Published in final edited form as:

Depress Anxiety. 2012 December ; 29(12): 1050–1057. doi:10.1002/da.21990.

Psychosocial Features Associated with Lifetime Comorbidity of Major Depression and Anxiety Disorders Among a Community Sample of Mid-Life Women: The SWAN Mental Health Study

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Abstract

Background—In clinical samples, comorbidity between depressive and anxiety disorders is associated with greater symptom severity and elevated suicide risk. Less is known, however, regarding the *long-term psychosocial impact* that a lifetime history of both MDD and one or more anxiety disorders has in community samples. This report evaluates clinical, psychological, social, and stress-related characteristics associated with a lifetime history of MDD and anxiety.

Methods—Data from 915 women aged 42–52 who were recruited as part of the the Study of Women's Health Across the Nation Mental Health Study were used to examine clinical and psychosocial features across groups of women with a SCID-diagnosed *lifetime history* of MDD alone, anxiety alone, both MDD and anxiety, or neither MDD nor anxiety.

Results—As compared with women with a history of either MDD or anxiety alone, women with a comorbid history were more likely to report recurrent MDD, multiple and more severe lifetime anxiety disorders, greater depressive and anxiety symptoms, diminished social support, and more past-year distressing life events. Exploratory analyses indicated that women with a comorbid history also report more childhood abuse/neglect and diminished self-esteem, as compared with women with a history of either disorder alone.

Conclusions—Midlife women with a comorbid history that includes both MDD and anxiety disorders report diminished social support, more symptomatic distress, and a more severe and recurrent psychiatric history. Future research is needed to clarify the biological and psychosocial

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risk factors associated with this comorbid profile, and to develop targeted interventions for this at-risk group.

Keywords

major depressive disorder; anxiety disorders; comorbidity; child abuse; social support; stress, psychological

Comorbidity between major depression and anxiety disorders is common.^[1–3] In the US National Comorbidity Survey, 59.2% of individuals reporting a lifetime episode of major depressive disorder (MDD) also reported one or more lifetime anxiety disorders, and 57.5% of those reporting MDD in the past year also met past-year anxiety disorder criteria.^[4] Comorbidity rates are similarly high across clinical samples, where about half of all MDD patients report co-occurring anxiety.^[5–9] Moreover, as compared with patients with MDD alone, patients with comorbid MDD and anxiety display greater psychiatric symptom severity,^[7, 10–12] earlier age of onset,^[7, 13–14] greater MDD recurrence,^[11, 15–16] poorer psychosocial function,^[11, 17] and elevations in general distress and suicide risk.^[11–12, 18–20]

Such data suggest that individuals with a *past history* that includes both MDD and anxiety may be prone to exhibit persistent or residual levels of symptomatic distress and social dysfunction. To date, however, most of what we know about the impact of depression and anxiety comorbidity has been gleaned from treatment-seeking clinical samples, or samples selected to meet current depressive or anxiety disorder criteria. In contrast, less is known about the *long-term impact* that a lifetime history of both MDD and anxiety has among community samples. This adverse impact is particularly relevant for women, who are more likely than men to experience a lifetime episode of MDD as well as many of the anxiety disorders.^[4]

The current study evaluated clinical correlates and psychosocial features associated with lifetime comorbidity of MDD and anxiety in a community sample of midlife women recruited through the Study of Women's Health across the Nation Mental Health Study (SWAN-MHS). We hypothesized that compared with women with a lifetime history of either MDD or anxiety alone, women with a history of both MDD and one or more anxiety disorders would report: (1) a more severe psychiatric history (characterized by recurrent MDD, more lifetime anxiety disorders, greater risk of severe anxiety disorders, and an earlier age of onset); (2) more treatment-seeking for emotional problems; (3) greater levels of current depressive and anxiety symptoms; (4) elevated levels of perceived life stress; and (5) diminished social support.

