THE EFFECTIVENESS OF AUTOMATED E-COGNITIVE BEHAVIORAL THERAPY FOR PTSD AMONG SEXUAL ABUSE VICTIMS DURING CHILDHOOD

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by

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LIST OF ABBREVIATIONS

AECBT	Automated E-Cognitive Behavioral Therapy
AECBT-PTSD-CSA	Automation of Electronic Cognitive Behavioral Therapy for Post-Traumatic Stress Disorder Sexual Abuse in Childhood
AMT	Anxiety Management Training
APA	American Psychological Association
ARM	Agnew Relationship Measure
CBT	Cognitive-Behavioral Therapy
CSA	Child Sexual Abuse
CT	Cognitive Therapy
DSM-IV-TR	Diagnostic and Statistical Manual of Mental Disorders, 4th Edition Text Revision
EMAS-PTSD-CSA	An E-Multi-Automatic Scale For PTSD Victim Resulting From Childhood Sexual Abuse
EMDR	Eye Movement Desensitization And Reprocessing
GAD	Generalized Anxiety Disorders
GPA	Grade Point Average
HPA	Hypothalamic-Pituitary-Adrenal
HPA	Hypothalamic-Pituitary-Adrenal
HTML5	Hypertext Markup Language revision 5
IB-CBSM	Internet-Based Cognitive Behavioral Stress Management
ICBT	Internet-Based Cognitive Behavioral Therapy
ICD-10	International Classification of Diseases 10
ICD-11	International Classification of Diseases 11
MENA	Middle East and North Africa region
NC	National Center

NET	Narrative Exposure Therapy
OCD	Obsessive-Compulsive Disorder
Pd/A	Panic Disorders With/Without Agoraphobia
PFC	Prefrontal Cortex
PTSD	Post-Traumatic Stress Disorder
PTSD-CSA	Post-Traumatic Stress Disorder - Child Sexual Abuse
RCT	Randomised Controlled Trials
SAD	Social Anxiety Disorder
SCID-IV	Structured Clinical Interview for DSM-IV
TF-CBT	Trauma Focused Cognitive Behavioral Therapy
TR	Training
TS	Treatment Session
UI	User interface
UK	United Kingdom.
WAI	Working Alliance Inventory
WHO	World Health Organization
WIX	Windows Installer XML
WMH	World Mental Health

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KEBERKESANAN AUTOMASI TERAPI E-PERILAKU KOGNITIF UNTUK PTSD BAGI MANGSA PENDERAAN SEKSUAL KETIKA KANAK-KANAK

ABSTRAK

Kajian ini mengkaji keberkesanan e-terapi perilaku kognitif automatik (automated electronic cognitive behavioural therapy-e-CBT) terhadap mangsa penderaan seksual kecelaruan stres post-traumatik (post-traumatic stress disorder-PTSD) ketika zaman kanak-kanak. Terdapat peningkatan kejadian penderaan seksual kanak-kanak di negara-negara Timur Tengah dan Afrika Utara (MENA) akibat faktor keagamaan, kebudayaan dan kekeluargaan serta kekurangan akses kepada rawatan trauma. Mengenai penderaan seksual ini, program psikoterapi automatik diketengahkan untuk memudahkan akses kepada rawatan trauma dalam kalangan pesakit PTSD. Dari segi rangkanya, program ini adalah e-terapi automatik yang direka berdasarkan prinsip terapi perilaku kognitif (CBT), dengan menggabungkan beberapa kaedah untuk diselaraskan dengan idea automasi. Tujuan kajian ini adalah yang pertama, untuk mengukur keberkesanan e-CBT automatik dalam mengurangkan gejala PTSD dengan menumpukan pada usia didera, jenis penderaan seksual, jenis sokongan yang diberikan selepas peristiwa traumatik, dan sama ada tahap kesan rawatan berbeza mengikut jenis kumpulan. Kedua, untuk mengkaji korelasi antara perbezaan usia dengan keberkesanan program. Ketiga, untuk mengukur tahap kepuasan dalam kalangan pesakit PTSD terhadap rawatan yang diterima daripada program terapi perilaku kognitif elektronik automatik (e-CBT) yang dicadangkan. Dengan menggunakan pendekatan eksperimen kuasi, kajian ini memilih satu kumpulan rawatan untuk mengkaji keputusan pra-pasca ujian untuk menilai keberkesanan e-CBT automatik. Dengan menggunakan kaedah *volunteer non-random probability*, seramai

160 orang peserta telah dipilih daripada 274 orang peserta selepas menjalankan ujian homogeniti. Peserta berbahasa Arab yang berusia 15-45 tahun, termasuk 15 lelaki dan 145 perempuan didedahkan kepada sepuluh sesi rawatan. Data yang dikumpulkan dianalisis dengan menggunakan kekerapan, ujian T, dan teknik ANOVA. Dapatan menunjukkan bahawa: 1) terdapat pengurangan ketara dalam gejala PTSD apabila ujian pra-rawatan dibandingkan dengan ujian pasca menggunakan perbezaan min bergandingan ($\bar{X}$ = 0.38, P = .000 ≤ .01). 2) Kanak-kanak Arab berusia 7-18 tahun lebih cenderung untuk didera secara seksual berbanding kanak-kanak yang lebih muda dan tiada perbezaan besar antara purata usia didera dengan respons terhadap keberkesanan rawatan. 3) Bentuk penderaan paling lazim yang dialami oleh kanak-kanak berusia 3-18 tahun di MENA adalah gangguan seksual, panggilan telefon dan mesej lucah, dan penderaan seksual secara lisan, dan semua kumpulan dengan pelbagai jenis penderaan telah memberikan respons terhadap keberkesanan rawatan dalam perkadaran yang hampir. 4) Sokongan keluarga wujud terutama selepas peristiwa traumatik, diikuti oleh rakan sebagai pilihan alternatif, dan kemudiannya adalah peranan kerajaan dan badan bukan kerajaan. Sementara itu, keberkesanan rawatan adalah lebih tinggi bagi mereka yang menerima sokongan keluarga dan diikuti oleh sokongan daripada rakan, berbanding dengan mereka yang mendapatkan sokongan daripada kerajaan dan organisasi. 5) Tiada kepentingan secara statistik antara perbezaan usia dengan keberkesanan e-CBT automatik (Tukey, P = 0.22; Scheffe, P = 0.25 pada P ≤ 0.05). 6) Kadar kepuasan purata adalah 90.7 peratus, signifikan pada tahap P=.001 peratus. Secara praktiknya, kajian ini menyimpulkan bahawa keberkesanan (saiz impak yang besar dan kesan rawatan yang berterusan) program e-CBT automatik adalah rawatan alternatif yang berdaya maju bagi mangsa yang

mengalami pelbagai gangguan seksual yang sering disebabkan oleh faktor sosial dan keagamaan.

