 391|             |      |       |
| Academic year          | Between Groups | 0.064          | 3  | 0.021       | 0.183| 0.908 |
|                        | Within Groups  | 44.942         | 388| 0.116       |      |       |
|                        | Total       | 45.005         | 391|             |      |       |
| Monthly income         | Between Groups | 0.109          | 3  | 0.036       | 0.315| 0.815 |
|                        | Within Groups  | 44.896         | 388| 0.116       |      |       |
|                        | Total       | 45.005         | 391|             |      |       |

5. Discussion

Terroristic groups might be looking for supporters among the educated youth especially at the educational institutions, schools, institutes, and universities for being the places of youth gathering, learning, discussing, and refining and forming intellect, which entitles the educational institutions of increased liability for confronting the movements attracting students, since the intellectual and political currents and movements are created in the first place among the youth. The educational systems in the Arab countries usually depend on instruction, repetition and memorization without even activating the role of mind in analysis and criticism among students, which makes students as recipients who accept everything provided by the professor, while being more susceptible to accepting some of the terroristic groups ideas or beliefs, thus joining them to commit their acts without even thinking about or analyzing the results; while annulling the mind function (Al-Yousef, 2006).

Terrorist activities have a destabilizing impact causing distress and fear amongst the population (Rubaltelli et al. 2018). The media plays an important role in shaping perceptions about the fear of terrorism; White (2020) confirms that the media’s relationship with regards to terrorism is a strong contribution. Media can and sometimes does contribute to the recruitment and mobilization of violence, and has a power to both amplify and suppress the social and psychological effects of terrorism, e.g.; levels of fear or social cohesion. Terrorist organizations are exploiting media to formulating, disseminating the terrorist messages, and spread fear (Al-Ameri, 2013). Freis-Beattie (2020) found that media coverage fueled the racial tensions and anxieties of terrorism, and mass media content shaped the fear of violent victimization at the hands of minorities and pervasive. Elmas (2020) emphases, based on victimization and vulnerability perspectives, that there is a relationship between fear of terrorism and perceived risk of terrorism, and should not underestimate the influence of individual-level predictors of fear, crime literature, media exposure, and indirect victimization. According to Ekici and Akdogan (2020), terrorism perceptions are significant factors in determining social and political policy responses, and most perceptions become cognitive in individuals at an early age. Moreover, the media coverage for terrorism-related pictures has negative effects on university students, that the perceived likelihood of future attacks affected by the interaction between exposure to terrorism pictures and psychophysiological reactivity stress (Rubaltelli et al. 2018).

One of the reasons behind terroristic groups targeting youth, especially those receiving technical education and scientific specialization, is for exploiting their skills necessary for implementing their...
terroristic plans; particularly with regards to the social media means, cyber security and manufacturing developed explosives (Enderlini et al, 2017). Accordingly, a controversial idea is recently spread and imposed among researchers who provided various interpretations thereof; which is having several Islamic Jihadists being correlated to scientific specializations; including engineering, medicine, physics, and other natural and experimental sciences, which clarifies having relation between specialization and extent of extremism and tendency to violence and terrorism (Khushaib, 2019).

In this context, our results found that there are no academic specializations, age, sex, academic level, and monthly income statistically significant differences in perceptions of terrorism among university students. This result is contradictory with the findings of Aricak et al. (2008) which indicate that there are sex differences in Turkish student’s perception of terrorism in the affective and cognitive domains. This may be due to the difference in the age group of the sample, as students’ age ranged from 9 to 15. Also, contradictory with Hertog & Gambetta (2017) who concluded having a strong relationship between the experimental scientific specializations and endeavor towards terrorism or extremism practiced by the Islamic Radical Groups. While consistent with the findings of Al-Sharari (2007) and Al-Thawabah and Al-Harahsheh (2009) concluded having no relation between the trends of university students and their academic specialization and academic level.

The controversial relationship between education and terrorism is resulting from several indicators and evidences that include; organizations targeting recruitment of some of the Jihadists of postgraduates in different fields, including natural and experimental sciences, such as physics, chemistry, engineering, and communications sciences and engineering, which are obvious evidences of terrorist organizations targeting the educated categories to join their forces; as a result of their needs and to keep pace with societies’ development and modernity. This includes having varied forms of terrorism; since it developed as a result of its members employing modern techniques and natural sciences in manufacturing explosives, directing terroristic strikes remotely and making bombs, missiles and explosives, with the potential of using biological terrorism through spreading viruses in particular countries or public entities, targeting networks’ security, stealing important and confidential information of states and other terroristic organizations; in order to access some of the targeted locations by terrorists or benefit from intelligence information of particular states for the purposes of all forms of terrorism (Khushaib, 2019).

