Employment Barriers, Skills, and Aspirations Among Unemployed Job Seekers With and Without Social Anxiety Disorder

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<u>Objective:</u> The literature has consistently demonstrated that social anxiety disorder has substantial negative impacts on occupational functioning. However, to date, no empirical work has focused on understanding the specific nature of vocational problems among persons with social anxiety disorder. This study examined the association between perceived barriers to employment, employment skills, and job aspirations and social anxiety among adults seeking vocational rehabilitation services. Methods: Data from intake assessments (June 2010–December 2011) of 265 low-income, unemployed adults who initiated vocational rehabilitation services in urban Michigan were examined to assess perceived barriers to employment, employment skills, job aspirations, and demographic characteristics among participants who did or did not screen positive for social anxiety disorder. Bivariate and multiple logistic regression analyses were performed. Results: After adjustment for other factors, the multiple logistic regression analysis revealed that perceiving more employment barriers involving experience and skills, reporting fewer skills related to occupations requiring social skills, and having less education were significantly associated with social anxiety disorder. Participants who screened positive for social anxiety disorder were significantly less likely to aspire to social jobs. Conclusions: Employment-related characteristics that were likely to have an impact on occupational functioning were significantly different between persons with and without social anxiety problems. Identifying these differences in employment barriers, skills, and job aspirations revealed important information for designing psychosocial interventions for treatment of social anxiety disorder. The findings underscored the need for vocational services professionals to assess and address social anxiety among their clients. (Psychiatric Services 65:924-930, 2014; doi: 10.1176/appi.ps.201300201)

ocial anxiety disorder is a common and debilitating condition with a lifetime prevalence of 13% in the United States (1). Social anxiety

disorder is a fear of social or performance situations involving exposure to unfamiliar people or to possible scrutiny by others (2). The disorder is

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associated with diminished quality of life (3,4) and has been linked to functional impairments in educational, social, and occupational domains (5-7).

The literature has consistently demonstrated that social anxiety disorder has substantial impacts on occupational functioning (3,8). Work-related impairments among persons with social anxiety disorder include reduced productivity and job performance (4), lowered educational attainment (3), unemployment (9), financial dependence (10), and reduced income (11). Approximately 20% of persons with social anxiety disorder reported declining a job offer or promotion because of social fears (3), and primary care patients with social anxiety disorder reported significantly greater absenteeism and reduced productivity compared with patients without psychiatric problems (12,13). A recent longitudinal study examined unemployment rates and work impairments among primary care patients. Those with social anxiety disorder were over two times more likely to be unemployed than patients without social anxiety disorder, and they had higher rates of unemployment and greater work impairments than those with other anxiety disorders or depression (14). Another longitudinal study found that among women receiving welfare, social anxiety disorder was the only one of the mental illnesses assessed that was associated with reduced employment over time (15). Despite the substantial impact of social anxiety disorder on occupational functioning (3,4,8–10,14,15), scant attention has been paid to the specific nature of the vocational problems associated with the disorder.

Increased understanding of specific impairments and other characteristics related to employment among persons with social anxiety disorder can reveal important information for designing effective, targeted interventions. In fact, the field of mental health has increasingly emphasized functional impairment, asserting that symptom management is not sufficient and that psychosocial treatments must also lead to improvements in functional status (16).

Although existing treatments for social anxiety disorder target occupational deficits to some extent (17), data suggest that they have limited occupational benefits (18,19). For example, psychosocial treatment is effective for social anxiety symptoms (5,20), but it is often less effective for occupational and other functional deficits associated with the disorder (18,19). These findings support the need for treatment innovations that more fully address occupational impairments.

