1995

Lawyer Distress: Alcohol-Related Problems and Other Psychological Concerns among a Sample of Practicing Lawyers

Connie J.A. Beck

Bruce D. Sales
University of Arizona

G. Andrew H. Benjamin
University of Washington

Follow this and additional works at: https://engagedscholarship.csuohio.edu/jlh

Part of the Legal Ethics and Professional Responsibility Commons
How does access to this work benefit you? Let us know!

LAWYER DISTRESS: ALCOHOL-RELATED PROBLEMS AND OTHER PSYCHOLOGICAL CONCERNS AMONG A SAMPLE OF PRACTICING LAWYERS

CONNIE J.A. BECK[1]
BRUCE D. SALES[2]
G. ANDREW H. BENJAMIN[3]

INTRODUCTION

Psychological distress and alcoholism do not recognize socioeconomic or professional boundaries.[4] The increase in employee assistance programs and professional associations that are now actively addressing psychological distress and providing confidential counselling and alcohol treatment for their members is a testament to the rising concern about these issues.[5] One

---

[1] B.S., Portland State University, 1983; B.S., University of Oregon, 1989; M.A., University of Arizona, 1993; and is a joint degree Doctoral Student in Psychology, Policy and Law and Clinical Psychology, University of Arizona.

[2] B.A., University of Rochester, 1966; Ph.D., University of Rochester, 1971; J.D., Northwestern University, 1973; and is Professor of Psychology, Psychiatry, Sociology, and Law, University of Arizona.

[3] B. A., University of Oregon Honors Program, 1976; J.D., University of Arizona, 1984; Ph.D., University of Arizona, 1985; and is Affiliate Associate Professor of Law and Clinical Associate Professor of Medicine, University of Washington; Director of the Parenting and Evaluation Training Program at Outpatient Psychiatry and Behavioral Sciences at the University of Washington School of Medicine.

[4] *See* G. Andrew H. Benjamin et al., *The Prevalence of Depression, Alcohol Abuse, and Cocaine Abuse Among United States Lawyers*, 13 INT'L J. L. & PSYCHIATRY 233 (1990) [hereinafter, Benjamin, *Prevalence of Depression*]; Thomas L. Cory, *How Not To Snap Under Pressure*, TRIAL, Jan. 1992, at 28; Eric Drogin, *Alcoholism in The Legal Profession: Psychological and Legal Perspectives and Interventions*, 15 LAW & PSYCHOL. REV. 117 (1991); John S. Martel, *Lawyer Burnout: Its Causes—Some Thoughts on Prevention*, TRIAL, July 1988, at 62.

[5] *See* G. Andrew H. Benjamin et al., *Comprehensive Lawyer Assistance Programs: Justification and Model*, 16 LAW & PSYCHOL. REV. 113 (1992); Terry C. Blum & Paul M. Roman, *Purveyor Organizations and the Implementation of Employee Assistance Programs*, 24 J. APPLIED BEHAV. SCI. 397 (1988); Bruce E. Brody, *Employee Assistance Programs: An Historical and Literature Review*, 2 AM. J. HEALTH PROMOTION 13 (1988); Michael M. Harris & Mary L. Fennell, *Perceptions of an Employee Assistance Program and Employees' Willingness to Participate*, 24 J. APPLIED BEHAV. SCI. 423 (1988); William J. Sonnenstuhl, *Contrasting Employee Assistance, Health, Promotion, and Quality of Work Life Programs and Their Effects on Alcohol Abuse and Dependence*, 24 J. APPLIED BEHAV. SCI. 347 (1988); William J. Sonnenstuhl et al., *Ideology and Referral Categories in Employee Assistance Program Research*, 24 J. APPLIED BEHAV. SCI. 383 (1988); Paul D. Steele, *Employee Assistance Programs in Context: An Application of The Constructive Broker Role*, 24 J. APPLIED BEHAV. SCI. 365 (1988); Paul D. Steele, *Substance Abuse and the Workplace, with Special Attention to Employee Assistance Programs: An Overview*, 24 J. APPLIED BEHAV. SCI. 315 (1988);

professional group, lawyers, is particularly subject to psychological distress which can manifest in a variety of counterproductive actions and impairment. This danger is of particular societal concern due to the influential and important roles played by lawyers as elected and appointed public officials, as policy advisors, and as advocates of public and private interests.[6]

The findings of the research reported in this study, in conjunction with earlier studies, suggest that the professional and the personal well-being of lawyers is in serious jeopardy. Lawyers are working more, reducing vacation time, spending less time with family members,[7] are prone to alcohol abuse,[8] and face high levels of psychological distress.[9] The combination of elements suggests an impending crisis for lawyers' family lives. Although the data are not sufficient to suggest that psychological distress has detrimentally affected the lawyers' ability to practice competently, the warning signs are present. Further empirical study may well reveal that lawyer distress is having an adverse effect on the ability to practice competently and ethically.

The data and analyses presented below manifest a highly alarming fact: a significant percentage of practicing lawyers are experiencing a variety of significant psychological distress symptoms well beyond that expected of the general population. These symptoms are directly traceable to law study and practice. They are not exhibited when the lawyers enter law school,[10] but emerge shortly thereafter and remain, without significant abatement, well after graduation from law school. The dangers of psychological distress among members of the legal profession arise, at least in part, from two of the very elements that are traditionally associated with effective litigation strategy - directed anger and hostility. Both of these factors may often be counter-productive to one's overall well-being. Posed differently, the environment surrounding lawyers is conducive to the creation of substantial psychological distress.

The distress symptoms apply to both male and female lawyers. Although there are gender based distinctions, there is substantial commonalty in regard to stress factors, psychological distress, and alcohol-related problems. Both male and female lawyers exhibit symptoms of distress, well beyond the norm,

---

Association of American Law Schools Committee Report, *Report of the AALS Special Committee on Problems of Substance Abuse in the Law Schools*, 44 J. OF LEGAL EDUC. 35 (1994) [hereinafter AALS Committee Report].

[6] *See* FRANCES K. ZEMANS & VICTOR G. ROSENBLUM, THE MAKING OF A PUBLIC PROFESSION (1981).

[7] AMERICAN BAR ASSOCIATION YOUNG LAWYERS DIVISION, THE STATE OF THE LEGAL PROFESSION: 1990 22 (1991) [hereinafter ABA Young Lawyers].

[8] Benjamin, *Prevalence of Depression, supra* note 4 at 240.

[9] *Id.*

[10] G. Andrew H. Benjamin et al., *The Role of Legal Education in Producing Psychological Distress Among Law Students and Lawyers*, 1986 AM. B. FOUND. RES. J. 225 [hereinafter, Benjamin, *Role of Legal Education*].

relating to such key areas as obsessive-compulsiveness, social alienation and isolation, interpersonal sensitivity, anxiety, and depression. Male lawyers report significant levels of stress and anger combined with less happiness in their significant relationships. Female lawyers report even greater levels of stress and anger with equal unhappiness in their significant relationships. The combination of high stress, high anger, and poor significant relations is a strong predictor of serious psychological distress.

The resultant stress directly relates to the fact that between 9-20% of lawyers exceed expected norms for current alcohol-related problems. Even more alarming, the data suggest that nearly 70% of lawyers are likely candidates for alcohol-related problems at some time within the duration of their legal careers. Contrary to common research findings, the dangers of alcohol abuse and dependence apply, with substantial force, to both male and female lawyers.

This study makes no predictions or statement as to the ability of the legal profession or its members to minimize the causes of these levels of psychological distress. Rather, this study provides a claxon call for systemic behavioral change and illustrates the need for still more refined study in the future.

Psychological Distress

In an impressive program of research, a team possessing both legal and psychological expertise has studied law students and lawyers both cross-sectionally and longitudinally[11] to determine the epidemiology of distress and substance use in the legal profession. Their initial study demonstrated that law students show significant elevations on measures of psychological distress.[12] In order to understand what is meant by "significant," it is important to understand how they calculated distress.

As a beginning point, the developers of the instrument the authors used to measure the law students' levels of psychological distress suggested that those individuals scoring more than two standard deviations above the mean of a normal population be considered clinically distressed and needing treat-

---

[11] A cross-sectional design in data collection allows information to be collected at one point in time from several groups of subjects that are somehow different. Generally, cross-sectional designs are used in developmental contexts where the groups of subjects are of different ages. Comparisons can then be made between the groups of subjects on the basis of age. In this study the distinction of groups of law students was based on the student's particular year in law school (i.e., first, second, and third).

Longitudinal designs are different in that they follow subjects over time and test the subjects at different points in time. *See id.* The researchers obtained information from law students who were in different years of law school and then tested these students at different points in time as they moved through law school and entered their first years of practice.

[12] Stephen B. Shanfield & G. Andrew H. Benjamin, *Psychiatric Distress in Law Students*, 35 J. LEGAL EDUC. 65, 68-69 (1985).

ment.[13] In a normal population statistical theory teaches that the mean is at the center of the distribution and signifies an average score. Over two-thirds of all scores (68.2%) should fall within one standard deviation above and below this mean, while 95.38% of the scores should fall within two standard deviations of the mean. Because the authors were only interested in the people at the high end of the scale (i.e., students who were reporting many more symptoms than the average), significant elevations were determined to be those students that scored at or above the top 2.27%. The authors found that more than 40% of the law students scored above this percentile on symptoms relating to obsessive-compulsiveness, anxiety, social alienation and isolation, and interpersonal sensitivity.[14] That 40% of law students scored above the cutoff on four measures of psychological distress is quite alarming in light of the fact that the proportion of people in a general population expected to score above the cutoff is only 2.27%.

To further aid in understanding the significance of these data, a comparison group of medical students was studied. Overall these students scored significantly lower than the law students on these symptoms. The medical students, however, did exhibit significant psychological distress.[15] Although law students score significantly higher than medical students on several dimensions of psychological distress, both groups appear to be significantly distressed.

A subsequent study (the 1986 study) followed law students longitudinally to ascertain whether students entering law school were more distressed than the general population or if the distress occurred as a result of attending law school.[16] The authors found that the prelaw students did not show significant elevations of psychological distress when tested in the summer prior to law school entry. Yet, within two months of beginning law school the students' psychological distress was found to be significantly elevated. Depending on the group (first, second, or third year), the authors found that 17-40% of the law students fell above the cutoff on symptoms relating to depression.[17] Of these same students, 20-40% also fell above this cutoff on symptoms relating to obsessive-compulsiveness, interpersonal sensitivity, anxiety, hostility, and

---

[13]Leonard R. Derogatis & Phillip M. Spencer, THE BRIEF SYMPTOM INVENTORY (BSI), ADMINISTRATION, SCORING & PROCEDURES MANUAL § 1 (1982) [hereinafter Derogatis & Spencer, *BSI*].

[14]These terms, together with somatization, depression, hostility, phobic anxiety, and paranoid ideation, as used in the BSI (in test instrument that measures distress), are defined more fully at *infra* notes 80-91 and accompanying text.

[15]A large percentage of medical students scored well above the cutoff. Twenty percent of the medical students tested scored higher than this cutoff percentile on symptoms relating to depression, hostility and paranoid ideation. Ten percent of the students in this comparison group scored above the cutoff on symptoms relating to somatization and phobic anxiety.

[16]Benjamin, *The Role of Legal Education, supra* note 10, at 249-50.

[17]*See infra* notes 80-92.

paranoid ideation in addition to social alienation and isolation.[18] A similar pattern was found in law school alumni two years post-graduation.[19] On a global measure of distress (GSI),[20] the authors found that 17.9% of these lawyers fell above the cutoff for the nonpatient normal population mean. In comparing the students at their third year of law school and then two years post-graduation, the study found that symptoms present during the third year had not diminished significantly during the lawyers' first two years of practice.[21]

Data was then collected through a survey from a random sample of lawyers from the state of Washington.[22] The lawyers ranged from zero to seventy-eight years of practice, with 84% falling below twenty years of practice. The authors administered a questionnaire similar to that given to the law students in the previous study. The researchers found that 19% of the Washington lawyers suffered from levels of depression above the ninety-eighth percentile of the normative population. Most of these lawyers were also having thoughts about suicide. These data support the conclusion that elevated psychological distress may continue to occur in a significant percentage of lawyers throughout their careers.

Alcohol-Related Problems:

Another important finding is that a substantial number of lawyers were consuming alcohol at a level significantly above the normal population.[23] While nearly 9% of adults in the United States meet criteria for abuse and/or dependency,[24] 18% of the Washington lawyers were problem drinkers.[25]

---

[18] *See infra* notes 80-92.

[19] Benjamin, *Role of Legal Education, supra* note 10, at 241.

[20] Global measure of distress refers to a measure of the extent or intensity of psychological distress currently being experienced by an individual. The acronym given this measure is "GSI" for "General Severity Index." This measure has been shown to be the best indicator of current psychological distress levels. "The GSI combines information on the numbers of symptoms and the intensity of perceived distress." Leonard R. Derogatis & Nick Melisaratos, *The Brief Symptom Inventory: an introductory report* 13 PSYCHOL. MED. 595, 597 (1983).

[21] Benjamin, *Role of Legal Education, supra* note 10, at 241.

[22] Benjamin, *Prevalence of Depression, supra* note 4, at 236-37.

[23] *Id.* at 240.

[24] Bridget F. Grant, *Alcohol consumption, alcohol abuse and alcohol dependence: The United States as an example,* 89(11) ADDICTION 1357, 1362 (1994). Breaking down these figures even further, base rates for lifetime alcohol abuse (without dependence) is 12.5% for men and 6.4% for women; for the last 12-month period prior to responding to the survey, figures are 3.4% for men and 1.6% for women. For alcohol dependence, lifetime rates are 20.1% for men and 8.2% for women; last 12-month figures are 10.7% for men and 3.7% for women. Ronald C. Kessler et al., *Lifetime and 12-Month Prevalence of DSM-III-R Psychiatric Disorders in the United States: Results from the National Comorbidity Survey,* 51 ARCHIVES OF GEN'L PSYCHIATRY 8, 12 (1994) [hereinafter Kessler, *Lifetime*].

Another researcher used a more conservative estimate of problem drinkers in the legal profession of 15% and notes that over 80,000 persons are alcoholics out of a legal community of 543,000.[26] Using the earlier finding of 18% problem drinkers in a sample of lawyers,[27] this 80,000 figure rises to nearly 98,000. In other words, current data strongly suggest that approximately 98,000 practicing lawyers are problem drinkers who could potentially end up alcoholic.

Mitigating and Aggravating Variables:

Since severe distress and alcohol-related problems are apparent in a significant number of members of the legal profession at a variety of points in time, important factors to consider are the variables that either mitigate or aggravate psychological distress and alcohol problems. Significant variables found to be related to psychological distress include: social support and satisfaction with social support, marital satisfaction, anger, and perceived stress.[28] Other variables hypothesized to be related are the number of job changes[29] and whether one works with others or alone.[30]

General Social Support:

One possible mitigating variable is social support. A comprehensive review of the literature found several studies that indicate a positive relation between social support and mental health.[31] It is hypothesized that the lack of social support leads to increased levels of anxiety and depression.[32]

Although there is great disagreement in the literature as to the nature, function, and mechanism through which social support leads to an increased

---

[25]Benjamin, *Prevalence of Depression, supra* note 4, at 241.

[26]Drogin, *supra* note 4, at 127.

[27]Benjamin, *Prevalence of Depression, supra* note 4, at 241.

[28]*See generally* Cory, *supra* note 4, at 28.

[29]Dennis W. Kozich, *Stress is Taking its Toll on Wisconsin Attorneys*, WIS. LAW., Apr. 1989, at 12.

[30]Corey, *supra* note 4, at 28.

[31]Carol S. Aneshensel & Jeffrey D. Stone, *Stress and Depression: A Test of the Buffering Model of Social Support*, 39 ARCHIVES GEN. PSYCHIATRY 1392 (1982); Andrew G. Billings & Rudolph H. Moos, *Stressful Life Events and Symptoms: A Longitudinal Model*, 1 HEALTH PSYCHOL. 99 (1982); Sheldon Cohen & Thomas A. Wills, *Stress, Social Support, and The Buffering Hypothesis*, 98 PSYCHOL. BULL. 310 (1985)[hereinafter Cohen, *Buffering*], (citing Carol S. Aneshensel & Ralph R. Frerichs, *Stress, Support, and Depression: A Longitudinal Causal Model*, 10 J. COMMUNITY PSYCHOL. 363 (1982)); Charles J. Holahan & Rudolf H. Moos, *Social Support and Psychological Distress: A Longitudinal Analysis*, 90 J. ABNORMAL PSYCHOL. 365 (1981); R. Jay Turner, *Social Support as a Contingency in Psychological Well-Being*, 22 J. HEALTH & SOC. BEHAV. 357 (1982); Ann W. Williams et al., *A Model of Mental Health, Life Events, and Social Supports Applicable to General Populations*, 22 J. HEALTH & SOC. BEHAV. 324 (1981).

[32]Cohen, *Buffering, supra* note 31, at 327.

sense of well-being, there is widespread agreement that social support contributes positively to well-being.[33] Social support has also been shown to influence behaviors such as alcohol use.[34]

Although a 1989 study[35] indicates that lawyers use social support as a means to reduce stress, it is important to replicate this finding and to assess:

1. Whether lawyers use social support to reduce the possibility of distress;

2. How social support interacts with other variables (i.e., anger, relationship satisfaction, age, and gender) as a predictor of psychological distress; and

3. The importance of social support as a predictor of alcohol related-problems.

Marital or Relationship Status and Satisfaction:

Being married or living with a significant other has shown to have a significantly positive effect, often buffering or reducing the effects of stress when compared to persons living alone.[36] Involvement in a significant relationship reduces the occurrence of psychological distress in the form of depression.[37] Couples with high marital satisfaction show significantly lower levels of distress than those with low marital satisfaction.[38] Positive significant relationships have also been linked to feelings of success and happiness.[39]

The presence of a significant interpersonal relationship is likely to provide several kinds of functional social support, which often yields significant

---

[33] *Id.* at 347-49; *see also* Sheldon Cohen et al., *Social Skills and the Stress-Protective Role of Social Support*, 50 J. PERSONALITY & SOC. PSYCHOL. 963 (1986) [hereinafter, Cohen, *Social Skills*]; Sheldon Cohen, *Social Support and Physical Illness*, 7 ADVANCES 35 (1990) [hereinafter Cohen, *Social Support*]; Howard Litwin & Gail K. Auslander, *Evaluating Informal Support*, 14 EVAL. REV. 42 (1990) (citing Benjamin H. Gottlieb, *Social Networks and Social Support in Community Mental Health in* SOCIAL NETWORKS AND SOCIAL SUPPORT 11 (B. H. Gottlieb, ed., 1981)).