In a study that was republished in a book titled “Jihad Engineers”; both Gambetta & Hertog (2017) argued of having strong relation between the experimental-scientific specializations and tendency towards extremism or terrorism practiced by the Islamic radicalistic groups, and that despite difference in personalities along with the social, economic and geographic conditions of such extremists; that type of specializations is considered a strong common space that interestingly combines them.

There is another level of explaining the controversial relationship between terrorism and education, which is related to the technical, informatics and operational needs of terroristic organizations; such as manufacturing bombs and maintaining security of confidential communication technology-dependent networks. But this is not an irrevocable statement, nor does it explain the relation between the level of education and skills that the terrorist organizations aim at having among the selected individuals; because of having a number of determinants that might prove or deny relationship; such as: organization strategy of recruitment, whether the organization prefers high educational level and technical skills of the joining members, or rather seeks increasing level of membership only. Manufacturing bombs is a small specialized function at the organization, which makes increasing engineers’ membership unjustified; such as for example the Islamic Resistance Movement “Hamas”, whereas most bomb creators therein received education in Islamic studies. However; it is proved that bomb creators form around 10% of the total organization; while engineers are specialized in most organizational aspects and leading positions, thus the reasons behind that relationship may not be only related to the state of frustration and discontentment felt by them because of not having available jobs appropriate for their academic levels in most of the third world countries. This theory is denied by the other statements related to the extremists emerging in the western countries and graduating from the most prominent universities; while not being definitely related to
the technical needs of such organizations, thus reasons behind that relation tend to be correlated to the nature of specialization itself (Sageman, 2004).

Experimental natural sciences are physical sciences that deal with matter as a subject of research, and in which the researcher and the researched do not have a single subject similar to the human and social sciences, thus the first methodology of research is considered more objective and accurate, and these sciences do not have much space for freedom of opinion and the expression of impression or opposition along with intellectual argument and mental criticism, since their facts are either white or black, right or wrong, and there is no place for grey areas in which a lot can tolerate debate, unlike social and human sciences where opinion, argument, criticism and non-acceptance of the prevailing axioms are necessary elements for thinking and formulating theories, as they are sciences that greatly contribute to the formation of the critical spirit of the individual, the skeptical philosophical spirit that is always questioning and rejecting ready data provided as facts that cannot be debated or refuted. Therefore, the logic of experimental natural sciences is closer to the logic of extremist groups in their dual view of the world between right and wrong (Khushaib, 2019).

With regards to university students’ perceptions of terrorism, our results revealed that most Jordanian students viewed terrorism as the most heinous crime, and is never justified, and that terrorists are hard-core criminals, separatist groups that want to weaken the unity of the country. Therefore, they should be treated as traitors and punished as they pose a threat to national interest, and the safety and security of citizens. While a few of student indicated that there are some terrorist activities’ as a repercussion of repressed needs and the demands of society, it should however be managed, and the violations committed by states against their nationals must be confronted with the aim of eliminating injustices to vulnerable citizens. Most students believe that poverty and material deprivation are of the most prominent causes of terrorism. They also stress the necessity of providing food security and an optimal life for citizens in order to limit the spread of the phenomenon of terrorism and achieve societal solidarity to save human lives and stabilize communities. Jordanian students’ rejection of all kinds of terrorism and its causes is due to the sound social upbringing and the policy of King Abdullah II that adopts world peace and provides the needs of Jordanian citizens, in addition to His Majesty’s successive directions to the Jordanian governments to spread cultural awareness towards rejecting extremism, exaggeration and terrorism, nevertheless adopting peaceful intellect through press interviews and conferences. It is also worth mentioning issuance of the Amman Message in 2004, in which His Majesty called on the Islamic world to tolerate, unity and fight extremism.

Ahmed et al. (2018) found that university students’ are concerned about the domestic triggers of terrorism and students’ place of origin impacts upon the experiences of terrorism. Malik & Batool (2018) found that students perceived poverty, foreign interference, wrong interpretation of Islamic preaching, and social injustice as the main causes of terrorism. Furthermore, Ahmad (2019) concluded that the students of higher educational institutions agreed that extremists’ activities disturbed the daily functioning of institutions and created fear among learners. There is an interesting finding, which relates to individual perceptions of terrorism and counter terrorism, Brogan et al. (2020) found that Americans feel there is little they can do about terrorism and though the government is working to protect the nation, the public feels the government cannot stop or prevent, terrorist acts from occurring.

