Bibliography on links among stress, violence, drug abuse, alcohol, tobacco in the workplace

(Draft)

Compiled by Daniele ARMAND UGON PhD candidate in Criminology University of Trento Italy

e-mail: darmand@tin.it

September 2000

Ames G. M.; Grube J. W. and Moore R.S.

"The relationship of drinking and hangovers to workplace problems: An empirical study"

in *Journal of Studies on Alcohol* (New Brunswick), 58 (1), 1997, pp. 37-47 ISSN: 0096882X

Keywords: workplace problems, environmental variables, drinking patterns

This article reports on the relationship between drinking patterns and workplace problems in a multinational corporation with facilities throughout the United States and abroad. The data comes from a survey of 832 hourly employees (88% male) and from ethnographic research in the plant. This study is distinctive because it examined a large random sample of workers, it is among the few that has asked employees how much they drank prior to and during working hours and how frequently they had been hung over at work. The most important conclusion to be reached from the analyses is that alcohol consumption and coming to work hungover are modestly, but significantly, associated with self-reported workplace problems for this sample of hourly workers. Analysis indicates that overall drinking, heavy drinking outside of work, drinking at or just before work and coming to work hungover were related to the overall number of work problems experienced by respondents as well as to specific problems such as conflicts with supervisors and falling asleep on the job. Work-related drinking and hangovers may have important implications for the productivity, safety and quality of working life. Characteristics of the work environment, along with personal demographic factors, influence work-related drinking. These findings also support the argument that the identification and explanation of environmental factors that put employees at risk can be employed in the development of strategies for primary prevention of alcohol-related problems.

Ames G.M. and Janes C.A.

"A cultural approach to conceptualizing alcohol and the workplace"

in *Alcohol Health and Research World* (Washington), 16, 1992, pp. 112-119 ISSN: 0090838X

Keywords: cultural factors and organisation, human behaviour, alcohol use

The article considers dimensions of the workplace that have been shown to influence alcohol use. These dimensions are discussed under four conceptual headings: normative regulation of drinking, the quality and organisation of work, factors external to the workplace and drinking subcultures. Normative regulation of drinking includes subcategories of social control and availability of alcohol. Formal social control includes culturally embedded rules and actions that explicitly regulate alcohol use in work-related contexts. Info rmal social control includes values, attitudes and expectations of particular occupational subgroups, job situations or the workplace in general. It is assumed that elements of social control influence the availability of alcohol. Quality and organisation of work content, subcategories of job stressors and alienating factors, refer to objective positive and negative environmental factors in the workplace that may influence workers' feeling of well being with respect to work. Negative feelings towards the work experience support the development and maintenance of drinking subcultures. Factors external to the workplace include characteristics of a person's background and current life circumstances that influence a tendency to develop or resist a high-risk drinking pattern when exposed to a drinking subculture in the workplace. In all of the studies of work populations with heavy drinking explained in the article, drinking subcultures were in evidence, suggesting a causal relationship between drinking subcultures and work-related drinking patterns. Work-related drinking refers to drinking patterns in work-related circumstances such as on the job, on work premises, during lunch and breaks, on the way to work, and during work or union-sponsored meetings. Stress and alienation at work (how tasks are assigned, accomplished and supervised), together with general and social environment, may influence workplace drinking levels.

Ames, G.M. and Grube J.W.

"Alcohol availability and workplace drinking: Mixed method analyses"

in *Journal of Studies on Alcohol* (New Brunswick), 60 (3), 1999, pp. 383-393 ISSN: 0096882X

Keywords: physical and social availability, job conditions, work-related drinking

