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An Attempt to Assess a Link between Early Maladaptive Schemas and Anxiety among Young People Morocco

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Abstract

Young adults represent the most common class in our society. Increasing evidence suggests that a clear link between early maladaptive schemas (EMS) and adjustment paradigms is inconclusive. The EMS may have adverse effects on Academyeople causing personality-related disorders (e.g. Anxiety and Depression). According to Young, activation of early maladaptive schemas has a direct impact on the development of anxiety disorders. The main aim of the current investigation is to disentangle a link between anxiety and Young's early maladjustment patterns. These two concepts and the search for determining factors. The study involved a sample of 79 young people living taken care of by residential care facilities in the Fez-Meknes settings in Morocco. The Young Schema Questionnaire (YSQ) assesses 13 EMS, and the State-Trait Anxiety Inventory questionnaire was employed for the current investigation. The results suggested that the early dysfunctional patterns tested were active in subjects with anxiety symptoms. A prevalence of 17.72 % of people who develop an EMS and 26.4% (n=19) develop high to very high state anxiety and 44.2% (n=34) develop high to very high trait anxiety. In contrast, a positive correlation between the trait anxiety ($r=0.899$; $p<0.000$) and the EMS score ($r=0.237$; $p<038$) was recorded. Taken together, the schema-based approach could ease the path to well understanding of the anxiety-related symptoms that are underpinned by the individual's structural organization.

Keywords: Early maladaptive schemas, Trait Anxiety, State Anxiety, Youth, Risk factors

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1. Introduction

Early maladaptive schemas (EMS) refer to a concept derived from the theory of cognitive schemas developed by American psychologist Jeffrey Young [2] that manifest from childhood in response to unmet emotional needs or traumatic experiences. The treatment of maladaptive early schemas involves cognitive-behavioral therapy that aims to identify and modify maladaptive schemas using techniques such as cognitive restructuring, and emotional and relational exposure. It is worth noting that a broad range of early maladaptive schemas (EMS) such as Abandonment, mistrust/abuse, emotional deprivation, self-defect, dependency/incompetence, and excessive control schema [3, 4]. In addition, an accumulating body of studies corroborates the correlation between early maladaptive schema activation and anxiety-related disorders [5-8]. According to Young and Klosko, these early dysfunctional patterns were often associated with early adverse experiences such as: neglect, abuse, or parental separation. Nonetheless, could also be linked to biological, genetic, or environmental factors. Furthermore, the accurate abandonment schema frequencies worldwide remain elusive. In Morocco, no study has been carried out, so we have a frequency of individuals suffering from this behavior. Anxiety has a long history but a short past [9]. An important conceptual development in the exploration of the phenomenon of anxiety can be attributed to the work of Spielberger (ibid.) who has made a distinction between state and trait anxiety [10]. State anxiety has been defined as an unpleasant emotional response while coping with threatening or dangerous situations [11], which includes a cognitive appraisal of a threat as a precursor for its appearance [12]. On the other hand, trait anxiety pertains to enduring individual variances in the proclivity to react with an escalation in state anxiety when contemplating an

impending perilous circumstance. This inclination remains constant across a wide array of scenarios and is transiently steadfast. With this in mind, in the same vein, we were targeted to assess the level of state and trait anxiety among young people and to disentangle its link with EMS by using Spielberger's STAI "Stat trait anxiety inventory" scale, according to its two concepts: state and trait. This scale encompasses 2 parts: The first, assesses anxiety state (AE) which reflects the current emotional state (STAI form Y-A) as well as has the potential to evaluate the subject's nervousness and worry during the session. The second assesses anxiety treatment (AT) which reflects the usual emotional state (STAI form Y-B).

2. Materials and methods

2.1. Study area, presentation of the Region

The study was carried out throughout the Fez-Meknes setting in central northern Morocco, one of the five most populous regions in Morocco. Owing to demographic weight, it ranks nationally the 4th. A rate of 70% of the urban population is concentrated in the two prefectures of Fez and Meknes [13]. The region resulted from the merging of two large regions, namely the former region of Fez-Boulemane and the region of Meknes-Tafilalet, with 4,2 million inhabitants, or 12,5% of the national population. 60,5 %: Urban Population, 8,7 %: Unemployment rates, 43 %: Activity rates, 12,7 %: Investment of the GB, 919 496 %: Households, and 5 %: of the state-owned private land allocated for investment. The Region is endowed with a geostrategic positioning that places it at the heart of national economic exchanges and demographic flows thus turning it into a new emerging pole. [25]

2.2. Participants and procedure

This comparative cross-sectional study was conducted from August 2020 to December 2020 in the following centers: the children's social welfare center in Meknes City as a multidisciplinary social the Bab-Khoukha care facility in Fez city implanted in central northern Morocco including 79 subjects; 59 young men and 20 young women. The age ranges from 15 to 24 years, their average age was 19.34 years. These subjects experience awkward social and family situations.