There is an urgent need to enhancing students’ perceptions that injustice and economic deprivation are not justifications for terrorism and harm to others, and that there are other means instead of intimidation to achieve social justice and achieving the demands of vulnerable and marginalized groups. "Violence begets violence", "hate begets hate" (King, 2010), and terrorist activities are not the best means for the development of society. On the contrary, they are devastating to individuals and society. Peace between citizens and human security is the basis for the stability of societies. The reality in life is that there will always be radical and extremist groups that will make it their goal to exploit the innocent for self-gain and justification to obtain and support their ideologies and actions against honest and innocent members of a society. As with the Covid virus this attempt by
extremists is not prevented by religion, culture, nationality, gender, or circumstances. Given this fact, the unfortunate situation of the innocent who strive to live a good and honorable life will always be a soft target and subject to this exploitation. Unfortunately, many students whom due to their personal circumstances in life become more vulnerable and easy targets in being persuaded to accept or partake in the extreme and unjust activities of terrorism. The solid base of a well-balanced family life during the developing years of a student when having a vacuum or imbalance due to one or more of the following reasons: unconditional: love, support, understanding, forgiveness, security, fairness, equal treatment, and recognition of siblings in the family could label them as a soft target to partake in terrorism. The student could experience an imbalance in their life and to rectify this resort to partaking in terrorism as this they believe this would fill the vacuum they experience or restore the balance they so desperately need to be happy. Unknowingly, they will only be exploited more by these self-centered recruiting agents of terrorism. The developing years for the student in a normal loving and caring family circle of love, trust, support, security equal treatment and understanding is therefore vital in protecting them from being easily influenced or intimidated by acts of terrorism.

6. Conclusion

This article investigated the relationship between university students’ perceptions of terrorism and their academic specializations. It also examined the relationship between age, sex, income, as well as the academic level and perceptions of terrorism. This study provides information about perceptions of terrorism at a university level in an Arab country, which has the potential for the development of policies and solutions that address phenomenon “infodemic” of misinformation the students have about terrorists and their motivation’s, to create awareness about the causes of terrorism and separatist groups. Therefore, future studies can further investigate the contradictions between perceptions of terrorism and academic specializations using different samples, as well as different measures, reflecting the fact this relation can be understood in different ways. Internationally it is a known fact that youth are easily influenced and subjected to peer pressures to follow an ideology in order to feel part of the group, especially if they are unhappy in their current family life and social circles which leaves them very vulnerable.

References

Abdullah, K., Sukma, R., Jamhari, M., Musa, M. (2012). Perception and Attitudes toward Terrorism in a Muslim Majority Country. Asian Social Science Archives, 8 (4): 77-89. http://doi.org/10.5539/ass.v8n4p77.

Ahmad, A. (2018). Analytical study on the phenomenon of terrorism, Al-Furat Studies Center http://firatn.com/?p=590.

Ahmad, S. (2019). Influence of Terrorism on Educational Institutions: Perceptions of University Students. Journal of Education and Practice, 10 (1): 27-32. http://doi.org/10.7176/JEP/10-1-04.

Ahmed, Z. S., Yousaf, F., & Zeb, K. (2018). Socio-economic and Political Determinants of Terrorism in Pakistan: University Students’ Perceptions. International Studies, 55(2), 130-145. https://doi.org/10.1177/0020881718790689

Aricak, T., Bekci, B., Siyahhan, S., Martinez, R. (2008). Turkish Elementary School Students’ Perceptions of Local and Global Terrorism. Electronic Journal of Research in Educational Psychology, 6 (14): 117-134. https://doi.org/10.25115/ejrep.v6i14.1261.

Al-Hasan, A. (2008). Sociology of Violence and Terrorism: An Analytical Study on Terrorism and Political and Social Violence, (1st Edition), Amman: Wael Publishing House.

Al-Ameri, M. S. (2013). Media and USF Students’ Perception of Terrorism. Graduate Theses and Dissertations. https://scholarcommons.usf.edu/etd/4429.

Al-Sawalqhi, R. (2019). Dialectical Relationship Between Terrorism and Human Security: A Sociological, Utopia y praxis latinoamericana. 26 (1): 275-285. http://doi.org/10.5281/zenodo.4556274

Al-Thawabiya, A., Al-Harahsheh, M. (2009). Tendencies of Tafila Technical University students towards terrorism, Al-Manara, 15 (3): 45-63.

Al-Yousef, A. (2006). Social systems and their role in resisting terrorism and extremism, (1st edition), Naif Arab University for Security Sciences, Riyadh.
Al-Zubaidi, J, Al-Helo, H. (2015). Terrorism in International Law: Legal Comparative Study, (1st Edition), Academic Book Center.

Anderson, E. V. (2018). Genealogies of terrorism: revolution, state violence, empire. Columbia University Press.