THE EFFECTIVENESS OF AUTOMATED E-COGNITIVE BEHAVIORAL THERAPY FOR PTSD AMONG SEXUAL ABUSE VICTIMS DURING CHILDHOOD

ABSTRACT

This study investigates the effectiveness of an automated electronic cognitive behaviour therapy (automated e-CBT) on sexual abuse victims of post-traumatic stress disorder (PTSD) during childhood. There are increasing incidents of child sexual abuse in the Middle East and North Africa (MENA) countries due to religious, cultural and family factors and the general lack of access to trauma treatments. Pertaining to this sexual abuse provided a program; automatic psychotherapy that can facilitate the access to trauma treatment among PTSD patients. By design, the program is an automated e-therapy that is created based on the principles of cognitive behavioral therapy (CBT), combining several methods to align with the idea of automation. Specifically, the present study aimed: First, it measures the effectiveness of automated e-CBT in reducing the symptoms of PTSD by focusing on the age of the harm, the type of sexual abuse, the type of support provided after the traumatic event, and whether the level of treatment effect varies among groups' types. Second, it examines the correlation between age difference and program effectiveness. Third, it measures the satisfaction level among PTSD patients toward the treatment they received from the proposed automated electronic cognitive behavioral therapy (e-CBT) program. Using a quasi-experimental approach, this study employed one treatment group to examine the pre-post-test results to assess the effectiveness of the automated e-CBT. Using a volunteer non-random probability method, 160 participants were sampled out of 274 participants after conducting a homogeneity test. The sampled Arab-speaking

participants who are aged 15-45 years, including 15 males and 145 females were exposed to ten treatment sessions. The data collected were analyzed using frequencies, T-test, and ANOVA techniques. Findings revealed that: 1) there is a significant reduction in the PTSD symptoms when the pre-treatment testing is compared to the post-testing using the paired difference of means ($\bar{X}$=0.38, P =.000 $\leq$ .01). 2) Arab children aged 7-18 years are more likely to be sexually abused than younger children and there are no large differences between the average age of harm and response to treatment efficacy. 3) The most common abuses affecting children aged 3-18 in MENA are sexual harassment, obscene phone calls, and messages, and verbal sexual abuse, and all groups with different types of abuse responded to the treatment efficacy in close proportions. 4) Family support exists primarily after the traumatic event, followed by friends as an alternative option, and then comes the role of government and non-profit organizations. Meanwhile, treatment efficacy was higher with those who received family support and then support from friends, compared to those who received support from government and organizations. 5) There is no statistical significance at P $\leq$ 0.05 between age differences and the effectiveness of automated e-CBT (Tukey, P=0.22; Scheffe, P=0.25). 6) The average rate of satisfaction is 90.7 percent, significant at P=.001 percent level. Practically, the study concludes that the effectiveness (in terms of high impact and sustained treatment effects) of the automated e-CBT program is a viable alternative treatment for victims suffering from various sexual disorders often caused by societal and religious factors.

CHAPTER 1

INTRODUCTION

1.1 Background to the Study

Throughout the years, *sexual abuse* has been deemed to be a type of abuse that causes significant psychological trauma to the victim. Despite the fact that signs of physical injuries are indiscernible in some instances, it can take a serious toll on the victim's emotions (American Psychological Association [APA], 2012). More specifically, abuse or maltreatment of a child is covered under different forms of physical and emotional ill treatment, that leads to actual or potential harm to the health, development and the dignity of the child as evidenced by Gonzalez and Mc Call (2018), Butchart et al. (2006) and WHO (2004).

Child sexual abuse (CSA) has been found to be widespread in all nations, and in order to facilitate the process of research and investigation of this phenomenon, it was necessary to define a clear definition to guide those interested in this issue although, studies have used different definitions of the term (e.g., Barth, Bermetz, Heim, Trelle, & Tonia, 2013; Stoltenborgh, van Ijzendoorn, Euser, & Bakermans-Kranenburg, 2011; Sumner et al., 2015). Substantial adverse health, behavioral, and social sequelae have been identified, with studies again using different definitions of CSA (Chen et al., 2010; Dube et al., 2005; Edwards, Freyd, Dube, Anda, & Felitti, 2012; Paolucci, Genuis, & Violato, 2001; Trickett, Noll, & Putnam, 2011). Evidence of the etiology, prevalence, and sequelae of CSA has grown considerably since the late 1970s. There is a general consensus that CSA is a complex phenomenon occurring for multiple reasons, in various ways, and in different relationships within families, peer groups, institutions, and communities (Mathews & Collin-Vézina, 2019).

The Definition of Child Sexual Abuse is broader than most people realize, it extends to include different types which most importantly that they violate the body and self-image of child's (Al-Wahedi, 2010). Also, it is a traumatic experience for children and is a criminal offense punishable by law in many societies (Townsend & Rheingold, 2013). As a term, Oxford dictionary introduced a definition for child sexual abuse and describes it as "Subjecting children or other vulnerable groups to sexual activity, which would cause physical or psychological harm" (Andrew, M. Colman, 2001, p672). According to the US Centers for Disease Control and Prevention (CDC), child sexual abuse is "any sexual act completed or attempted (incomplete), sexual contact, or exploitation of any child by the caregiver." (Lib et al., 2008). The CDC provides specific definitions for both boldface terms, and distinguishes sexual acts such as penetration, arbitrary sexual contact as deliberate contact without penetration, and indirect sexual abuse such as exposing a child to sexual activity, taking sexual images, child pornography, sexual harassment or prostitution or trafficking (Leeb et al., 2008).