Participants of the Pittsburgh site of the SWAN-MHS study also completed self-report measures of self-esteem and the childhood experience of abuse or neglect. Hence, in the Pittsburgh sample, we sought to explore whether women with a lifetime history of MDD and anxiety would report a greater history of childhood abuse/neglect and lower levels of self-esteem, as compared with women with a lifetime history of either MDD or anxiety alone.

Methods

Participants and Procedures

The study group consisted of women recruited from three sites of SWAN, a multi-site longitudinal study of middle-aged women's health. SWAN participants in Chicago, IL (n=230), Newark, NJ (n=266), and Pittsburgh, PA (n=443) who were available to undergo psychiatric interviews within 9 months of the SWAN baseline were recruited to take part in the ancillary SWAN-MHS study.

The design and sampling procedures of SWAN have been described elsewhere.^[21] Participants were identified via a variety of methods, including random digit dialing, voter registration lists, and/or random sampling of complete community census. Eligibility criteria included being a female aged 42–52 years, having an intact uterus and at least one menstrual period and no use of reproductive hormones in the previous 3 months, and self-identifying with one of the site's designated racial/ethnic groups (i.e., Caucasian or African-American at the Chicago and Pittsburgh sites, and Caucasian or Hispanic at the Newark site).

Each study site adhered to its Institutional Review Board's guidelines for human research, and written informed consent was obtained after the nature of study procedures was explained. SWAN baseline assessments consisted of questions about medical, reproductive and menstrual history, psychosocial factors, and psychological symptoms, and were administered orally or as written self-reports. Study forms were available in English and Spanish and bilingual staff was used, as appropriate.^[22] For the SWAN-MHS study, the Structured Clinical Interview for the Diagnosis of DSM-IV Axis I Disorders (SCID-IV) was used to evaluate lifetime and current psychiatric diagnoses. Women without full SCID data (n=2) and those meeting lifetime criteria for psychotic symptoms or bipolar disorder (n=22) were excluded from analyses, leaving a sample of 915 participants.

Measures

Lifetime Psychiatric History—SCID-IV interviewers included an MD, four master's level clinical social workers, and a master's degree candidate in social work who were supervised by psychiatrists (HK) or a psychiatric epidemiologist (JB). Interrater reliabilities evaluated for selected lifetime diagnoses, as assessed in a systematic sample of 36 audiotaped interviews (stratified across interviewers), ranged from good to very good (e.g., kappas of 0.81 for lifetime MDD and 0.82 for any phobia or panic disorder).

Lifetime diagnoses of MDD and the following anxiety disorders—panic disorder, agoraphobia, social phobia, specific phobia, obsessive compulsive disorder (OCD), and anxiety disorder not otherwise specified (NOS)—or current diagnosis of generalized anxiety disorder (GAD) were used to categorize women into one of four psychiatric history groups: (1) no psychiatric history, (2) history of one or more anxiety disorders alone, (3) history of MDD alone, or (4) comorbid history (i.e., lifetime history of both MDD and one or more anxiety disorders). Additional SCID data included: current diagnosis of MDD or anxiety, number of lifetime MDD episodes, number of lifetime anxiety disorder diagnoses, age of onset of first lifetime MDD and/or anxiety disorder diagnosis, and lifetime treatment for emotional problems.

Demographic and Clinical Characteristics—Demographic characteristics included age, ethnicity, education, income, and marital status. Current depressive symptoms were evaluated with the 20-item Center for Epidemiologic Studies Depression (CES-D) scale, which asks about the frequency of being bothered by depressive symptoms during the previous week.^[23–24] Current anxiety symptoms were evaluated with a 4-item anxiety symptom scale, in which women rated the frequency of experiencing anxiety-related symptoms (feeling tense or nervous, fearful for no reason, irritable or grouchy, and heart racing or pounding) over the previous 2 weeks.^[25] This scale displayed good reliability in the current sample (Cronbach's $\alpha=0.77$), and has shown concurrent associations (Spearman $\rho=.71$) with the Generalized Anxiety Disorder-7 (GAD-7) scale.^{26–27}

Perceived Life Stress—To evaluate life event stress, participants endorsed which of 18 life events had occurred over the past year, and rated the level of distress engendered by each on a scale ranging from “not at all upsetting” to “very upsetting.” The total number of

events endorsed, as well as the number of events rated as “very upsetting” were then summed. In addition, scores on the brief (4-item) version of the Perceived Stress Scale (PSS)^[28] were used to assess global perceptions of stress experienced in the past 2 weeks.