This research studies the relationship between perceived social and physical availability of alcohol at work and drinking among employees in the manufacturing industry. Physical availability of alcohol at work is defined as the ease or difficulty with which an individual can obtain alcohol for work-related consumption. Objective physical availability at work refers to the extent to which such elements actually exist in the workplace. Subjective physical availability refers to perceptions or beliefs about how easy or difficult it is to obtain and consume alcohol in a work-related context. Social availability of alcohol in the workplace is defined as normative support for work-related drinking within ones work environment. Objective social availability refers to actual presence of drinking at work by one's work friends, co-workers and supervisor. Subjective social availability refers to an individual's perceptions of workrelated patterns of his or her co-workers and work friends, and perceptions of the extent to which friends, co-workers and supervisors approve or disapprove of his or her drinking. It is hypothesised that work-related drinking increases directly as subjective physical availability of alcohol in the workplace increases, perceived approval for drinking by others in the workplace increases and perceived workrelated drinking by others increases. Subjective physical availability and perceived approval are both hypothesised to increase as perceived drinking by others increases. The authors integrated survey and ethnographic methods to determine if and why physical and social availability of alcohol predicted work-related drinking in a manufacturing plant with approximately 6,000 employees. Analysis revealed that subjective physical availability was not significantly related to work-related drinking; the strongest predictors of work-related drinking were beliefs about drinking of coworkers and workplace friends; respondents' belief about approval or disapproval of drinking at work did not predict drinking before or during work hours after other factors were controlled. Physical availability of alcohol was unrelated to drinking in the analyses, but this cannot be taken to indicate that easy access to alcohol at work plays no role in workplace drinking. Perceived drinking by friends and associates at work, the first dimension of social availability, is an important correlate of workplace drinking. Drinking in groups served as a shared response for some workers to job conditions that demanded repetitive tasks, overtime and shift work. Workers who believed that their close friends and other co-workers drank more frequently at work also reported more frequent drinking during work hours themselves. Perceived drinking by others appears from this research to be a more important predictor of drinking at work than is one's own typical frequency and quantity of alcohol

consumption. The fact that overall alcohol consumption and heavy drinking were predictive of both drinking at work and drinking just before work provides evidence for the importance of considering non-work factors when trying to understand workrelated drinking. It also suggests that effective preventive efforts should focus not just on work-related drinking, but should also give attention to overall consumption patterns. Barling J.

"The prediction, experience, and consequence of workplace violence"

in *Violence on the job*, by VandenBos G. R. and Bulatao E. Q., American Psychological Association (Washington, DC) 1997, pp. 29-49 ISBN: 1-55798-389-5

Keywords: personal and work factors, interaction effects, coping strategies violence and outcomes

This chapter discusses the possible predictors of workplace violence and presents a brief conceptualisation of the psychological experience of workplace violence. Finally, the personal and organisational consequences of violence in the workplace are considered.

Both workplace factors and personal factors may predict workplace violence. The likelihood of violence may increase with the increase in psychological bases of job insecurity (i.e. feelings of powerlessness and loss of control), being perceived as one of the possible means for regaining control. Furthermore, different writers have noted that murder and incidents of less severe workplace violence sometimes occur after employees are laid off. Thus, job insecurity will predict workplace violence to the extent that it is experienced as a direct threat. Four personal factors are able to predict workplace violence: alcohol use, past history of aggression, lack of self-esteem and the use of psychological aggression in the workplace. Workplace stress affects negative moods, particularly work-related stressors, such as experiencing sexual harassment. Negative moods mediate the relation between psychological stress and other negative outcomes. Understanding the subjective experience of workplace violence helps in predicting how different people's reactions are when exposed to workplace violence. The effects of workplace violence are numerous and related to the nature of the violence. Direct outcomes are considered to be the first effect of the psychological experience of workplace violence (specifically, negative mood and cognitive distraction). Indirect outcomes are the consequence of the direct outcomes (e.g., emotional exhaustion, depression, psychosomatic complaints, accidents, turnover intentions). One of the most prevalent sources of stress is related closely to the fear of workplace violence (e. g. the risk of carrying large sums of money). In general, having adequate social support or inappropriate regressive (or negative) coping strategies (e.g., alcohol consumption, smoking) may influence the subjective experience of workplace violence. Personality factors such as optimism may influence the relationship between workplace violence and direct outcomes (stressors and stress) influencing the way in which workplace events are perceived.

Bennett J. B.; Lehman W. E. K.