The World Health Organization defines Child Sexual Abuse as: Involvement of a child in sexual activity that he/ she does not fully understand, or which the child is not developmentally prepared and can not consent to, or violates the social laws or taboos of society. This sexual abuse of children is manifested between the child and an adult or other child of age or growth in a relationship of responsibility, trust or authority, and this activity is intended to satisfy or meet the needs of the other person. This may include, but is not limited to: urging or coercing a child to engage in any unlawful sexual activity; exploitative use of the child in prostitution or other unlawful sexual practices; exploitative use of children in pornography and displays (WHO, 1999). It also covers physical abuse, emotional abuse, neglect and negligent treatment

of a child (Abdella et al., 2015). As a result, child sexual abuse is the most serious of abuse and has been extensively examined (Al Odhayani et al., 2013; Center for Substance Abuse Treatment, 2000).

The Diagnostic and Statistical Manual of Mental Disorders (DSM) and the International Classification of Disease (ICD) have been revised to come up to confirm the previous definition. These revisions provided an opportunity to elaborate on the definitions of maltreatment to encourage better screening and detection of child maltreatment. The DSM-5 has defined child sexual abuse as a form of child abuse in which an adult or older adolescent uses a child for sexual stimulation. Forms of child sexual abuse include asking or pressuring a child to engage in sexual activities (regardless of the outcome), indecent exposure (of the genitals, female nipples, etc.) with intent to gratify their own sexual desires or to intimidate or groom the child, physical sexual contact with a child, or using a child to produce child pornography (American Psychiatric Association, 2013).

Through the analysis of definitions and the debate on the definition of what is sexual abuse, is clear to *the current study* that all the definitions dealt with multiple axes in describing child sexual abuse where the term refers to the use of children in sexual activities that they do not fully understand, can not consent to and which violate generally accepted cultural norms. The term also gives many forms of sexual contact characterized by varying degrees of violence or non-violence, which does not include physical contacts, such as taking situations for filming or pornographic movies. The abuser is usually known to the child and most likely is a family member (incest).

Accordingly, the present study is based on this definition in its research path where become clear that the child sexual abuse covers a wide range of incidents

committed by men and women on young children of both sexes and different ages, although it is an activity involving the complete secrecy and guilt by the abuser and the evening. Therefore, it is difficult to give a clear indication of both the occurrence and the prevalence, because of the contradictions and the somewhat divergent results, especially with regard to the prevalence of child sexual abuse.

The CSA Pervasion; retrospective adult studies (community surveys) in the last two decades have indicated an increase in child sexual abuse, especially adultery and incest (Doyle, 1994, p99). In fact, incidence varies from time to time and from place to place, depending on individual, family and community circumstances, but sexual exploitation of children appears to be a global phenomenon (Slep et al., 2015). Actuality, the majority of the data obtained in this field and topic come from the U.S. and Canada but various findings were also evidenced in different European countries that match similar outcomes of child sexual abuse (Polonko et al., 2010; May-Chahal & Herczog 2003).

Owing to the serious outcome of such abuse, data on the existence of child sexual abuse (CSA) are astoundingly full of disturbing information. In Finkelhor's (1994) work, the author noted that international-based studies are aligned with those found in North America when it comes to the issue of sexual abuse. According to his conclusion, studies in different country contexts indicate the proliferating issue of sexual abuse in the international arena. Based on the researchers' data, there is high level of sexual abuse evidenced via surveys carried out among a few hundred adults from the population. Moreover, the rates are greater than what has been indicated by the reports of the countries, and therefore, epidemiological results are obtained for majority of countries. This makes it irresponsible for anyone to claim the rarity of sexual abuse in his/her locality (Polonko et al., 2010, p.412). In an early international

perspective on child abuse, introduction to Korbin's Child Abuse and Neglect Cross-Cultural Perspectives (1981) states that "child abuse has become a serious social problem in developed and developing countries, yet it occurs frequently or not it occurs at all in many societies of the world " (Lalor & McElvaney, 2010) also international prevalence estimates of maltreatment (which vary due to operationalization differences) suggest the phenomena are far from rare.

For example, a review of child physical and sexual abuse estimates in high-income countries found 1-year prevalence rates of 4–16% (Gilbert et al., 2009). WHO in 2002 indicated that in many countries, such as Romania, India, and the Republic of Korea, rates of child physical and sexual abuse occur at alarmingly high rates with one-third to one-half of all children experiencing physical and sexual abuse. A review of 21 studies, primarily from English-speaking and Northern European countries, found a range of prevalence rates of 7–36% for female victims of child sexual abuse (CSA) and 3–29% for male victims of CSA (Finkelhor, 1994). Childhood prevalence of neglect is estimated at 6–12% in U.S. and U.K. samples (Gilbert et al., 2009). There is a high rate of co-occurrence among the maltreatment types (Gilbert et al., 2009; Higgins & McCabe, 2001). It is estimated that about 35–64% of victims of child maltreatment experience more than one type of maltreatment (Donga et al., 2004; Edwards, Holden, Felitti, & Anda, 2003; Manly, Kim, Rogosch, & Cicchetti, 2001). However, the relative rates of maltreatment types vary by country. In Canada and the United States, neglect is most common (Trocm_e, Tourigny, MacLaurin, & Fallon, 2003), whereas in Australia, emotional abuse is the most prevalent (Hatty & Hatty, 2001).

In the context of the prevalence Lionel (2017) has noted in his book some recent statistics which represent some of the research done on child sexual abuse such

as the U.S. Department of Health and Human Services' Children's Bureau report Child Maltreatment 2010 found that 9.2% of victimized children were sexually assaulted. Studies by David Finkelhor, Director of the Crimes Against Children Research Center, show that: 1 in 5 girls and 1 in 20 boys is a victim of child sexual abuse; Self-report studies show that 20% of adult females and 5-10% of adult males recall a childhood sexual assault or sexual abuse incident; Moreover, during a one-year period in the U.S., 28% of youth ages 14 to 17 had been sexually victimized; Over the course of their lifetime, and the most vulnerable to CSA is children between the ages of 3 and 14. According to a 2003 National Institute of Justice report, 3 out of 4 adolescents who have been sexually assaulted were victimized by someone they knew well. A Bureau of Justice Statistics report shows 1.6 % (sixteen out of one thousand) of children between the ages of 12-17 were victims of rape/sexual assault (Lionel, 2017). A study conducted in 1986 found that 63% of women who had suffered sexual abuse by a family member also reported a rape or attempted rape after the age of 14. Recent studies in 2000, 2002, and 2005 have all concluded similar results (Lalor & McElvaney, 2010).