[34] Cohen, *Buffering, supra* note 31, at 312. *See also* David S. Krantz et al., *Health Psychology*, 36 ANN. REV. PSYCHOL. 349 (1985).

[35] Kozich, *supra* note 29, at 11.

[36] Cohen, *Buffering, supra* note 31, at 320-21 (citing Ronald C. Kessler & Marilyn Essex, *Marital Status and Depression: The Role of Coping Resources*, 61 SOC. FORCES 484 (1982)); *See also* William W. Eaton, *Life Events, Social Supports, and Psychiatric Symptoms: A Re-analysis of The New Haven Data*, 19 J. HEALTH & SOC. BEHAV. 230 (1978); George J. Warheit, *Life Events, Coping, Stress, and Depressive Symptomatology*, 136 AM. J. PSYCHIATRY 502 (1979).

[37] Warheit, *supra* note 36, at 506; Cohen, *Buffering, supra* note 31, at 321 (relating to stress).

[38] Mike McLaughlin et al., *Relation Between Coping Strategies and Distress, Stress, and Marital Adjustment of Multiple-Role Women*, 35 J. COUNSELLING PSYCHOL. 187, 191-92 (1988).

[39] Edwin S. Shneidman, *Personality and "Success" Among a Selected Group of Lawyers*, 48 J. PERSONALITY ASSESSMENT 609 (1984).

positive effects on well-being.[40] There is, however, an important difference between the support found in significant relationships and social support from friends and family. Specifically, in two studies, the existence of a positive relationship with a husband or boyfriend served a stress- protective function for women, whereas other relationships did not.[41]

The importance of social support received through a significant relationship may reflect gender-based differences. A 1982 study found that increased marital satisfaction, as distinct from marital status, was associated with increased well-being for women, but not for men.[42] Unfortunately, in comparison to other groups of women, there may be comparatively fewer married women lawyers who benefit from this significant relationship.

Women who have completed six or more years of college have significantly higher rates of divorce than women at all other education levels, except for those who have dropped out of high school.[43] "[T]he percentage of divorced [women] lawyers is twice that of physicians and about 25-40% higher than that of teachers."[44] Furthermore, after the first marriages end, women lawyers are the least likely to remarry.[45] "[T]he marital histories of [women] lawyers indicate their stronger tendency to withdraw from marital life through divorce"[46] and to continue to live unmarried thereafter.[47] Given the relationship of marital status to the reduction or buffering of stress, this finding has profound implications for the stress levels of women in the legal profession.

As with social support generally, it is important to directly assess whether maintenance of a significant relationship mitigates psychological distress and alcohol-related problems in lawyers. Given the number of divorced or never married women lawyers, it is essential to ascertain the extent to which a strong social support network outside of a significant relationship can mitigate the effect of being single (or without a significant relationship) and provide necessary social support. Finally, although marriage, or the supportive aspects of marriage, can be seen as social support, it is necessary to assess the level of

---

[40]Cohen, *Buffering, supra* note 31, at 328.

[41]*Id.* (citing George W. Brown et al., *Social Class and Psychiatric Disturbance Among Women in an Urban Population,* 9 Soc. 225 (1975)). *See also* E. S. Paykel et al., *Life Events and Social Support in Puerperal Depression,* 136 BRIT. J. PSYCHIATRY 339 (1980).

[42]Cohen, *Buffering, supra* note 31, at 328. *See also* Baqar A. Husaini et al., *The Stress-Buffering Role of Social Support and Personal Confidence Among the Rural Married,* 10 J. COMMUNITY PSYCHOL. 409, 420 (1982).

[43]Teresa M. Cooney & Peter Uhlenberg, *Family-Building Patterns of Professional Women: A Comparison of Lawyers, Physicians, and Postsecondary Teachers,* 51 J. MARRIAGE & FAM. 749, 749 (1989).

[44]*Id.* at 751.

[45]*Id.* at 752.

[46]*Id.*

[47]Cooney & Uhlenberg, *supra* note 43, at 752.

satisfaction within the marriage relationship to determine if it is in fact supportive.

Anger:

Anger has been linked to a specific feeling while aggression has been linked to the overt expression of the feeling of anger. This is not to say that anger and aggression are mutually inclusive or synonymous.[48] A person can express anger in many different ways. Conversely, a person can act aggressively without feeling angry.[49]

Within the lawyering process, anger and/or aggressiveness can serve as either a functional or a dysfunctional force for the involved lawyers. Planned and controlled aggressiveness is an essential tool for the winning trial lawyer. In the work environment, aggressiveness may play an instrumental role and can be motivated by the desire to win rather than driven by anger.[50] Over time this aggressiveness exacts a heavy toll since it is not easy to turn it off when dealing with co-workers or personal relationships. "Stop being a damn lawyer," is often the response of frustrated friends or spouses.[51] A lawyer, reproached for the very attribute that makes she or he professionally successful, may very well respond with primary anger.

Anger has also been linked to alcohol use. It is generally believed that alcohol releases anger and aggression as evidenced by the fact that "many crimes of violence are committed when the participants have been drinking, and . . . many marital quarrels accompany drinking. . .."[52] Our culture accepts drinking as an excuse for venting emotions that might otherwise be threatening or uncomfortable, such as sexual desire, love, and anger.[53] People may also drink to avoid anger, drown their woes, or forget their anger. For many people, including lawyers, anger can serve as both a positive and a negative force. Thus, it is important to directly assess the degree to which lawyers experience anger and, in turn, whether that level of anger has a correlation to either psychological distress or alcohol-related problems.

Perceived Stress:

Stress has been linked to a significant number of serious illnesses.[54] Stress is a recognized risk factor in physical illness.[55] Perceived stress, which involves

---

[48]CAROL TAVRIS, ANGER: THE MISUNDERSTOOD EMOTION 111 (1989).

[49]*Id.* at 34-35.

[50]Martel, *supra* note 4, at 64.

[51]*Id.* at 64.

[52]TAVRIS, *supra* note 48, at 165. *See also* Andrew G. Billings et al., *Marital Conflict Resolution of Alcoholic and Nonalcoholic Couples During Drinking and Nondrinking Sessions,* 40 J. STUD. ALCOHOL. 183 (1979).

[53]TAVRIS, *supra* note 48, at 165.

[54]There is evidence of such a linkage in regard to chronic hypertension, coronary heart disease, anxiety, ulcers, cancer, stroke, diabetes, multiple sclerosis, tuberculosis,

situations being appraised as beyond the available resources needed to cope with them,[56] is also a risk factor because it can lead to cognitive, motivational, and physiological responses that are commonly associated with stress.[57] Both perceived and actual stress are virtually inherent components of the lawyer's job. Specific stress factors applicable to lawyers include knowledge that the public's perception of attorneys is not always positive, fear of failure, excessive desire to please senior members of the firm, time pressures, pressures to bill more hours to client accounts, clients that make inordinate demands on an attorney's time and attention, and the fact that clients are occasionally less than honest with their attorneys.[58] Stress is, therefore, a risk factor for lawyers in regard to both physical and psychological illness.[59] For example, 32.5% of a sample of Wisconsin lawyers report using alcohol regularly as a coping mechanism to reduce stress.[60] Nearly half of this same sample (46.5%) indicated that they "sometimes" use alcohol to reduce stress.[61] These findings make it all the more important to learn lawyers' perceptions of stress in their lives and to ascertain whether stress is predictive of either psychological distress or alcohol-related problems.[62]

Other Variables:

A panoply of other variables could also relate to psychological distress and alcohol-related problems. Two variables that appear in the literature are: (1) the effects of practicing alone as distinct from a law firm practice that involves other lawyers; and (2) the number of times lawyers change positions within relatively short time frames (i.e., a measure of job stability and security). Building a practice takes time and money. Because sole practitioners cannot bring in any money when they are not actively engaged in their practice, they may feel

---

influenza, and pneumonia. *See* Stephen R. Dager et al., *Stress, Anxiety and The Cardiovascular System*, 2 HANDBOOK OF ANXIETY: CLASSIFICATION, ETIOLOGICAL FACTORS AND ASSOCIATED DISTURBANCES 399 (R. Noyes, Jr. et al., eds., 1988); Sheldon Cohen & Gail M. Williamson, *Stress and Infectious Disease in Humans*, 109 PSYCHOL. BULL. 5 (1991); Karen A. Matthews & Suzanne G. Haynes, *Type A Behavior Pattern and Coronary Disease Risk: Update and Critical Evaluation*, 123 AM. J. EPIDEMIOLOGY 923 (1986); Sandra Zakowski et al., *Stress, Stress Management and Immune System*, 1 APPLIED & PREVENT. PSYCHOL. 1 (1992).

[55] Dager, *supra* note 54, at 404-06. *See also* Krantz, *supra* note 34, at 353-54.

[56] Sheldon Cohen et al., *A Global Measure of Perceived Stress*, 24 J. HEALTH & SOC. BEHAV. 385, 387 (1983) [hereinafter, Cohen, *Global Measure*].

[57] *Id.* at 386.

[58] *See* Cory, *supra* note 4, at 28-30.

[59] Cohen, *Global Measure*, *supra* note 56, at 385.

[60] Kozich, *supra* note 29, at 12.

[61] *Id.*

[62] William E. McAuliffe et al., *Risk Factors of Drug Impairment in Random Samples of Physicians and Medical Students*, 22(9) THE INT'L J. ADDICTIONS, 825, 839 (1987).

pressured to show up for work even when physically ill and take few or no vacations. To the sole practitioner, rest and relaxation may be viewed as luxuries.[63] Nearly 10% of the Wisconsin lawyers sampled for the 1989 study had changed employers two or more times in the previous five years.[64] Frequent job changes could indicate a lack of employment satisfaction, which could lead to psychological distress and increased alcohol use. Directly assessing whether work pressure, stability and work environment predicts psychological distress and/or alcohol-related problems is thus important.

Current Study:

Prior research has obviously left a number of questions unanswered. First, Benjamin and his colleagues conducted their original studies in Arizona, with Arizona law students and alumni from one Arizona law school.[65] This limited data base makes it difficult to determine the extent to which that data can be given generalized application to lawyers practicing in other regions who graduated from other law schools. In addition, whereas that study found that students develop significant levels of distress in law school, and these levels remain high up to two years into their careers, it did not answer the question of whether high levels of distress remain as the lawyers move into later years of their careers. This question was partially answered by a subsequent report which indicated that significant levels of depression and alcohol-related problems remain at all points in lawyers careers.[66] It is now important to determine if this pattern holds for other levels and types of distress found in the original student study.[67]

Finally, it is important to determine the predictors of distress and alcohol-related problems, and what factors may mitigate these processes. Variables such as social support, the presence of significant relationships, work environment, anger, age, gender, and perceived stress have all been found to relate to both psychological distress and alcohol use. Statistical models of the causal relationships need to be constructed.

METHODS

The present study returns to the data collected and described by Benjamin and his colleagues in 1990,[68] wherein the authors analyze and report levels of

---

[63]Cory, *supra* note 4, at 28. The author further indicates that associates and partners within law firms are subject to different forms of stress-inducing pressures.

[64]Kozich, *supra* note 29, at 12.

[65]Shanfield & Benjamin, *supra* note 12, at 66; Benjamin, *Role of Legal Education, supra* note 10, at 228.

[66]Benjamin, *Prevalence of Depression, supra* note 4, at 241.

[67]The types of distress requiring further study include paranoid ideation, anxiety, phobic anxiety, social isolation, hostility, and obsessive compulsiveness.

[68]*See* Benjamin, *Prevalence of Depression, supra* note 4, at 236.

depression, alcohol use, and cocaine use in a random sample of lawyers from Washington state. The current research takes the analysis of these data several steps further. This study considers demographic variables not yet reported and analyzes how these variables may correlate with levels of distress and alcohol use found in the sample. This report will analyze all types of distress (i.e., paranoid ideation, anxiety, phobic anxiety, social alienation and isolation, hostility, obsessive-compulsiveness). The data will first be analyzed comparing the two year post-graduation Arizona alumni with the two year post graduation Washington lawyers. Then, all years of practice (i.e., sample includes lawyers from one to seventy-eight years of practice) will be analyzed. Finally, using sequential canonical analysis,[69] the degree of relationship of the predictor variables to the different categories of psychological distress, a global measure of psychological distress, and current and lifetime alcohol-related problems will be determined.

Subjects:

Subjects were a random sample of 10% (1,300) of the 12,403 actively practicing lawyers in Washington state. Due to incorrect addresses, moves out of state, vacation or death, the sample was reduced to 1,184 possible subjects. During April, 1987, 802 lawyers returned the anonymous questionnaire for a 68% response rate. The questionnaires were anonymous because the authors determined that too many subjects would refuse to respond unless their anonymity was guaranteed.[70]

Instruments:

The "Lawyer Ways of Living and Health Questionnaire" was mailed to the sample of lawyers under the sponsorship of the Washington State Bar Association. A cover letter contained an explanation of the questionnaire and the confidential nature of the data.[71] This questionnaire was comprised of several standardized self-report measures. Self-report surveys of psychological distress have several inherent advantages.[72] First, information is gained directly from the individual, as opposed to an assessment of overt symptoms made by another. Second, fewer professionals are required to administer the testing instruments.[73] Third, and probably most important, information can be obtained anonymously.[74] Finally, surveys are at times the only method avail-

---

[69]*See supra* notes 40-42; *see infra* notes 122-25. *See generally,* BRUCE THOMPSON, CANONICAL CORRELATION ANALYSES: USES AND INTERPRETATION (1984).

[70]*See* Benjamin, *Role of Legal Education, supra* note 10, at 233.

[71]*See* Benjamin, *Prevalence of Depression, supra* note 4, at 238.

[72]*See* Derogatis & Melisaratos, *supra* note 20, at 595.

[73]*Id.* at 595.

[74]*See* Benjamin, *Role of Legal Education, supra* note 10, at 233.

able to obtain and evaluate particularly sensitive information.[75] This approach was consistent with various pilot studies, which indicated that lawyers and law students refused to respond to questionnaires unless guaranteed anonymity.[76]

There are, however, disadvantages to using surveys. They are based on the assumption that a person will accurately describe current symptoms and behavior.[77] Several phenomena have been noted, including the subjects responding in a socially desirable manner, that contribute to systematic distortions in data gathered from surveys.[78] In order to address this question, the L (Lie) scale from the Minnesota Multiphasic Personality Inventory was used to alert the researchers to any flawed response sets and whether the subjects were responding to the questions in a socially desirable manner.[79] Based on this analysis, the authors concluded that over 99% of the responding lawyers did so with candor rather than with an effort to present themselves in a socially desirable manner.

Psychological distress or impairment was measured using the Brief Symptom Inventory (BSI).[80] The BSI is an instrument which seeks to measure nine specific categories of psychological distress and three overall measures of distress. Many researchers have used this instrument to assess particular levels of distress in a wide variety of populations.[81] The BSI includes nine subscales and a global severity index (GSI). The nine subscales include:

> *somatization* which represents "distress arising from perceptions of bodily dysfunction ... [that] have all been demonstrated to have a high

---

[75]*Id.*

[76]*Id.*

[77]Derogatis & Melisaratos, *supra* note 20, at 595.

[78]*Id.*

[79]JOHN R. GRAHAM, THE MMPI: A PRACTICAL GUIDE 19-21 (1977).

[80]Derogatis & Spencer, *BSI, supra* note 13.

[81]Since 1987, a search of the Psychlit database revealed that at least eighty-nine studies have been conducted using this instrument.

The BSI is a fifty-three item, shortened version of the Hopkins Symptom Checklist-90 (SCL-90). The BSI's convergent validity has been established in favorable comparisons to the clinical, content and cluster scores of the Minnesota Multiphasic Personality Inventory (MMPI). *See* Leonard R. Derogatis et al., *The SCL-90 and The MMPI: A Step in The Validation of a New Self-Report Scale,* 128 BRITISH J. PSYCHIATRY 280 (1976)[hereinafter Derogatis, *SCL-90*]. To assess the internal structure of the BSI, the authors conducted a principal components factor analysis on the data produced from the psychiatric out-patient sample norm group. Nine interpretable factors were derived from a normal varimax rotation of the principle components, which accounted for 44% of the variance in the matrix. *See* Derogatis & Melisaratos, *supra* note 20, at 596. Reliability of this instrument has been assessed in two ways: internal consistency and test-retest. The internal consistency alpha for the nine subscales range from .71 to .85. Test-retest reliabilities for the nine subscales and the global measure of distress range from .68 to .91. *Id.* at 600.

association with disorders of a functional etiology, although all may be reflections of true physical disease;"[82]

obsessive-compulsive behavior which "focuses on thoughts, impulses and actions that are experienced as unremitting and irresistible by the individual" and are unwanted;[83]

interpersonal sensitivity which "centers on feelings of personal inadequacy and inferiority, particularly in comparison with others. Self-deprecation, feelings of uneasiness, and marked discomfort during interpersonal interactions are characteristic . . .;"[84]

depression which represents "[s]ymptoms of dysphoric mood and affect are represented as are signs of withdrawal from life interest and lack of motivation. In addition, feelings of hopelessness, [thoughts of suicide], and other cognitive and somatic correlates of depression are included;"[85]

anxiety which represents "[g]eneral signs such as nervousness and tension . . . as are panic attacks and feelings of terror. Cognitive components involving feelings of apprehension, and some somatic correlates of anxiety are also included . . .;"[86]

hostility which "indicates thoughts, feelings or actions that are characteristic of the negative affect state of anger. . . and reflects qualities such as aggression, irritability, range and resentment;"[87]

phobic anxiety which represents "persistent fear response to a specific person, place, object or situation which is characterized as being irrational and disproportionate to the stimulus, and which leads to avoidance or escape behavior;"[88]

paranoid ideation which represents "paranoid behavior fundamentally as a disordered mode of thinking. The cardinal characteristics of projective thought, hostility, suspiciousness, grandiosity, centrality, fear of loss of autonomy and delusions . . .;"[89] and

---

[82]Derogatis & Spencer, *BSI, supra* note 13, at 11.