A limited number of treatments with a basis in cognitive-behavioral therapy have been designed specifically to address vocational problems among persons with mental health conditions. These specialized treatments have been provided in vocational rehabilitation (21,22) and mental health settings (21–23). Evidence suggests that these treatments improve vocational functioning and increase employment rates. Vocationally focused cognitivebehavioral therapy, whether delivered in vocational service or mental health settings, appears to have been developed largely through input from professionals and from qualitative impressions provided by unemployed persons with mental health problems (21–23). There is a paucity of quantitative research to guide efforts to modify existing cognitive-behavioral therapy to address specific employment-related issues. Notably, we found no studies involving the use of vocationally focused cognitive-behavioral therapy for social anxiety disorder, although the disorder may be among the psychiatric disorders with the greatest impact on employment (3,14,15,24).

The significant occupational impairments associated with social anxiety disorder (4,8,10,14,15,24,25) and the limited impact of current treatments on functional outcomes (16) reinforce the importance of delineating specific employment-related functional impairments among persons with social anxiety disorder. This study examined the association between employment-related factors (perceived barriers to employment, employment skills, and job aspirations) and social anxiety in a sample of unemployed, low-income adults initiating vocational rehabilitation services. Understanding work-related functional impairments associated with social anxiety disorder can inform the development of interventions aimed at improving vocational outcomes for unemployed persons with social anxiety disorder.

Methods

Participants and setting

Participants consisted of 265 adults seeking career services from an urban vocational service agency. Individuals who completed an intake assessment between June 2010 and December 2011 were included. All procedures were approved by an institutional review board.

On average, participants were 41.48±10.86 years old and had 11.55±2.11 years of education; two-thirds (66%, N=175) were male, and 85% (N=226) were African American. Approximately 60% (N=163) reported a history of incarceration. The participating agency provides comprehensive programming focused on career assessment, resume construction, coworker relationships, GED preparation, computer literacy, job placement assistance, and job coaching.

Measures

Social anxiety disorder. Social anxiety was assessed by using the Mini-Social Phobia Inventory (Mini-SPIN) (26). Scores on this three-item inventory range from 0 to 12, with scores ≥6 indicating probable social anxiety disorder. The Mini-SPIN has been verified with the social phobia module of the Structured Clinical Interview for DSM-IV (SCID) (27) and was shown to have 90% efficiency in diagnosing

the presence or absence of generalized social anxiety disorder (26). When tested with a treatment-seeking sample, the Mini-SPIN demonstrated strong internal consistency among African-American (α =.85) and Caucasian (α =.84) participants (28). An examination of the psychometric properties of the Mini-SPIN among some of the unemployed, mostly African-American adults sampled in this study indicated that a score of ≥5 resulted in the greatest diagnostic efficiency, a result that was verified by the SCID (unpublished data, Levine DS, Himle JA, Vlnka S, et al, 2013). In keeping with this research, a cut point of 5 was used in this analysis to indicate the presence of social anxiety disorder.

Employment barriers. As part of the standard intake assessment, participants were asked to select perceived employment barriers from a list of 20 compiled previously by professionals at the vocational service agency. Participants could select all applicable employment barriers. This information provided an opportunity to compare perceived employment barriers among participants who did or did not screen positive for social anxiety disorder. To reduce redundancy and conceptual overlap, the dichotomously coded barriers were categorized into meaningful indices on the basis of patterns of correlations between barriers and the expert opinion of vocational rehabilitation specialists collaborating on this project. Five categories of employment barriers were identified: disability related (presence of disability, general medical or health issues, and Social Security-related rules), experience and skills (lack of interview skills, lack of training, lack of work experience, and limited education), resources (lack of appropriate clothing, equipment or tools, transportation, or permanent address), criminal record, and appearance. Seven original employment barriers were dropped because of infrequent endorsement or lack of conceptual relevance. Scores for employment barriers reflected the number of individual barriers endorsed in each category.