"Employee attitude crystallization and substance use policy: Test of a classification scheme"

in *Journal of Drug Issues* (Tallahassee), 26 (4), 1996, pp.831-864 ISSN: 0022-0426

Keywords: job satisfaction, co-workers, sanctions

This study investigates how perceptions of both substance abuse and the workplace may determine general policy attitudes. It focuses on policy options and how they may be shaped by related work attitudes, personal familiarity with substance abuse, and exposure to situations, such as co-worker substance abuse, that might make policy salient. Two situations in which employees attitudes may be more crystallized are suggested: when policy is the most relevant to employee comfort and productivity and when policy may be a direct concern or threat to the employees (for employees who themselves use alcohol or drugs). The study examines attitudes in three cities in the southwestern United States. The variables were: attitudes toward substance use policy, personal substance abuse, co-worker use and climate, job identity, prevention/intervention attitudes. The results of this study demonstrate that 1) it is possible to differentiate attitudes toward substance abuse policy on the basis of both co-worker and personal substance abuse, employee job identity, and orientation towards self-referral and disciplinary sanctions; and 2) this statistical distinction may be optimal when including unclear or uninformed opinions, mixed views, as well as clearer positions that indicate either a satisfaction or dissatisfaction with the policy. Policy learning will benefit from a knowledge of social psychological profiles that guide employee responsiveness to policy. Interaction effects that combine both personal (e.g. job identity) and situational (e.g. co-worker use) factors might better explain workplace behaviour than either factor alone. Exposure to co-worker substance abuse best discriminated between employees who do (i.e. crystallized) and do not know about policy. Users who report co-worker use and high job identity are more likely to be satisfied with policy.

Bennett J. B.; Lehman W. E. K.

"Workplace drinking climate, stress and problem indicators: Assessing the influence of team work (group cohesion)"

in *Journal of Studies on Alcohol* (New Brunswick), 59, 1998, pp. 608-617 ISSN: 0096882X

Keywords: alcohol use, work environment, job stress, productivity

The study assesses the relationship between exposure to co-worker drinking and selfreports of one's own problems. The researcher hypothesis is that either exposure to co-worker drinking or the presence of a drinking environment would positively correlate with reports of stress and other problems. They predict that drinking climates would be associated with the perceived lack of group cohesion and the presence of a drinking climate would independently correlate with reports of more problems. The combination of drinking environment and lack of cohesion would leave workers particularly vulnerable to the negative consequences of co-worker use. To test this central hypothesis they created four different groups of employees based upon their ratings of both drinking climate (low versus high) and group cohesion (low versus high). The sample included workers from two different cities in the south-western United States, randomly selected from the total city work force (excluding uniformed fire and police officers). About 80% of all surveyed employees were over 30 years old between 55% and 65% were men and between 30% and 65% had completed some college. The anonymous surveys assessed individual drinking, co-worker drinking, task-oriented group cohesion, the direct reports of negative consequences due to coworker substance use, and five problem indicators: job stress, job withdrawal, health problems, work accidents and absences.

Futhermore results from both samples suggest that employee exposure to both coworker alcohol use and drinking climates was associated with problem indicators and that, to some degree, group cohesion buffers problems in drinking climates. There was a significant positive relationship between drinking climates and reports of job stress, withdrawal, absences and accidents. The association of individual drinking with job stress and withdrawal were weaker or not significant; drinking climate and stress were negatively related to group cohesion; employees with the most problems reported both drinking climate and a work group that lacked cohesion; among employees exposed to drinking climates, group cohesion was associated with significantly less job stress and less job withdrawal.

Co-worker alcohol use correlated more strongly with job stress and more pervasive than the effects of isolated individual use or that they serve an important coping function in an alienated work climate. These results reinforce the idea that effective substance use policy requires a focus on changing workplace norms and interpersonal factors as much as on changing individual behaviour. Bennett J. B.; Lehman W. E. K.

"Alcohol, antagonism and witnessing violence in the workplace, drinking climates and social alienation-integration"

in *Violence on the job*, by VandenBos G. R. and Bulatao E. Q., American Psychological Association (Washington, DC), 1997, pp. 105-152 ISBN: 1-55798-389-5

Keywords: organisational stress, teamwork, group norms, alcohol use, alienating factors