Social Support—Perceptions of social support were assessed with the 4-item MOS Social Support Survey,^[29] which evaluates respondents' perceptions regarding how often someone is available to provide emotional or instrumental support.

Exploratory Analyses (Pittsburgh Site only) Childhood Trauma History and Self-Esteem—Self-esteem was assessed with the 10-item Rosenberg Self-Esteem scale,^[30] and the experience of abuse or neglect prior to age 18 was assessed with the 28-item Childhood Trauma Questionnaire (CTQ).^[31–32] The CTQ (administered at year 8) includes subscales related to emotional abuse, physical abuse, sexual abuse, emotional neglect and physical neglect. Follow-up analyses were also run using previously-validated clinical cut scores^[33] to classify women as scoring positive for each type of childhood abuse or neglect (see Table 3).

Statistical analyses

To compare the psychiatric history groups across variables of interest, standard analytic methods (chi-square tests, analysis of variance) were employed. Because of the multi-site nature of the SWAN-MHS Study, and because the likelihood of meeting criteria for a lifetime psychiatric disorder increases with age, subsequent analyses controlled for study site and age. General linear modeling techniques were used for continuous outcomes. Initial tests compared all four study groups; subsequent planned comparisons tested whether women with a comorbid history displayed a more severe profile as compared with women with a history of either anxiety or MDD alone. For categorical variables, outcome data were analyzed using logistic regression models that controlled for age and study site. Similarly, for highly-skewed continuous variables, outcomes were confirmed using clinical cut-off scores and logistic or binomial regression models controlling for age and study site. All analyses were implemented using SAS version 9.1 (SAS Institute, Cary, NC, USA).

Results

Demographic and Clinical Characteristics of the Study Sample

Mean age of the sample was 46.2 (SD=2.6); 55% were Caucasian, 26% were African American, and 18% were Hispanic. Two-thirds were currently married, and 71% had more than a high school education. See Table 1.

Of the full sample, 53.2% (n=487) reported no history of MDD or anxiety, 13.8% (n=127) endorsed a history of anxiety alone, 22.1% (n=203) endorsed a history of MDD alone, and 10.7% (n=98) endorsed a comorbid history including MDD and one or more anxiety disorders. As compared with the Pittsburgh and Newark sites, women at the Chicago site were more likely to meet lifetime criteria for anxiety alone, and less likely to meet lifetime criteria for MDD alone [$p=0.01$ in models controlling for age]. Controlling for site and age, the four psychiatric history groups did not significantly differ in race, income or education. However, women with a lifetime history of MDD with or without anxiety were slightly less likely to be married (61% and 59% married, respectively), as compared with those with no psychiatric history (70%) or those with a history of anxiety alone (71%), in models controlling for study site and age ($p=0.06$). At baseline assessment, 37 women (4%) met criteria for current MDD, and 130 women (14.2%) met criteria for one or more current anxiety disorders.

Psychiatric History Profiles

Among women with a lifetime history of MDD ($n=301$), 48% reported a single lifetime episode, 53% reported a history of recurrent episodes, and 12% met current MDD criteria. Women reporting a comorbid history were more likely to meet criteria for recurrent MDD (64%), as compared with women reporting a history of MDD alone (47%) ($p=0.004$). Women with a comorbid history were also twice as likely to meet current MDD criteria (18.3%), as compared with women with a history of MDD alone (9.3%) ($p=0.03$). However, the comorbid versus MDD alone groups did not differ in the age of first MDD episode onset [mean age of 28.5 ($SD=10.8$) years for comorbid group, 30.3 ($SD=10.4$) years for MDD alone group; $p=0.17$]. Results were essentially unchanged in models controlling for age and site.