[83]*Id.* at 11-12.

[84]*Id.* at 12.

[85]*Id.* at 13.

[86]Derogatis & Spencer, *BSI, supra* note 13, at 13.

[87]*Id.* at 14.

[88]*Id.*

[89]*Id.* at 15.

social alienation and isolation which represents "a graduated continuum from mild interpersonal alienation (withdrawal, isolation) to dramatic evidence of psychosis (thought-control)."[90]

global severity index (GSI) a measure of the number of or intensity of psychological distress currently being experienced by a person.[91]

Those individuals scoring two standard deviations from the mean are considered clinically distressed and in need of treatment.[92]

The level of alcohol-related problems was assessed using the Michigan Alcoholism Screening Test-Revised (MAST).[93] The MAST is a widely used screening instrument, which has been found to adequately identify the pool of those people likely to be alcoholic.[94] The MAST has been found to be valid when complemented by collateral information from social service agencies, medical service agencies, and past arrest records.[95] This study also indicates that the internal consistency of this instrument has been found to be quite high.[96]

The original scoring system[97] was developed to provide a minimum number of false negatives (hospitalized alcoholics who scored below the criterion levels). This scale is best viewed as a screening instrument for alcohol-related problems. With the total score ranging from zero to fifty-three, it categorizes, as nonalcoholic, those with a score of three or less; as suggestive of alcoholism those with a score of four, and as potentially alcoholic those with a score of five or greater.[98]

A modification of the MAST was made for the present study. The original MAST is a dichotomous scale wherein respondents answer "yes" or "no" to a list of questions. Many of the questions refer to the present (e.g., Do you feel

---

[90]Derogatis & Spencer, *BSI, supra* note 13, at 15.

[91]*Id.* at 14.

[92]Derogatis, *SCL-90, supra* note 81, at 284.

[93]*See* Melvin L. Selzer, *The Michigan Alcoholism Screening Test: The Quest for a New Diagnostic Instrument,* 127 AM. J. PSYCHIATRY 1653 (1971); Thomas F. Babor et al., *Early Detection of Harmful Alcohol Consumption: Comparison of Clinical, Laboratory and Self-Report Screening Procedures* 14 ADDICTIVE BEHAV. 139 (1989).

[94]GERARD J. CONNORS & ARTHUR R. TARBOX, *Michigan Alcoholism Screening Test, in* 3 TEST CRITIQUES 439, 441 (D. J. Keyser & R. C. Sweetland, eds., 1985).

[95]*Id.* at 444.

[96]*Id.* Noting, for example, that a 1975 sample of 500 alcoholics and nonalcoholics revealed a .95 consistency. Melvin L. Selzer et al., *A Self-Administered Short Michigan Alcoholism Screening Test (SMAST),* 36 J. STUD. ALCOHOL 117 (1975)[hereinafter Selzer, *SMAST*]; and a later study finding a test-retreat reliability of .86 or greater. Burton J. Zung, *Evaluation of The Michigan Alcoholism Screening Test (MAST) in Assessing Lifetime and Recent Problems,* 38 J. CLINICAL PSYCHOL. 425 (1982).

[97]Selzer, *SMAST, supra* note 96, at 117.

[98]Selzer, *supra* note 93, at 1656.

you are a normal drinker?) while other questions refer to lifetime prevalence (e.g., Have you ever lost a job because of drinking?). One scholar has suggested that researchers can easily assess for lifetime problems and for problems that occurred during specific, recent periods using the MAST instrument.[99] The authors of this and an earlier study followed this advice by listing each question of the MAST and then giving respondents a choice as to time frame for reporting their answers. The choices were: (1) Yes, this year; (2) Yes, within the last two to five years, (3) Yes, more than five years ago, and (4) No.[100]

Relationship satisfaction was assessed by using a modified version of the Positive Feelings Questionnaire, which was originally constructed to predict outcome in marital therapy.[101] Relationship satisfaction was defined to include satisfaction with your partner if the lawyer was not married but was living with or in a significant relationship with someone. The scale is a seventeen-item inventory that assesses the overall affect an individual feels toward his or her partner or spouse.[102]

Perceived stress was measured by using the Perceived Stress Scale (PSS).[103] The PSS measures the degree to which a person appraises her/his life as stressful.[104] Validation of the PSS was conducted by correlating its scores to various other measures of health symptomology. The PSS has been found to be correlated with life-event measures, depressive and physical symptoms, health service utilization, social anxiety, and smoking-reduction maintenance.[105]

Anger was assessed using the Brief Anger-Aggression Questionnaire (BAAQ).[106] The BAAQ is a short version of the Buss-Durkee Hostility In-

---

[99] Zung, *supra* note 96, at 436.

[100] Benjamin, *Prevalence of Depression, supra* note 4.

[101] K. Daniel O'Leary et al., *Assessment of Positive Feelings Toward Spouse,* 51 J. CONSULT. & CLINICAL PSYCHOL. 949, 949 (1983).

[102] All items met a homogeneity coefficient of >.50. The instrument was validated by comparing it to an older, well established scale, the Marital Adjustment Test. *See* D. Russell Crane et al., *Assessing Marital Quality with Distressed and Nondistressed Couples: A Comparison and Equivalency Table for Three Frequently Used Measures,* 52 J. MARRIAGE & FAM. 87, 90 (1990) (citing Harvey J. Locke & Karl M. Wallace, *Short Marital-Adjustment and Prediction Tests: Their Reliability and Validity,* 21 MARRIAGE & FAM. LIVING 251 (1959)). The validity coefficient comparing the Positive Feelings Questionnaire to the Marital Adjustment Test is r=.70, p<.001. O'Leary, *supra* note 101, at 950.

[103] Cohen, *Global Measure, supra* note 56, at 387, 394-95.

[104] *Id.* at 385.

[105] *Id.* at 389-92. The PSS reliability (coefficient alpha) was found to be between .84 and .86 for samples of students, community volunteers and people involved in a smoking cessation program. Test-retest reliability was .85 for the student sample. The fourteen items are summed after reversing the seven positive items. *Id.* at 390.

[106] Roland D. Maiuro et al., *A Brief Measure for the Assessment of Anger and Aggression,* 2 J. INTERPERSONAL VIOLENCE 166, 167 (1987).

ventory.[107] Construct validity was assessed by computing the total score for the BAAQ and the Buss-Durkee. The authors found that they were significantly related.[108] Criterion validity was determined by assessing four separate violent and nonviolent populations. Significant differences were found between all three violent samples and the control sample suggesting that the BAAQ is able to discriminate violent from nonviolent men. The BAAQ is most reliable when its total score is used; the authors suggest a cutting score of nine. Those people attaining a score higher than nine are fairly likely to lose control when angry and possibly become interpersonally violent.

Social support was assessed using a modified subset of questions from the Sarason Social Support Questionnaire.[109] The subset questions asked the subject to indicate the persons who supported them in various ways.

RESULTS

Analysis of the data allow several levels of statistical analysis to be presented. First, to ascertain if the Arizona results are replicated with the Washington sample, the results of the two year post-graduate Washington lawyer population will be compared to the results of the Arizona two year post-graduate lawyer population.[110] Second, details of the Washington sample will be presented in a three step analysis focusing on: (1) demographic composition and gender differences; (2) comparison of the Washington lawyer population to the normal population groups for each of the instruments used in the study; and (3) application of sequential canonical analysis to introduce a multivariate model explaining lawyer distress.

COMPARISON OF THE TWO YEAR POST-GRADUATE ARIZONA AND WASHINGTON LAWYERS

Demographic Differences:
Approximately two-thirds of both the Arizona and Washington new practicing lawyers were male, and there were no statistical differences as to gender between the two groups.[111] There were, however, age differences. Arizona female and male lawyers were statistically younger than their Washington counterparts.[112]

---

[107]*Id.* at 167.

[108]r=.78. Principle component factor analysis indicated only one factor with an eigenvalue greater than 1.0. A coefficient alpha of .82 indicates an adequate level of internal consistency.

[109]Irwin G. Sarason et al., *Assessing Social Support: The Social Support Questionnaire,* 44 J. PERSONALITY & SOC. PSYCHOL. 127, 129 (1983).

[110]Benjamin, *Prevalence of Depression, supra* note 4, at 236-37.

[111]*Id.* at 239.

[112]The data revealed that for Arizona females X=29, SD=3.5, Washington females X=32.7, SD=6.5; while for Arizona males the corresponding figures were X=28.6,

Psychological Distress:

Symptoms present during the third year of law school did lessen somewhat during the first two years of practice, but not significantly so.[113] Nearly 18% of the alumni remained above the ninety-eighth percentile cutoff on a measure of global psychological distress.[114] Since the findings were only from one law school in one region, it is important to assess whether these data can be replicated in another region. Table 1 indicates the percentage of Washington lawyers up to and including two years of practice that score above the cutoff on measures of psychological distress.

Table 1

Two Year Post-Graduation Washington Lawyers Scoring Above The 98th
Percentile Using The 1995 Gender Adjusted Norms

BSI Subscale Name	Arizona	Washington
Somatization		2.7% (5/179)*
Obsessive-Compulsive		19.0% (35/184)
Interpersonal Sensitivity		35.3% (65/184)
Depression	20.0%	23.4% (43/184)
Anxiety		30.4% (56/184)
Hostility		8.7% (16/184)
Phobic Anxiety		10.3% (19/184)
Paranoid Ideation		12.5% (23/184)
Social Alienation & Isolation		26.6% (49/184)
Global Severity Index (GSI)	17.9%	18.5% (34/184)

* Note: Not all respondents answered all questions thus the difference in respondents measured.

The 1986 study reported specific percentages of alumni above the cutoff for two category scales, depression and the global measure of psychological distress.[115] These points can be used as a reference in comparing the newly practicing Arizona and Washington lawyers. Twenty-three percent of the Washington lawyers are complaining of depressive symptoms above the cutoff score, while 20-40% of the Arizona newly practicing lawyers report this level of depressive symptoms.[116] On the global measure of psychological distress, the newly practicing Washington lawyers are reporting symptoms at

---

SD=3.8, Washington males X=31.5, SD=6.6. *Id*. at 240.

[113]Benjamin, *Role of Legal Education, supra* note 10, at 248.

[114]*Id*. at 236.

[115]*Id*. The study did not report specific percentages of alumni above the cutoff for other subscales.

[116]*Id*.; *see supra* Table 1.

approximately the same rate as the Arizona lawyers (18.50% for Washington versus 17.91% for Arizona). A fuller understanding of the comparison of Arizona and Washington lawyers can be gained by review of the means and standard deviations for both groups, which are set forth in Table 2.

Table 2

Arizona Two-Year Post-Graduation Alumni Compared To Washington
Two-Year Post-Graduation Alumni

BSI Subscale Name	ARIZONA Mean/SD	WASHINGTON Mean/SD
Somatization	-0.13(0.97)	-0.12(0.85)
Obsessive-Compulsive	1.15(1.56)	1.00(1.31)
Interpersonal Sensitivity	0.83(1.72)	1.37(1.76)***
Depression	0.77(1.80)	1.00(1.85)
Anxiety	1.44(1.90)	1.54(1.97)
Hostility	1.16(1.70)***	0.37(1.18)
Phobic Anxiety	0.05(1.27)	0.36(1.39)**
Paranoid Ideation	0.73(1.53)*	0.51(1.30)
Social Alienation & Isolation	1.02(2.15)	1.21(2.16)
Global Severity Index (GSI)	0.92(1.56)	0.93(1.41)

NOTE: Significance levels for difference probabilities.[117]
*   p <= 0.05
**   p <= 0.001
*** p <= 0.001

A meaningful disparity is revealed in five of the subscales. The Arizona alumni are significantly higher on measures of hostility and paranoid ideation while the Washington attorneys are significantly higher on measures of interpersonal sensitivity and phobic anxiety. The other six of the ten BSI subscales (somatization, obsessive-compulsiveness, depression, anxiety, social alienation and isolation, and global severity index) reveal no significant differences between the mean of the zscores for the Arizona alumni and the

---

[117]In the Tables, asterisks denote the level of the "difference probability", or the "difference score probability," that are sometimes referred to as the "p=value." In this context, probability is related to the concept of statistical significance, a method for ruling out chance as the explanation for a particular result. Statistical significance is measured against several levels, the most common is the 0.5 level (noted as *). This 0.05 level indicates that there are five chances in one hundred that the value occurred by chance. In turn, the 0.01 level (noted as **) indicates that there is only one chance in one hundred that the value occurred by chance and the 0.001 level (noted ***) indicates that there is only one chance in one thousand that the value occurred by chance. In the social sciences, it is generally agreed that if the p=value is equal to or less than 0.05, then the result is significant. Throughout this paper, we indicate the probability levels of the significance tests as calculated so that the reader can understand the significance level of the tests performed. There is no such thing as a p=value of 0, since there is always some possibility that the result occurred by chance alone.

newly practicing Washington lawyers. The study did not report gender differences in scores on these variables.

Alcohol Problems:

Although the 1986 study did not specifically administer the MAST Questionnaire to measure alcohol use as was done in the Washington sample, the Arizona subjects did specify their degree of concern about their alcohol use. The subsequent study reports that 26% of the Arizona young lawyers express concern about their alcohol use.[118] Overall, 13% of the similar cohort of Washington lawyers score above the clinical cutoff of likely current alcohol problems as measured by the MAST Questionnaire.[119] Breaking this down by gender, 13% of newly practicing male Washington lawyers exceed the MAST cutoff score while approximately 10% of the newly practicing Washington females do so.[120]

The 1990 study reported only the current year figure for the MAST Questionnaire for the Washington lawyers.[121] This limited report was a function of the authors' decision to restrict themselves to the "Yes, this year" column and report only the percentage of all lawyers scoring at least five or greater on this scale for this time frame. In order to estimate a "lifetime" prevalence, if a respondent marked any of the choices except for the "No" response (the choices were: [1] Yes, this year; [2] Yes, within the last two to five years; [3] Yes, more than five years ago; and [4] No), the respondent was given the points associated with that question. A different picture emerges upon closer observation of the data relating to the practicing Washington lawyers. Seventy-one percent of the females and 67% of the males score above the cutoff indicating that a lifetime prevalence of alcohol problems is likely.[122]

WASHINGTON SAMPLE DEMOGRAPHICS (AGE, MARITAL STATUS, AND PRACTICE VARIABLES)

Focusing now on the entire Washington sample, 84% of the lawyer population fall below age forty-nine.[123] Seventy-two percent are married while 28% are single, divorced, or widowed. Approximately three-fourths of the sample is male (76%, 605 lawyers). In addition, 84% fall below twenty years of practice, with 95% falling below thirty-seven years of practice. The average number of years of practice is eleven.[124] Seventy-six percent share space or practice with other lawyers and 83% have had the same job for over one year.

---

[118] Benjamin, *Prevalence of Depression, supra* note 4, at 240.

[119] *Id.* at 241.

[120] *Id.*

[121] *See id.*

[122] *See supra* Table 8.

[123] X=39, S.D.=11.

[124] S.D.=12.

As a whole, the group consists primarily of married, middle-aged males who have practiced with others for approximately eleven years.

Gender Differences in Demographics and Practice Variables:

In describing the sample, are there gender differences in demographic and practice variables (i.e., age, marital status, length of practice, number of job changes)? Gender differences were found in describing the sample and in the demographic variables; these are detailed in Table 3. As noted above, only 24% of the sample are women. Ninety-seven percent of the women fall below age fifty, only 81% of the men fall below this age.[125] Also, many fewer women lawyers are married (58% of the women versus 76% of the men). Forty-one percent of the women are either never married (29.4%), separated (0.5%), or divorced (10.7%). On the other hand, 23% of the men are either never married (13.6%), separated (2%), or divorced (7.6%). Of those women who are currently married, the length of their marriages is the same as for men. Ninety-three percent of the women have practiced ten years or less,[126] while 93% of the men have practiced thirty-five years or less.[127] Of the women, 73% have maintained their same job over the last year while 85% of the men stayed at the same position. Table 3 reports the statistical significance of these differences in regard to age, years of practice, and marital status. Overall the data indicate that the women were younger, practiced as a lawyer for a fewer number of years, and were less likely to be married.

Table 3

Significant and Nonsignificant Differences Between Male and Female Lawyers On Demographic Variables

Variable	Female	Male
Average Age	34.4	40.6***
Average Years of Practice	5.0	13.0***
Percent Married versus Single	58.0%	76.0%
Maintained Same Job Last Year	73.0%	85.0%
Share Space with Others	80.0%	80.0%
Average Duration Marriage	13.3	15.0

*   p <= 0.05
**   p <= 0.001
*** p <= 0.001

---

[125]X=34, S.D.=7 for women; X=41, S.D.=12 for men.

[126]X=5, S.D.=6.

[127]X=13, S.D.=12.

COMPARISONS OF THE LAWYER SAMPLE TO NORMAL POPULATION SAMPLES

To aid in determining the extent to which the Arizona findings compare to normal population samples and can be generalized across the career span, three factors are discussed below. These factors are: (1) a comparison of the Washington lawyers to others who have responded to the different sampling instruments used in this study; (2) a determination of whether the lawyers are significantly distressed and, if so, the areas of such distress; and (3) a comparison of these results to the Arizona attorneys.