In fact, physical and sexual abuse of children exists in different cultures, socio-economics, education, race and ethnic categories (Abdella et al., 2015; Carr, 2012). Cultural differences in child-rearing beliefs and practices and in universal social services, combined with different definitions of maltreatment, likely influence variability in prevalence rates. This is supported through a study related to international epidemiology of CSA conducted by Finkelhor (1994) which found that research studies point to a large number of results from Caucasian, Western and Christian countries and the relative lack of data from countries in the Middle East, Africa or the Far East. Lachman (1996) also pointed to the lack of research on child

abuse in Africa, where it is "overshadowed by political and economic problems, lack of resources, greatness of the phenomenon, lack of research culture and research experience" (p. 543) However, he has noted an increasing number of publications from Africa and the Middle East in international journals. Today, despite the many gaps, but there is better information about the nature of CSA occurrence and its occurrence worldwide.

The CSA proliferation literature in the *Middle East and North Africa (MENA)* "Arabic Speakers, especially societies that abide by conservative social laws and values and consider this issue to be taboo" are still significantly lacking compared to Western countries and the Caucasus, in part reflecting the impact of the near universal ratification of the UN Convention on the Rights of the Child (CRC). For example, the Child Rights Situational Analysis for the Middle East and North Africa (MENA) Region (Pereda et al., 2008) states "persist progress in the legislative and programming fronts - with many of the Governments of MENA countries working with civil society groups, international NGOs, regional bodies, donors and United Nations agencies to better protect children" child protection remains a serious issue every c country of the region. The nature and extent of child protection issues varies country to country in Arabic-speaking areas and includes issues such as violence against children whether at homes, schools or institutional settings, harmful practices, particularly female genital mutilation and early marriage, juvenile justice, exploitative child labor, and birth registration.

As expected, an extensive review of the prior research in 21 countries in the Middle East and North Africa such as " Al-Tanbari (1995), Bashtah (2001), Kassem (2005), Fareed (2006), Al-Mahroos (2007), Assamiee (2008) and Al-Wahedi (2010)", published in refereed academic outlets and/or NGO documents, yielded few studies

with prevalence data on CSA. The total percentage of sexual abuse of children for all studies in 21 countries ranges from 18% to 35% of total abuse, and that 60% of the victims are minors and 45% the offender is known to the victim; either from relatives or from the social environment; as study colleagues, teachers, school guards, neighbors, supermarkets owners ... etc.

MENA Dealings with the CSA Phenomenon; The social determinants of CSA in the MENA region largely rooted in traditionally held cultural beliefs and mores towards sex, sexuality, and the myriad issues and topics arising thereof, almost all of which have been taboo, though not to equal degrees in all countries within the region (Polonko et al., 2011). Cultural taboos often underlie stigmatisation, making it difficult to prepare national plans of action and address the needs of child victims. It is possible that child victims of CSA (or other forms of sexual exploitation) in the MENA region struggle with openly discussing their emotional problems and reporting the incident to local authorities or staff and personnel in the tourism industry, in fear of being stigmatised, judged, labeled, or even ostracised by their families and social circles. For example, in the Special Rapporteur's report of CSEC in Morocco, it notes that child maids who endure sexual abuse at their employment are unlikely to file a complaint with the authorities because they fear the implications of declaring that one is no longer a virgin, which is extremely daunting for most unmarried women in Morocco (Commission on Human Rights, 2006). Similarly, some of the prevailing customs and norms in certain communities pose dangers to the physical and mental health, integrity, and development of their children. Especially pertinent is the perception of child marriage in some areas in MENA. Susanne Mikhail speculated in a 2002 article that child marriage has been sanctioned by many families, tribes, and religious groups in some parts of the region (Susanne, 2002).

That the proliferation of this phenomenon extensively towards the violation of the body of the child, urging governments, religious entities and Children Rights Organizations to establish robust laws to mete out punishments to the perpetrators. (Abdella et al., 2015). Accordingly, several efforts have been made all over the world for its prevention and reduction. In this regard, the UN Convention on child's rights (UNCRC) guarantees the right of the child to be provided services, to participate in society, to be protected and cared for (Weyts, 2005). In this background, the role of criminal justice system is pertinent in preventing the behavior of perpetrators, supporting the mitigation of the phenomenon and providing victims the required relief (Clark, 2011). Advocates have made efforts to promote the awareness of the public concerning child maltreatment and different initiatives have been launched and implemented in various countries to prevent and minimize child sexual abuse. In relation to this, researchers have contributed greatly to the comprehension of the different issue aspects, such as its prevalence, and the causes and outcomes of maltreatment of children (Jimerson et al., 2012; Alleyne et al., 2006).

The downside being which hinders stop this phenomenon, in general, that there are minimal reports of the phenomenon, especially in the MENA, but relatively speaking, late reports are better than no reports at all, and this it exacerbates the spread of the phenomenon and face difficulties in dealing with (Abdella et al., 2015). The reason behind late reports is attributed to the *accompanying shame or guilt* that sexually abused victims suffer from, as some people blame them for the attack (Krug et al., 2002). Aside from the negative stigma related to childhood abuse, *there are several factors* that contribute to the victims underreporting and hiding their sufferings of abuse from their immediate families and friends and these include their fear of reliving the experienced trauma of abuse and fear of being judged and accused

(O'Leary & Gould, 2010; Wright et al., 2009). And it may also be attributed to amnesia or traumatic dissociation that bars people from reporting as the victims only remembers the abuse after several years (Cossins, 1997). Cheit et.al (2010) considered that an important player contributing to the relaying of false information of childhood sexual abuse throughout the years is the media, and this has resulted in misconstrued and negative perceptions of the victims within the society which leed them to close more with themselves and careful not to disclose.