This chapter is divided in two main sections. The first reviews the different areas of research and provides general background knowledge about the alcohol-aggression relationship and workplace factors that may be relevant to this relationship. The second section reports an empirical study that directly examines alcohol use within the work setting. The authors consider alcohol from two perspectives: they discuss alcohol as it affects the individual aggression of employees who drink and they study the impact of co-worker drinking as it affects employee risk for witnessing violence. Previous research and highlights were analysed, suggesting that three interrelated processes underlie alcohol-related aggression within the work setting. These are: the relative strength or weakness of work group norms as these guide individual selfregulation of deviant behaviour, the effects of alienation as a force countervailing the integrative effects of social cohesion at work, and the relative persuasiveness of alcohol use as part of the drinking climate within work groups. The researchers developed a conceptual model that emphasises the importance of the work setting as moderating the relationship between alcohol and aggression. Based on previous review, there appear to be two specific work factors, operating either within the organisational culture or through individual attitudes, that would serve as common moderators for both alcohol use and aggression. These factors, in the article referred to as integrative and alienating, may also influence alcohol use and violence through personal factors as well as external factors. The work setting results are characterised by five factors: social integration, social alienation, personal factors, stressors and stress, drinking environment.

The samples included municipal workers (excluding uniformed fire and police officers) randomly selected from the total city force of three cities in the southwestern United States. Results showed that the drinking environment accounted for significant variation in antagonism and violence over and above the variation accounted for by demographic, personal, work setting and stress factors. Employees reporting more alienating than socially integrative factors were more adversely affected by the drinking environment than those who reported drinking tendences along with integrative factors. Employees who experienced strong drinking norms among their co-workers as well as those who reported low cohesiveness in their work groups were more likely to exhibit antagonistic behaviours at work and witness violence. These findings extend past research literature on substance use and alienation to include violence as a potential consequence of alienation. If the alienating and integrating factors are compared, the alienating factors (job withdrawal or isolation) tended to be better predictors of antagonism and violence. Drinking environment factors moderated the relationship between alienation-integration and violence. Bennett J. B. and Lehman W. E. K.

"The relationship between problem co-workers and quality work practices: A case study of exposure to sexual harassment, substance abuse, violence and job stress"

in *Work & Stress* (London), 13 (4), 1999, pp. 299-311 ISSN: 0267-8373

Keywords: job control, teamwork, social and psychological condition, decision latitude, emotional reactions

This study assessed the degree to which the contextual (organisational and personal) factors explain variance in the actual quality of the environment. The focus is on the degree to which co-worker problem exposure (harassment, drugs and violence) and/or stress explains additional variation in the three quality environment factors. Data for this work came from a survey of municipal employees in the south-western USA; a total of 87 work groups representing 909 employees from all occupational classifications across seven departments were randomly selected to participate in a survey on Employee Health and Performance. Measures were job strain, exposure to substance abuse, consequences of substance abuse exposure to the severity of violence, exposure to harassment and felt effects of violence or harassment. Relationships were found between employees' emotional reactions to witnessing violence /harassment and both team work and empowerment. The strong link between strain and empowerment supports the assumption that job control (decision latitude) has an important role to play in the experience of job stress. Decreased behavioural risks are associated with a work climate that supports productivity. Exposure to harassment, violence, and substance abuse are related to perceptions of productivity and thus may be an issue of legal liability and safety. The negative feelings that result from exposure to the troubling behaviours of co-workers, in comparison to either the exposure itself or to general strain, may be the stronger hindrance to a productive team environment. In the area of empowerment, job strain appears to play as important a role as reactions to violence.

Birch D.; Ashton H.; Kamali F.

"Alcohol, drinking, illicit drug use, and stress in junior house officers in North-East England"

in *The Lancet* (London), Sep. 5, 1998, pp. 785-786 ISSN: 01406736

Keywords: medical residencies, work pressure, anxiety, mental-ill health

This study looked at the lifestyles of medical residents in 18 National Health Service Trust hospitals in the UK. The results show that most of the house officers surveyed drink excessive amounts of alcohol and many also use cannabis and take other illicit drugs. Alcohol drinking has increased in both men and women. High scores for anxiety and mental ill-health were related to work pressures, but unrelated to the use of alcohol or illicit drugs. Conway T. L.; Vickers R. R.; Ward H. W. and Rahe R. H.

"Occupational stress and variation in cigarette, coffee and alcohol consumption"

in *Journal of Health and Social Behavior* (Albany), 22, 1981, pp. 155-165 ISSN: 00221465

Keywords: stress perception, cigarette smoking, coffee drinking

In this article, the impact of occupational stress on self-reported cigarette, coffee and alcohol consumption is studied. Substance consumption and subjective stress indicators are measured repeatedly for 34 men performing a job with known systematic variation in stress.