Psychological Distress:

The BSI measures different types of psychological distress. The BSI Manual notes that a consistent observation in the literature is that females report significantly greater numbers of psychological symptoms than do males and they tend to do so with increased levels of intensity.[128] However the BSI manual does not provide separate means and standard deviations for the males and females for their original norm group. Cochran and Hale[129] provide these gender-adjusted scores. Using the Cochran and Hale scores, the study data will initially be presented separately for the genders. Thereafter a comparison of the genders will be made.[130] Finally, these gender-adjusted norms are then

---

[128]There is some debate as to whether this is a bias in reporting symptoms such that women report more symptoms, Derogatis & Spencer, *BSI, supra* note 13, at 18, or that "women are more ready than men to translate nonspecific feelings of psychiatric symptoms into conscious problem recognition", Ronald C. Kessler et al., *Sex Differences in Psychiatric Help-Seeking: Evidence from Four Large-Scale Surveys,* 22(1) J. OF HEALTH AND SOC. BEHAV. 49, 60 (1981); "men do not present with somatic complaints until there is greater disruption in their lives, which is compatible with work showing that men referred for psychiatric treatment have more comorbid psychopathology than women." Carol A. Wool & Arthur J. Barsky, *Do Women Somatize More than Men? Gender Differences in Somatization,* 35(5) PSYCHOSOMATICS 445, 447 (1994). *But see* Susan Nolen-Hoeksema, *Sex Differences in Unipolar Depression: Evidence and Theory,* 101(2) PSYCHOL. BULL. 259, 266 (1987).

> ([T]he hypothesis that the lower rates of depression observed in
> men are due to men's unwillingness to admit to their depressive
> symptoms has not been consistently supported. Men appear to be
> just as likely to admit to and seek help for a given level of depression.
> Still, women appear to experience depression more commonly than
> men.)

In addition, in the national study of the prevalence of psychiatric disorders in the United States done with in-person clinical interviews, female rates of having nearly all psychiatric disorders (except alcohol-related disorders) are considerably higher. Kessler, *Lifetime, supra* note 24, at 12.

[129]C. D. Cochran & W. Daniel Hale, *College Student Norms on the Brief Symptom Inventory,* 21 J. CLINICAL PSYCHOL. 777 (1985).

[130]Separating the genders implies differences between the genders; however, the results of gender differences should not be over interpreted. Much stronger conclusions can be drawn about male lawyers due to the greater sample size. When the lawyer sample is pooled, there were no statistically significant interactions for gender. *See supra* text *Model 1, Gender Differences.*

used to calculate the lawyers' sample means, standard deviations, and zscores. Table 4 separates the lawyer sample by gender and reports the percentage of each gender scoring above the ninety-eighth percentile bench mark on each of the subscales.

Table 4

Comparison of the Male and Female Lawyers Scoring Above the 98th Percentile Using the 1985 Gender-Adjusted Norms

BSI Subscale Name	Women Lawyers Two SD Above Gen.-Adj. Mean	Men Lawyers Two SD Above Gen.-Adj. Mean
Somatization	1.6% (3/183)	4.1% (25/605)
Obsessive-Compulsive	15.0% (28/187)	20.3% (123/605)
Interpersonal Sensitivity	26.7% (50/187)	30.2% (183/605)
Depression	16.0% (30/187)	20.8% (126/605)**
Anxiety	19.8% (37/187)	27.8% (168/605)*
Hostility	11.2% (21/187)	6.8% (41/605)
Phobic Anxiety	3.2% (6/187)	7.3% (44/603)***
Paranoid Ideation	8.6% (16/187)	13.2% (80/605)
Social Alienation & Isolation	19.3% (36/187)	24.6% (149/605)
Global Severity Index (GSI)	10.7% (20/187)	18.3% (111/605)*

Male lawyers:

Approximately 30% of the male lawyers score above the clinical cutoff for interpersonal sensitivity, 28% for anxiety, 25% for social alienation and isolation, 21% for depression, 20% for obsessive-compulsiveness, 13% for paranoid ideation, 7% for phobic anxiety, and 7% for hostility. The percentage of lawyers scoring above the cutoff is alarming in that the expected percentage of people scoring above the benchmark is only 2.27%.[131] Another way to view these data is to compare the lawyer means and standard deviations to the normal population group means and standard deviations. Since Table 4 indicates such high percentages of lawyers two standard deviations from the mean, it is expected that the male lawyer means are significantly higher than the normal population means. Table 5 details this analysis. As anticipated, with the exception of somatization, all of their subscale scores are significantly above the normal population means.

---

[131]A great percentage of lawyers score above the clinical cutoff and this result clearly indicates the lawyers are reporting a significant number of symptoms as compared to an unselected normal group. It is, however, important to note that scoring above this cutoff on these different categories of distress is not synonymous with a full-blown psychiatric diagnosis. More detailed information, such as a comprehensive diagnostic interview with each lawyer, would need to be provided.

Table 5

Female and Male Lawyer Means and Standard Deviations Compared to the
1985 Gender-Adjusted Norms

MALE LAWYERS
1985 GENDER ADJUSTED NORMS

BSI Subscale Name	Male Lawyers Mean/SD	Gen Adj. ADULT Mean/SD
Somatization	0.25(0.34)	0.29(0.33)*
Obsessive-Compulsive	0.75(0.56)***	0.34(0.39)
Interpersonal Sensitivity	0.62(0.61)***	0.25(0.32)
Depression	0.58(0.61)***	0.28(0.31)
Anxiety	0.59(0.53)***	0.22(0.27)
Hostility	0.42(0.44)***	0.29(0.37)
Phobic Anxiety	0.14(0.24)***	0.08(0.19)
Paranoid Ideation	0.50(0.53)***	0.34(0.41)
Social Alienation & Isolation	0.34(0.44)***	0.13(0.23)
Global Severity Index (GSI)	0.46(0.36)***	0.25(0.24)

Male Lawyer N=605
*   p <= 0.05
**   p <= 0.001
***   p <= 0.001

FEMALE LAWYERS
1985 GENDER ADJUSTED NORMS

BSI Subscale Name	Female Lawyers Mean/SD	Gen Adj. ADULT Mean/SD
Somatization	0.34(0.33)	0.43(0.47)***
Obsessive-Compulsive	0.87(0.55)***	0.44(0.49)
Interpersonal Sensitivity	0.84(0.69)***	0.35(0.43)
Depression	0.74(0.68)***	0.46(0.52)
Anxiety	0.83(0.64)***	0.37(0.43)
Hostility	0.52(0.45)***	0.33(0.42)
Phobic Anxiety	0.18(0.28)	0.19(0.37)
Paranoid Ideation	0.49(0.51)***	0.34(0.46)
Social Alienation& Isolation	0.41(0.46)***	0.15(0.25)
Global Severity Index (GSI)	0.57(0.36)***	0.36(0.35)

Female Lawyer N=187
*   p <= 0.05
**   p <= 0.001
***   p <= 0.001

Female lawyers:

Approximately 27% of the female lawyers score above the clinical cutoff for interpersonal sensitivity, 20% for anxiety, nearly 20% for social alienation and isolation, 16% for depression, 15% for obsessive-compulsive, and 11% for hostility.[132] Phobic anxiety and somatization are very near the expected cutoff of 2.27%. With the exception of phobic anxiety and somatization all subscales for female lawyers reflect percentages which are significantly above the normal population mean. Since Table 4 indicates such high percentages of lawyers two standard deviations from the mean, it is expected that female lawyer means will also be significantly higher than the normal population means. Table 5 details this analysis. As was true with male lawyers, nearly all of the female lawyer subscale scores are significantly above the normal population means.

Comparison of males to female lawyers:

There are two important questions to ask concerning gender differences among the lawyers in these data. First, are there gender differences among the lawyers? The answer can be found by simply comparing the average (or mean) symptom scores reported by the males and the females in this sample. Second, once scores are adjusted to follow the pattern found in the general population,[133] do gender differences remain among the lawyers?

When looking only at the average symptoms reported by the Washington lawyers at Table 6A, the female average symptom scores are significantly higher than the males for six of the subscales of distress and the overall measure of distress (GSI). This result indicates that females are reporting more intense distress in these subscales. However, when scores are compared to gender adjusted norms, it is the male lawyers average scores that are significantly higher than the female scores as seen in Table 6B. In addition, a higher percentage of male lawyers, in comparison to female lawyers, score above the ninety-eighth percentile on measures of depression, phobic anxiety, anxiety and general distress as seen at Table 4.

Taken together, the data summarized in these tables indicate a considerable amount of psychological distress within the lawyer sample. Whether this distress decreases, increases, or remains stable over the career span is, of course, a question of considerable magnitude.

---

[132]*See supra* Table 4.

[133](Females reporting higher levels of symptoms); *see supra* note 127.

Table 6

Gender Comparisons Female Compared Male Lawyer Raw Score Means and 1985 Gender-Adjusted Zscores

A. Lawyer Raw Score Means

BSI Subscale Name	Female Lawyers Raw Score Mean	Male Lawyers Raw Score Mean
Somatization	0.34(0.33)***	0.25(0.34)
Obsessive-Compulsive	0.87(0.55)***	0.75(0.56)
Interpersonal Sensitivity	0.84(0.69)***	0.62(0.61)
Depression	0.74(0.68)**	0.58(0.61)
Anxiety	0.83(0.64)***	0.59(0.53)
Hostility	0.52(0.45)**	0.42(0.44)
Phobic Anxiety	0.18(0.28)	0.14(0.24)
Paranoid Ideation	0.49(0.51)	0.50(0.53)
Social Alienation & Isolation	0.41(0.50)	0.34(0.44)
Global Severity Index (GSI)	0.57(0.36)***	0.46(0.36)

* $p <= 0.05$
** $p <= 0.001$
*** $p <= 0.001$

B. Lawyer Gender-Adjusted Zscores

BSI Subscale Name	Female Lawyers Zscore Mean/SD	Male Lawyers Zscore Mean/SD
Somatization	-0.19(0.70)	-0.13(1.04)
Obsessive-Compulsive	0.87(1.13)	1.04(1.44)
Interpersonal Sensitivity	1.14(1.60)	1.17(1.92)
Depression	0.55(1.30)	0.96(1.96)***
Anxiety	1.06(1.49)	1.36(1.95)*
Hostility	0.46(1.08)	0.34(1.18)
Phobic Anxiety	-0.03(0.75)	0.34(1.27)***
Paranoid Ideation	0.32(1.10)	0.40(1.28)
Social Alienation & Isolation	1.02(1.83)	0.92(1.92)
Global Severity Index (GSI)	0.61(1.04)	0.87(1.51)**

* $p <= 0.05$
** $p <= 0.001$
*** $p <= 0.001$

COMPARISON OF THE WASHINGTON LAWYERS OVER THE CAREER SPAN

The initial approach to making this comparison was based on dividing the lawyers into five categories based on the number of years practiced. The categories were based on the following years of practice:
1. two years or less;
2. more than two, but less than or equal to five years;
3. more than five, but less than or equal to ten years;

      4.   more than ten, but less than or equal to twenty years; and
      5.   more than twenty years.

An Analysis of Variance (ANOVA)[134] using the Bonferroni-Dunn[135] test for pairwise comparisons (post-hoc tests) for the categories of years practiced was run comparing the lawyers' mean raw scores on the subscales of the BSI over their career span. The ANOVA is detailed in Table 7.

Table 7

Psychological Distress of Washington Lawyers Over the Career Span

BSI Subscale Name	MALE F-VALUE	FEMALE F-VALUE
Somatization	1.01	0.56
Obsessive-Compulsive	0.81	1.77
Interpersonal Sensitivity	1.75	0.46
Depression	2.67*	0.28
Anxiety	3.45**	0.73
Hostility	0.59	2.57*
Phobic Anxiety	2.38*	0.86
Paranoid Ideation	1.67	0.74
Social Alienation & Isolation	2.56*	0.93
Global Severity Index (GSI)	2.20	0.90

* $p <= 0.05$
** $p <= 0.001$
*** $p < 0.001$

Psychological Distress:

Male lawyers:

    Several subscales of the BSI show statistically significant differences over the career span: depression, anxiety, phobic anxiety, and social alienation and isolation.

Female lawyers:

    The only BSI subscale that changes significantly over the career span is hostility. However, because Categories four and five (lawyers with the longest periods of practice) have only ten and three subjects respectively, the robustness of this finding is questionable.

    134An Analysis of Variance (ANOVA) is a statistical technique designed to measure the degree to which variations or differences in one variable can be explained by variations or differences in another variable. ANOVAs are represented as "f" ratios, which is the result of the statistical test, and a "p" value, which explains whether the "f" value actually reaches statistical significance. *See supra* note 117 ("p" values).

    135GEOFFREY KEPPEL, DESIGN AND ANALYSIS: A RESEARCHER'S HANDBOOK 167-70 (3d ed. 1991).

Comparisons of male to female lawyers:

The data summarized in Table 7 suggest that male lawyers' scores change over the career span much more so than females' scores. Four of the subscales indicate change over time for males while only one subscale changes over time for females.

Alcohol Problems Over the Career Span:

Table 8 indicates the percentage of male and female lawyers scoring above the cutoffs for alcohol-related problems in terms of both current year and lifetime prevalence.[136]

Table 8

A. Percentage of Lawyers Scoring Above Case Cutoff on the Alcohol Problems Scale (MAST) For Current Year and Lifetime Use

	Males	Females
Current	20.30(159/605)	9.63(18/187)
Lifetime	67.10(406/605)	71.10(133/187)

B. Percentage of Lawyers Scoring Above the Case Cutoff by Number of Years Practiced

Years Practiced	Males	Females
Category 1	67.27% (74/110)	72.00% (52/72)
Category 2	72.00% (72/100)	75.00% (39/52)
Category 3	69.70% (85/122)	72.00% (36/50)
Category 4	68.70% (101/147)	40.00% (4/10)
Category 5	58.70% (74/126)	66.70% (2/3)

Male lawyers:

Over 20% of the practicing Washington lawyer sample are reporting levels of alcohol use that are likely to indicate current alcohol-related problems. This figure increases dramatically to 68% who are reporting a lifetime likelihood of alcohol-related problems. Over the career span, the rates remain at nearly 70% until the lawyers practice twenty years or more. For these most experienced

---

[136]The reader will remember that in the 1990 study, the authors found that 18% of all lawyers were currently scoring above the clinical cutoff for alcohol-related problems. Benjamin, *Prevalence of Depression, supra* note 4, at 241. Using the same data, Table 8, breaks down this 18% figure by gender and finds 20.3% males and 9.63% females are scoring above the cutoff. The males in this sample greatly outnumber the females, thus the combined total percentage scoring above the cutoff is much closer to the males 20.3% figure.

lawyers the rate drops to below 60% which does not reflect a significant change.[137]

Female lawyers:

Nearly 10% of the practicing Washington lawyer sample are reporting levels of alcohol use that are likely to indicate current alcohol-related problems. As with male lawyers, however, this rate increases dramatically to 71% who are reporting a lifetime likelihood of alcohol-related problems. Over the career span, the data reveal that almost three-fourths of female lawyers in the first three categories (those practicing up to and including ten years), are reporting a lifetime likelihood of alcohol-related problems. The limited number of subjects in the last two categories (those practicing for ten or more years) negates any possibility of reliable statistical analysis for these subgroups.

Comparison of male to female lawyers:

The breakdown of male and female lawyers readily shows that many more male than female lawyers are currently scoring above the cutoff for likely alcohol problems (20.30% versus 9.63%). What is alarming, however, is that when the MAST scale is scored in its original dichotomous form using the original scoring system, nearly 70% of the lawyers are above the cutoff for possible lifetime alcohol-related problems. In considering the breakdown by gender, the female lawyers are actually scoring higher on this scale than the male lawyers (71.0% versus 67.10%). Also alarming is the finding that although female lawyers report less current alcohol-related problems than do their male counterparts, the converse is true in regard to lifetime alcohol-related problems.

POTENTIAL NON-DEMOGRAPHIC PREDICTOR VARIABLES

Relationship Satisfaction, Stress, and Anger:

As outcome variables have been assessed, it is possible and important to consider how the lawyers compare to the normal population groups on potential predictor variables. Table 9 compares the mean scores of the female and male lawyers to their respective normal population means in regard to relationship satisfaction, stress and anger.

---

[137]Although the instrument used to measure alcohol-related problems (the MAST) is highly sensitive (able to correctly identify those people who are truly alcoholic), there is some debate in the literature concerning its specificity (ability to correctly identify those people who are not experiencing alcohol-related problems). Ivan G. Tulevski, *Michigan Alcoholism Screening Test (MAST)—its possibilities and shortcomings as a screening device in a pre-selected non-clinical population,* 24 DRUG AND ALCOHOL DEPENDENCE 255, 258 (1989); Dace S. Svikis et al., *Effects of Item Correction on Michigan Alcoholism Screening Test Scores in College Men With and Without a Family History of Alcoholism,* 3(4) PSYCHOL. ASSESSMENT: A J. OF CONSULTING & CLINICAL PSYCHOL. 654, 655 (1991). Therefore, any conclusions regarding diagnoses of alcohol abuse or dependency (alcoholism) using the findings of this analysis will need to be replicated using a comprehensive diagnostic interview and DSM-IV criteria. AMERICAN PSYCHIATRIC ASSOCIATION, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS, FOURTH EDITION (1994).

Table 9

Male and Female Lawyers Compared to the Predictor Variable Norms

A. Male Lawyers Compared to the Variable Norms

Variable Name	Male Mean/SD	Normal Population Mean/SD
Relationship Satisfaction	91.65/27.94***	100.52/12.44
Stress	31.76/ 3.73***	24.00/ 7.80
Anger	5.54/ 2.91***	5.00/2.38

*   p<=   0.05
**   p<=   0.001
***   p<=   0.001

B. Female Lawyers Compared to theVariable Norms

Variable Name	Female Mean/SD	Normal Population Mean/SD
Relationship Satisfaction	90.87/30.90***	104.26/9.73
Stress	32.40/ 3.40***	25.60/8.24
Anger	6.04/ 2.90***	5.00/2.38

*   p <=   0.05
**   p <=   0.001
***   p <=   0.001

Male lawyers:

Male lawyers report significantly more stress and anger than does the normal population groups for each scale. In terms of relationship satisfaction, the male lawyers are significantly less satisfied than the normal population.

Female lawyers:

Female lawyers also report significantly more stress and anger than does the normal population. As with the male lawyers, female lawyers report significantly less satisfaction with their relationships than does the normal population. Table 10 indicates the percentage of lawyers scoring above the cutoff for these variables.