Such *non-disclosure or late disclosure* may compound the mental and psychological sufferings of the victims. It cannot be stressed enough that the self-disclosure of sexual abuse by the child victim forms a crucial element in intervention initiatives to stop abuse, tackle its effects and mitigate the probability of negative effects in the long-run (Paine & Hensen, 2002). Because of non-disclosure of childhood sexual abuse, it becomes difficult to gauge the related emotional and mental outcome during the victim's childhood and adulthood (Burton et al., 2004).

The issue was further examined by Lee, Scragg and Turner (2001) and the study findings supported the results that were highlighted in past studies in that *shame and guilt* have a key role in traumatic events. The study proposed a clinical model of shame-based and guilt-based *Post-Traumatic Stress Disorder (PTSD).* Among the reasons cited behind the hesitance of people to come forward to assist with PTSD is the operation of shame in different levels. Moreover, the shame and guilt effects can render the patient disabled in as far as the effect of the experience in self and social-behavior, add to long-term psychopathology, impact help-seeking (Andrews, 1995, 1998; Gilbert, 1997), prevent emotional event processing (Brewin, Dalgleish& Joseph, 1996; Joseph, Williams & Yule, 1997; Riggs, Dancu, Gershuny, Greenberg &Foa, 1992) and considerably disturb the therapeutic effects of imaginal exposure, and

treatment, as they interfere with the ability of the individual to process their traumatic memory.

In a related study conducted by Feiring and Taska (2002) and Negrao, Bonanno, Noll, Putnam and Trickett (2005) revealed that had high levels of shame (gauged following the abuse from 1-6 years), were had a greater tendency to report PTSD symptoms after CSA, indicating that chronic shame may prevent successful the traumatic event processing.

The Rationale for Post-Traumatic Stress Disorder Creates (PTSD); The negative consequences of child sexual abuse trauma, all effects of trauma can take place either over a short period of time or over the course of weeks or even years. Any effects of trauma should be addressed immediately to prevent permanence. The sooner the trauma is addressed, the better chance a victim has of recovering successfully and fully (McNally, 2003). Often these symptoms that are accompany the child during his life after the shock, if caretakers of the child did not the attention it and provide emotional support it will develop with days from reaction to depression and anxiety, and with the growth stage, it will progress with him and it will turn from short-term symptoms to symptoms of PTSD (Lamis, 2014; Stallard 2014; Sperry & Widom 2013; Feeny et.al 2004; Yule et.al 2001) as shown in the table 1 below:

Table 1.1

Child Sexual Abuse Psychological Impact Short and Long Term and PTSD

Impacts	List of symptoms	Author & year
Short-Term Disorders	Self-conflict "Especially if he lives in an authoritarian social environment", Easy to threat and exploitation of any pedophilia person, becomes incapacitated and unable to cope,	Frances et al., (1981) list (Stanhope & Lancaster, 2015)
	Weakness of self-esteem, the tendency to suicidal behavior, Guilt and cognitive disorder, High aggression, Anxiety and narcissism, Excessive withdrawal, Speech	Coons,(1986) list (Abdulwahab Kamel, 1991; Al-Wahedi, 2010)

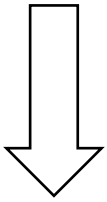
disorders, Cognitive dysfunction, Learning difficulties, Lack of ability to enjoy life while losing their sense of self,

Infect with excessive retirement, shaking his self-image, Distrust of others, Increased fears, Especially fears of physical closeness associated with pain, Fears of adults in general increase, — Laurel, (1988), pp645-649.

Sleep loss, Bed wetting, Loss of interest in social relationships, Diminished self-esteem, Hyper-vigilance, Anxiety, Depression, Lack of focus in education, Impaired self-conceptualization, Physical pain, — Polonko et al., (2010); Berliner& Elliott, (2002)

Responses in the form of shock and denial and reflective of the cognitive distortions. — APA, (2012)

Develop Into



PTSD

Long-Term Disorders

The PTSD symptoms include: Irritability and/or hostility, Depression, Mood swings, instability, Anxiety (e.g., phobia, generalized anxiety), Fear of trauma recurrence, Grief reactions, Shame, Feelings of fragility and/or vulnerability, Emotional detachment from anything that requires emotional reactions (e.g., significant and/or family relationships, conversations about self, discussion of traumatic. — Briere & Scott, (2014); Foa, Stein, & McFarlane, (2006); Pietrzak, Goldstein, Southwick, & Grant, (2011); Center for Substance Abuse Treatment, (2014); Frommberger et al., (2014); Schechter et al., (2007); Schechter et al., (2008); Schoedl et al. (2010) and Leahy et al. (2008)

Sleep disturbances, nightmares, Intrusive memories or flashbacks, Reactivation of previous traumatic events, Self-blame, Preoccupation with event, Difficulty making decisions, Magical thinking: belief that certain behaviors, including avoidant behavior, will protect against future trauma, Belief that feelings or memories are dangerous, Generalization of triggers (e.g., a person who experiences a home invasion during the daytime may avoid being alone during the day).

Suicidal thinking events or reactions to them), Avoidance of event reminders, Social relationship disturbances, Decreased activity level, Engagement in high-risk behaviors, Increased use of alcohol and drugs, Withdrawal, Questioning (e.g., “Why me?”), Increased cynicism, disillusionment, Increased self-confidence (e.g., “If I can survive this, I can survive anything”), Loss of purpose, Renewed faith, Hopelessness, Reestablishing priorities, Redefining meaning and importance of life, Reworking life’s assumptions to accommodate the trauma (e.g., taking a self-defense class to reestablish a sense of safety)

The table shows that there is a wide range of symptoms of *childhood sexual abuse* that develop over time to become a symptom of *post-traumatic stress disorder*. In fact, the risk of PTSD is higher if trauma is inflicted deliberately (Resnick et al., 2007). However, it likely develops due to a range of environmental and genetic factors. A person who has previously experienced trauma, or has another mental health disorder, or is experiencing other stressful events will have a higher chance of developing acute stress disorder or PTSD (Stern et al., 2016).

People who experience interpersonal trauma (e.g., example child sexual abuse) are more likely to develop PTSD, as compared to people who experience non-assault based trauma, such as accidents and natural disasters (Zoladz & Diamond, 2013). About half of people develop PTSD following rape (Bisson et al., 2015; Petrak & Hedge, 2003). Children are less likely than adults to develop PTSD after trauma, especially if they are under 10 years of age, it may not appear with them in childhood but appear strongly at puberty (NCCMH, 2005). Diagnosis is based on the presence of specific symptoms following a traumatic event (Bisson et al., 2015).