Employment skills. Participants were provided a list of 13 occupations compiled by professionals at the vocational service agency and were asked to identify the occupations that matched

Table 1Classification of employment skills and job aspirations, by Holland Code

Holland code ^a	Worker characteristics	Employment skills ^b	Job aspirations
Conventional	Seeks organization, rule focused, sys- tematic, conforming	Sales, office, retail	Administrative/clerical, sales/retail, legal
Enterprising	Seeks organization, persuading, action/ outcome oriented	Not assessed	Management, beautician/ cosmetology, customer service
Realistic	Practical, "no non- sense," dislikes ambiguity	Repair/maintenance, manufacturing, warehouse/labor, construction, techni- cal, computers	Installation/repair/ maintenance, manufacturing/ assembly, construc- tion, warehouse, janitorial, military, transportation, law enforcement, landscaping
Social	Values interpersonal activities, warm, seeks harmony	People, hospitality/ restaurant, service, health care	Health care technician, food service, human services, tourism/ hospitality, health care/support services, child care, educa- tion and training

^a Holland Codes also include artistic and investigative categories; however, none of the employment skills or job aspirations assessed by the vocational service agency fell into these categories.

their skill set. To explore differences among participants who screened positive for social anxiety and those who did not, the occupations were classified according to the Holland Occupational Codes (29,30), which classify occupations into six typologies of work: realistic, investigative, artistic, social, enterprising, and conventional (Table 1). This coding scheme posits a theoretical connection between an individual's personality attributes and vocational choices. Holland Occupational Codes are widely used and have been incorporated into the U.S. Department of Labor's Occupational Information Network (O*NET), a database that provides information about occupations, worker skills, and job training requirements (31).

Three vocational specialists used the O*NET classifications to categorize the employment skills in this study. The vocational specialists independently identified the primary Holland Code associated with each occupation included in the intake assessment. The independent ratings resulted in full consensus on the employment skills categories. Scores for employment skills indicated the number of occupations

within each Holland Occupational Code that were considered by participants to be a good match for their skill set.

Job aspirations. Information about participants' job aspirations was also collected at intake. Participants were asked to select their top three job aspirations from a list of 22 occupations compiled by professionals at the vocational service agency. Three vocational specialists independently categorized the job aspirations by using the O*NET to identify the primary Holland Code associated with each occupation. Initial consensus was achieved for 19 of the 22 job aspirations. The vocational specialists engaged in discussion to obtain full consensus for the remaining three job aspirations. Although participants were asked to select their top three job aspirations, some selected more or fewer (mean=3.34). To limit the effect of variation in the number of aspirations, scores for job aspirations were reported as the proportions of each participant's total number of aspirational endorsements within each Holland Occupational Code. Proportions of job aspirations endorsed in each Holland Code were used to calculate job aspiration scores in order to limit the effect of variation.

Demographic characteristics. Demographic variables included race (African American or non-Hispanic white), age, gender, incarceration history, and education. Literacy was measured by using the wide-range scale–vocabulary portion of the U.S. Department of Labor basic occupational literacy test (32). This eight-item tool assesses basic vocabulary and literacy. Scores range from 0 to 8, with scores <3 indicating insufficient basic reading and literacy skills.

Data analysis

Differences in perceived employment barriers, employment skills, job aspirations, and demographic characteristics among participants with and without social anxiety were investigated. Bivariate analyses were conducted with independent t tests for continuous variables and chi square tests for categorical variables. Multiple logistic regression analysis was used to identify variables that were significantly associated with social anxiety after adjustment for other factors. All analyses were conducted in SPSS, version 20.

Results

Thirty-five percent of participants (N= 95) screened positive for social anxiety disorder. The findings of the bivariate analyses suggested that there were significant differences in perceived employment barriers, employment skills, and job aspirations between the participants who screened positive for social anxiety disorder and those who did not (Table 2). Participants with social anxiety disorder were significantly more likely to endorse experience and skills barriers to employment (p=.001), including lack of interview skills, lack of training, lack of work experience, and limited education. They were also significantly less likely to report having social employment skills (p=.012), significantly more likely to aspire to realistic jobs (p=.034), and significantly less likely to aspire to social jobs (p=.023).