The data indicate that habitual cigarette smoking and coffee drinking are positively associated with chronic tendencies to perceive high stress. The research cannot find an association between chronic alcohol consumption and stress perceptions. Consumption of all three substances varies significantly across days that differed in perceived stress level. On the average, there is more cigarette smoking and more coffee drinking but less alcohol consumption under high stress. These general effects of stress appear to depend largely on the behaviour of only a few of the participants, as the association between subjective stress indicators and substance use, within individuals differences in the tendency to increase or decrease habitual substance consumption in response to varying levels of stress.

Cooper M. L.; Russell M.; Frone M. R.

"Work stress and alcohol effects: A test of stress-induced drinking"

in *Journal of Health and Social Behavior* (Albany), 31 (3), 1990, pp. 260-276 ISSN: 0022-1465

Keywords: negative emotions, vulnerable individuals, drinking to cope

This article proposes and tests a model of work stress-induced drinking. According to this model, work stressors increase negative emotions (distress), which in turn promote heavy or problematic alcohol use, especially among vulnerable individuals. Such individuals are hypothesised to possess few resources and skills for responding adaptively to work stressors and consequent distress and to hold strong positive expectancies for alcohol's effects. The relationship between work stressors, on the one hand, and drinking to cope, alcohol use and alcohol problems on the other will correlated with increases in work distress. Thus, stressors and alcohol outcomes will be related only indirectly. Respondents in the study were drawn from a random sample survey of 1,933 household residents in Erie County, New York, sociodemographically heterogeneous, of whom approximately half were white, 47% were married or living in stable relationship, 51% were female, and 53% were engaged in white-collar occupations. Both work pressure and lack of job control exerted significant direct effects on work distress, even after sociodemographic and psychosocial resource variables were controlled; work distress did not significantly predict any of the alcohol outcomes. The results failed to support a simple tension reduction model of alcohol use in response to the experience of work-related stressors and negative emotional consequences. Although work stressors did increase work distress, the researchers found no significant effects for work stressors or distress on three separate alcohol-behaviours (drinking to cope, alcohol consumption and drinking problems) after controlling the sociodemographic and psychosocial resources. Work distress was related positively to drinking to cope among low-skilled individuals, but was essentially unrelated among high-skilled individuals. While the relationship between distress and drinking to cope was significant and positive among individuals holding strong positive expectancies for alcohol's effects, it was essentially zero among individuals holding weak expectancies. No support was obtained for the hypothesised buffering effects of social support on the distressalcohol outcome relationship or for the hypothesised three-way interactions of adaptive resources, expectancies and distress. The findings suggest that prevention programmes aimed at reducing and managing work stress may not be a cost-effective way to address alcohol problems in the work force; instead interventions targeted at individuals known or suspected to have alcohol-related problems may be more appropriate.

Estryn-Behar M.; Kaminski M.; Peigne E.; Bonnet N.; Vaichere E.; Gozlan C.; Azoulay S. and Giorgi M.

"Stress at work and mental health status among female hospital workers"

in *British Journal of Industrial Medicine* (London), 47, 1990, pp. 20-28 ISSN: 0007-1072

Keywords: hospital workers, working conditions, mental health, job stress

In this study, the relations between working conditions and mental health status of 1505 female hospital workers were studied. Of these workers, 43% were nurses, 32% auxiliaries and 7% ancillary staff. Four health indicators were considered: fatigue, sleep impairment, use of drugs, psychiatric morbidity and four indices of stress at work were defined: job stress, mental load, insufficiency in internal training and discussion, and strain caused by schedule. The frequency of all five mental health indicators increased significantly with the level of job stress. Fatigue and sleep impairment were more frequent when internal training and discussion were insufficient. Job stress, mental load and strain due to schedule all remained significant risk factors for fatigue. The adjusted odds ratios for drug use or psychiatric morbidity at examination were also significantly increased according to the level of job stress. This shows an association between work involving an excessive cumulation of stress factors in interventions aimed at improving the working conditions of hospital workers.

Frone M. R.