Brief Description of PTSD; PTSD arises as a delayed or protracted response to a stressful event or situation (of either brief or long duration) of an exceptionally threatening or catastrophic nature, which is likely to cause pervasive distress in almost anyone. Predisposing factors, such as personality traits (e.g., compulsive, asthenic) or previous history of neurotic illness, may lower the threshold for the development of the syndrome or aggravate its course, but they are neither necessary nor sufficient to explain its occurrence. Typical features include episodes of repeated reliving of the trauma in intrusive memories ("flashbacks"), dreams or nightmares, occurring against the persisting background of a sense of "numbness" and emotional blunting, detachment from other people, unresponsiveness to surroundings, anhedonia, and

avoidance of activities and situations reminiscent of the trauma. There is usually a state of autonomic hyperarousal with hypervigilance, an enhanced startle reaction, and insomnia. Anxiety and depression are commonly associated with the above symptoms and signs, and suicidal ideation is not infrequent. The onset follows the trauma with a latency period that may range from a few weeks to months. The course is fluctuating but recovery can be expected in the majority of cases. In a small proportion of cases the condition may follow a chronic course over many years, with eventual transition to an enduring personality change (ICD-10-F62.0, 2016; WHO, 2004).

In addition to, the survivors' immediate reactions in the aftermath of trauma are quite complicated and are affected by many factors such; characteristics of the individual, the type and characteristics of the event(s), developmental processes, the meaning of the trauma, and sociocultural factors, their own experiences, the accessibility of natural supports and healers, their coping and life skills and those of immediate family, and the responses of the larger community in which they live. Although reactions range in severity, even the most acute responses are natural responses to manage trauma, they are not a sign of psychopathology. Most survivor's exhibit immediate reactions, yet these typically resolve without severe long-term consequences. This is because most trauma survivors are highly resilient and develop appropriate coping strategies, including the use of social supports, to deal with the aftermath and effects of trauma. Most recover with time, show minimal distress, and function effectively across major life areas and developmental stages (Center for Substance Abuse Treatment, 2014).

The story of evolution usually begins with typical reactions are an intense, unavoidable reliving of the traumatic event in the form of images, film-like scenes, or nightmares. The affected individual is unable to control his or her memories. The

attempt not to think about the trauma again fails and leads to dysfunctional avoidance behavior. This causes symptoms to become prolonged and chronic (Frommberger et al., 2014)

In fact, it is not fully understood why some develop PTSD, which so dramatically and negatively alters individuals' self-concepts and outlooks (Terr, 1991), and others are more resilient, develop a sense of self, form relationships, can problem solve and plan for a positive future (Bernard, 1993; in Greene, 2002). One of the most commonly cited factors that mediate likelihood of PTSD is age at which the trauma occurred (Chaffin et al., 1997; Kendall-Tackett et al., 1993; Spaccarelli, 1994). According to Schoedl et al. (2010), those reporting CSA after age 12 were at ten times higher risk for PTSD. Other found victimization occurring before age 15 was most likely to cause greater psychological stress later in life (Draper et al., 2008). Other PTSD vulnerability factors include intensity, frequency, duration, and degree of sexual contact (Briggs & Joyce, 1997). Epstein, Saunders, and Kilpatrick (1997) found that those who experienced penetration had the highest prevalence of PTSD of all CSA survivors.

Dissociation, defined as a structured compartmentalization of mental processes, such as thoughts, feelings, or memories, can play a role in the development of PTSD. Hetzel and McCanne (2005) found a correlation between childhood dissociation and PTSD in adulthood. They noted risk factors used to predict lifetime PTSD include a parent who was arrested or abused substances, early behavioral problems, marital instability, and substance dependency. Widom (1999) found that abused children also have a greater genetic vulnerability to developing PTSD and prior psychopathology is shown to have a relationship to PTSD. It can be the most logical justification is what psychologists have pointed out that if PTSD is left untreated for at least half a decade, it may evolve into a chronic situation as evidenced by the third of children that suffered

from it (Yule et al., 2001). Therefore, according to Feeny et al. (2004) and Stallard (2014), an effective treatment for PTSD among children is required. Nevertheless, a dynamic in the trauma of child sexual abuse (CSA) arises with the delay or withholding of disclosure of the abuse (Alaggia, 2004). Based on the non-clinical and clinical population studies, a significant percentage of victims remain silent on CSA prior to reaching adulthood (Paine & Hansen, 2002; Smith et al., 2000; Arata, 1998; Lawson & Chaffin, 1992).

Prevalence of PTSD; The beginning of research for this disorder was when a conceptual PTSD model was applied with Vietnam combat veterans has been occurring for the past decade. The high prevalence of PTSD among Vietnam veterans has been well documented as well as the significant relationship between high levels of combat exposure and subsequent development of PTSD (e.g., Foy et al., 1984; Gailers et al., 1988). Only recently has this model been applied to other trauma groups. A review of research examining PTSD in trauma groups similar to CSA is helpful in conceptualizing the PTSD model with CSA survivors (Rowan & Foy, 1993).

Similar to the historical development of the study of CSA research, the National Comorbidity Survey–Replication, conducted in 2001–2002, estimated that the 12-month prevalence of PTSD in the U.S. adult population was 3.6% and that the lifetime prevalence was 6.8%. Women were more likely than men to have PTSD (9.7% vs 3.6% for lifetime), and the prevalence of PTSD increased with age from 18 to 59 years, but then decreased substantially in those over 60 years old (Harvard Medical School, 2007). Another national survey, the 2004–2005 National Epidemiologic Survey on Alcohol and Related Conditions, found a lifetime prevalence of PTSD of 7.3% (Roberts et al., 2011). For comparison, the 12-month and lifetime prevalence of major depressive disorder in the adult U.S. population was 6.8% and 16.9%,

respectively. The 12-month and lifetime prevalence's of any mental health disorder were estimated to be 32.4% and 57.4%, respectively (NIMH, 2013). (Galea et al., 2012).