Table 10

Total Female and Male Lawyers Scoring Above the 98th Percentile
on the Predictor Variables

(Gender-Adjusted for Relationship Satisfaction and Stress)

	Women Lawyers Two SD from Mean	Men Lawyers Two SD from Mean
Relationship Satisfaction (% two sds below mean)	24.0%(40/167)	15.4%(88/572)
Stress (% two sds above mean)	0.6%(1/181)	2.0%(10/588)
Anger (% two sds above mean)	12.0%(22/187)	8.0%(47/605)

Comparison of male to female lawyers:

When comparing male to female lawyers, the same two important questions asked in terms of psychological distress also need to be asked here. First, are there gender differences among the lawyers when comparing the average symptom scores reported by the males and the females in this sample? Second, are there gender differences among the lawyers once the scores are gender-adjusted?

The data summarized in Table 11 indicate that when comparing raw score means, the female lawyers are statistically more stressed and angrier than the male lawyers. Male and female lawyers are, however, equally unhappy with their significant relationships. Framed within the broader context of norm group comparisons, a somewhat different pattern emerges when comparing the genders. The female lawyers remain angrier; however, the female lawyers become significantly more unhappy in their primary relationship while the male lawyers become significantly more stressed.

Table 11

Gender Comparisons
Female Compared Male Lawyer Raw Score Means and Gender-Adjusted
Zscores on the Predictor Variables

A. Raw Score Comparisons

Variable	Female Mean	Male Mean
Relationship Satisfaction	90.87	91.65
Stress	32.40***	31.76
Anger	6.04*	5.54
Social Support	11.79	12.12
Satisfaction with Social Support	23.81	23.22

*   p <= 0.05
**   p <= 0.001
***   p <= 0.001

B. Gender-Adjusted Zscore Comparisons

Variable	Female Zscore Mean	Male Zscore Mean
Relationship Satisfaction	-1.37**	-0.71
Stress	0.83	1.00***
Anger	0.44*	0.23

```
 *    p <=  0.05
 **   p <=  0.001
 ***  p <=  0.001
```

A Proposed Multivariate Model of Lawyer Distress

Since multiple outcomes are hypothesized and these outcomes may be at least spuriously correlated with each other or exert various causal influences on each other, sequential canonical analysis was chosen to model the relationships among the potential predictor and outcome variables.[138] Although other statistical procedures such as Structural Equations Modeling[139] can be used to predict or specify the causal relationships between variables and then test these predicted relationships using actual data, this analysis requires the guidance of a strong theory.[140] In the present analysis, no strong theory exists to explain all the relationships between all the variables.

Sequential canonical analysis does not require the guidance of a strong theory. The only guidance required is a tentative specification of the causal order among independent and dependent variables. Sequential canonical analysis is defined as a data analytic procedure which partitions the covariance of the variables (both predictor and outcome) sequentially while maintaining their separate identity. Thus, this method isolates the direct effects of the independent variables sequentially on each of the outcome variables, controlling for all indirect effects through the prior dependent variables or

---

[138]RICHARD L. GORSUCH, UNIMULT: FOR UNIVARIATE AND MULTIVARIATE DATA ANALYSIS (1991).

[139]Social science theory often predicts causal relationships between and among a set of variables. From a particular theory, the researcher can develop one or more causal models and specify the expected relationships between and among the variables. The researcher then collects a sample of data based on the variables specified in the model/s. Structural Equations Modeling is a data analytic procedure that allows the researcher to then test the plausibility of the complex specification of interrelationships given the sample data. It can also allow the researcher to evaluate the plausibility of different models. HERBERT B. ASHER, CAUSAL MODELING (2d ed. 1983); PETER M. BENTLER, EQS: STRUCTURAL EQUATIONS PROGRAM MANUAL (1989).

[140]GORSUCH, *supra* note 138. *See also* Richard L. Gorsuch & Aurelio J. Figueredo, *Sequential Canonical Analysis As An Exploratory Form of Path Analysis* (1991) (unpublished paper, on file with the American Evaluation Association and Connie J.A. Beck).

outcomes.[141] In this case, it is reasonable to assume that the set of predictor variables are related to one another, and thus do not have totally independent effects on the outcome variables. For example, marital status is related to relationship satisfaction since one needs to be in a relationship to express an opinion about the level of satisfaction with it. In addition, this relatedness then needs to be accounted for when attempting to predict an outcome such as the GSI (measure of general distress). It is equally reasonable to assume that the outcome variables are also related, particularly current and lifetime alcohol-related problems, and thus cannot be looked at in isolation.[142]

This procedure will permit the data to be interpreted so as to address two essential concerns. First, the extent to which the predictor variables or independent variables (anger, age, marital status, stress, relationship satisfaction, social parallel construction support, satisfaction with social support, number of job changes) explain the dependent variables (levels of psychological distress and potential alcohol problems). Second, the contribution of each of the predictor variables to the overall level of variance explained by the group of variables. The variables are entered hierarchically into the model with the second variable having had the effects of the first removed from its score. In statistical terms this removing of the effects of one variable on the effects of the following variables is referred to as "partialling out" or statistically controlling for the effects of one variable on the remaining variables. This process of removing effects of the previous variable (higher order) on the remaining variables (lower order) continues through the list of variables until the last variable entered into the list contributes only the unique variance attributed to that variable. Both independent and dependent variables were calculated in this manner so that overlapping variances could be addressed.

The actual order of the variables was arrived at in two ways. First, since the effects of the higher order variables are removed or partialled out of the lower level, logic suggests the order of some of the variables. For example, the marital status variable is entered into the model prior to the relationship satisfaction variable since as just noted one must be in a relationship in order to be satisfied with that relationship. Likewise, the social support variable was entered prior to the variable assessing the satisfaction with social support. Also, by partialling out the effects of having a significant relationship and the associated level of relationship satisfaction, the social support variable can be assessed for both people in a significant relationship and those who are single and unattached. Second, further ordering was established by testing different ways of entering the variables and arriving at the one that best represented the data.

This modeling was initially completed by using a general measure of distress (the GSI total score on the BSI), a measure of current as well as lifetime rates of

---

[141]Gorsuch & Figueredo, *supra* note 140, at 2.

[142]The correlations between the outcome variables are as follows: GSI and Current Drinking Problems r=.22 (p<=.001); Current Drinking Problems and Lifetime Drinking Problems r=.45 (p<=.001); GSI and Lifetime Drinking Problems r=.13 (P<=.001).

alcohol-related problems (from the MAST), as a primary outcome variables. The multivariate model was then rerun using the specific psychological distress subscales of the BSI as the primary outcome variables.

Model 1

Gender Differences

Prior to reporting the multivariate models, it is important to consider whether to present the data together, or as was done thus far, present it separately by gender. Not only are there strong demographic and practice variable differences as previously reviewed at Table 3, research has shown strong gender differences in several areas of interest in this study. For example, many of the psychiatric disorders (depression, phobias, anxiety disorders) are found to be much more common in women than in men.[143] And, recent research has also shown gender differences in the rates of alcohol abuse and dependence citing significantly more men with these problems than women.[144] Considering the lawyers as one group could mask these important gender differences. On the other hand, presenting separate models for women and men may suggest differences that are nonexistent. There are two basic questions to answer in order to determine if in fact gender differences exist beyond the demographic and practice variables already noted.

First, do males and females report different levels of psychological symptoms or alcohol-related problems? In statistical terms, this question relates to the issue of whether there is a main effect for gender (or intercept) on the outcome variables of interest. Second, are there gender differences in how the predictor variables "interact with" the outcome variables? In other words, if anger is an important predictor of the outcome current alcohol-related problems, does this predictor variable anger affect the outcome variable, current alcohol-related problems, in a different manner for males and females? In statistical terms, this second question relates to the issue of interactions (or slope).

In response to the first question concerning main effects, a review of Tables 6, 8, 9, and 11 indicate that one could predict there would be some main effects for gender. And, the raw score means on the subscale scores measuring psychological distress (Table 6A) indicate that female lawyers scores, with one limited exception, are consistently higher. When looking at the gender-adjusted scores, however, males score higher on a few of the subscales although at a lower level of significance as seen in Table 6B. A sequential canonical analysis was run to test these predictions. When the male and female lawyers are directly compared in terms of mean raw scores, there are main effects for gender. Females report more psychological distress symptoms than do male

---

[143]Kessler, *Lifetime, supra* note 24, at 12; Nolen-Hoeksema, *supra* note 128, at 260-61.

[144]Grant, *supra* note 24, at 1362-64; Kessler, *Lifetime, supra* note 24, at 12.

lawyers;[145] however, male lawyers report more current alcohol-related problems[146] but not lifetime alcohol-related problems.[147] Figure 1 details this analysis.

Figure 1 - Model 1
Lawyer Distress
(Raw Score Means)

Gender
Anger
Age
Marital Status
Relationship
    Satisfaction
Social Support
Satisfaction with
    Social Support
Perceived Stress
Number of Job Changes
Solo or Firm
    Practice

Global
Psychological
Distress

Current Drinking
Problems

Lifetime Drinking
Problems

r=-.17***
r=.50***
r=.16***
r=.14**
r=.10**
r=-.14***
r=.12**

Model Variance Explained = .40, p<.0001
Global Psychological Distress Variance Explained = R^2 =.33
Current Drinking Semipartial Variance Explained = R^2 =.05
Lifetime Drinking Semipartial Variance Explained = R^2 =.03

There are no gender differences for GSI when lawyer scores are adjusted for gender—and those zscore means are assessed.[148] In other words, when the lawyers are compared after their scores are adjusted for differences in symptom reporting levels between men and women in the norm group, the gender differences between the lawyers disappear. Unfortunately, there are no comparison norm groups separated by gender for the test used to measure current or lifetime alcohol-related problems.

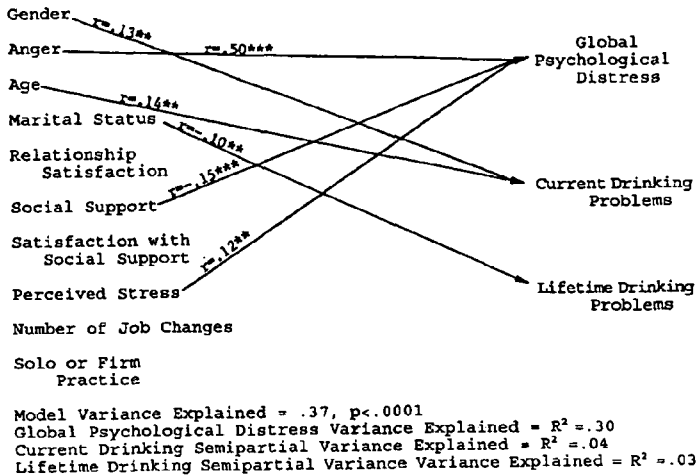[145]The gender variable was coded 0=females, 1=males so that a negative correlation of gender with an outcome variable indicates females score higher on that outcome variable; a positive correlation of gender with an outcome variable indicates males score higher on that variable.

[146]F=15.58, p<.0005.

[147]F=0.06, p is nonsignificant.

[148]F=22.36, p<.0001 for mean raw scores; F=3.13, p=.07 for gender-adjusted zscores.

Figure 2 - Model 1
Lawyer Distress
(Gender-Adjusted Z-Score Means)

Gender
Anger
Age
Marital Status
Relationship
   Satisfaction
Social Support
Satisfaction with
   Social Support
Perceived Stress
Number of Job Changes
Solo or Firm
   Practice

Global
Psychological
Distress

Current Drinking
Problems

Lifetime Drinking
Problems

Model Variance Explained = .37, p<.0001
Global Psychological Distress Variance Explained = R^2 =.30
Current Drinking Semipartial Variance Explained = R^2 =.04
Lifetime Drinking Semipartial Variance Variance Explained = R^2 =.03

In response to the second question concerning interactions and answering the question of whether the predictor variables predict the outcome variables in significantly different patterns for male and female lawyers, the answer is no. A sequential canonical analysis was run, which included all interaction terms,[149] and there were no significant interactions out of a possible fifty-four.[150] Predictor variables do not predict the outcome variables in significantly different ways for male and female lawyers. Because of this finding, of no difference between the genders, the model will be presented combining both male and female lawyers.

All potential predictor variables were entered into the multivariate model. The outcome variables assessed were: (1) the global severity index, (a measure of psychological distress); (2) the measure of current alcohol-related problems; and (3) the measure of lifetime prevalence of alcohol-related problems. Figure 1 indicates the effect sizes or correlations of the different predictor variables in predicting the outcome variables when raw score means are used. Figure 2 uses gender-adjusted zscores for the GSI comparison, and as can be expected, gender is no longer significant for this variable. Unless otherwise specified, the remaining analyses will use the gender-adjusted scores. Interestingly, other than the change in GSI, the Model 1 and Model 2 results are remarkably similar.

---

[149]Gender x anger, gender x age, gender x marital status, gender x relationship satisfaction, gender x social support, gender x satisfaction with social support, gender x stress, gender x number of job changes, gender x solo or firm practice.

[150]Twenty-seven for raw mean score comparisons and twenty-seven for gender-adjusted zscore mean comparisons (each of the variables noted in note 149, for each of the three outcome variables).

One method to assess the significance of effect sizes or correlations, as postulated by Cohen, proposes that effect sizes can be thought of as "small," "medium," and "large."[151] This approach proposes that .10 be considered small, .30 be considered medium, and .50 be considered large.[152] Returning to the Model at Figure 2, the amount of variance explained by the entire Model is .37 as measured by the Pillai-Bartlett statistic.[153] With consideration of Cohen's categorization, the entire model explains a medium amount of variance. Additionally, the multivariate model explains 30% of the variance in the global psychological distress variable (GSI). Remembering that the outcome variables are entered hierarchically with the first capturing all the variance available, and the second capturing only that which is left over after the first is accounted for (semi-partial), the predictor variables explain an additional 4% of the variance in current drinking problems. The predictor variables were able to explain an additional 3% of lifetime likelihood of drinking problems, after current drinking problems and global distress were taken into account.[154]

In breaking down the model into separate outcomes, however, anger is the variable that drives the explanatory power.[155] The remaining effect sizes, although small, are logical. GSI is predicted by high amounts of anger, low levels of social support, and high levels of perceived stress. Quite simply, a person who is expressing a high level of stress, a low level of social support in which to buffer that stress, and a high level of anger has a good chance of experiencing a high level of psychological distress.

The second predictor variable that carries any explanatory power is gender. As noted previously, gender relates to current drinking problems in that males report higher current drinking levels than do females. The third predictor variable, age, relates to current alcohol-related problems; those who are older tend to be those who are currently experiencing problems with their alcohol-related use.[156] The fourth notable effect is that people who are currently single tend to have a higher rate of lifetime likelihood of alcohol-related problems.[157] The former result, related to age, appears to contradict Table 8 where the lifetime likelihood of alcohol-related problems is higher in younger lawyers. This and the latter result are likely due to the fact that the

---

[151]JACOB COHEN, STATISTICAL POWER ANALYSIS FOR THE BEHAVIORAL SCIENCES 147-49 (2d ed. 1988).

[152]Due to the large sample size in this study and the increased risk of finding statistically significant relationships due to chance, effect sizes between predictors and outcome variables that are less than .10 were not considered in this analysis.

[153]Chester L. Olson, On Choosing a Test Statistic in Multivariate Analysis of Variance, 83 PSYCHOL. BULL. 579 (1976).

[154]See discussion supra A PROPOSED MULTIVARIATE MODEL OF LAWYER DISTRESS.

[155]Anger reflects an effect size of .50.

[156]Age reflects an effect size of .14.

[157]Single status reflects a negative effect size of .10.

alcohol-related outcome variables are semi-partials and thus only capture the variance left after the global psychological distress variable has accounted for as much variance as possible. And, in the case of lifetime likelihood of alcohol-related problems, it captures only that variance that has not been accounted for by GSI and current alcohol-related problems. In other words, at equal levels of distress, older people tend to report more current alcohol-related problems. And, at equal levels of distress and age, people who are currently unmarried tend to report higher rates of lifetime alcohol-related problems.

Analysis of Categories of Psychological Distress

The GSI is by far the outcome variable best accounted for by this multivariate model.[158] Since the instrument used to measure GSI, the BSI, also measures

---

[158]A question can be raised concerning the relationship between anger and GSI because one of the subscales of the GSI is hostility. An association between the hostility subscale of the BSI and the anger scale could be responsible for driving the high association between the anger and GSI variables. To resolve this question, several analyses were utilized to assess the degree of association between anger and hostility.

First, a correlation analysis between the anger scale and the hostility subscale was run and found to be .617. Thus, .38 of the variance is not related to the hostility subscale. Second, those questions relating to the hostility subscale of the BSI were deleted from the calculation of the GSI and the model was rerun with the results illustrated in Figure 3.

Figure 3
Global Psychological Distress (GSI)
(No Hostility Subscale Questions)
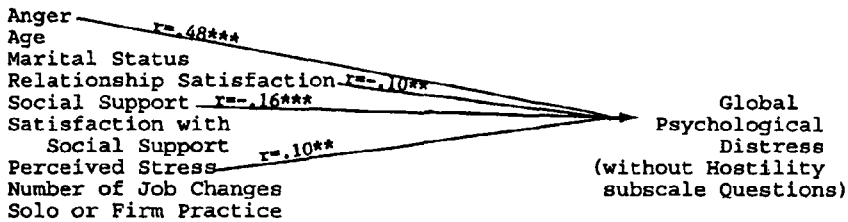
Multiple Correlation R = .54
Variance Explained R² = .29

Third, a canonical analysis was run using anger as the only predictor variable and each of the nine subscales of the BSI (that make up the GSI) as the outcome variables. The program partitions the variance in such a manner that all the common variance goes to the first dependent variable entered (obsessive-compulsiveness). Then, each successive variable captures the unique variance associated with it as well as any remaining variance associated with the other variables. The hostility subscale was entered last in order to ascertain the unique variance associated with it, having partialled out all the other available variance. Figure 4 indicates the unique variance associated with the hostility subscale.

different types of psychological distress, it is important to examine which types of distress are best predicted by the variables measured in this study.[159] As noted above,[160] the nine different types of psychological distress measured by the instrument are: somatization, interpersonal sensitivity, anxiety, social alienation, obsessive-compulsiveness, depression, hostility, paranoid ideation, and phobic anxiety. The depression subscale, in terms of prevalence and its relation to cocaine and alcohol problems, has been previously analyzed.[161] The discussion below addresses this and the other types of psychological distress.