The most prevalent lifetime anxiety disorders reported included specific phobia (9%), anxiety NOS (7%), social phobia (5%) and panic disorder (5%), with fewer women reporting lifetime OCD (1%) or current GAD (2%). Among women with a lifetime history of anxiety ($N=225$), 16% ($N=35$) met lifetime criteria for two or more anxiety disorders and 58% met criteria for a current anxiety disorder. As hypothesized, women reporting a comorbid history were more likely to meet lifetime criteria for two or more anxiety disorders (22%), as compared with women reporting lifetime anxiety alone (10%) ($p=0.01$). Further, women with a comorbid history were more likely to report a lifetime history of panic disorder ($p=0.001$) and OCD ($p=0.03$), two of the most severe and disabling anxiety disorders. However, women with a comorbid history did not differ from those with anxiety alone in: (1) likelihood of meeting current anxiety disorder criteria (53% versus 61%, respectively; $p>0.2$), or (2) reported age of first anxiety disorder onset [mean age of first onset: 22.7 ($SD=12.7$) years for comorbid group, 22.2 ($SD=13.5$) years for anxiety alone group; $p=0.75$]. Results were unchanged in models controlling for age and site.

Of the full study sample, 42% of women reported lifetime treatment for an emotional disorder, with 37% reporting psychotherapy and 21% reporting medication treatment. Not surprisingly, results of logistic regression models indicated that the psychiatric history groups differed in their reports of lifetime mental health treatment ($p's<.0001$). Planned comparisons indicated that women with a comorbid history were more likely than those with either anxiety alone ($p<0.0001$) or MDD alone ($p=0.003$) to report any treatment for emotional disorders, and were more likely to report psychotherapy treatment ($p<0.0001$ and $p=0.02$, respectively). Women reporting a comorbid history were also more likely to report lifetime medication treatment as compared with women with anxiety alone ($p<0.0001$), but did not differ from women with MDD alone ($p=0.17$) in their reports of lifetime medication treatment.

Current Symptom Profiles

In general linear models controlling for age and study site, the four psychiatric history groups differed with respect to current levels of depressive and anxiety symptoms ($p's<0.0001$). Women with a comorbid history reported greater depression and anxiety symptoms as compared with women with a history of either MDD or anxiety alone. Notably, follow-up analyses including additional control for current MDD diagnosis (for the analysis predicting depressive symptoms) or current anxiety disorder diagnosis (for the analysis predicting anxiety symptoms) displayed a similar pattern of results. See Table 2.

Perceived Life Stress

In models controlling for age and study site, the four psychiatric history groups differed with respect to the total number of life events and number of very upsetting life events reported in the past year, as well as global evaluations of perceived stress experienced in the past month.

Planned comparisons indicated that women with a comorbid history reported more total life events and more very upsetting life events than women with anxiety alone, and more very upsetting life events than women with MDD alone. In contrast, the three psychiatric history groups did not differ in their global ratings of perceived stress, as assessed with the PSS. See Table 2.

Social Support

The four psychiatric history groups differed in their reports of social support, in models controlling for age and study site ($p < 0.0001$). As hypothesized, women with a comorbid history reported lower levels of social support as compared with women with a history of either MDD or anxiety alone. See Table 2.