Multiple logistic regression analysis revealed that employment barriers, employment skills, and demographic variables were associated with social anxiety disorder (Table 3). After we adjusted for the influence of all other variables, we found that higher scores

b Participants' perceived employment skills were identified by their selection of occupations that matched their skill set.

for experience and skills barriers, lower scores for social employment skills, and less education were significantly associated with the presence of social anxiety disorder.

Discussion

A range of cross-sectional (3,4,8,10,24)and longitudinal (14,15) studies indicate that social anxiety disorder has a negative impact on employment and that the impact is stronger than that of many other mental disorders. The high rate of social anxiety problems in this sample (35%) further underscores the relationship between social anxiety and employment problems. Given this negative relationship, it is important to ascertain how social anxiety undermines employment. This study is the first to examine the relationship between social anxiety disorder and specific employment-related barriers, skills, and aspirations. In addition, the sample consisted of traditionally underserved, urban-based, impoverished job seekers, most of whom were from racial minority groups—individuals who are typically underrepresented in studies of the functional impact of mental disorders (33,34).

The results of the multiple regression analysis showed that participants who screened positive for social anxiety disorder reported greater barriers related to experience and skills. The bivariate comparisons found that participants with social anxiety disorder were significantly more likely to report poor interview skills, limited job training and work experience, and lower educational attainment. These findings reveal important information for designing effective, targeted interventions that focus on the occupational deficits associated with the disorder. For example, cognitive-behavioral therapy can address lack of interview skills, an important barrier to employment (35,36), by encouraging patients to expose themselves to as many job interviews as possible in order to reduce fear and avoidance.

Lack of work experience was also associated with social anxiety. An interesting question is whether the experience deficit was primarily related to problems with job attainment or with limited job tenure. Clinical experience suggests that both issues contribute to this finding. In addition, clinical impressions

Table 2Characteristics of 265 clients at a vocational service agency with or without social anxiety disorder

	Social anxiety disorder						
	No (N=170)		Yes (N=95)		T		
Variable	N	%	N	%	Test statistic	df	p
Race					$\chi^2 = 3.40$	1	.065
African American	146	86	77	81	,,		
Non-Hispanic white	24	14	18	19			
Gender					$\chi^2 = .01$	1	.933
Male	113	67	62	65	,,		
Female	57	33	33	35			
History of incarceration							
(jail or prison)					$\chi^2 = .70$	1	.403
Yes	102	60	61	64			
No	68	40	34	36			
Age (M±SD)	41.7 ± 10.5		41.1 ± 11.6		t = .37	262	.714
Highest grade completed							
(M±SD)	12.3 ± 6.91		11.1:	± 2.59	t = 1.70	262	.090
Wide-range scale-vocabulary							
test (M±SD score) ^a	6.74 ± 1.30		6.81	± 1.05	t =04	261	.660
Employment barriers							
$(M \pm SD)^b$							
Disability	$.15 \pm .39$		$.18 \pm .57$		t =77	262	.443
Experience and skills	$.65 \pm .99$		1.15 ± 1.29		t = -3.27	153.7	.001
Resources	$.84 \pm 1.01$		$1.09 \pm .99$		t = -1.94	262	.053
Criminal record	$.26 \pm .44$		$.29 \pm .46$		t =52	263	.601
Appearance	$.13 \pm .34$		$.16 \pm .37$		t =64	263	.523
Employment skills (M±SD) ^c							
Realistic	1.78 ± 1.43		1.71:	± 1.46	t = .38	262	.708
Social	1.38 ± 1.10		1.04	±.98	t = 2.54	262	.012
Conventional	$.57 \pm .90$		$.55 \pm .91$		t = .15	262	.881
Job aspirations (M±SD) ^d							
Realistic	$.51 \pm .38$		$.62 \pm .37$		t = -2.13	263	.034
Social	$.27 \pm .29$.19±	.24	t=2.28	263	.023
Conventional	.06±.13		.06±	.14	t =53	263	.599
Enterprising	$.09 \pm .17$		$.08 \pm$.16	t = .60	263	.549
1 0							

^a Scores range from 0 to 8, with scores <3 indicating insufficient basic reading and literacy skills.

indicate that unemployed persons with social anxiety disorder often report difficulties interacting with coworkers and supervisors in a number of domains, including reporting problems that require immediate attention, sharing work-related accomplishments, and building relationships. Our clinical and research-based interactions with unemployed persons with social anxiety disorder revealed that some individuals believed that they were laid off before others not because of their job performance but because they were not as well known to colleagues and supervisors.