Borum, R. (2003). Psychology of terrorism. Tampa: University of South Florida. https://www.ojp.gov/pdffiles1/nij/grants/208551.pdf

Brogan, M., Rusciano, F.L., Thompson, V., Walden, K. (2020). Perceptions of Terrorism and Counterterrorism: Fear, Risk and the 2016 Trump Effect. Journal of Homeland Security and Emergency Management, 17(1): 1-9. https://doi.org/10.1515/jhsem-2018-0023.

Brents, B., & Mshigeni, D. (2004). Terrorism in Context: Race, Religion, Party, and Violent Conflict in Zanzibar. *The American Sociologist, 35*(2), 60-74. Retrieved May 21, 2021, from http://www.jstor.org/stable/27700385.

DeAngelis, T. (2009). Understanding terrorism. *Monitor on Psychology, 40*(10). http://www.apa.org/monitor/2009/11/terrorism.

De Vaus, D. (2004). *Surveys in Social Research* (5th ed.). London: Routledge.

Elmas, M.S. (2020). Perceived risk of terrorism, indirect victimization, and individual-level determinants of fear of terrorism. Secur J. https://doi.org/10.1057/s41284-020-00242-6.

Enderlini, S., Quick, D., Holmes, M. (2018). Education, Identity and Preventing Extremism. International Society Civil Action Network. https://icanpeacework.org/wp-content/uploads/2018/06/PVE-and-Education-Arabic.pdf.

Ekici, N., Akdogan, H. (2020). Structural Equation Modeling of Terrorism Perception: New Correlates of Perception Formation. *Perspectives on Terrorism, 14*(5):63-76.

Freis-Beattie, R.C. (2020). *Fear and Loathing in Post 9/11 America: Public Perceptions of Terrorism as Shaped by News Media and the Politics of Fear*. Doctoral Dissertations. 2502. https://scholars.unh.edu/dissertation/2502

Gambetta, D., & Hertog, S. (2017). Engineers of jihad: The curious connection between violent extremism and education. Princeton University Press.

Hair, F., Black, W., & Anderson, R. (2013). *Multivariate data analysis: Person new international edition*. Person Education Limited.

Hudson, R. A. (1999). The sociology and psychology of terrorism: Who becomes a terrorist and why?. Library of Congress Washington Dc Federal Research Div.

Kahlil, I. (2002). *Terrorism and the national liberation wars,* (1st Edition), Cairo: Dar Misr El Mahrousa.

Khushaib, J. (2019). *Role of Sociology in Confronting Violent Extremism*. Egypt Studies Institute, Egypt.

King, Martin Luther Jr. (2010). Where Do We Go from Here: Chaos Or Community?. Beacon Press.

Kofi Annan Foundation. (2017). Countering Violent Extremism: A Guide For Young People By Young People. ‘Extremely Together’ project, Kofi Annan Foundation. https://www.oijj.org/sites/default/files/documentos/extremelytogether_counteringviolentextremism_guide_2017_march...pdf.

Krieger, T., & Meierrieks, D. (2011). What causes terrorism?. *Public Choice, 147*(1/2):3-27. DOI 10.1007/s11127-010-9601-1.

Krueger, Alan, B., Malečková, Jitka. (2003). Education, Poverty and Terrorism: Is There a Causal Connection? *Journal of Economic Perspectives, 17*(4), 119-144. DOI: 10.1257/089533003772034925.

Malik, M., Batool, A. (2018). Perceptions of University Students about Causes of Terrorism. Bulletin of Education and Research, 40 (3): 115-127.

Quartermaine, A. (2014). *Pupils’ perceptions of terrorism from a sample of secondary schools in Warwickshire*. PhD thesis, University of Warwick. http://webcat.warwick.ac.uk/record=b2870761-St.

Rubaltelli, E., Scrimin, S., Moscardino, U., Priolo, G., & Buodo, G. (2018). Media exposure to terrorism and people's risk perception: The role of environmental sensitivity and psychophysiological response to stress. *British journal of psychology* (London, England: 1953), 109(4), 656–673. https://doi.org/10.1111/bjop.12292.

Sageman, M. (2004). *Understanding terror networks*. University of Pennsylvania Press.

Sanyal, S. A. (2018). Scale Measuring Attitude Towards Terrorism. Available at SSRN: http://dx.doi.org/10.2139/ssrn.3195927.

Sekaran, U., Bougie, R. (2016). *Research methods for business: A skill building approach*. 7th ed. Wiley.

Tauzend, C. (2020). *Terrorism and the Mass Media*. Occasional Paper, the Royal United Services Institute. https://rusi.org/sites/default/files/terrorism_and_the_mass_media_final_web_version.pdf.

Zayed, A. (2011). Civil Society and Human Security Achievement, a research paper presented at the Scientific Forum for Civil Society Organizations and their role in achieving comprehensive Arab security 2011/11-30-28, Naif Arab University for Security Sciences.