Exploratory Analyses: Childhood Abuse and Self-Esteem

Using data gathered at the Pittsburgh site, age-adjusted analyses indicated group differences in Rosenberg Self-Esteem scores ($p < 0.0001$), with planned comparisons indicating that women with a comorbid history reported lower levels of self-esteem than those with a history of either MDD or anxiety alone. In addition, age-adjusted analyses of Childhood Trauma Questionnaire data ($n = 335$) indicated significant differences across the four groups with respect to reports of emotional, physical and sexual abuse and emotional neglect. Planned comparisons indicated that women with a comorbid history reported higher levels of emotional abuse and neglect, as compared with women reporting a history of either MDD or anxiety alone ($p's < 0.001$). Women with a comorbid history also reported significantly greater physical abuse than women with MDD alone, and more sexual abuse than women with anxiety alone. These group contrasts were confirmed with logistic regression models run using validated clinical cut scores. See Table 3.

Post-Hoc Analyses Controlling for Current Diagnostic Status

To ensure that differences obtained across the four psychiatric history groups were not driven solely by the 16.9% of the sample meeting SCID criteria for a current mood or anxiety disorder (including 118 women with a current anxiety disorder, 25 with current MDD, and 12 with current MDD and anxiety), study models were rerun with additional control for current diagnostic status. Results of follow-up analyses provided a pattern of results remarkably similar to those presented in Tables 2 and 3, with the exception that three planned comparisons between the MDD alone and comorbid groups fell below statistical significance [for CESD ($p = .13$), upsetting life events ($p = .16$), and social support ($p = .07$)].

Discussion

The current study results extend our understanding regarding the *long-term consequences* associated with a lifetime history that includes both MDD and anxiety. As compared with women with a history of *either* MDD *or* anxiety, women with a comorbid history were more likely to report a lifetime history that included recurrent MDD, multiple lifetime anxiety disorders (such as panic disorder) and greater treatment-seeking, as well as elevations in *current anxiety and depressive symptoms*. This latter finding held after controlling for current diagnostic status, suggesting that elevated symptom profiles include chronic or residual symptoms that persist beyond acute disorder episodes. Contrary to our hypotheses, women with a comorbid history *did not* report an earlier age of disorder onset. This null finding may, however, result from faulty participant recall, given the lengthy (often 20 year) interval since first disorder onset.

The current findings build upon yet extend the literature in this area, which has predominantly focused on treatment-seeking clinical samples, or samples explicitly selected

to meet current diagnostic criteria.^{7, 12} While important, such studies raise questions regarding the potential for distress-related reporting bias. In contrast, the current study reports on a community based sample of midlife women, most of whom (83%) did not meet *any* current depressive or anxiety diagnosis. Thus, these findings expand the extant literature, highlighting the *broad and enduring consequences* that a comorbid lifetime history has on women's social functioning, stress sensitivity, and residual symptom profiles.

A comorbid history of MDD and anxiety, and the residual symptoms that follow, may leave women vulnerable to future MDD recurrence via a number of mechanisms. First, a lifetime history of anxiety and recurrent MDD may, over time, undermine women's social function and ability to garner social support in times of life stress. Indeed, our data indicate that women with a comorbid history reported the *lowest levels of social support*. We would note that while the comorbid group differed by only 2 points from, for example, women with a history of anxiety alone (see Table 2), this group difference on the 16-point MOS Social Support scale fell in the moderate-to-large effect size range (Cohen's $d=.63$), and warrants further elaboration with more detailed and sensitive measures of lifetime social function and perceived social support.

Second, a comorbid history of MDD and anxiety may influence the likelihood of encountering negative life events, as well as the emotional distress experienced in the face of such events. Research indicates that women with MDD generate or create stressful life situations,^[34–36] and that this stress-generating effect can be observed well beyond the acute MDD episode.^[37] Similarly, we observed that women with a history of MDD report more past-year life events, and that women with a comorbid history of both MDD and anxiety experience these events as particularly distressing.