Other important items in the category of experience and skills barriers included lack of training and limited education. Social anxiety was associated with less education but was not associated with any other demographic variable. These findings were not surprising, given that other studies have also reported reduced educational attainment among persons with social anxiety disorder (3,5,7). Our results suggest that unemployed persons with social anxiety should be carefully assessed for educational and training needs. Educational deficits

^b Scores reflect the number of barriers endorsed from a total of 3 for disability, 4 for experience and skills, 4 for resources, and 1 each for criminal record and appearance.

^c Scores reflect the number of occupations endorsed from a total of 3 for conventional, 6 for realistic, and 4 for social jobs.

d Participants were asked to choose their top 3 from a total of 22 job aspirations, but some selected more or fewer. Scores reflect the proportion of job aspirations endorsed under each Holland Code from a total of 3 conventional, 3 enterprising, 9 realistic, and 7 social jobs.

Table 3Associations between characteristics of 247 clients of a vocational service agency and a positive screen for social anxiety disorder

Characteristic	OR	95% CI	p
Age	1.00	.97–1.02	.723
Non-Hispanic white (reference:			
African American)	1.60	.64-3.99	.322
Male (reference: female)	.67	.30-3.48	.333
History of incarceration (reference:			
never incarcerated)	.82	.40-1.68	.591
Education (years completed)	.81	.6798	.030
Vocabulary score	1.22	.93-1.59	.156
Employment barriers			
Disability	1.49	.80-2.78	.210
Experience and skills	1.38	1.03-1.84	.032
Resources	1.00	.74-1.37	.979
Criminal record	.95	.44-2.01	.901
Appearance	.99	.41-2.35	.973
Employment skills			
Realistic	.92	.72 - 1.19	.541
Social	.69	.4999	.045
Conventional	1.26	.82-1.93	.287
Job aspirations			
Realistic	1.98	.35-11.2	.437
Social	.51	.07-3.82	.513
Enterprising	.47	.03-7.37	.593
Conventional	2.80	.15–51.8	.480

are critical in today's economy, given that many job openings require specialized knowledge and skills attainable only with education and training beyond high school (37). Unfortunately, attending school or other training programs presents a range of challenges for many persons with social anxiety, such as interacting with fellow students and instructors, asking questions in class, and being observed while working, taking tests, and giving presentations. To achieve substantial improvement in these important domains, a socially anxious person would be likely to require specialized psychosocial therapy or pharmacotherapy from either a vocational service center (unpublished data, Himle JA, Bybee D, Steinberger E, et al, 2013) or a mental health clinic.

Among the most notable findings, the multiple logistic regression analysis revealed that after adjustment for other factors, possessing fewer skills related to social occupations was significantly associated with social anxiety disorder. These results fit with prior research that identified social skills deficits among some persons with social anxiety disorder (38) and suggest that these individuals may benefit from social skills training (38). It may be

particularly important for vocational programs to identify clients with deficits in skills related to social occupations, given that they are likely to view employment-related social deficits as part of their scope of service. Also, job sectors requiring strong workplace-based social capabilities, such as health care and hospitality, are among the most active in the current economy (37).