PTSD in MENA; It is recognized that the presence of the PTSD wherever there are traumatic shocks threaten survival or self-worth. The review above about the prevalence of child sexual abuse gives us an expected that the PTSD-CSA for boys and girls exists in the MENA region and constitutes a source of concern. Actually, the incidence of post-traumatic stress disorder in Arab-speaking countries is often strongly correlated with the prevalence of wars, as there are no statistical studies dealt with the subject of PTSD-CSA directly in these countries until now, due to a number of methodological challenges including; that the MENA is remarkably heterogeneous, encompassing a large variety of cultures, political systems, ethnicities, and religious beliefs, which limits the cross-cultural applicability of the instruments used and the generalization of the findings. In addition, there are many countries in the MENA remain underrepresented in the trauma and PTSD literature (Yuval at al., 2010). Despite these limitations, the literature presented in this brief review may be relevant and timely for researchers, clinicians, and policy makers interested in addressing the mental health needs of affected populations in the MENA.

***General Perspective for the Prevalence of PTSD in MEN*A;** surveys of current rates of PTSD have been conducted in several Arab countries using different research instruments, and have reported a wide range of PTSD prevalence rates as general. It can be summarized as described in the study Baddoura & Merhi, (2015) in Arab countries affected by war and conflict, the rates of PTSD in children seem to be homogeneous, all ranging between 35-50%. Even the causes of PTSD are evidently different between these countries, conflict and war in the Arab nations versus crime

19%-75% and rape 80% in the rest of the world (Javidi & Yadollahie, 2012; The Arab Journal of Psychiatry, 2015).

Overall, the general-population prevalence of PTSD in the Middle East ranges widely from less than one percent to more than a third of the sample, with higher rates consistently reported among children and in areas of recent or ongoing conflict (Yuval et al., 2010). These findings suggest that PTSD and other trauma-related mental health issues resulting from widespread conflict are, and will be, a public health crisis in the Arab world. Despite these limited studies, a vast majority of cases of trauma in the Arab world will go undiagnosed and untreated. Trauma among Arabs will have long-term consequences for both individuals and communities throughout the region for generations.

Actually, there is cultural sensitivity in Arab societies towards mental health, and this is why the services of all kinds are facing rejection and failure in achieving their goals to overcome mental disorders. People prefer to attribute mental illness to some voodoo and erroneous beliefs. Mental-health problems are often ignored for fear for bringing shame and disgrace to both individual and family. This stigma is even greater among Arab men, who are discouraged from seeking help or being perceived as weak or dependent. Due to these cultural challenges, Arabs often express psychological problems in physical terms (SUTO, 2016), they describe their psychological experiences and psychiatric symptoms using a socially-based vocabulary, rather than a universal and biological one, in order to express their suffering, to engage with their social environments, and to interpret their traumatic experiences (Afana, 2012). As Engel (1977) noted in his seminal paper, explaining mental suffering in entirely psychiatric terms is a "reductionist" view of human adversities. Consequently, there is a need for incorporating social, political, cultural and economic factors as important

dimensions in formulating and understanding PTSD and other mental health conditions and assessing the overall mental health impact of exposure to continuous, repetitive, and extreme forms of trauma.

Based on currently available proposals, the DSM appears to be moving in the direction of making PTSD a more inclusive and more heterogeneous category. Phillips (2010) has argued that, even with the new additions proposed for the DSM-5, the PTSD construct is not broad enough to encompass cultural differences, local idioms of distress, and explanatory models experienced by the nonwestern cultures. If this is the case, the DSM-5 construct is unlikely to be very helpful in understanding how people experience and explain their reactions ("symptoms"), their thoughts and beliefs about these experiences, and how best to help them when they become trapped in maladaptive patterns (Afana, 2012).

Currently, here is a trend towards attention to the category that suffers from shocks of abuse and therefore focuses on organizations interested in human rights and government institutions such as schools and hospitals, and another hand the researcher's efforts in an attempt to help these cases and reduce the phenomenon, where the system had established for monitoring the victims and called them to participate in the rehabilitation programs. As noted above, most of this category prefers silence and non-disclosure and thus the amount of participation is almost rare and most of the rehabilitation programs have failed because of the lack of presence of the targeted. Al-Wahedi (2010) pointed out in his study that the failure of these programs is due to the same factors that lead to non-disclosure of sexual abuse, and the most important cultural and beliefs that play a wrong role in the management of human rights. She says that the victim in *Middle Eastern* societies is not the victim of a person with criminal behavior but a victim of a society with criminal habits and traditions.

The Interventions; Using effective interventions to overcoming *post-traumatic stress disorder (PTSD)* is increasingly important. Potential preventive interventions span a variety of psychological and pharmacological domains. These interventions have been used both separately and in combination with one another. With regard to psychological interventions that have been studied for the prevention of adult PTSD are include the following: psychological debriefing interventions, including critical incident stress debriefing (CISD) and critical incident stress management (CISM); psychological first aid (PFA); cognitive-behavioral therapy (CBT) which include: cognitive restructuring therapy, cognitive processing therapy, exposure-based therapies, coping skills therapy (including stress inoculation therapy), psychoeducation, normalization; and eye movement desensitization and reprocessing (EMDR). These therapies are designed to prevent the onset of PTSD and the development of symptoms. Each treatment method has achieved its effectiveness in overcoming PTSD, but the effectiveness of each of them has varied. Majority of studies in the topic evidenced that cognitive behavioral therapy was the top effective treatment, especially for a treat of post-traumatic stress disorder childhood sexual abuse (Stefan et al., 2012). The majority of these therapies were designed to be provided face-to-face by trained therapists and some of the therapies are trauma-focused (Simblett et al., 2017).