This set of analyses parallels those in Model 1 (Figures 1 and 2) for the GSI, but utilizes individual categories of distress as the outcome variables. In order to minimize the possibility of spurious findings (relationships due to chance), only those predictor variables (gender, anger, relationship satisfaction, social support, perceived stress) and that were significantly related to global distress

Figure 4
Unique Variance Associated with Anger Variable from
Brief Anger-Aggression Questionnaire (BAAQ)
and with Hostility Subscale Variable
from Brief Symptom Inventory (BSI)
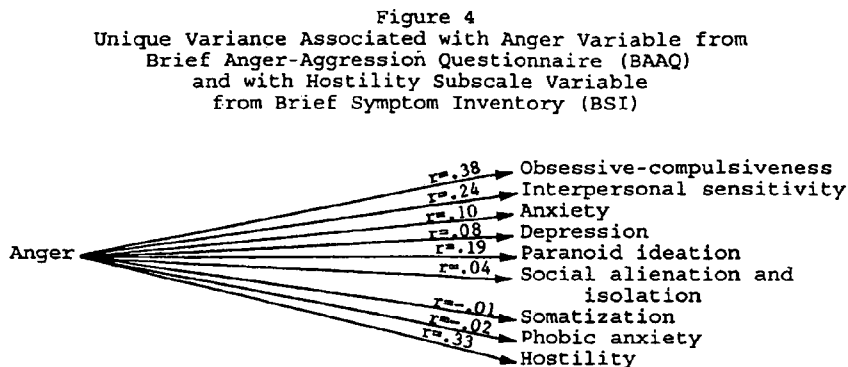
As illustrated in Figure 4, the correlation between anger and the hostility subscale is .33 while the amount of unique variance associated with this subscale is .11. In other words, approximately 89% of the variance associated with the anger scale cannot be attributed to the relationship between it and the hostility subscale. As a substantial part of the variance is not accounted for by the hostility subscale, the remaining analyses assessed the GSI as it was originally created.

[159]There is controversy in the literature concerning the independence and validity of the BSI subscale scores. Jack Boulet & Marvin W. Boss, *Reliability and Validity of the Brief Symptom Inventory*, 3(3) PSYCHOL. ASSESSMENT: A J. OF CONSULTING & CLINICAL PSYCHOL. 433-37 (1991). For conclusions regarding acutal psychiatric diagnoses, findings of this analysis will need to be replicated using a comprehensive diagnostic interview and DSM-IV criteria. AMERICAN PSYCHIATRIC ASSOCIATION, *supra* note 137, at 9-35.

[160]*See supra* notes 74-84 and accompanying text.

[161]*See* Benjamin, *Prevalence of Depression, supra* note 4.

in Figures 1 and 2 were examined. These analyses tested the following questions: (1) are there gender differences in the level of distress on each symptom category?; (2) which categories of distress are best predicted by the variables in this study?; and, (3) what is the pattern of predictor variables associated with each category of distress? (The pattern of predictor variables is detailed in Figures 5 and 6 and examined at length in the discussion section of this paper.)

As opposed to Model 1 where sequential canonical analysis was used, this set of analyses applies a more traditional hierarchical multiple regression analysis.[162] Separate analyses will be run for each category of distress and the different categories of distress will serve as the outcome variable. The predictor variables will be entered hierarchically.[163] As noted above, those predictor variables which significantly predicted GSI in Model 1 will serve as the predictor variables in each of these analyses.

Gender Differences

First, in terms of differences between male and female lawyers when directly compared (main effects) on straight raw scores, female lawyers report more symptoms of obsessive-compulsiveness,[164] interpersonal sensitivity,[165] anxiety,[166] depression,[167] and hostility.[168] There are no main effects for gender for the categories paranoid ideation,[169] social alienation and isolation,[170] somatization,[171] or phobic anxiety.[172] Figure 5 details these analyses.

---

[162]JACOB COHEN & PATRICIA COHEN, APPLIED MULTIPLE REGRESSION/CORRELATION ANALYSIS FOR THE BEHAVIORAL SCIENCES 120-21 (2d ed. 1983).

[163]The effects of the higher order variables will be partialled-out of the lower order variables.

[164]Correlation coefficient for gender and obsessive-compulsiveness is $r=-.12$, $p<.005$; *see* sources cited *supra* note 24.

[165]Correlation coefficient for gender and interpersonal sensitivity is $r=-.19$, $p<.0001$; *see* sources cited *supra* note 24.

[166]Correlation coefficient for gender and anxiety is $r=-.17$, $p<.0001$; *see* sources cited *supra* note 24.

[167]Correlation coefficient for gender and depression is $r=-.14$, $p<.0005$; *see* sources cited *supra* note 24.

[168]Correlation coefficient for gender and hostility is $r=-.15$, $p<.001$; *see* sources cited *supra* note 24.

[169]Correlation coefficient for gender and paranoid ideation is $r=-.01$, $p=$(nonsignificant); *see* sources cited *supra* note 24.

[170]Correlation coefficient for gender and social alienation/isolation is $r=-.05$, $p=.2$; *see* sources cited *supra* note 24.

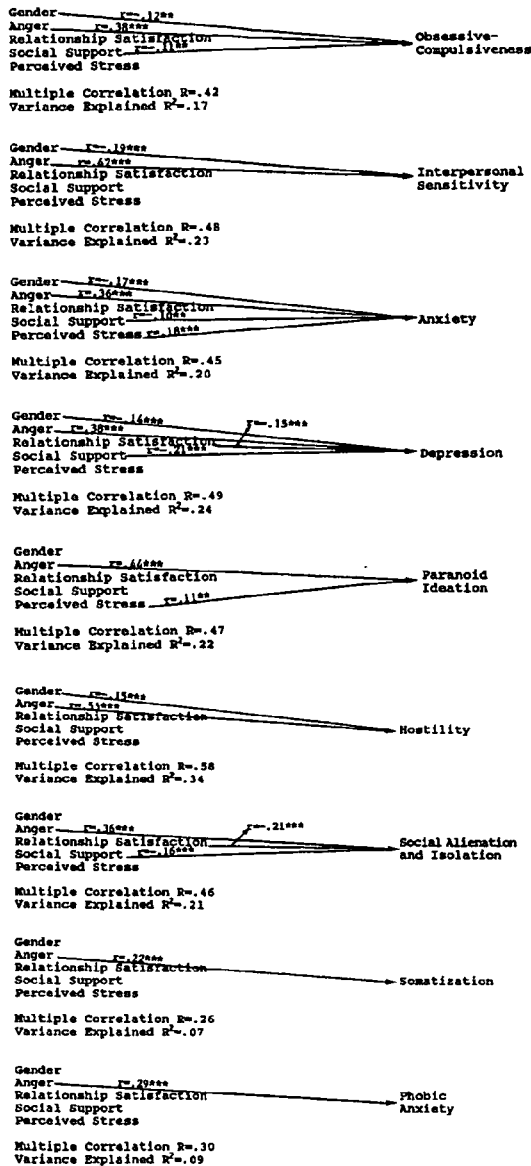[171]Correlation coefficient for gender and somatization is $r=-.09$, $p<.02$; *see* sources cited *supra* note 24. Although traditionally any "p" value below .05 would be considered statistically significant, *see* discussion *supra* note 117, due to the large sample size the

Figure 5
Relationship between Predictor
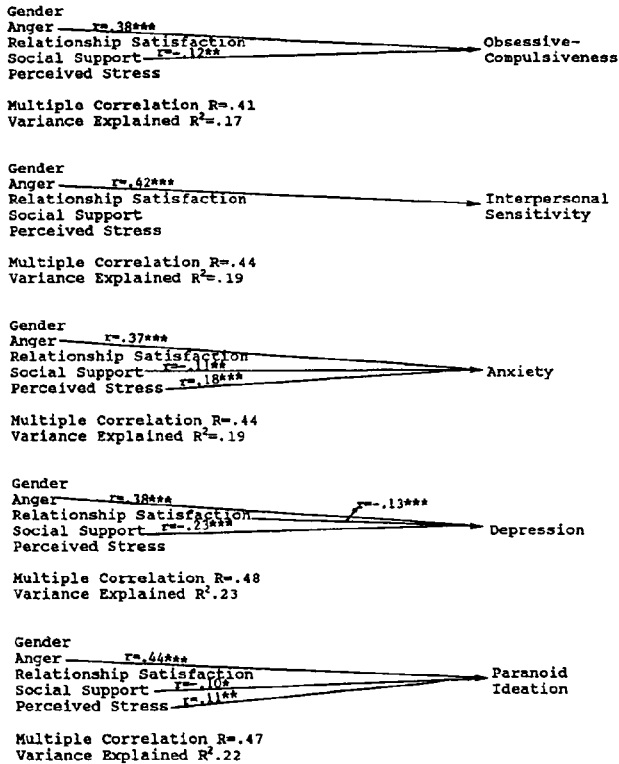Variables and BSI Subscales
(Raw Mean Scores)

Gender——— r=.12**
Anger——— r=.38***
Relationship Satisfaction
Social Support— r=.11**   Obsessive-
Perceived Stress   Compulsiveness

Multiple Correlation R=.42
Variance Explained R²=.17

Gender——— r=.19***
Anger——— r=.67***
Relationship Satisfaction   Interpersonal
Social Support   Sensitivity
Perceived Stress

Multiple Correlation R=.48
Variance Explained R²=.23

Gender——— r=.17***
Anger——— r=.16**
Relationship Satisfaction
Social Support— r=.18**   Anxiety
Perceived Stress r=.18***

Multiple Correlation R=.45
Variance Explained R²=.20

Gender——— r=.14***
Anger——— r=.38***   r=.15***
Relationship Satisfaction
Social Support— r=.21**   Depression
Perceived Stress

Multiple Correlation R=.49
Variance Explained R²=.24

Gender
Anger——— r=.44***
Relationship Satisfaction   Paranoid
Social Support   Ideation
Perceived Stress— r=.11**

Multiple Correlation R=.47
Variance Explained R²=.22

Gender——— r=.15***
Anger——— r=.51***
Relationship Satisfaction
Social Support   Hostility
Perceived Stress

Multiple Correlation R=.58
Variance Explained R²=.34

Gender
Anger——— r=.16***   r=.21***
Relationship Satisfaction
Social Support— r=.16***   Social Alienation
Perceived Stress   and Isolation

Multiple Correlation R=.46
Variance Explained R²=.21

Gender
Anger——— r=.22**
Relationship Satisfaction
Social Support   Somatization
Perceived Stress

Multiple Correlation R=.26
Variance Explained R²=.07

Gender
Anger——— r=.29***
Relationship Satisfaction   Phobic
Social Support   Anxiety
Perceived Stress

Multiple Correlation R=.30
Variance Explained R²=.09

---

authors are considering anything less than a correlation coefficient of .10 as nonsignificant; *see generally* Cohen, *supra* note 151.

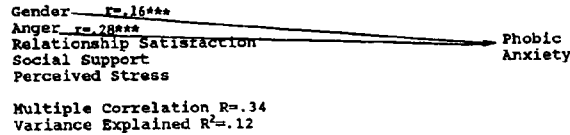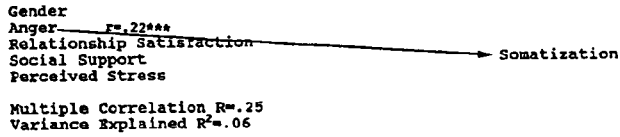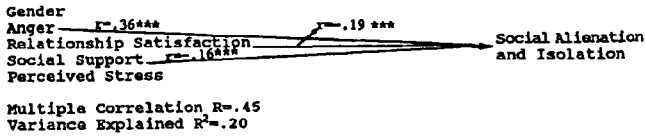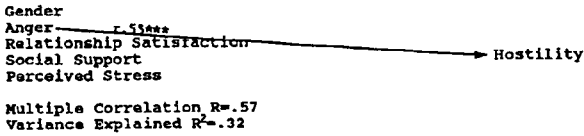172Correlation coefficient for gender and phobic anxiety is r=-.04, p=.3.

Second, when the lawyer scores are adjusted for gender differences appearing in the norm group, the main effect for gender disappeared with only one change. There is now a main effect for gender for males on the phobic anxiety scale.[173] At least in large part, once adjustments are made for the gender differences in symptom reporting found in the unselected norm group, there no longer are major differences between female and male lawyers in terms of main effects or the level of symptom reporting. Figure 6 details these analyses

Figure 6
Relationship between Predictor
Variables and BSI Subscales
(Gender-Adjusted Z-Scores)

Gender
Anger ——— r=.38***
Relationship Satisfaction   Obsessive-
Social Support—r=-.12**   Compulsiveness
Perceived Stress

Multiple Correlation R=.41
Variance Explained R²=.17

Gender
Anger ——— r=.42***
Relationship Satisfaction   Interpersonal
Social Support   Sensitivity
Perceived Stress

Multiple Correlation R=.44
Variance Explained R²=.19

Gender
Anger ——— r=.37***
Relationship Satisfaction—r=-.11**
Social Support—r=.18***   Anxiety
Perceived Stress—r=.18***

Multiple Correlation R=.44
Variance Explained R²=.19

Gender
Anger ——— r=.18***
Relationship Satisfaction   r=-.13***
Social Support—r=-.23***   Depression
Perceived Stress

Multiple Correlation R=.48
Variance Explained R².23

Gender
Anger ——— r=.44***
Relationship Satisfaction   Paranoid
Social Support —r=.10*   Ideation
Perceived Stress—r=.11**

Multiple Correlation R=.47
Variance Explained R².22

---

[173]Correlation coefficient for gender and phobic is r=.16, p<.0005; *see* sources cited *supra* note 24.

Figure 6 Continued

Gender
Anger————r.55***
Relationship Satisfaction
Social Support ————————————————————► Hostility
Perceived Stress

Multiple Correlation R=.57
Variance Explained R²=.32

Gender
Anger————r=.36*** ————————————r=.19 ***
Relationship Satisfaction ————————————————► Social Alienation
Social Support——r=.16*** and Isolation
Perceived Stress

Multiple Correlation R=.45
Variance Explained R²=.20

Gender
Anger————r=.22***
Relationship Satisfaction
Social Support ————————————————————► Somatization
Perceived Stress

Multiple Correlation R=.25
Variance Explained R²=.06

Gender——r=.16***
Anger—r=.28***
Relationship Satisfaction ————————————————► Phobic
Social Support Anxiety
Perceived Stress

Multiple Correlation R=.34
Variance Explained R²=.12

Amount of Variance Accounted For

Third, when looking at the data to determine which categories of distress are best predicted by the variables measured in this study, we found that the predictor variables account for diverse amounts of variance in the nine categories of distress. The predictors account for a medium amount of variance in one of the subscales and a small amount in another seven.[174] The subscale with the highest amount of variance accounted for is hostility (32%). Following close behind are depression (23%), paranoid ideation (22%), social alienation and isolation (20%), interpersonal sensitivity (19%), anxiety (19%), obsessive-compulsiveness (17%), and phobic anxiety (12%).[175] Figure 6 details these analyses.

---

[174]*See supra* note 126 and accompanying text.

[175]The variance account in each of the categories of distress are very similar when lawyers average scores or raw score means are compared (see Figure 5): hostility (34%), depression (24%), interpersonal sensitivity (23%), paranoid ideation (22%), social alienation and isolation (21%), anxiety (20%), obsessive-compulsiveness (17%), phobic anxiety (9%), and somatization (7%).

DISCUSSION

The results obtained from this study indicate some fairly disturbing conclusions about the evolution of psychological distress and probable alcohol-related abuse problems in currently practicing lawyers. It must be noted, however, that these results arise from a study which utilizes a cross-sectional design. This design contains an inherent limitation as well as inherent benefits. The findings discussed below must be considered in light of the strengths and weaknesses of the design parameters utilized.

One advantage of using this approach is that it permits the researchers to obtain useful career span data in a relatively short period of time. The researchers did not have to follow the subjects over a twenty year time frame. Rather, the data were collected through a single test instrument completed by lawyers of differing ages and years of practice. On the other hand, a serious problem exists with this type of design. Cross-sectional designs are susceptible to the influence of generational differences in experience, which become confounded with the effects of age or years of practice.[176] The subjects were born in different decades or attended law school in different decades. These facts may provide an alternative explanation for the observed differences in psychological distress and alcohol-related problems, and thus affect the internal validity of the study.[177]

A longitudinal design, in which the subjects are followed over time, corrects for this problem. Such a design, however, presents its own significant problems. Conclusions drawn from the study of a particular generation over time may not apply to other generations. Moreover, problems associated with subject mortality, testing effects, and the time and money needed to collect data complicate efforts to use a longitudinal design. Given the importance of identifying significant problems within an important segment of our society, and difficulties in justifying spending significant time and money on a longitudinal study, cross-sectional research presents an appropriate step in a programmatic research plan.

Two Year Post-Graduate Arizona Alumni and Washington Alumni:

The current study augments the work of Benjamin and his colleagues in several important ways.[178] Their initial study found that, although not present prior to law school, a variety of forms of psychological distress become evident at clinically significant levels within the first few months of law school attendance.[179] These symptoms increased as the law students progressed

---

[176]KENNETH S. BORDENS & BRUCE B. ABBOTT, RESEARCH DESIGN AND METHODS: A PROCESS APPROACH 171-81 (2d ed. 1991).

[177]*Id.* at 173.

[178]*See* Benjamin, *Prevalence of Depression, supra* note 4; Benjamin, *Role of Legal Education, supra* note 10, at 240, 243-44 (setting forth some of the limitations of prior studies).

[179]Benjamin, *Role of Legal Education, supra* note 10, at 240.

through the three years of the program and did not significantly decrease during the first two years of practice.[180] This prior study did not ascertain whether this pattern of symptoms could be replicated in another region of the country or whether its results are idiosyncratic to the Arizona sample.