The bivariate analyses suggested that socially anxious job seekers have significantly different career aspirations than job seekers without social anxiety. Participants with social anxiety disorder were significantly more likely to aspire to realistic jobs, such as manufacturing, which generally require less social interaction, and were significantly less likely to aspire to social jobs, which require frequent interaction with others. This situation presents a challenge for vocational service professionals, who wonder whether to support the socially anxious job seekers' job aspirations or encourage them to consider social jobs that they are interested in but are afraid to pursue. Socially anxious job seekers who want to overcome their fear and avoidance of social jobs could benefit from mental health treatment. Immersion in

cognitive-behavioral therapy could lead socially anxious persons to modify their aspirations to include social jobs, thereby increasing the scope of their job search. Notably, after the multiple logistic regression analysis accounted for perceptions about barriers to employment, employment skills, and educational attainment, it indicated that job aspirations were not significantly associated with social anxiety disorder, suggesting that aspirations did not independently differentiate individuals who did and did not screen positive for social anxiety disorder.

Bivariate analyses should be interpreted with caution, but beyond advising caution with respect to these comparisons, we recognize that this study had other limitations. First, the study population comprised unemployed persons who were seeking vocational services. This group likely differed from unemployed persons who are able to find work without help and from those who are reluctant to use a vocational service center. Second, this investigation involved impoverished African Americans, a group that is largely unstudied with respect to social anxiety and unemployment, and the findings may not generalize to other unemployed groups. There is a need for further research involving a more representative sample of unemployed persons with social anxiety.

Third, although this study used an established theoretical framework to construct conceptually meaningful indices of employment-related barriers, skills, and job aspirations, these measures are not standard and have not been empirically validated. However, these measures were developed in a systematic process involving input from three vocational experts with extensive experience. In the future, researchers may wish to utilize additional, alternative measures, including qualitative interviews to assess job aspirations and direct observation strategies to assess employment skills. Fourth, the presence of social anxiety was measured by a cutoff score of 5 on the Mini-SPIN. Ideally, the assessment of participants would have included structured interviews or a second self-report measure of social anxiety. However, prior research in this population found that the Mini-SPIN cut-off score of 5

was highly concordant with the detection of social anxiety diagnoses by structured interviews (unpublished data, Levine DS, Himle JA, Vlnka S, et al, 2013).

Fifth, comorbid psychiatric illnesses likely contributed to the job aspirations and employment-related barriers among the persons in this sample, and future research would benefit from investigation of these factors. However, it is important to note that prior research involving a sample of impoverished members of racial-ethnic minority groups found that social anxiety was the only one of the mental disorders assessed that had a significant effect on employment (15). Finally, this crosssectional study did not provide data on the relationship between social anxiety and employment over time. Future longitudinal studies of employment differences over time between unemployed persons with and without social anxiety disorder would be invaluable in furthering understanding of the relationship between social anxiety and unemployment.

This study sets the stage for further research aimed at uncovering how social anxiety undermines employment. Studies with larger and more diverse samples, structured diagnostic interviews, and refined measures of employment skills and job aspirations are needed. Semistructured interviews with unemployed job seekers would also likely yield further insights into the relationship between social anxiety and employment difficulties. These important future steps notwithstanding, the present results help to guide both vocational service and mental health professionals who seek to assist unemployed persons with social anxiety.

Conclusions

This study revealed significant differences in a range of important employment-related factors between unemployed persons with and without social anxiety problems. These differences are consistent with existing literature documenting occupational impairments among persons with social anxiety disorder. The findings have important implications for both vocational and mental health professionals seeking to assist unemployed persons with social anxiety.

Acknowledgments and disclosures

This research was supported by National Institute of Mental Health grant R34MH083031.

The authors report no competing interests.

