

# Associations between Psychosocial Problems and Personality Disorders among Egyptian Adolescents

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**Abstract.** The study investigated the relationship between psychosocial problems and personality disorders among a sample of 817 Egyptian adolescents (408 males and 409 females). Using 15 subscales from the Adolescent Psychopathology Scale (APS-long form) we assessed prevalence rates of a number of internalizing and externalizing psychosocial disorders. Additionally, we investigated whether there are gender differences in psychopathology among Egyptian adolescents and to what extent can psychosocial problems predict specific personality disorders. Stepwise multiple regression analyses showed that the participants experienced higher levels of PD, AV, and BD. Gender differences were found in certain personality disorders as well as in externalizing and internalizing psychosocial problems. A number of externalizing and internalizing psychosocial problems were highly predictive of specific personality disorders.

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Adolescents have been traditionally classified as 'at-risk' for psychopathology according to demographic attributes and personal experiences which are believed to predict adverse outcomes (Ball, 2005; Michael, 2001). Literature on psychopathology in western cultures has shown that adolescents' vulnerability for psychopathology is strongly related to psychosocial maladjustment (Aviles, Anderson, & Davila, 2006; Manners, 2009; Masten & Powell, 2003; Mykota & Schwan, 2006). Adolescents who exhibit psychosocial maladjustment are more likely to develop internalizing psychosocial problems including anxiety (Petty et al., 2008), depression (Barnow, Linden, Lucht, & Freyberger, 2002), loneliness, and alienation (Neto & Barros, 2000). Psychosocial maladjustment, moreover, may be pronounced by adolescents in the form of externalizing disorders including conduct disorders (Dimond, 2005; Storvoll & Wichstrom, 2003), aggression, and social interaction problems (Malti, 2006; Vermeiren, Deboutte, Ruchkin, Schwab-Stone, 2002).

Persistent psychosocial maladjustment and adaptation problems are argued to have unique association with personality disorders (PDs) (Ball, 2005; Vermeiren et al., 2002). Adolescents with internalizing and externalizing psychosocial problems are more likely to develop PDs (Krueger, Markon, Patrick, & Iacono, 2005; Krueger & South, 2009). A number of research studies, for example, found a strong association between drug

dependence and antisocial as well as mood and anxiety PDs (Dawson Goldsteina, Moss, Li, & Grant, 2010; Grant, Stinson et al., 2004). Similarly, Barnow et al. (2002) referred to a strong relationship between the severity of the depressive symptomatology and chronic psychosocial problems in psychiatric inpatients before admission to hospital. Hamerlynck, Doreleijers, Vermeiren, Jansen, and Cohen-Kettenis, (2008) argued for a link between severely aggressive behavior and both post-traumatic stress disorder and suicidality in female delinquent adolescents.

Research studies on psychopathology of adolescents in western cultures have provided some insight into factors most likely to place adolescents at risk for psychopathology (e.g., poverty, single-parent status, sexual abuse, family violence, family transitions, multiple life transitions, maternal psychopathology, and temperament). Additionally, the expression of psychopathology in general and child and adolescent psychopathology in particular is affected by a number of variables including gender differences, age-related differences and informant differences (Hudziak, Achenback, Althoff, & Pine 2007).

Gender, which is of interest to the current study, has been a prominent theme in the prevalence of psychosocial problems and PDs. A number of research studies show some consistent gender differences in overall co-occurrence of psychiatric disorders (Grant, Katz et al., 2004). Females, for example, tend to exhibit higher levels of depression, psychiatric disorders, distress than men (McDonough & Walters, 2001). Anxiety and affective disorders are most likely to co-occur in women while substance disorders, conduct disorders, and antisocial personality disorders are most likely

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to co-occur in men (Schneider, Steele, Cadelle, & Hermsworth, 2011). Similarly, boys have been found to have a higher level of conduct problems than girls (e.g. Storvoll & Wichstrom, 2003; Vermeiren, 2003). In a study of the epidemiology of mental disorders in Europe, Alonso et al. (2004) found that alcohol dependence was strongly associated with generalized anxiety disorder among men but more strongly associated with major depression among women. Winkler et al. (2004) found that depression symptoms were pronounced differently in males and females, concluding that this is indicative of psychopathological differences between them. McCabe, Lansing, Garland, and Hough, (2002) reported that female delinquents showed higher levels of psychopathology than males. Storvoll and Wichstrom (2003) indicated that externalizing psychosocial disorders are more stable for boys than for girls.