Cognitive-Behavioral Therapy (CBT); CBT is distinguished from all these therapeutic methods. This is because CBT has a special strategy that focuses on trauma from childhood to adulthood, which named Trauma-Focused Cognitive Behavioral Therapy (TF-CBT). TF-CBT also distinguished with quick effectiveness and compatibility with various trauma situations that is why most therapists are likely to use it (Bisson et al., 2013; Ehlers et al., 2005). Previous studies have been proved by

evidence that the trauma-focused cognitive behavioral therapy childhood sexual abuse (TF-CBT- CSA) was successful in its effectiveness in mitigating PTSD symptoms and restructuring dysfunctional premises accompanying different psychological disorders, in particular for PTSD in victims with childhood sexual abuse experience (Cohen et al., 2000; Cohen et al., 2016; Grove, 2013; Zayfert & Becker, 2006). More specifically, Deblinger et al. (1990, 1999) illustrated that TF-CBT, including anxiety management components for children from 3-16 years of age, is effective in mitigating PTSD symptoms (Cohen et al., 2004). Similarly, Kar (2011) evidenced that CBT is effective in treating PTSD and current studies evidenced its safe and effective nature in intervening both acute and chronic PTSD after different traumatic experiences suffered among adults, adolescents and children. The most interesting is that the CBT has been validated and employed throughout several cultures and implemented between community therapists, and has achieved great success after a short training in individual and group cases (Miranda et al., 2003). Although, CBT face to face therapies may involve substantial input from the therapist, require substantial time commitments, and may be associated with the stigma of attending a mental health clinic (Banerjee & Severn, 2018; Lewis et al., 2017).

The Challenges; Popoola & Adebowale (2012) offered a list of the most important challenges faced by patients in to receive treatment face to face, include: managed care's insistence on the necessity of medical treatment, fear of social stigma, lack of time, long-term waiting times and geographic isolation. For this reason, the efforts of specialists in the development of the therapeutic body have intensified through the use of electronic technology as the largest area that collects the greatest amount of human communication for the purpose of installing electronic clinics,

directly and indirectly, and providing *e-psychotherapy* to all who need it within a confidential and safe environment (Singh & Severn, 2018).

E-Therapy; In recent times, psychotherapies that can be offered remotely have been investigated for the treatment of mental health conditions. These include therapies with telecommunication offered via video conferencing, telephone, e-mail, and internet (Bolton & Dorstyn, 2015; Popoola & Adebowale, 2012; Grohol, 1999). Comparatively, e-mail services are characterized as asynchronous, wherein participants pick a time convenient for them to reply back. Moreover, online psychotherapists have created various price arrangements, with the inclusion of flat fees for standard message lengths, minute-by-minute charges to send replies, or package deals for a number of e-mail, or unlimited emails for a time period (Rochlen et al., 2004).

In actuality, the technological development area takes much time and rapid internet technology has enabled the growth of individuals and corporations in offering healthcare services or e-health (e.g., counseling and therapy). Despite this fact, information on such individuals is non-existent partially because of the challenges in carrying out research over the Internet (Maheu & Gordon, 2000). Based on an internet-based survey, the backgrounds, communication technologies and clinical interventions from individual behavioral e-health care practitioners. Based on the results, issues relating to legal, ethical and professional aspects arise when it comes to using various internet technologies. Therefore, it is pertinent for psychologists to focus on empirical research, language and the present practical standards prior to delivering counseling or psychotherapy via the internet (Maheu & Gordon, 2000).

A growing number of rigorous studies have been recently appraised in systematic reviews (Calear & Christensen, 2010, Richardson et al, 2010). Calear and Christensen (2010) reviewed only internet-delivered interventions. Combined, the reviews identified 12 studies with six interventions (two that target anxiety and four depression): BRAVE-ONLINE (Spence et al., 2008) (anxiety); Cool Teens (Cunningham et al, 2009) (anxiety); CATCH-IT (Van Voorhees et al, 2009) (depression), MoodGYM (https://moodgym.anu.edu.au) (Christensen et al, 2004a); Grip op je dip online (Dutch: 'Master Your Mood') (Gerrits et al, 2007) (depression); Stressbusters (Abeles et al, 2009) (depression).

Participants in these studies were aged from 7 to 25 years. The programs included treatment and selective, indicated and universal preventive interventions, were based largely on CBT principles and were delivered over 5-14 sessions. Four of the 12 studies were RCTs. None of the RCTs was of a computerised treatment of depression but two were RCTs of computer-assisted anxiety treatment. The studies ranged in size from case studies or pilot studies with small numbers of participants to large trials. Interventions were delivered in a variety of settings and the amount of therapist support varied from none to regular contact. Outcomes varied between interventions and neither of the reviews conducted a meta-analysis. However, Calear and Christensen (2010) listed the effect sizes, which ranged from 0.11 to 1.49 at post-intervention.

The authors of reviews concluded that, overall, there is emerging evidence supporting the effectiveness of computerand internet-delivered interventions for anxiety and depression in children and adolescents. The fact that programs vary in format and delivery method and yet produce consistently positive outcomes suggests that e-therapies can be versatile and offer an opportunity to successfully engage young

people in the treatment or prevention of anxiety and depression. Evidence is also shown that web-based interventions are preferred for their anonymous nature, the absence of face-to-face contact (that mitigates shame) and the convenience of being at home. This may contribute to increasing the likelihood of participation of individuals who refuse to seek general care (Leach et al., 2007).

As already highlighted, this is an emerging area of research, thus the number of high-quality studies is small. Methodological shortcomings include lack of controlled trials, reliance on self-report, recruitment via advertisements and restrictive eligibility criteria (Stasiak & Merry, 2013). There is also a lack of controlled trials with e-interventions associated with PTSD especially post-traumatic stress disorder resulting childhood sexual abuse, despite it has been suggested that for treatment of PTSD internet-based treatment options may have several advantages such as increased accessibility for individuals residing in remote areas and those with mobility restrictions; patients can access it at their convenience; available 24/7 in the privacy and comfort of one's home without the need to travel or make an appointment; patients can work at their own pace but weekly appointments may not suit everyone; it suits those who are concerned about privacy, or stigma or are reluctant to engage in traditional face-to-face therapy, it can provide treatment to those who live in geographically isolated areas, otherwise inaccessible (Stasiak & Merry, 2013; Banerjee & Severn, 2018; Olthuis et al., 2016; Mall et al., 2003).

E-Cognitive Behavioral Therapy; As mentioned previously, most of the programs adopted on the Internet were based largely on the principles of cognitive behavioral therapy, which proved to be effective by evidences that its implementation in electronic fields has been highly successful in the treatment of PTSD compared to the rest of the therapeutic methods, because of its characteristic of easy to adapt and