"Work stress and alcohol use"

in Alcohol Research and Health (Washington), 23 (4), 1999, pp. 284-291 ISSN: 0090838X

Keywords: employment, stress, alcohol use, models

This study explores the different theories related with work-stress and alcohol use. addiction. First, research has explained to include sources of stress within the work role (i.e., work stressors) as well as sources of stress within work and family roles (i.e., work family conflict). Second, evidence is growing that work stressors and work-family conflict are related to alcohol use. The article presents four work-stress models. The first is the simple cause-effect model of work stress and alcohol use. Men holding jobs that were high in demands and low in job control were more likely to develop either an alcohol abuse or alcohol dependence disorder than were men in jobs that lacked one or both of these two job stressors. This model has two limitations. First, the model is based on the premise that work stressors are casual antecedents of alcohol use for all, or at least many, employees. The second limitation is that even if the simple cause-effect model supports a relation between work stressors and alcohol use, no information is provided about why work stressors cause increased alcohol use. The mediation model differs in that because it incorporates the variables thought to link work stressors to alcohol use, such as sadness or anger. The model tries to explain why or by what mechanism work stressors are related to alcohol use. The moderation model includes variables that moderate the relationship between work stressors and alcohol use. It goes beyond the simple cause-effect model by trying to explain when or under what conditions work stressors are related to alcohol use. In other words, work stressors are not assumed to be related to alcohol use among all employees. Both job demands and the lack of a clearly defined role at the workplace (i.e. role ambiguity) were positively related to heavy drinking only among employees who reported that their work role was psychologically important for self-definition. The moderated mediation model combines the features of the mediation and the moderation models and tries to explain how, as well as when, work stressors are related to alcohol use. Following this model, other authors have hypothesised that work stressors are positively related to job dissatisfaction and job dissatisfaction is positively related to alcohol use among vulnerable people. Work demands and lack of job control were positively related to job dissatisfaction. In conlcusion, the author gives some suggestions for future research based on longitudinal studies (daily or weekly diary studies in which participants record their drinking behaviours and stressors each day).

Frone M. R. and Windle M.

"Job dissatisfaction and substance use among employed high school students: The moderating influence of active and avoidant coping styles"

in *Substance Use and Misuse* (New York), 32, 1997, pp. 571-585 ISSN: 1082-6084

Keywords: student workers, job dissatisfaction, coping styles, buffering effect

The study examined the link between job dissatisfaction to substance use and the potential moderating influence of active and avoidant coping styles in a sample of employed high schools students. Three hypotheses are formulated: 1) job dissatisfaction is positively related to the use of cigarettes, alcohol and illicit drugs. Various individual characteristics might moderate the relationship between job dissatisfaction and substance use. Coping styles, which represent general or habitual ways by which individuals attempt to resolve problems, are one set of factors that may influence the magnitude of the job dissatisfaction-substance use relation. The authors tested the following hypotheses regarding the moderating influence of active and avoidant coping styles: 2) high levels of active coping will buffer or attenuate the link between job dissatisfaction and substance abuse; 3) high levels of avoidant coping will strengthen or exacerbate the relation between job dissatisfaction and substance abuse. The sample for this study consisted of 446 high school students who worked at least 10 hours per week. The measures were: job dissatisfaction, coping styles, cigarette use, alcohol use and illicit drug use. The study revealed that job dissatisfaction is positively related to cigarette and alcohol use among adolescents still in high school but not to illicit drug use. Employment represents a major social role influencing the health-related behaviours of individuals before they reach adulthood. The researchers couldn't find evidence to support a moderating influence of coping styles on the link between job dissatisfaction and substance use. However significant main effects were revealed, such as avoidant coping was positively related and active coping was negatively related to cigarette and alcohol use.

Frone M.R.; Russel M.R.; Cooper M.L.