Gender differences in psychopathology result from a number of structural, behavioral and psychosocial determinants (Denton, Prus, & Walters, 2004). In terms of structures of social inequality research has highlighted the relationship between gender differences in mental health problems and socio-economic inequalities in income, education, occupation and employment status (Arber, 1997; Blaxter, 1990; D'Arcy, 1998; Denton & Walters, 1999) in addition to social support (Blaxter, 1990).

Behavioral determinants which include the individual's lifestyle (e.g. smoking, drinking, drug taking, type of diet, and exercise) are argued to contribute to gender differences in psychopathology (Denton & Walters, 1999). As for psychosocial determinants, they are categorized by researchers into three interrelated groups: (1) critical life events, (2) stressors, (3) and psychological resources (Denton et al., 2004). All three categories can place individuals at risk for developing psychopathology. In this respect, McDonough and Walters (2001) found that exposure to social life stress, financial stress, relationship stress, child (i.e., parenting-related) stress, environmental stress, family health stress and job strain were all positively associated with distress. Denton and colleagues (2004) found that structural and psychosocial determinants play a role in psychopathology among females while behavioral determinants explain much of the psychopathology among males.

Whereas patterns of psychopathology among adolescents in western culture have been delineated by empirical research, little has been carried out regarding the profiles and manifestations of psychopathology in Eastern cultures, particularly in the Middle East and North Africa (MENA) region which is known to have a youth bulge (Chaaban, 2008; Emam & Gaafar, 2006). The current study attempts to fill this gap by exploring psychopathology among Egyptian adolescents. The contribution of the study lies in that the importance

and urgency for cross-cultural research on various human experiences is well established among researchers (Hambleton, Merenda, & Spielberger, 2005; Neto & Barros, 2000).

Demographically, Egypt has a population which amounts to over 80 millions. Adolescents represent over 60% percent of that population. This percentage, however, is the source of most of the social and economic problems in the society. The unemployment rate among adolescents is one of the highest in the MENA region which in turn has the highest rates of unemployment in the world for both genders (Chaaban, 2008). Egyptian adolescents are believed to experience psychosocial problems due to low socioeconomic status, cumulative life stressors that pertain to the low quality of life, the dilemma of living in a religious oriented culture where sexual activities outside the boundaries of legal marriage are not permitted, and the prevalence of marginalized population settlements (Chaaban, 2008). The investigation in the current study begins from the premise that psychosocial factors exacerbate behavioral risk factors and effectively change lifestyle choices (Hudziak, Achenback, Althoff, & Pine, 2007). Therefore, our study attempts to answer the following research questions.

- To what extent do Egyptian adolescents in educational settings experience enhanced levels of psychosocial problems and PDs?
- Is there a relationship between internalizing and externalizing psychosocial problems which Egyptian adolescents in educational settings may experience?
- Do female and Male Egyptian adolescents differ in psychosocial problems and PDs?
- Do certain types of psychosocial problems predict specific types of PDs among Egyptian adolescents?

## Method

The study used a descriptive cross-sectional design using a self-report measure which was surveyed on a sample of Egyptian adolescents (Creswell, 2003).

## Participants

Upon obtaining consent from the Directorate of Education, and a consent of the participants' families to participate in the study the APS was administered to a sample of 862 Egyptian adolescents from middle and high schools in Assyut City, one of the most modern and largest cities in the southern region of Upper Egypt. A team of five research assistants collected the data over one academic year. After refining the collected data the number of participants who responded correctly to the survey was 817 from both genders (408 Males, 409 Females) with an age range of 12 to 17 years.

Information from the APS provided an assessment of the problems which adolescents in Egypt experience by probing recent feelings and behaviors in a six month period. The data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 16.

### Instrument

The study questions were addressed through the administration of 15 subscales of the Adolescent Psychopathology Scale (APS, long form, Reynolds, 1998). APS is a 346 item self-report that assesses psychopathology, personality, and social-emotional problems. It is used to assess psychological problems and behaviors that may interfere with an adolescent's psychological adaptation and personal competence. The APS measures three broad disorder-problem domains: clinical disorders (20 scales), personality disorders (5 scales), and psychosocial problem content areas (11 scales). Although we administered the whole instrument, we report here the results of the association between psychosocial problems scales and personality disorders scales. Due to the wide scope of the APS-long form, we preferred to report on the association between psychosocial problem scales and clinical disorders scales in another study which is still in preparation (Elbheiry & Emam, 2013). In addition we preferred to omit the "psychosocial difficulties substance use" scale from this study because responses of the participants were fuzzy due to a couple of reasons. The substances that were mentioned in the scale differ from those which Egyptian adolescents may use. Second, and during administration, most of the participants mentioned that this particular scale of substance use was unintelligible. Thus, we report on the results of the administration of ten of the psychosocial problems scales in addition to the five personality disorders scales.