Clinically, enhanced interventions are needed to reduce lifetime symptom burden and improve long-term functional outcomes for women with this high-risk profile. Importantly, these data suggest that interventions should aggressively target residual inter-episode depressive and anxiety symptoms, while concomitantly seeking to improve social function and support, enhance emotion regulation, and bolster effective problem-solving in the face of life stress,

In line with previous findings,^[7, 38] our exploratory analyses suggest an etiologic role of childhood abuse or neglect in the development of lifetime MDD and anxiety comorbidity. Exposure to childhood trauma or abuse may undermine the development of secure attachment styles in adulthood, and may have lasting effects on limbic brain systems that govern autonomic nervous system outflow associated with physiologic patterns of stress reactivity. For example, we have found that depressed women with a lifetime trauma history display decrements in parasympathetic (vagal) function in response to acute laboratory stressors,^[39] and that depressed women who report childhood emotional abuse display greater mood and blood pressure reactivity in response to interpersonal stressors.^[40] Additional research is needed to clarify the nature of observed relationships between childhood abuse and patterns of social dysfunction and stress reactivity among women with a history of MDD and anxiety.

Several limitations should be considered in interpreting our findings. First, SCID data collected as part of the SWAN-MHS did not include diagnoses of PTSD or lifetime GAD, which may have resulted in diagnostic misclassification. However, because some argue that MDD-GAD comorbidity represents boundary problems rather than true syndromal co-occurrence,^{41–42} the impact of excluding these diagnoses is uncertain. Second, the current study did not include assessment of personality pathology, which may play a role in the patterns of psychiatric, social and stress-related dysfunction observed in the current report.

Third, the current study could not evaluate temporal patterns of lifetime comorbidity, and the sample size did not allow for analyses separated by individual anxiety disorder diagnoses. Finally, the SWAN study was limited to females; thus, the extent to which the observed findings would hold for males is unknown.

Strengths of the current study include the evaluation of a large, ethnically diverse, community-based sample of mid-life women. In addition, the rich SWAN study data base and careful MHS psychiatric assessments enabled us to characterize many of the clinical, psychological, social, and stress-related concomitants associated with a lifetime history of depression and anxiety.

Conclusions

The current report highlights the broad and enduring psychosocial consequences associated with a lifetime history that includes both MDD and anxiety, and points to the potentially pathogenic role of childhood abuse in the development of lifetime MDD-anxiety comorbidity. These data suggest that women with a lifetime history of not only MDD, but also one or more anxiety disorders, are among those with the lowest levels of social support, greatest residual symptoms, and greatest levels of life event distress. Clinically, future work is needed to improve long-term symptomatic and functional outcomes for this at-risk group.

Acknowledgments

The Study of Women's Health Across the Nation (SWAN) has grant support from the National Institutes of Health (NIH), DHHS, through the National Institute on Aging (NIA), the National Institute of Nursing Research (NINR) and the NIH Office of Research on Women's Health (ORWH) (Grants NR004061; AG012505, AG012535, AG012531, AG012539, AG012546, AG012553, AG012554, AG012495). The content of this article is solely the responsibility of the authors and does not necessarily represent the official views of the NIA, NINR, ORWH or the NIH. Supplemental funding from the National Institute of Mental Health (NIMH) is also gratefully acknowledged (Grants MH59689, MH59770, MH59688).

Clinical Centers: University of Michigan, Ann Arbor – Siobán Harlow, PI 2011-present, MaryFran Sowers, PI 1994–2011; Massachusetts General Hospital, Boston, MA – Joel Finkelstein, PI 1999 – present; Robert Neer, PI 1994 – 1999; Rush University, Rush University Medical Center, Chicago, IL – Howard Kravitz, PI 2009 – present; Lynda Powell, PI 1994 – 2009; University of California, Davis/Kaiser – Ellen Gold, PI; University of California, Los Angeles – Gail Greendale, PI; Albert Einstein College of Medicine, Bronx, NY – Carol Derby, PI 2011-present, Rachel Wildman, PI 2010 – 2011; Nanette Santoro, PI 2004 – 2010; University of Medicine and Dentistry – New Jersey Medical School, Newark – Gerson Weiss, PI 1994 – 2004; and the University of Pittsburgh, Pittsburgh, PA – Karen Matthews, PI.