2.3. Working tool

A questionnaire developed by Jeffrey Young pertaining to maladaptive precocious patterns and by Spielberger devoted anxiety traits along with states. The purposes of such a large-scale study encompass a myriad of anamnestic data: young person's age, family composition, education level, living conditions, and so on.

2.4. EMS self-assessment scale

The current study examined the composition of the abbreviated edition of the Young Schema Questionnaire [14]. The EMS was measured using the Young schema questionnaire short form (YSQ-SF) (so-called emergency version, adapted by Prof. Dr.: Ahmed.O. T. Ahami and Dr. L. Fofana), self-administered with a 26-item inventory designed to assess the subject's relative allegiance to 13 schemas. We analyzed a total of 13 schemas, which were translated by Rusinek and Hautekeete (2000) [15]. Our questionnaire, which was developed based on the Rusinek short version 13 EMS adapted for children (Rusinek et al., 2013) [16], comprised of 26 items. The purpose of this questionnaire was to facilitate and accelerate the screening process among individuals. The 13 schemas are divided into five domains: Disconnection and Rejection, Impaired Autonomy and Performance, Impaired Limits, Other Directedness, Over-vigilance and Inhibition. Collectively, 13 patterns were studied: Abandonment, insufficient self-control, mistrust, vulnerability, dependence, emotional deprivation, Social isolation, imperfection, failure, Self-sacrifice, Unrelenting standards, It's all down to me, fear of loss of control.

2.5. EMS Scoring

The questionnaire consists of 26 statements such as "I'm afraid of loss of control of my actions", to which the subject is asked to respond by circling a number from 1 to 6 (the higher the score, the more the statement corresponds to him or her).

2.6. STAI-Y self-assessment scale

The state-trait anxiety inventory form Y (STAI-Y) is designed for self-completion. It comprises two scales, a state-anxiety scale (STAI-A) and a trait-anxiety scale (STAI-B). Notwithstanding the test is designed to measure anxiety, the evaluator should not use this term when administering the scales, solely referring to the "self-report questionnaire".

2.7. STAY-Y Scoring

Each inventory item is scored from 1 to 4 with 1 indicating the lowest degree of anxiety and 4 the highest. The STAI- A (AE) is scored according to its intensity. In turn, STAI-B (AT) is scored according to its frequency. In general, scores range from 20 to 80. The score obtained by a subject provides a relative indication of the state anxiety and trait anxiety scales. To make a mere interpretation, the scores can be categorized into 5 levels: Very high, if over 65; High, from 56 to 65; Medium, from 46 to 55; Low, from 36 to 45; Very low, if less than 36. The STAI-Y has obvious qualities: Brevity, short, clearly defined items, and ease of quantifying in terms of intensity or frequency. The two parts devoted to state anxiety and treatment anxiety could be used independently. Following the aims delineated by this evidence The STAI-A exhibited a substantial sensitivity to change, mainly during empirical procedures.

2.8. Statistical tool

The collected data were performed by using Excel and afterward were treated by SPSS. Qualitative characteristics were expressed as frequencies whereas quantitative characteristics were expressed as mean ±SD. Means were compared using the Student's t-test with a 5% error. Pearson's correlation test was applied to delineate a correlation between scores at 5% error

3. Results and Discussions

3.1. Social demographics

The gender breakdown shows that 74.7% (n=59) were male, as compared to 25.3% (n=20) female. The sex ratio is not balanced (M/F= 2.95) in favor of males. The distribution of respondents by age shows that the average age is 19.39, with a minimum age of 15 and a maximum age of 24. The distribution pattern was Gaussian, with a skewness coefficient of 0.326 and a kurtosis of 0.855.

3.2. EMS test study

The following Table 1, shows the results of the descriptive analysis and the comparison of means between the highest scores of each sub-dimension. Average scores stagger between a minimum of 3.58 and a maximum of 5.59. We note that the mean score for most of the dimensions exceeds the threshold of 3, which may explain why these dimensions are indeed active in our study. In turn, only the EMS "Abandonment" and "Everything is due to me" showed significant differences between the mean scores of the two sexes, with ($t=2.916$; $p<0.05$) and ($t=3.386$; $p<0.05$) respectively. However, the mean score for the "Mistrust" Schema was 5.59 with a minimum of 4 and a maximum of 6, Albeit the t-test showed no significant difference between the two sexes ($p<0.166$). According to Young's threshold (< 3), the distribution is shown in Table 2. In fact, the representativeness of respondents having developed EMS+ shows that these values fluctuate between minimums of 54.4% and 59.5% displayed respectively for the schemas "Imperfection" and "Failure", and a maximum of 100% recorded for the schema "Mistrust". The total score is obtained by adding the scores corresponding to each EMS (sum of the 13 EMS). The mean score was 60.68±1.01 (minimum= 40; maximum=78) and the median was 62. The distribution displayed a Gaussian pattern with a skewness coefficient of 0.311 and a kurtosis coefficient of 0.585.