The scales administered to the sample included a two, three, or five point Likert scale. The data type from all items is either ordinal or interval. The chosen scales were adapted using consecutive and back translation methods (Hambleton et al., 2005) by the authors. A third translator who had background in adolescent psychology conducted the back-translation while having no access to the original questionnaire. Two translation processes were sufficient to achieve a desired adaptation. Group administration procedures were used consistent with those described in the APS manual. Scales reliability analyses yielded measures of internal consistency for the Arabic Version of the scales ( $\alpha$ ). The number of items and reliability values for the administered scales are as follows. The Psychosocial Problem Content scales included four internalizing disorders and six externalizing disorders. Cronbach's  $\alpha$  for the four internalizing disorders are: Self Concept (SC, nine

items,  $\alpha = .81$ ), Introversion (IN, ten items,  $\alpha = .82$ ), Alienation-Boredom (AL, 13 items,  $\alpha = .79$ ), and Social Adaptation (SA, 12 items,  $\alpha = .83$ ). The six externalizing disorders include Anger (AN, seven items,  $\alpha = .85$ ), Aggression (AG, 12 items,  $\alpha = .78$ ), Interpersonal Problems (IP, 13 items,  $\alpha = .79$ ) Emotional Liability, (EL, 11 items,  $\alpha = .80$ ), Disorientation (DO, 16 items,  $\alpha = .78$ ), and Suicide (SU, 8 items,  $\alpha = .80$ ). The five personality disorders include: Avoidant Personality Disorder (AV, ten items,  $\alpha = .80$ ), Obsessive-Compulsive Personality Disorder, (OC, ten items,  $\alpha = .81$ ), Borderline Personality Disorder (BD) ten items,  $\alpha = .87$ ), Schizotypal Personality Disorder (SZ, 13 items,  $\alpha = .79$ ), and Paranoid Personality Disorder (PD eight items,  $\alpha = .85$ ).

### Results

To answer the question 'To what extent do Egyptian adolescents in educational settings experience enhanced levels of psychosocial problems and personality disorders?' prevalence of personality and psychosocial disorders in the study sample were estimated as follows. An adolescent was considered having a disorder if his or her disorder score was higher than that of 95% of the participants in the sample, that is the thresholds were age-and gender-adjusted 95<sup>th</sup> percentiles from an Egyptian representative sample ( $N = 817$ ); this value is equal to a standardized score of (+2SD) (Grimm, 1993). These thresholds were calculated from the raw data and are displayed in Table 1. According to table 1, the PD was the highest reported personality disorder in the sample with a percentage of 8.8%. SU and IP were the highest reported externalizing psychosocial disorders with percentages of (6.73%) and (6.61%) respectively. IN was the highest reported internalizing psychosocial disorder among the participants with a percentage of (8.57%).

To answer the question 'Is there a relationship between internalizing and externalizing psychosocial problems which Egyptian adolescents in educational settings may experience?' the association between the externalizing and internalizing psychosocial problem scales was explored by obtaining the correlation coefficients. As shown in table 2 SA was negatively correlated with AN ( $r = -.150, p < .01$ ), AG ( $r = -.117, p < .01$ ), IP ( $r = -.149, p < .01$ ), EL ( $r = -.85, p < .05$ ), DO ( $r = -.88, p < .05$ ), and SU ( $r = -.20, p < .01$ ). AL was significantly correlated with AN ( $r = .22, p < .01$ ), IP ( $r = .40, p < .01$ ), EL ( $r = .40, p < .01$ ), DO ( $r = .33, p < .01$ ), SU ( $r = .39, p < .01$ ). However, there was no correlation between AL and AG. IN was significantly correlated with AN ( $r = .09, p < .01$ ), IP ( $r = .24, p < .01$ ), EL ( $r = .30, p < .01$ ), DO ( $r = .19, p < .01$ ), SU ( $r = 0.83, p < .01$ ). However, there was no correlation between IN and AG. SC was significantly correlated with AN ( $r = .09, p < .05$ ), IP ( $r = .15,$