NIH Program Office: National Institute on Aging, Bethesda, MD – Winifred Rossi 2012; Sherry Sherman 1994 – 2012; Marcia Ory 1994 – 2001; National Institute of Nursing Research, Bethesda, MD – Program Officers.

Central Laboratory: University of Michigan, Ann Arbor – Daniel McConnell (Central Ligand Assay Satellite Services).

Coordinating Center: University of Pittsburgh, Pittsburgh, PA – Kim Sutton-Tyrrell, Co-PI 2001 – present; Maria Mori Brooks, Co-PI 2012; New England Research Institutes, Watertown, MA – Sonja McKinlay, PI 1995 – 2001.

Steering Committee: Susan Johnson, Current Chair

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We thank the study staff at each site and all the women who participated in SWAN.

Drs. Schott, Kravitz, Brown, Thurston, Matthews and Bromberger have received research grant support from the NIH; Dr. Cyranowski has received grant support from NIH and the Pittsburgh Foundation; Dr. Joffe has received grant support from NIH and Cephalon, and has served as a consultant for Noven, Pfizer and Sunovion. See acknowledgements for full detail regarding grant support for the current study.

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Table 1

Characteristics of the total study sample (N=915), and of the four lifetime psychiatric history groups

	Total Sample N=915	Lifetime Psychiatric History Group			
		Neither n=487	Anxiety Alone n=127	MDD Alone n=203	Comorbid n=98
Age (years), mean $\pm$ SD	46.2 $\pm$ 2.6	46.3 $\pm$ 2.7	46.1 $\pm$ 2.7	46.2 $\pm$ 2.4	45.5 $\pm$ 2.5
Married, N (%)	608 (66)	339 (70)	90 (71)	119 (59)	60 (61)
Race / ethnicity, N (%)					
African American	241 (26)	134 (28)	39 (32)	45 (22)	23 (23)
Hispanic	167 (18)	95 (20)	15 (12)	40 (20)	17 (17)
Caucasian	507 (55)	258 (53)	73 (57)	118 (58)	58 (59)
Education, N (%)					
High school or less	261 (29)	147 (31)	29 (24)	56 (28)	29 (30)
Some college, trade, or technical school	276 (31)	151 (32)	37 (31)	61 (31)	27 (28)
College graduate	352 (40)	174 (37)	54 (45)	82 (41)	42 (43)
Income, N (%)					
< \$20,000	150 (17)	83 (17)	10 (8)	38 (19)	19 (20)
\$20–49,999	316 (35)	161 (34)	44 (35)	84 (42)	27 (28)
\$50–74,999	207 (23)	109 (23)	34 (27)	37 (19)	27 (28)
> \$75,000	223 (25)	123 (26)	37 (30)	41 (21)	23 (24)

Table 2

Least square means (95% confidence interval) of current symptoms, perceived life stress, and social support outcomes by psychiatric history profile, adjusted for site and age

	Lifetime Psychiatric History			
	Neither n=487	Anxiety Alone n=127	MDD Alone n=203	Comorbid n=98
Current Symptom Profiles				
CES-D scale	9.7 (8.8,10.5)	11.7 (10.1,13.3)	13.8 (12.5,15.1)	18.7 (16.9, 20.6) ^{a,b,c}
Adjusted for current MDD diagnosis	14.2 (12.5, 16.0)	16.3 (14.0, 18.5)	17.5 (15.7, 19.3)	21.6 (19.5, 23.7) ^{a,b,c}
Anxiety symptoms	2.3 (2.1,2.5)	2.5 (2.2, 2.9)	3.0 (2.7, 3.3)	4.4 (4.0, 4.9) ^{a,b,c}
Adjusted for current anxiety diagnosis	2.7 (2.4,3.1)	2.4 (2.1,2.8)	3.4 (3.0, 3.8)	4.4 (4.0, 4.8) ^{a,b,c}
Perceived Life Stress Outcomes				
Perceived stress scale	8.3 (8.0, 8.6)	9.0 (8.4, 9.5)	9.3 (8.8, 9.7)	9.9 (9.3,10.6) ^a
Total number of life events	3.1 (2.9, 3.3)	3.3 (2.9, 3.7)	3.9 (3.6, 4.3)	4.5 (4.0, 4.5) ^{a,b}
Total number of very upsetting life events	0.9 (0.7,1.0)	1.1 (0.8,1.3)	1.5 (1.3,1.7)	1.9 (1.7, 2.2) ^{a,b,c}
Social Support Outcome				
MOS social support survey	12.5 (12.2,12.8)	12.7 (12.1,13.2)	11.9 (11.5,12.4)	10.5 (9.8, 11.2) ^{a,b,c}