The transformation of scores into Z-scores yielded the following results:

- Scores with Z-scores less than -1 standard deviation are normal people
- Scores between -1 standard deviation and +1 standard deviation are people to watch out for.
- Those whose Z-scores are greater than + 1 standard deviation are at-risk individuals.

The results of this analysis provided evidence a 17.72% of people have the potential to develop this demeanor compared to 21.52% with normal proneness. However, 60.76% of cases were prone to watch out for as they or referred to as normal pathological individuals.

3.3. Anxiety test study

A following Table 3 illustrates the findings pertaining to anxiety-related states and traits. Indeed, 43% of respondents had high or very high trait anxiety, while 24.1% had high or very high trait anxiety. However, there is a strong correlation between state and trait anxiety scores, with a value recorded at 0.808.

3.4. Global analysis

The aforementioned Table 4 presents the results of the multiple correlation between the three scale scores and age. The table highlights a positive correlation between the anxiety state score (AES) and trait anxiety score (TAS) ($r=+0.899$; $p<0.000$) and the EMS score ($r=+0.237$; $p<038$). However, a correlation between age and tests was recorded.

4. Discussion

This current work was conducted to investigate early maladjustment profiles among adolescents stemming from charitable residential care facilities. It is worth clarifying that the assessment of early patterns among this category must be linked to the measurement of their level of anxiety traits and anxiety state. Hence, taking into account the limitations of our research due to its cross-sectional design and the specific characteristics of our samples, it has been pointed out that anxiety among adolescents was correlated to an array of maladaptive patterns that evolved during childhood developmental windows. Specific interpretations of life-related events may explain the onset peculiarities of EMS. The evidence thus far suggests that maladaptive schemas are related to experiences of childhood emotional abuse and neglect and are evident before adulthood [17]. Young et al. (2003) also argued that EMS in the rejection domain can be the most damaging and resistant to change and are often characterized by a history of abuse and difficulty in forming secure attachments to others, additionally argued that significant relationships in adulthood can affect the development, endorsement, and maintenance of EMS [18]. The random effect estimate for overall EMS with anxiety was $r = 0.59$ (95% Cl = 0.50 to 0.68, $Z = 9.69$, $p < 0.0001$), indicating a strong association between EMS and anxiety [19]. When different schema domains were investigated separately, anxiety was shown to have significantly stronger associations with the schema domains of disconnection/rejection ($r = 0.50$), impaired autonomy/performance ($r = 0.47$), and other-directedness ($r = 0.49$) [19]. females were found to have higher schemas of hypervigilance and other-directedness and associated anxiety symptoms compared to males [19]. The first component of this assertion corresponds to Beck's theoretical view [20,21], according to which anxiety is essentially a construct made up of a multitude of models. Adolescent maladaptive schema refers to dysfunctional cognitive structures that are prevalent in adolescents and can contribute to psychological distress and mental health problems [1]. These maladaptive schemas are often associated with childhood experiences of abuse and neglect, including emotional abuse, emotional neglect, and problems with peers [2]. In addition, maladaptive schemas such as disconnection and rejection, autonomy and performance impairment, and other orientations have been shown to be particularly important precursors of anxiety symptoms in adolescents and young adults [22].

Table 1: Descriptive analysis and comparison of EMS score averages between the sexes

Schemas	Mean	S.D	Min	Max	t	P value
Abandonment	5,08	1,607	1	6	2,916	0,05*
Insufficient self-control	4,70	1,644	1	6	2,48	0,119
Mistrust	5,59	0,725	4	6	1,958	0,166
Vulnerability	5,16	1,295	1	6	0,884	0,350
Dependence	4,86	1,448	1	6	0,867	0,355
Emotional deprivation	4,35	1,955	1	6	0,38	0,71
Social isolation	4,62	1,682	1	6	0,147	0,703
Imperfection	3,58	1,823	1	6	0,002	0,960
Failure	3,71	1,806	1	6	0,014	0,907
Self-sacrifice	4,16	1,772	1	6	0,692	0,408
Unrelenting standards	5,05	1,339	1	6	0,330	0,567
Everything is due to me	4,75	1,418	1	6	3,386	0,05*
Fear of loss of control	5,06	1,284	1	6	0,022	0,884

S.D: Standard deviation, Min: Minimum; Max: Maximum; « t »: the value of "student"; Significant difference at 5%.