The present study compares the Arizona alumni with a sample of similarly situated lawyers from Washington. The data indicate that the lawyers from both states reported symptoms at the same level and the same severity on many of the measures of distress. For example, there were no significant differences between the two samples on measures of somatization, obsessive-compulsiveness, depression, anxiety, social alienation and isolation. These similarities in outcome suggest that the initial findings have been largely replicated. One can conclude that psychological distress, in its many forms, is likely to affect newly practicing lawyers in a similar manner regardless of the state in which they practice.[181]

Another conclusion that can be drawn is that, overall, an alarming percentage of newly practicing lawyers are reporting a variety of significant psychological distress symptoms well beyond that expected in a normal population. Further research will have to be conducted to ascertain the affect these high levels of distress have on the newly practicing lawyers' personal or professional lives, their ability to give legal advice, and their ability to strategize with a client about their case.[182] It is also important to determine how lawyers cope with this high level of distress. One researcher found that a significant number of his sample of lawyers indicate that they use alcohol regularly as a coping mechanism to reduce stress.[183] This earlier finding is suggestive of potential alcohol abuse and dependency problems.

The current study reveals that alcohol-related problems are a significant problem. Thirteen percent of the newly practicing Washington males and nearly 10% of the newly practicing Washington females sampled in this study score above the cutoff for current alcohol-related problems. Although the researchers did not administer the same questionnaire to the Arizona lawyers as they did with the Washington lawyers, they did question the Arizona lawyers about their level of concern with their drinking.[184] Twenty-six percent of the Arizona lawyers were very concerned about their current level of drink-

---

[180]*Id.* at 241.

[181]One could speculate that the indicators of psychological distress would become even more pronounced in areas such as the cities of New York, Chicago, and Los Angeles where the practice of law is supposedly more competitive and pressure driven than found in the states of Washington and Arizona. Further study is needed to ascertain the validity or invalidity of this hypothesis.

[182]*See generally* Benjamin, *Prevalence of Depression, supra* note 4.

[183]Kozich, *supra* note 29, at 12.

[184]Benjamin, *Prevalence of Depression, supra* note 4, at 243.

ing. Thus, it appears that many more of the Arizona than the Washington lawyers are concerned about their drinking.[185]

The 1990 study reports only the figure for current alcohol-related problems with the Washington lawyers.[186] An alarming picture emerges in regard to lifetime prevalence of alcohol problems. Seventy-one percent of the females and 67% of the males score above the cutoff indicating that a lifetime prevalence of alcohol problems is likely (See Table 8). This finding is alarming for several reasons. As was noted in the 1990 report, substance abuse is a contributing factor in a substantial portion of lawyer disciplinary cases.[187] Questions can also be raised concerning long term affects of alcohol abuse on a person's physical health, as well as personal and professional well-being.

Psychological Distress During the Career Span:

Given that much of the prior Arizona findings have been replicated with the newly practicing Washington lawyers, it is appropriate to consider whether the symptom levels return to normal population levels and whether the percentage of lawyers experiencing these symptoms decrease at some point during the career span. The results show that on four of the BSI subscales (depression, anxiety, phobic anxiety, social alienation and isolation) there are changes over the career span for males and in the hostility subscale for females.

The data related to male lawyers indicate that for two of the subscales (anxiety and social alienation and isolation) the significant differences are found within the years of practice categories. There is a significant difference in reported levels of anxiety between male lawyers in the first practice category (those practicing up to and including two years) and those in the fifth category (those practicing more than twenty years). This is logical in that those beginning a career are much more likely to be anxious about their abilities than those who have been in the same career for a substantial time. There is also a significant difference in reported levels of social alienation and isolation between those lawyers in the first practice category and those in the third practice category (those practicing greater than five years but less than ten). For most lawyers, the first five years are critical in that it is a time when they establish themselves with a firm and hopefully move toward or gain partnership.[188] Again, it makes sense that during the first five years these lawyers are working long hours to establish themselves.

---

[185]A more specific conclusion cannot be drawn due to the difficulty in making any direct comparison based on distinctly different sampling instruments.

[186]Benjamin, *Prevalence of Depression, supra* note 4, at 241.

[187]*Id.* at 244 (indicating that 27% of the discipline cases in the United States involved alcohol abuse); a second study reports 50-75% of disciplinary cases involve substance abuse. AALS Committee Report, *supra* note 5, at 36 (citing Betty Reddy & Ruth Woodruff).

[188]This is also true of many attorneys who commence a solo practice or establish a new small firm as the ability of the lawyer to maintain such a practice is most questionable during these early years.

Female lawyers in the sample do not show this same pattern. The reasons for this difference remain unclear. For the remaining scales (depression and phobic anxiety for males and the hostility scale for females) the overall experiment-wise Analysis of Variance comparisons are significant.[189] However, the Bonferroni-Dunn post-hoc tests[190] do not indicate specific differences between the years of practice categories. This means that the direction of the change and where the change lies over the career span is unclear. Although statistically significant, these findings are too weak to adequately differentiate the categories. Future research, utilizing more discriminating instruments, may provide more specific indicia that permit closer specific differentiation. Despite these ambiguities, the current study confirms that for many lawyers psychological distress levels remain high throughout their career span. The study also confirms that these symptoms occur at levels which are clearly beyond what is expected in the general population.

Pattern of Distress:

The pattern of average raw scores for the different types of distress presents an interesting picture as illustrated in Table 12.

Table 12

Raw Score Means and Standard Deviations
From Highest to Lowest Scores

Variable	FEMALE Mean/SD	MALE Mean/SD
Obsessive-Compulsive	0.87(0.55)	0.75(0.56)
Interpersonal Sensitivity	0.84(0.69)	0.62(0.61)
Anxiety	0.83(0.64)	0.59(0.53)
Depression	0.74(0.68)	0.58(0.61)
Hostility	0.52(0.45)	0.42(0.44)
Paranoid Ideation	0.49(0.51)	0.50(0.53)
Social Alienation & Isolation	0.41(0.46)	0.34(0.44)
Somatization	0.34(0.33)	0.25(0.34)
Phobic Anxiety	0.18(0.28)	0.14(0.24)

For both males and females, obsessive-compulsiveness ranks the highest with interpersonal sensitivity and anxiety following close behind. A lawyer's job includes a determination of client objectives thereby requiring a significant level of interpersonal sensitivity. Lawyers must also be highly motivated to ponder the available approaches and remedies to resolution of the clients' problems while dotting the "i's" and crossing the "t's" to ensure that the job is

---

[189] *See supra* note 134 and accompanying text.

[190] *See supra* note 135 and accompanying text.

done well. The motivation factor relates to anxiety while the need to be correct relates to obsessive-compulsiveness. Conflict arises if these qualities are taken to an excessive level which can become pathological, but the basic pattern may represent the traits necessary to be a successful lawyer.[191]

When the lawyers' scores are gender-adjusted to account for normal population differences, a somewhat different pattern emerges but the lawyers scores remain very similar as seen at Table 13. Interpersonal sensitivity, anxiety, and obsessive-compulsiveness remain in the top five scores for each gender. As stated above, the basic pattern of these may represent the traits necessary to be a successful lawyer. Depression and social alienation and isolation may also be heavy prices lawyers pay working long hours and thus not having time to spend with family and friends.[192]

Table 13
Gender-Adjusted Zscore Means and Standard Deviations
From Highest to Lowest Scores

BSI Subscale Name		Female Lawyers Zscore Mean/SD	Male Lawyers Zscore Mean/SD
Interpersonal Sensitivity	1.14(1.60)	Anxiety	1.36(1.95)
Anxiety	1.06(1.49)	Interpersonal Sensitivity	1.17(1.92)
Social Alienation & Isolation	1.02(1.84)	Obsessive-Compulsiveness	1.04(1.44)
Obsessive-Compulsiveness	0.87(1.13)	Depression	0.96(1.96)
Depression	0.55(1.30)	Social Alienation & Isolation	0.92(1.92)
Hostility	0.46(1.08)	Paranoid Ideation	0.40(1.28)
Paranoid Ideation	0.32(1.10)	Hostility	0.34(1.18)
Phobic Anxiety	-0.03(0.75)	Phobic Anxiety	0.34(1.27)
Somatization	-0.19(0.70)	Somatization	-0.13(1.04)
Global Severity Index (GSI)	0.61(1.04)	Global Severity Index (GSI)	0.87(1.51)

As noted earlier,[193] the raw *mean scores* on each of the subscales are higher for women than for men. This result is interesting in that it follows what is generally reported in the literature. Females report more symptoms[194] and

---

[191]Benjamin, *Role of Legal Education, supra* note 10, at 248-52.

[192]*See supra* notes 7-9 and accompanying text (Lawyers, as critical members of family units, "are working more, reducing vacation time, spending less time with family members.").

[193]*See* discussion *supra* Table 6A.

[194]*See supra* note 128 and accompanying text.

often use more health services for chronic illness than males.[195] Females are also healthier than males (females have a lower rate of fatal conditions and injuries and females live longer).[196] But when the scores are gender-adjusted to account for this normal population difference, the females' scores stay the same but they are no longer higher than the male scores. It is the male lawyers that score higher on several subscales (depression, anxiety, phobic anxiety, and the global severity index (GSI)) as seen at Table 6B. And, there is actually a higher *percentage* of men above the cutoff for depression, anxiety, phobic anxiety, and general distress (See Table 4).

The results of this study are inconsistent with prior studies[197] which have shown that women far outnumber men in rates of depression. This difference may be explained by the women in this study being younger and perhaps less likely to experience depression when confronting frustrating circumstances. The data analyzed in this study suggest that when faced with working in a predominantly male-dominated field, female lawyers respond with anger rather than depression.[198]

How Serious is the Distress?

There are two methods to assess the seriousness of these findings: statistically and through comparisons of the lawyers rates to base rates of these problems found in the general population. Statistically, 2.27% of the population is expected to be above the 98% cutoff level of each of the psychological distress symptoms. The percentages of lawyers above this cutoff, as indicated on Table 4,[199] are quite alarming. Over 30% of the males and 26% of the females are beyond the clinical cutoff for interpersonal sensitivity, 20% of the men and 15% of the women exceed the cutoff for obsessive-compulsiveness, and almost 21% of the men and 16% of the women exceed the cutoff for depression. This sample of lawyers gives substantial indication of a profession operating at extremely high levels of psychological distress.[200]

---

[195]Alfred C. Marcus & Judith M. Siegel, *Sex Differences in the Use of Physician Services: A Preliminary Test of the Fixed Role Hypothesis*, 23 J. OF HEALTH AND SOC. BEHAV., 186, 192 (1982).

[196]Elizabeth A. Klonoff & Hope Landrine, *Sex Roles, Occupational Roles, and Symptom-Reporting: A Test of Competing Hypotheses on Sex Differences*, 15 J. OF BEHAVIORAL MED., 355-56 (1992).

[197]*See* Nolen-Hoeksema, *supra* note 128, at 266.

[198]Future research is needed to confirm this hypothesis and to address whether these women, like their male counterparts, will experience increased depression as they grow older.

[199]*See supra* Table 4.

[200]A great percentage of lawyers score above the clinical cutoff and this result clearly indicates the lawyers are reporting a significant number of symptoms as compared to an unselected norm group. It is, however, important to note that scoring above this cutoff on these different categories of distress is not synonymous with a full-blown psychiatric diagnosis. More detailed information, such as a diagnostic interview, would need to be provided. The authors do, however, make these comparisons so that the reader has a

Comparing the lawyers symptom levels to base rates found in the general population is difficult. Unfortunately, base rates have not been calculated for all types of psychological distress. Where base rates have been established, the comparative data indicate that lawyers have a significantly higher incidence of their reported levels of distress.

For example, the base rate of any affective disorder (which includes depression) is 8.5% for males and 14.1% for females,[201] but the percentage of male lawyers in this study scoring above the clinical cutoff on the measure of depression is nearly 21% and for female lawyers 16%. Similarly, the base rate for obsessive-compulsiveness is 1.4-2%,[202] yet nearly 21% of the male lawyers and 15% of the female lawyers in the study score above the clinical cutoff on the measure of obsessive-compulsiveness. The same pattern exists in regard to generalized anxiety disorder where the base rate is 4%,[203] while 30% of the male lawyers and nearly 20% of the female lawyers in the study report scores above the clinical cutoff on the measure of anxiety. It is apparent that, compared to general population groups, a much higher percentage of these lawyers are reporting extreme levels of distress in many areas.[204]

Alcohol-Related Problems During the Career Span:

The finding that more than 20% of the male Washington lawyers are scoring above the cutoff for probable alcohol-related problems for the *current year* cannot be minimized.[205] This percentage is over twice the approximately 9% alcohol abuse and/or dependency prevalence rates estimated for adults in the United States.[206] In addition, the current study applies a broader perspective by examining the lifetime likelihood of alcohol problems. The results reveal an astounding number of lawyers with a high likelihood of developing alcohol

---

reference point for understanding the percentage of lawyers reporting serious levels of distress.

[201] These figures are for the immediately preceding 12-month period. These figures were chosen because it most closely matches the time period measured in this study (the last seven days). Kessler *Lifetime, supra* note 24, at 12.

[202] Jerome K. Myers, et al., *Six-Month Prevalence of Psychiatric Disorders in Three Communities,* 41 ARCHIEVES GEN. PSYCHIATRY 959, 966 (1984).

[203] DAVID H. BARLOW, ANXIETY AND ITS DISORDERS: THE NATURE AND TREATMENT OF ANXIETY AND PANIC (1988).

[204] *See supra* note 200.

[205] *See supra* Table 8.

[206] *See* sources *supra* cited note 24. In addition, a great percentage of lawyers score above the clinical cutoff and this result clearly indicates lawyers are reporting a significant number of alcohol-related problems. It is, however, important to note that scoring above this cutoff on the MAST scale is not synonymous with a psychiatric diagnosis of alcohol abuse or dependence (alcoholism). More detailed information, such as a diagnostic interview, would need to be provided. The authors do, however, make these comparisons so that the reader has a reference point for understanding the percentage of lawyers reporting serious levels of alcohol-related problems.

related problems. Approximately 70% of the lawyers in the sample are likely to develop alcohol problems over their lifetime.[207] The data further indicate that this 70% likelihood is consistent across all years. As a comparison, base rates for lifetime prevalence of alcohol abuse and/or dependence is estimated to be 13.7%.[208]

Implications of the Multivariate Model:

Given the importance of the psychological distress and alcohol-related problems data, a multivariate model for explaining the findings assumes added weight. Sequential canonical analysis was applied to the data to address two important subjects. First, the extent to which mitigating and aggravating variables (anger, age, marital status, stress, relationship satisfaction, social support, satisfaction with social support, number of job changes) explain levels of psychological distress and/or alcohol-related problems. Second, the contribution of each of the predictor variables to the overall level of variance explained by the group of variables.

In regard to the first subject, the role of mitigating and aggravating variable, the model discloses a medium amount of variance (.37) as measured by the Pillai-Bartlett V statistic.[209] In terms of the contribution each variable makes to the overall level of variance explained, clearly the association driving the model is between anger and global psychological distress (GSI). The remaining associations, although sensible, are within the small range.[210]

---

[207]This conclusion is based on returning the instrument used to measure alcohol-related problems (MAST) to its original dichotomous form, which denotes lifetime prevalence of alcoholism. The 18% figure for all lawyers found in the 1990 study, rises to 71% for females and 67% for males. Benjamin, *Prevelence of Depression, supra* note 4, at 241.

[208]John E. Helzer, *Psychiatric Diagnoses and Substance Abuse in the General Population: The ECA Data,* in 81 NAT'L INSTITUTE ON DRUG ABUSE: RESEARCH MONOGRAPH SERIES 1988, 405, 406 (1988). Breaking down these figures even further, base rates for lifetime alcohol abuse (without dependence) is 12.5% for men and 6.4% for women. For alcohol dependence, lifetime rates are 20.1% for men and 8.2% for women. Kessler, *Lifetime, supra* note 24, at 12.

[209]Olson, *supra* note 153, at 579-86.

[210]*See supra* Figure 6. There could be several reasons for the lack of a strong relationship between the remaining variables. For example, from a conceptual standpoint, to be able to model statistically significant relationships between these sets of variables, it is important that there be variability in both the predictor variables (anger, age, marital status, stress, relationship satisfaction, social support, satisfaction with social support, number of job changes) as well as the dependent variables (i.e., psychological distress and alcohol-related problems). The possibility of finding relationships between these variables increases as variability in both the predictor and outcome variables increases. In other words, if this population is homogeneous on the chosen variables, it will reduce the possibility of modeling significant relationships between the predictor and outcome variables.

Another reason for the lack of a strong relationship could be the statistic used to evaluate the data. Variability can be investigated using a variety of statistics. The choice of which statistic is most informative depends on the question being asked. Each statistic

carries limitations. For example, the range of a distribution can be broad thereby indicating a wide variability. Reliance upon range alone can be misleading. For instance, if the majority of scores are grouped at one end of the distribution, the effect is very limited overall variability. Although the range is large, the variability will be small because only a few scores will lie at the outer boundaries of the range. The arithmetic average or mean, while the most common and most easily understood statistic, is very susceptible to extreme scores and presents problems similar to the range. Since the formula for variance squares the deviations, both positive and negative deviations contribute to the variance in the same way. The formula for the standard deviation merely takes the square root of the variance. The problem with these statistics is, in many distributions, either positive or negative deviations from the mean can be of greater magnitude. Since the positive and negative deviations contribute in the same way, the variance and standard deviation statistics do not indicate if the scores are evenly distributed across the range or are grouped together at one end. Skewness is another measure of the distribution of scores. However, this statistic indicates if the deviations have a tendency to be larger in one direction than in the other by maintaining the sign of the deviations. *See* SAS INST. INC., SAS USER'S GUIDE: BASICS (5th ed. 1985).

Table 14 displays the statistics used to determine variability (ranges, means, standard deviations and skewness).

Table 14

Variability of the Predictor and Outcome Variable

Variable	Range	Mean	SD	Skew
Predictor Variables (raw scores):				
Anger	0 - 24	5.64	2.91	0.85
Age	25 - 79	39.25	11.32	1.20
Social Support	0 - 20	12.02	2.64	-0.20
Satisfaction with Social Support	0 - 28	23.31	4.96	-2.03*
Job Changes	0 - 25	0.25	1.07	17.08*
Marital Status	0 - 01	0.72	0.45	-0.97
Relationship Satisfaction	0 - 119	91.18	28.90	-2.10
Perceived Stress	18 - 43	31.90	3.70	-0.05
Outcome Variables:				
Global Distress	0 - 2.43	0.48	0.36	1.48
Current Drug Abuse	0 - 12	1.08	1.36	3.40*
Lifetime Drug Abuse	1 - 18	3.20	2.09	2.85*
Current Alcoholic	0 - 39	2.36	4.00	2.94*
Lifetime Alcoholic	0 - 38	7.02	5.21	1.94

Note: * indicates those variables which are either positively or negatively skewed. Positive skew means that the majority of the scores are piled up at the low end of the distribution. A negative skew means that the majority of scores are piled up at the high end of the distribution.