**Table 1.** Prevalence rates of PDs and Psychosocial Problems Content Scales in the sample (entire sample;  $N = 817$  aged 12–17 years)

Scales	Total Sample ( $N = 817$ )		Clinical Range		
	<i>M</i>	<i>SD</i>	Percentile 95	Frequency	%
Personality Disorders					
AV	6.30	3.22	12	55	6.73
OC	9.87	3.65	16	45	5.51
BD	4.59	3.10	10	54	6.61
SZ	7.04	4.80	14	41	5.02
PD	5.31	2.24	9	66	8.08
Externalizing Psychosocial Problems					
AN	3.80	2.13	8	47	5.75
AG	2.52	3.59	10	46	5.63
IP	6.01	3.24	12	54	6.61
EL	6.42	3.27	12	48	5.88
DO	8.38	5.41	15	52	6.36
SU	2.31	2.56	7	55	6.73
Internalizing Psychosocial Problems					
SC	7.17	2.22	11	51	6.24
IN	8.86	2.28	15	70	8.57
AL	9.77	3.04	13	44	5.39
SA	13.00	3.27	18	64	7.83

$p < 0.01$ ), EL ( $r = .19, p < .01$ ), DO ( $r = .13, p < .01$ ), SU ( $r = 0.19, p < .01$ ). However, there was no correlation between SC and AG.

To answer the question ‘Do female and Male Egyptian adolescents differ in psychosocial problems and personality disorders?’ mean scores were obtained for PDs, and both externalizing and internalizing psychosocial problems for the entire sample as well as for boys and girls. As shown in table 3, the BD score was higher for boys ( $M = 4.93, SD = 3.19$ ) than for girls ( $M = 4.26, SD = 2.97$ )  $t(815) = 3.10, p < .05$ . The SZ score was higher for boys ( $M = 7.27, SD = 3.87$ ) than for girls ( $M = 6.80, SD = 5.58$ )  $t(815) = 1.38, p < .05$ , and the PD score was

**Table 2.** Interaction between internalizing and externalizing psychosocial problems in Egyptian adolescents

	AN	AG	IP	EL	DO	SU
SC 26	.090*	.021	.154**	.199**	.133**	.190**
IN 28	.094**	-.026	.249**	.306**	.191**	.083*
AL 29	.225**	.018	.400**	.408**	.338**	.390**
SA 36	-.150**	-.117**	-.149**	-.085*	-.088*	-.206**

\*\*Correlation is significant at  $p < .01$  (2-tailed)

\*Correlation is significant at  $p < .05$  (2-tailed)

higher for boys ( $M = 5.62, SD = 2.26$ ) than for girls ( $M = 5.00, SD = 2.18$ )  $t(815) = 4.02, p < .05$ .

As for the gender differences in externalizing psychosocial problems results showed that the IP score was higher for boys ( $M = 6.62, SD = 3.26$ ) than for girls ( $M = 5.40, SD = 3.11$ ),  $t(815) = 5.45, p < .05$ ; and the DO score was higher for boys ( $M = 9.13, SD = 6.49$ ) than that for girls ( $M = 7.64, SD = 3.94$ ),  $t(815) = 3.97, p < .05$ . With regard to internalizing psychosocial problems, the AL score was higher for boys ( $M = 9.05, SD = 2.27$ ) than for girls ( $M = 8.67, SD = 2.29$ ),  $t(815) = 2.36, p < .05$ ; and the SA score for boys ( $M = 13.35, SD = 3.21$ ) was significantly higher than that for girls ( $M = 12.65, SD = 3.29$ ),  $t(815) = 3.06, p < .05$ .