References

- Kessler RC, Petukhova M, Sampson NA, et al: Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States. International Journal of Methods in Psychiatric Research 21:169–184, 2012
- Diagnostic and Statistical Manual of Mental Disorders, 4th ed, text revision. Washington, DC, American Psychiatric Association, 2000
- Stein MB, Kean YM: Disability and quality of life in social phobia: epidemiologic findings. American Journal of Psychiatry 157:1606– 1613 2000
- Wittchen H-U, Fuetsch M, Sonntag H, et al: Disability and quality of life in pure and comorbid social phobia: findings from a controlled study. European Psychiatry 15:46–58, 2000
- Acarturk C, Cuijpers P, van Straten A, et al: Psychological treatment of social anxiety disorder: a meta-analysis. Psychological Medicine 39:241–254, 2009
- Davidson JRT, Hughes DL, George LK, et al: The epidemiology of social phobia: findings from the Duke Epidemiological Catchment Area Study. Psychological Medicine 23:709–718, 1993
- Kessler RC, Stein MB, Berglund P: Social phobia subtypes in the National Comorbidity Survey. American Journal of Psychiatry 155:613–619, 1998
- Bruch MA, Fallon M, Heimberg RG: Social phobia and difficulties in occupational adjustment. Journal of Counseling Psychology 50:109–117, 2003
- Heimberg RG, Dodge CS, Hope DA, et al: Cognitive behavioral group treatment of social phobia: comparison to a credible placebo control. Cognitive Therapy and Research 14:1–23, 1990
- Schneier FR, Johnson J, Hornig CD, et al: Social phobia: comorbidity and morbidity in an epidemiologic sample. Archives of General Psychiatry 49:282–288, 1992
- Magee WJ, Eaton WW, Wittchen H-U, et al: Agoraphobia, simple phobia, and social phobia in the National Comorbidity Survey. Archives of General Psychiatry 53: 159–168, 1996
- Alonso J, Angermeyer MC, Bernert S, et al: Disability and quality of life impact of mental disorders in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. Acta Psychiatrica Scandinavica 109:38–46, 2004
- Stein MB, McQuaid JR, Laffaye C, et al: Social phobia in the primary care medical setting. Journal of Family Practice 48: 514–519, 1999
- 14. Moitra EB, Beard C, Weisberg RB, et al: Occupational impairment and social anxi-

- ety disorder in a sample of primary care patients. Journal of Affective Disorders 130:209–212, 2011
- Tolman RM, Himle J, Bybee D, et al: Impact of social anxiety disorder on employment among women receiving welfare benefits. Psychiatric Services 60:61–66, 2009
- Achieving the Promise: Transforming Mental Health Care in America. Pub no SMA-03-3832. Rockville, Md, Department of Health and Human Services, President's New Freedom Commission on Mental Health, 2003
- Heimberg RG, Becker RE: Cognitive Behavioral Group Therapy for Social Phobia: Basic Mechanisms and Clinical Strategies. New York, Guilford, 2002
- Eng W, Coles ME, Heimberg RG, et al: Domains of life satisfaction in social anxiety disorder: relation to symptoms and response to cognitive-behavioral therapy. Journal of Anxiety Disorders 19:143–156, 2005
- Blanco C, Heimberg RG, Schneier FR, et al:
 A placebo-controlled trial of phenelzine, cognitive behavioral group therapy, and their combination for social anxiety disorder.

 Archives of General Psychiatry 67:286–295, 2010
- Norton PJ, Price EC: A meta-analytic review of adult cognitive-behavioral treatment outcome across the anxiety disorders.
 Journal of Nervous and Mental Disease 195: 521–531, 2007
- 21. Kidd SA, Boyd GM, Bieling P, et al: Effect of a vocationally-focused brief cognitive behavioural intervention on employmentrelated outcomes for individuals with mood and anxiety disorders. Cognitive Behavior Therapy 37:247–251, 2008
- Lagerveld SE, Blonk RWB, Brenninkmeijer V, et al: Work-focused treatment of common mental disorders and return to work: a comparative outcome study. Journal of Occupational Health Psychology 17:220–234, 2012
- 23. Blonk RWB, Brenninkmeijer V, Lagerveld SE, et al: Return to work: a comparison of two cognitive behavioural interventions in cases of work-related psychological complaints among the self-employed. Work and Stress 20:129–144, 2006
- 24. Heimberg RG, Hope DA, Dodge CS, et al: DSM-III-R subtypes of social phobia: comparison of generalized social phobics and public speaking phobics. Journal of Nervous and Mental Disease 178:172–179, 1990
- Stein DJ, Ipser JC, van Balkom AJ: Pharmacotherapy for social phobia. Cochrane Database of Systematic Reviews 4:CD001206, 2000
- Connor KM, Kobak KA, Churchill LE, et al: Mini-SPIN: a brief screening assessment for generalized social anxiety disorder. Depression and Anxiety 14:137–140, 2001
- 27. First M, Spitzer RL, Gibbon M, et al: Structured Clinical Interview for Axis I DSM-IV Disorders (SCID). Patient ed, version 2.0. New York, New York State Psychiatric Institute, Biometrics Research Department, 1995