The range and standard deviation columns show that each variable has a wide range and a considerable amount of variability. This conclusion, however, is somewhat misleading. The degree of skewness, set forth in the last column, must be taken into account. Most of the variables are somewhat positively skewed indicating that the greatest number of scores are piled up at the low end of the distribution. In addition, six of the variables are very skewed, having a skew of more than two standard deviations from the mean of zero (i.e., satisfaction with social support, satisfaction with relationship, number of job changes, current alcoholic). The restricted variability makes it less likely that accurate and reliable relationships will be found in the sequential canonical analyses.

The finding of high rates of anger has cultural appeal given the image of the "hired gun" lawyer fighting for the client's rights while locked in a fierce battle with an opposing force. It is likely though that anger is both functional and dysfunctional. Aggressiveness is a trait which has been described as critical for the winning trial lawyer, but also as one which exacts a heavy toll over time.[211] Continuation of interpersonal approaches founded in anger and aggressiveness are not welcome in non-adversarial relationships and may cause considerable frustration among all concerned.

An alarming connection, described in the literature, is that alcohol releases anger and aggression.[212] Sadly, high levels of anger exhibited within the current sample of lawyers when combined with the high rate of developing alcohol-related problems over their lifetimes, may prove disastrous in regard to both their work and their private lives.

Specific Categories of Psychological Distress:

Since the instrument used to measure GSI also measures different categories of psychological distress, it is important to consider each of these specific categories.[213] In Figure 6, each of the nine types of psychological distress measured by the instrument is used as a separate outcome variable. A hierarchical multiple regression analysis was then run to ascertain the pattern of association each has with the predictor variables that predicted GSI in Model 1.

Beginning with the category with the most variance accounted for, and moving down the list to the subscale with the least amount of variance accounted for, the pattern of association between the predictor variables and the subscales are as follows. Hostility is the scale with the highest amount of variance accounted for in the regression analyses.[214] There is an obvious relationship between anger and hostility and appropriately directed hostility or anger are probably instrumental in a law career. Lawyers are hired to protect the rights of others and these qualities could assist them to passionately represent a client's interests and harness righteous indignation in the face of opposing counsel's requests. Unfortunately, the ability to leave this anger and hostility at the office is difficult for some lawyers who may, therefore, bring these emotions home.[215] This, in turn, may increase the hostility within the primary relationship.

---

[211]Martel, *supra* note 4, at 64. *See supra* notes 41-42.

[212]*See supra* notes 41-42.

[213]*Supra* note 157.

[214]The subscale hostility reflects a multiple correlation $R=.57$, variance accounted for $R2=.32$ or 32%.

[215]Martel, *supra* note 4, at 64.

Depression[216] is predicted by high levels of anger, unsatisfactory relationship(s) (if one has a relationship) and a lack of social support. As noted above, while anger may be useful in a legal career, chances are that if it is not left at the office it will be destructive interpersonally. If anger is causing difficulties interpersonally, the lawyers may find it hard to maintain positive relationships with family and friends. This resultant lack of social support could then increase levels of depression. Once caught in this cycle, the depressed person is often difficult company, and thus people, beyond the narrow circle of family and friends, are increasingly likely to shy away from her or him. Without this social support, the lawyer may find themselves further depressed and lonely, and having a difficult time mustering the energy to want to spend time with others.

Paranoid ideation[217] is predicted by anger, lack of social support, and high levels of perceived stress. Law is a competitive and stressful profession, with constant challenges to one's competence and feelings of self-worth. This can cause lawyers to experience paranoid ideation, which can be further validated by the fact that there are more lawyers than available legal jobs. In addition, often lawyers are expected to work many hours with little concern for their private lives. Working long hours may not leave enough time for building or maintaining relationships with family and friends and, thus, leave a person feeling a lack of social support and vulnerable to paranoid ideation about others. Finally, feelings of high anger can make a person suspicious of other's motives, which can rise to paranoid ideation. Although such feelings have a productive value when representing a client, if taken to an extreme they can be destructive both inside and outside of professional relationships.

Social alienation and isolation[218] is predicted by anger, unsatisfactory primary relationships, and a lack of social support. Anger could drive others away and thus leave a person feeling socially alienated and isolated. Unsatisfactory primary relationships and a lack of social support could also increase feelings of isolation and alienation. And lawyers lack of free time because of an overly demanding work schedule and pace would exacerbate these problems.[219]

Interpersonal sensitivity[220] is predicted by anger. Anger can work as a shield to cover feelings of interpersonal sensitivity which is defined for the BSI as including feelings of inferiority to others, self-consciousness with others, and

---

[216]The subscale depression reflects a multiple correlation R=.48, variance accounted for R2=.23 or 23%.

[217]The subscale paranoid ideation reflects a multiple correlation R=.47, variance accounted for R2=.22 or 22%.

[218]The subscale social alienation and isolation reflects a multiple correlation R=.45, variance accounted for R2=.20 or 20%.

[219]Cohen, *Social Skills, supra* note 33, at 971.

[220]The subscale interpersonal sensitivity reflects a multiple correlation R=.44, variance accounted for R2=.19 or 19%.

easily having their feelings hurt. Responding with anger, however, rarely resolves disputes or hurt feelings. Though much more "other" focused, interpersonal sensitivity relates to the same constellation of feelings provided by anxiety. Both center on feelings of uneasiness, nervousness, and tension. It is not surprising to find that anger relates to both of these disorders.

Anxiety,[221] as noted above is predicted by anger, but in addition is predicted by a lack of social support and high levels of perceived stress. There is a continuing debate as to the relationship between anger and anxiety. There is no clear answer as to whether, for instance, it is healthier (in terms of anxiety reduction) to express or suppress anger. Nor is it clear as to whether the same response is healthier in regard to short-term as opposed to long-term effects. Nevertheless, it is clear that there is an association between anxiety and anger. The association is revealed within this study as well as in the literature. One study suggests that they both share a common symptom—physiological arousal.[222] The author of that study suggests that a person prone to physiological arousal may become angry if provoked while anxiety may be the predominant sensation if not provoked. If increasing levels of stress are added to high levels of anger, physiological arousal is likely to increase, producing greater anxiety.[223] Social support from friends and family can help reduce anxiety by providing reassurance and a calm atmosphere to discuss worries and concerns, thereby reducing physiological arousal. Without this supportive network, anxiety is likely to increase.

Obsessive-compulsiveness[224] is predicted by anger and lack of social support. These relationships are logical in that people with an obsessive-compulsive disorder are hypothesized to have an obsessive need to control their fears, which often occurs at the expense of other's needs and desires. Significant others may become frustrated, confront the sufferers about their seemingly illogical repetitive behaviors, and withdraw their social support. The sufferers also may become angry when they are unable to stop recurrent thoughts, behaviors, or actions. Finally, it is also possible that a lawyer's work requires a need for control in order to properly manage their clients' work. Within a high pressure adversarial arena, however, the experience of control may begin to slip away. For some this, in turn, can result in more obsessive-compulsiveness as a behavioral mechanism to deal with the loss. The net result is a cycle of distress because the new obsessive-compulsive "coping mechanism" will increase the need for more control, potentially generating further obsessive-compulsiveness and anger.

---

[221]The subscale anxiety reflects a multiple correlation R=.44, variance accounted for R2=.19 or 19%.

[222]TAVRIS, *supra* note 48, at 111.

[223]*See* sources cited *supra* note 54.

[224]The subscale obsessive-compulsiveness reflects a multiple correlation R=.41, variance accounted for R2=.17 or 17%.

The amount of variance accounted for in the last two subscales, phobic anxiety[225] and somatization,[226] is extremely small, but again, anger significantly predicts both. Somatization (the externalization of psychological problems into physical complaints) and phobic anxiety (a persistent, irrational and disproportionate fear response to a specific person, place, object, or situation) may be attempts to deal with anger indirectly. What are essentially feelings of anger are transformed into physical complaints or fear of specific people, places, or situations. This allows the person to avoid feelings of anger by presenting what some would consider more socially-appropriate symptoms.

Interestingly, gender is significant in predicting phobic anxiety. This is the only gender-adjusted score comparison for which gender significantly predicts the outcome differentially for males. Male lawyers report significantly more phobic anxiety than do female lawyers. This finding is robust across the different statistical methods of viewing this data.[227] Some literature suggests that women are quicker to recognize non-specific, or vague, uncomfortable feelings as psychological symptoms and thus responding effectively to diminishing them (e.g., by initiating treatment).[228]

The small effect sizes for all variables except anger present the most curious general aspect concerning the patterns of relationships for the subscales of the BSI as well as the entire models including alcohol use. For many years the literature has clearly associated these predictor variables with the outcome variables.[229] The explanation for this overall small effect size, as previously noted, may reside in the variability of these subscales. As with the predictor variables and the GSI, restricted variability of these subscales limits the possible relationships that can be found between the predictors and the subscale scores. The lack of variability in many of the predictor and outcome variables probably accounts for part of this result. It appears that the group is too homogeneous to allow for modeling of the data.[230] More sensitive measures may be needed to identify all the causal relationships.

---

[225]The subscale phobic anxiety reflects a multiple correlation R=.34, variance accounted for R2=.12 or 12%.

[226]The subscale somatization reflects a multiple correlation R=.25, variance accounted for R2=.06 or 6%.

[227]Table 6B indicates that when scores are gender-adjusted to account for differences in the normal population, it is the males who score higher on several subscales including depression, anxiety, and phobic anxiety. The "p" values, or significance values (*see supra* note 117) for the phobic anxiety subscales is .0001; whereas, the significance values for the other subscales on Table 6B are lower (depression (.0009), anxiety (.02)). The difference in significance values may account for why the gender predictor did not prove significant in the Multivariate Models (Figure 2 and Figure 6) for the latter two subscales.

[228]*See supra* note 128.

[229]*See supra* notes 23-56 and accompanying text.

Summary

From the findings detailed above, one can conclude that psychological distress, in its many forms, is likely to affect newly practicing lawyers in a similar manner regardless of the state in which they practice. In addition, throughout their career span, a large percentage of practicing lawyers are experiencing a variety of significant psychological distress symptoms well beyond that expected in a normal population. Interestingly, the basic pattern of distress may represent the traits necessary to be a successful lawyer (obsessive-compulsiveness, interpersonal sensitivity, and anxiety) and the costs associated with this success (depression and social alienation and isolation).

Anger is definitely the variable that carried the most predictive power in relation to all the categories of distress as seen in Figures 5 and 6. This finding has cultural appeal given the image of lawyers as "hired guns." Appropriately directed anger is probably instrumental in a law career. Lawyers are hired to protect the rights of others and these qualities could assist them to passionately represent a client's interests and harness righteous indignation in the face of opposing counsel's requests. Unfortunately, the ability to leave this anger at the office is difficult for some lawyers, who may therefore, bring these emotions home. Some evidence that this destructive pattern may be occurring for these lawyers is that the pattern of predictors which is most representative of several different categories of psychological distress are high levels of anger, unsatisfactory primary relationships and low levels of social support. Interestingly, females score higher on anger, but this may not be clinically significant for some of the females tested. The women in this study were younger than male respondents, and as mentioned previously, when faced with a predominantly male-dominated field,[231] these female lawyers may be responding with anger. Thus, their anger may represent a legitimate response to an unfair work environment rather than psychological pathology. Unfortunately, however, for other women this anger can predict significant psychological distress.

High levels of anger found in this sample combined with the high likelihood of developing alcohol-related problems over their lifetimes, may prove disastrous in regard to both the lawyers' work and their private lives. Once psychological distress is accounted for in this population and that effect is taken out of the equation, the Multivariate Model predicts that males are more at risk of developing current alcohol-related problems. Once both psychological distress and current alcohol-related problems are accounted for, the Model

---

[230] *See supra* note 210.

[231] Barbara A. Curran, WOMEN IN THE LAW: A LOOK AT THE NUMBERS 6-7 (Dec., 1995). In 1991, 39% of law firms had women attorneys on the roster, only 26% had women partners. *Id.* at 21. In 1991, only 7% of federal judges were women, and only 9% of state judges were women (12% of immediate appellate court judges were women). *Id.* at 31. Only 17% of law professors were women, and only 19.3% are tenured law faculty, whereas 67% of lecturers/instructors were women. *Id.* at 39-40.

predicts that unmarried lawyers are more at risk for lifetime alcohol-related problems as seen at Figures 1 and 2.

Concerning gender differences, in straight comparisons between male and female lawyers, females report higher levels of psychological distress in nearly every area. When scores are gender-adjusted, both males and females are significantly higher than their respective gender norm and, in addition, a significant percentage of lawyers are above their respective norms. These results indicate a significant number of lawyers are reporting high levels of psychological distress. Interestingly, when gender-adjusting scores, in essence women's scores are adjusted upward as seen at Table 6A and B. There is disagreement in the literature concerning: (1) whether this is a result of women more readily recognizing vague concerns as psychological distress and reporting them as such; or (2) if in fact women in this culture are more susceptible to areas of psychological distress.[232] When comparing male to female gender-adjusted scores, however, the male lawyers report significantly higher levels of distress than the female lawyers in several areas (depression, anxiety, and phobic anxiety). In other words, the male lawyers are not mirroring the general population.

In contrast, male lawyers are mirroring the general population in that a higher percentage of males than females report current alcohol-related problems. This does not hold true for life-time likelihood of alcohol-related problems. Females and males are equally likely to develop alcohol related problems over their lifetimes.

As noted previously, for the general population being married or living with a significant other has been shown to have a significantly positive relationship to buffering or reducing the effects of stress when compared to persons living alone.[233] This positive relationship does not appear to benefit many of the lawyers in our study.[234] Of those that have a primary relationship, a significant number of lawyers find these relationships unsatisfactory.

A picture emerges that does not bode well for harmonious family life. Lawyers have been slowly increasing the number of hours they work over time and taking only two weeks or less of annual vacation. The percentage of lawyers who report that they do not have enough time for themselves or their families has increased 33% from 1984 to 1990.[235] Although this study's findings indicate limited differences in feelings of stress between lawyers and the general population, another researcher has found that 32.5% of his sample of

---

[232]*See supra* note 128.

[233]*See supra* notes 25 and 30; *see generally* Cohen, Buffering, *supra* note 31.

[234]This result was also found in another study. "Far fewer [women lawyers] are married, more are divorced, and far more have never been married. More females than men have made a decision based on career demands not to have children, at least for the time being. Clearly, being a lawyer takes a definite personal toll on women and changes their lives more than it does men's." ABA Young Lawyers, *supra* note 7, at 48-49.

[235]ABA Young Lawyers, *supra* note 7, at 22-27.

lawyers indicate that they use alcohol regularly as a coping mechanism to reduce stress.[236] That a critical member of the family is working more, taking less time off, spending less time with the family, and potentially using alcohol to cope with high degrees of psychological distress suggests an impending major crisis for lawyers' family life.

Future Directions For Research

The implications of these data for lawyers in society are troubling and warrants further study. This study relied on self-report survey data which is valuable for a variety of reasons. However, this data base contains certain problems related to its underlying assumptions, which may undermine its accuracy.[237] For this reason, further longitudinal and cross-sectional test designs and research are needed.[238]

The use of multiple methods[239] to assess a particular phenomena yields much stronger data than a study using any one method. Utilization of one method, as with the current study, leaves unclear whether the variance in a measured variable is attributable to the actual variable or to the assessment method. Multiple testing methods allow a researcher to assess and eliminate variables attributable to the study method thereby gaining findings that are much cleaner.

It is also important to use a similarly situated comparison group or groups. Collecting the same information on other groups of professionals (e.g., physicians or accountants) would give researchers a broader view of distress levels in professionals generally. And specifically, this information would allow researchers to determine if the high distress levels found in this study are found only in legal professionals or whether equally high distress levels exist in other professionals. Although information regarding distress in other professions is in the literature, it is difficult to make direct comparisons because different sampling instruments were used.

Finally, the instrument used to collect the data for this study also included a questionnaire concerning possible work-related consequences of psychological distress or alcohol-related problems. Unfortunately, as with many of the variables, there was not enough variability on the items such that

---

[236]Kozich, *supra* note 29, at 12.

[237]*See e.g.*, Benjamin, *Prevalence of Depression, supra* note 4; Benjamin, *Role of Legal Education, supra* note 10, at 228-31, 233-34. The benefits and detriments of this form of study are discussed in sources cited *supra* note 137.

[238]Although the test instruments used in this study are widely accepted, they are screening instruments. Future research should employ diagnostic instruments associated with the DSM-IV to diagnose the relationships between the variables found to exist in this study. The Structured Clinical Interview for DSM-IV (SCID) could be used to diagnose the major psychological distress variables. Structured interviews and more lengthy measures could also be used to diagnose alcoholism.

[239]*E.g.*, self-report surveys, physiological measures, and kinesic measures.

the relationships could be modeled. A job analysis of lawyering would provide the necessary information to construct a more appropriate instrument which would capture the variability on possible work-related consequences of psychological distress or alcohol-related problems.[240]

We recognize that further research, conducted with even better instruments, may still find that lawyers are functioning at a high level of efficiency and ethical propriety despite high levels of psychological distress and alcohol-related problems. If such research results in a negative finding, however, the ramifications for the profession would be even more serious than currently known. Such a result would require analysis of whether and to what extent lawyers are opting for legitimate but unnecessarily litigious or otherwise adversarial solutions to problems that could be solved in a less acrimonious and costly manner. If this casual sequence were occurring, the legitimacy of the attorney's role in the civil justice system could be jeopardized. Finally, the formal response of the profession would require reevaluation.

---

[240]There also is a need for additional research using a different data collection technique and a different selection of subjects. As opposed to a large-scale, anonymous survey, future research should use a smaller sample and demand that a good deal of time be spent with each person participating in the study.