To answer the question ‘Do certain types of psychosocial problems predict specific types of personality disorders among Egyptian adolescents?’, separate hierarchical stepwise multiple regression analyses were conducted using externalizing and internalizing psychosocial problems as independent variables and the PDs as dependent variables. Sex was also embedded in a separate block in the regression analysis. As shown in Table 4, five externalizing psychosocial problems (AN, IP, EL, DO, and SU) were significant predictors of the AV. AN ( $\beta = -.11, p < .05$ ), IP ( $\beta = .22, p = .01$ ), EL ( $\beta = .32, p < .001$ ), DO ( $\beta = .12, p < .05$ ), and SU ( $\beta = .18, p < .05$ ) accounted for 34% of the variance in the AV score. As for OC, two externalizing psychosocial problems (EL and SU) were significant predictors of the OC score. EL ( $\beta = .11, p < .05$ ) and SU ( $\beta = -.10, p < .05$ ) accounted for 01% of the variance in the OC score. Four externalizing psychosocial problems (IP, EL, DO, and SU) were significant predictors of the BD score. IP ( $\beta = .17, p < .05$ ), EL ( $\beta = .27, p < .01$ ), DO ( $\beta = .13, p < .05$ ), and SU ( $\beta = .41, p = .001$ ) accounted for 57% of the variance in the BD score. Five externalizing psychosocial problems (AN, IP, EL, DO, and SU) were significant predictors of the SZ score. AN ( $\beta = -.12, p < .05$ ), IP ( $\beta = .29, p < .01$ ), EL ( $\beta = .22, p < .01$ ), DO ( $\beta = .12, p < .05$ ), and SU ( $\beta = .23, p < .01$ ) accounted for 25% of the variance in the SZ score. Finally, three externalizing psychosocial problems (IP, EL, and SU) were significant predictors of the PD score. IP ( $\beta = .17, p < .05$ ), EL ( $\beta = .33, p < .001$ ), and SU ( $\beta = .10, p < .05$ ) accounted for 33% of the variance in the PD score. Sex was shown to be a predictor of PD only ( $\beta = -.10, p < .01$ ).

Four internalizing psychosocial problems (SC, IN, AL and SA) were significant predictors of the AV. As shown in table 5 SC ( $\beta = .18, p < .05$ ), AL ( $\beta = .14, p < .05$ ), AL ( $\beta = .36, p < .001$ ), and SA ( $\beta = -.24, p < .05$ ) accounted for 26% of the variance in the AV score. As for OC, three internalizing psychosocial problems (SC, AL and SA) were significant predictors of the OC score. SC ( $\beta = .17, p < .05$ ), AL ( $\beta = .13, p < .05$ ), SA ( $\beta = .25, p < .05$ ) accounted for 17% of the variance in the OC score.

**Table 3.** Gender Differences in Personality Disorders, Externalizing and Internalizing Psychosocial Problems

	Total sample (N = 817)		Males (N = 408)		Females (N = 409)		T	p value
	M	SD	M	SD	M	SD		
Personality Disorders								
AV	6.30	3.22	6.48	3.20	6.12	3.20	1.59	.112
OC	9.87	3.65	9.84	3.78	9.89	3.52	-.227	.821
BD	4.59	3.10	4.93	3.19	4.26	2.97	3.10	.002
SZ	7.04	4.80	7.27	3.87	6.80	5.58	1.38	.016
PD	5.31	2.24	5.62	2.26	5.00	2.18	4.02	.001
Externalizing Psychosocial Problems								
AN	3.80	2.13	3.94	2.16	3.66	2.10	1.88	.05
AG	2.52	3.59	2.59	4.03	2.46	4.08	.536	.59
IP	6.01	3.24	6.62	3.26	5.40	3.11	.545	.001
EL	6.42	3.27	6.48	3.30	6.35	3.23	.552	.58
DO	8.38	5.41	9.13	6.49	7.64	3.94	3.97	.001
SU	2.31	2.56	2.41	2.53	2.22	2.60	1.06	.28
Internalizing Psychosocial Problems								
SC	7.17	2.22	7.26	2.17	7.09	2.27	1.123	.262
IN	9.77	3.04	9.85	3.00	9.70	3.07	.722	.470
AL	8.86	2.28	9.05	2.27	8.67	2.29	2.36	.018
SA	13.00	3.27	13.35	3.21	12.65	3.29	3.06	.002

Three internalizing psychosocial problems (SC, AL and SA) were significant predictors of the BD score. SC ( $\beta = .12, p < .05$ ), AL ( $\beta = .53, p < .001$ ), SA ( $\beta = -.32, p < .001$ ) accounted for 33% of the variance in the BD score. Four internalizing psychosocial problems (SC, IN, AL and SA) were significant predictors of the SZ. SC ( $\beta = .08, p < .05$ ), IN ( $\beta = .12, p < .05$ ), AL ( $\beta = .41, p < .001$ ), and SA ( $\beta = -.25, p < .05$ ) accounted for 26% of the variance in the SZ score. Finally, two internalizing psychosocial

problems (SC and AL) were significant predictors of the PD score. SC ( $\beta = .12, p < .05$ ) and AL ( $\beta = .40, p < .05$ ) accounted for 24% of the variance in the PD score. Sex was shown to be a predictor of both BD and PD with a similar  $\beta$  value for both ( $\beta = -.12, p < .05$ ).