CES-D=Center for Epidemiologic Studies-Depression; MDD=Major depressive disorder; MOS=Medical Outcome Study

^a p < 0.01 for the full general linear model comparing all four profiles

^b p < 0.05 in Tukey-Kramer multiple comparisons tests between those in comorbid history group with those in anxiety alone group

^c p < 0.05 in Tukey-Kramer multiple comparisons tests between those in comorbid history group with those in the MDD alone group

Table 3

Least square means (95% confidence interval) for self esteem (n=424) and childhood abuse (n=335) measures for the Pittsburgh site, by psychiatric history profile and adjusted for age

	Lifetime Psychiatric History			
	Neither	Anxiety Alone	MDD Alone	Comorbid
<i>Self Esteem</i>	(n=219)	(n=52)	(n=102)	(n=51)
Rosenberg self esteem scale	26.1 (25.4, 26.8)	24.7 (23.2, 26.1)	24.5 (23.5, 25.5)	21.9 (20.5, 23.3) ^{a,b,c}
<i>Childhood Trauma Questionnaire (CTQ) *</i>	(n=176)	(n=41)	(n=84)	(n=34)
Emotional Abuse (total score)	6.7 (6.1, 7.2)	7.5 (6.3, 8.6)	8.6 (7.8, 9.4)	11.6 (10.3, 12.8) ^{a,b,c}
Met clinical cut-off for emotional abuse	11%	20%	30%	50%
Emotional Neglect (total score)	7.5 (6.9, 8.0)	7.5 (6.3, 8.7)	8.8 (8.0, 9.6)	11.1 (9.8, 12.4) ^{a,b,c}
Met clinical cut-off emotional neglect	4%	3%	10%	26%
Physical Abuse (total score)	6.0 (5.6, 6.4)	6.8 (6.0, 7.7)	6.9 (6.3, 7.5)	8.4 (7.5, 9.3) ^{a,c}
Met clinical cut-off for physical abuse	9%	22%	20%	41%
Physical Neglect (total score)	5.8 (5.4, 6.1)	6.1 (5.4, 6.7)	6.4 (6.0, 6.9)	6.8 (6.1, 7.5)
Met clinical cut-off for physical neglect	13%	12%	18%	24%
Sexual Abuse (total score)	5.6 (5.1, 6.1)	5.9 (4.9, 7.0)	7.0 (6.2, 7.7)	8.7 (7.6, 9.8) ^{a,b}
Met clinical cut-off for sexual abuse	8%	10%	25%	29%

^a p < 0.01 for the full general linear model comparing all four profiles

^b p < 0.05 in Tukey-Kramer multiple comparisons tests between those in comorbid history group with those in anxiety alone group

^c p < 0.05 in Tukey-Kramer multiple comparisons tests between those in comorbid history group with those in the MDD alone group

* **NOTE:** Logistic regression analyses utilizing clinical cut scores for CTQ subscales (10 for emotional abuse; 8 for physical abuse, physical neglect and sexual abuse; and 15 for emotional neglect) provided an identical pattern of group differences (p's<0.05 for all significant group comparisons indicated above).