- Weeks JW, Spokas ME, Heimberg RG: Psychometric evaluation of the Mini Social Phobia Inventory (Mini-SPIN) in a treatment-seeking sample. Depression and Anxiety 24:382– 391, 2007
- Holland JL: Exploring careers with a typology: what we have learned and some new directions. American Psychologist 51:397–406, 1996
- Gottfredson GD, Holland JL: Dictionary of Holland Occupational Codes, 3rd ed. Odessa, Fla, Psychological Assessment Resources, 1996
- Reardon RC, Bullock EE, Meyer KE: A Holland perspective on the US workforce from 1960 to 2000. Career Development Quarterly 55:262–274, 2007
- 32. Manual for GATB-NATB Screening Device. Washington, DC, US Department

- of Labor, Manpower Administration, 1975
- 33. Williams DR, González HM, Neighbors H, et al: Prevalence and distribution of major depressive disorder in African Americans, Caribbean blacks, and non-Hispanic whites: results from the National Survey of American Life. Archives of General Psychiatry 64: 305–315, 2007
- 34. Wang PS, Lane M, Olfson M, et al: Twelvemonth use of mental health services in the United States: results from the National Comorbidity Survey Replication. Archives of General Psychiatry 62:629–640, 2005
- 35. Tay C, Ang S, Van Dyne L: Personality, biographical characteristics, and job interview success: a longitudinal study of the mediating effects of interviewing self-efficacy and

- the moderating effects of internal locus of causality. Journal of Applied Psychology 91:446–454, 2006
- Salgado JF, Moscoso S: Comprehensive meta-analysis of the construct validity of the employment interview. European Journal of Work and Organizational Psychology 11:299–324, 2002
- 37. Carnevale AP, Smith N, Strohl J: Help Wanted: Projections of Jobs and Education Requirement Through 2018. Washington, DC, Georgetown University Center on Education and the Workforce, 2010
- Herbert JD, Gaudiano BA, Rheingold AA, et al: Social skills training augments the effectiveness of cognitive-behavioral group therapy for social anxiety disorder. Behavior Therapy 36:125–138, 2005

Submissions Invited for Column on Integrated Care

The integration of primary care and behavioral health care is a growing research and policy focus. Many people with mental and substance use disorders die decades earlier than other Americans, mostly from preventable chronic medical illnesses. In addition, primary care settings are now the gateway to treatment for behavioral disorders, and primary care providers need to provide screening, treatment, and referral for patients with general medical and behavioral health needs

To stimulate research and discussion in this critical area, *Psychiatric Services* has launched a column on integrated care. The column focuses on service delivery and policy issues encountered on the general medical–psychiatric interface. Submissions are welcomed on topics related to the identification and treatment of (a) common mental disorders in primary care settings in the public and private sectors and (b) general medical problems in public mental health settings. Reviews of policy issues related to the care of comorbid general medical and psychiatric conditions are also welcomed, as are descriptions of current integration efforts at the local, state, or federal level. Submissions that address care integration in settings outside the United States are also encouraged.

Benjamin G. Druss, M.D., M.P.H., is the editor of the Integrated Care column. Prospective authors should contact Dr. Druss to discuss possible submissions (bdruss@emory.edu). Column submissions, including a 100-word abstract and references, should be no more than 2,400 words.