## Discussion

By using self-reporting methods the study investigated the associations between psychosocial problems and PDs among Egyptian adolescents. With regard to the

**Table 4.** Summary of Stepwise Regression of Externalizing Psychosocial Problems as Predictors of Personality Disorders

Predictors	AV	OC	BD	SZ	PD
$\beta$ AN 30	-.11*			-.12*	
$\beta$ AG 31					
$\beta$ IP 32	.22**		.17*	.29**	.17*
$\beta$ EL 33	.32***	.11*	.27**	.22**	.33***
$\beta$ DO 34	.12*		.13*	.12*	
$\beta$ SU 35	.18*	-.10*	.41***	.23**	.10*
$\beta$ Sex					-.10*
Adjusted R <sup>2</sup>	.34	.01	.57	.25	.33
F	73.50	6.2	275.6	91.9	84.3
Df	806	809	808	809	807

Note: \* $p = .05$ , \*\* $p = .01$ , \*\*\* $p = .001$

**Table 5.** Summary of Stepwise Regression of Internalizing Psychosocial Problems as Predictors of Personality Disorders

Predictors	AV	OC	BD	SZ	PD
$\beta$ SC 26	.18*	.17*	.12*	.08*	.12*
$\beta$ IN 28	.14*			.12*	
$\beta$ AL 29	.36***	.13*	.53***	.41***	.40***
$\beta$ SA 36	-.24**	.25**	-.32***	-.25**	
$\beta$ Sex			-.12*		-.12*
Adjusted R <sup>2</sup>	.262	.17	.33	.21	.24
F	72.86	56.29	138.6	109.8	67.5
Df	807	807	808	809	807

Note: \* $p = .05$ , \*\* $p = .01$ , \*\*\* $p = .001$

questions which were raised in the study and in terms of how common psychosocial problems and personality disorders are among Egyptian adolescents, we found that the participants reported proportionate levels of PDs, externalizing, and internalizing psychosocial disorders. Our finding replicates similar findings in psychopathology related literature. A number of studies referred to the fact that adolescents, compared to both children and adults, tend to experience higher levels of psychopathology (Baumeister & Harter, 2007; Baumeister, Kriston, Bengel, & Harter, 2010; Overbeek, Vollebergh, Meeus, Engels, & Luijpers, 2001). The levels reported in this study are higher than those reported for youth in the western world (Weist, Myers, Hastings, Ghuman, & Han, 1999). The levels of psychopathology which the participants reported in our study can be interpreted from the perspective of psychosocial determinants of psychopathology. A number of studies (Denton et al., 2004; McDonough & Walters, 2001) indicated that life stressors are a prime source of psychopathology in adolescents and young adults. These studies argue that unless adolescents resort to psychological resources which can accommodate their psychological needs they may unwillingly face life stressors through externalizing and internalizing behaviors.

The current study reflected an association between internalizing and externalizing psychosocial problems. This association is consistent with the findings of a number of research studies (Carlson & Grant, 2008; Lynum, Wilberg, & Karterud, 2008) which provided substantial evidence on the association between externalizing and internalizing psychopathologies (Chan, Dennis, & Funk, 2008; Dawson et al., 2010; Englund, Egeland, Oliva, & Collins, 2008; King & Chassin, 2007; Vermeiren, 2003). The replication of such associations reflects a universal and culture free pattern of comorbidity between externalizing and internalizing problems. The negative relationship between AG and internalizing psychosocial problems which emerged in the study's findings is also consistent with similar findings in studies of psychopathology in the western world and which argued for a negative association between aggressive behavior and social adaptations and social competence (Malti, 2006). This is coupled with evidence in similar studies which argued for an insignificant relationship with self concept, self-esteem (Matsuura, Hashimoto, & Toichi, 2010), and with boredom/alienation (Dahlen, Martin, Ragan, & Kuhlman, 2004).