Table 2: Representativeness of respondents who developed EMS

Schemas	EMS-	%	EMS+	%
Abandonment	13	16,5	66	83,5
Insufficient self-control	15	19	64	81
Mistrust	0	0	79	100
Vulnerability	10	12,7	69	87,3
Dependence	13	16,5	66	83,5
Emotional deprivation	22	27,8	57	72,2
Social isolation	17	21,5	62	78,5
Imperfection	36	45,6	43	54,4
Failure	32	40,5	47	59,5
Self-sacrifice	27	34,2	52	65,8
Unrelenting standards	14	17,7	65	82,3
Everything is due to me	11	13,9	68	86,1
Fear of loss of control	10	12,7	69	87,3

Table 3: Category frequency of state and trait anxiety

Likert	Anxiety state		Anxiety Trait	
	n_i	%	n_i	%
very low anxiety	13	16,5	10	12,7
low anxiety	15	19,0	19	24,1
moderate anxiety	15	19,0	24	30,4
high anxiety	17	21,5	16	20,3
very high anxiety	17	21,5	3	3,8

Frequency: n_i; Percentage: %

Table 4: multiple correlations between the three scale scores and age

		AGE	AES	TAS	EMS
AGE	Pearson correlation	1	,200	,127	,107
	Sig. (bilateral)		,081	,288	,346
AES	Pearson correlation	,200	1	,899**	,237*
	Sig. (bilateral)	,081		,000	,038
TAS	Pearson correlation	,127	,899**	1	,138
	Sig. (bilateral)	,288	,000		,248
EMS	Pearson correlation	,107	,237*	,138	1
	Sig. (bilateral)	,346	,038	,248	
**. Correlation is significant at the 0.01 level					
*. The correlation is significant at the 0.05 level					

Understanding and addressing these maladaptive patterns may be crucial for the prevention, intervention, and management of anxiety disorders and other psychological problems in adolescents [5]. There was indeed a remarkable evolution in the substance of the patterns resulting in various differentiations. These differentiations manifest themselves in the dominant anxiety patterns observed in men and women. Moreover, the above-mentioned differentiations are not limited to anxiety patterns alone, but rather extend to the very concept of anxiety itself, giving rise to a wide range of anxieties. However, we must also take into account the teenager or young adult suffering the death of his parents; experiences a profound sense of loneliness in the face of their agony, and then reacts with a certain brutality perceived as an injustice. Additionally, they have to shoulder the responsibility not only to satisfy their material needs but also to follow the "moral" advice of their younger siblings for whom they remain the sole example. It should be noted that the formation of an anxious memory structure could be abruptly underpinned by a solitary-based event. It is therefore relevant to consider the impact of traumatic events on the pathogenesis of anxiety patterns. Maladaptive patterns, referred to as dysfunctional behaviors or thought processes have been extensively studied in relation to anxiety, both in childhood and adulthood [1]. Numerous studies have provided evidence of a significant association between maladaptive patterns and anxiety, underlining the importance of understanding the underlying mechanisms and implications of the implications of such patterns. Findings from another study indicated that disconnection/rejection and impaired autonomy/performance maladaptive schemas mediate the association between perceived maternal and paternal Psychological control and childhood anxiety for younger and older children [23]. The association between maternal rejection and psychological symptoms was mediated by the disconnection schema domain [24]. EMS most strongly associated with interpersonal problems included EMS in the rejection domain as well as vulnerability to harm, failure, subjugation, and negativity [18].

5. Conclusions

This research should be seen as preliminary work on dysfunctional early schemas. A larger number of subjects included in the study would have increased the efficiency of the results. In order to refine research into these patterns in anxious young people, population-based studies could be carried out by taking into account the different categories of anxiety disorders. Studies encompassing young people who suffer anxiety-related disorders would also be useful to observe the evolution of their patterns prospectively. Taken together, tailoring these findings to psychotherapy could make inroads into the management of anxiety. Young's model, seems to seem to be an efficient, robust, and scalable approach. This pattern is used for the treatment of an array of personality-related disorders. The findings have the potential to inform mental health professionals, policymakers, and educators about the unique psychological challenges faced by the youth in this region and guide the development of targeted interventions to promote mental well-being.

6. Limitations and Future Directions

The article is likely to acknowledge any limitations in the research, such as sample size constraints, potential biases, or cultural nuances that may not have been fully captured. Suggestions for future research directions could be proposed, including the need for longitudinal studies, cross-cultural comparisons, or the development of culturally sensitive interventions to address early maladaptive schemas and anxiety.

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