As for gender differences and consistent with clinical and general population data documented in the studies of psychopathology in western cultures (Baumeister et al., 2010; Baumeister & Harter, 2007; Epstein, Labouvie, McCrady, Jensen, & Hayaki, 2002; Kessler, Chiu, Demler, & Walters, 2005), our findings showed that boys were overrepresented among individuals with

externalizing psychopathology and personality disorders. Contrary to studies which argued for an overrepresentation of girls among individuals with internalizing psychopathology (Carlson & Grant, 2008; McCabe et al., 2002; Neto & Barros, 2000; Winkler et al., 2004), our findings showed that girls reported less internalizing psychosocial problems. The male excess prevalence of externalizing and internalizing psychopathology can be explained in terms of the prevailing culture in the MENA region in general and in Egypt in particular. In this culture which is described as being male dominated and collective, male adolescents' expectation for themselves is always tied to the high expectations of the family with regard to their achievement in life in general. This is exacerbated due to male adolescents' lack of social support which is one of the structural determinants of gender differences in psychopathology (Blaxter, 1990). Therefore, boys are always under stress to meet such expectations (Chaaban, 2008; Emam & Gaafar, 2006). The notion that gender differences in psychopathology may emerge due to structural determinants such as socio-economic inequalities in income, education, occupation and employment status (Arber, 1997; Blaxter, 1990; D'Arcy, 1998) supports our findings.

With regard to the extent to which externalizing and internalizing psychosocial problems can predict certain PDs, our findings suggest a similar pattern to that shown by previous research on psychopathology (Ansell et al., 2010; Ferraza et al., 2009; Hamerlynck et al., 2008; Vermeiren et al., 2002). These results reflect the comorbidity among personality disorders and internalizing as well as externalizing disorders (Vermeiren, Jaspers, & Moffitt, 2006; Krueger et al., 2002), and the predictive power of externalization and internalization of problems in disclosing the risk for developing PDs. Thus our argument in the light of the predictive power of externalizing and internalizing behavior for PDs is that psychosocial determinants of psychopathology come from the social context of adolescents' lives.

Interestingly enough the data of this study were collected a year ago, i.e. before the break out of mass demonstrations at Al-Tahrir Square in Cairo in a *Youth Revolution* which ended a thirty year of dictatorship regime in Egypt. Commentators, not researchers, resorted to the use of psychological interpretations for the youth revolutionary behavior. We argue that adolescents at that moment probably chose to face life stressors and dilemmas by externalizing behavior which they never imagined would escalate to such outcomes which the nation gained, and which inspired other youth in the regions in a wave coined as the *Arab Spring*.

In the present study it was shown that a representative sample of Egyptian adolescents in schools showed proportionate levels of psychopathology. There was an association between the adolescents' externalizing and

internalizing problems in which boys were overrepresented. Certain externalizing and internalizing psychosocial problems were highly predictive of specific personality disorders. The study in itself adds to the literature as it covers a region whose population was not well represented in research on psychopathology. One point which needs further research is that of gender differences. The reasons for reduced symptom expression of internalizing problems and PDs in female Egyptian adolescents are not clear. We suggest that girls in this sample may internalize less than girls in previous research because cultural norms and community stressors lead female adolescents in the study to view internalizing symptoms as signs of weakness or failure to cope. If these girls display more non-internalizing types of symptoms and less internalizing symptoms, they may be able to present themselves as stronger or less vulnerable, thereby possibly decreasing their chances of being victimized or rejected by others.

This fits with the notion of cultural orientation (Fabrega & Miller, 1995) as well as with the change that has swept over the population in Upper Egypt where the sample was drawn. This population has stayed for long time a conservative community governed by tribal traditions but has recently witnessed drastic change due to the increase in the number of educated females and the increase in the level of education in general. Such increase may lead us to another possibility. This possibility may be that gender roles in this community may be more egalitarian than how they were in the past. Thus, girls currently do not probably face external pressures to avoid externalizing problems that might have restricted their behavior in the past. This could be due to the possibility that cultural norms place a high value on women's strength, education and perseverance.

The findings of the study should, however, be taken with caution. All self-report data are subject to unintentional (e.g., through recall error) or intentional misreporting. The participants' responses may have been exaggerated to defy social desirability-related issues or may have been masked to for social desirability purposes. Despite its limitations this study provided some insight into psychopathology in a sample of the MENA regions which is always described as one of hot spots in the world and which has recently attracted the world's attention for the waves of demonstrations that overthrew long-standing regimes.

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