"Job stressors, job involvement, and employee health: A test of identity theory"

in *Journal of Occupational and Organizational Psychology* (Leicester), 68, 1997, pp. 1-11, ISSN: 09631798

Keywords: job involvement, work pressure, lack of autonomy, role ambiguity

The aim of this study is to examine whether the psychological importance of one's job role moderates the relationship between job stressors and employee health. The research tests the relationship between stress influence of job involvement and work pressure, lack of autonomy, and role ambiguity to employee health, using a randomly selected community sample of 795 employed adults. Importance is given to healthrelated outcomes (i.e. depressive symptomatology, overall physical health and heavy alcohol consumption). The block of variables, including job involvement and three job stressors (work pressure, lack of autonomy, role ambiguity), accounted for an additional and statistically significant proportion of variance in depression and physical health. Work pressure and lack of autonomy were negatively related to physical health. Although the block was not significant for heavy alcohol use, job involvement was positively related to heavy alcohol use. Alcohol may be used to cope with job stressors only among a subset of vulnerable individuals. A job stressor may be related to elevated levels of alcohol consumption if it impedes a successful role performance among individuals for whom the job is highly salient for selfdefinition. The block of job involvement-by-job stressor interactions accounted for an additional and also statistically significant proportion of variance in physical health and heavy alcohol use. The job involvement-by-role ambiguity interaction was significantly related to both physical health and heavy alcohol use. In addiction, the job involvement-by-work pressure interaction was significantly related to heavy alcohol use.

High levels of job involvement exacerbated the relationship between role ambiguity and physical health, role ambiguity and heavy alcohol use, work pressure and heavy alcohol use. Greenberg L. and Barling J.

"Predicting employee aggression against co-workers, subordinates and supervisors: The roles of person behaviours and perceived workplace factors"

in *Journal of Organizational Behavior* (Chichester) 20, 1999, pp. 897-913 ISSN: 08943796

Keywords: social control, job security, alcohol consumes, low justice perception

The first hypothesis is that the amount of alcohol consumed by employees and employees' history of aggressive behaviour will positively predict the amount of aggression they engage in at work. Employee aggression is viewed as a mode of social control (i.e., a way that employees express grievances).

The second hypothesis is that feelings of job insecurity, perceptions of procedural injustice, and workplace surveillance each will be positively associated with aggressive acts at work while perceptions of distributive justice will be negatively associated with aggressive acts at work. Participants were 550 non-faculty males employed full time at a Canadian university; the principal variables of the questionnaire were age, education, job security, amount of alcohol and workplace surveillance. The interactions between person and workplace involve at first procedural justice and amount of alcohol consumed. Specifically, procedural justice interacts with the amount of alcohol consumed in predicting both aggressions against a co-worker and subordinate. Under conditions of low justice perceptions, the amount of alcohol consumed is certainly and positively related to aggression against a coworker and a subordinate. Nevertheless, when perceptions of justice are high, the amount of alcohol consumed in not a significant predictor of aggression against a coworker. The amount of alcohol consumed and history of aggression are positively related to aggression against a subordinate when job security is low and, on the other hand, when job security is high, neither an amount of alcohol consumed nor a history of aggression is related to aggression against a subordinate.

When organisational procedures and supervisor-subordinate interactions are perceived as unfair or when employees are insecure about their jobs, the amount of alcohol consumed or employees' history of aggression is strongly related to aggressive acts at work. In contrast, when employees perceived the procedures and supervisory actions accompanying procedures as being fair or when job security was high, the amount of alcohol consumed or an employee's history of aggression is not related to aggression in the workplace.

Greenberg E. S.; Grunberg L.

"Work alienation and problem alcohol behavior"

in *Journal of Health and Social Behavior* (Albany), 36 (1), 1995, pp. 83-101 ISSN: 00221465

Keywords: decision making, problem drinking, drinking to cope, job autonomy

This research is based on the alienation model: the degree to which workers can or cannot participate in decision making at all levels of the enterprise. The effects of skill and job autonomy on problem drinking, and the effects of different kinds of worker control are tested. Assessing if certain kinds of participant opportunities and experience in the workplace can actually protect workers from developing alcoholrelated problems is the goal of this study. The line of reasoning is based on two interrelated assumptions: first, that work is of central and determining importance in people's lives and second, that the lessons of the workplace "generalise" or "spill over" into other aspects of life outside work. Three hypotheses are tested in this article: H1) alienating work is directly associated with an increased prevalence of problem alcohol use; H2) the association of alienating work with problem drinking is mediated through powerlessness/mastery and job satisfaction such as thoose that heightened powerlessness and diminished job satisfaction increase the adverse effects of alienating work on alcohol problems; H3) these links are, in turn, mediated through the worker's psychological interpretation of the uses of drink, such that alcohol problem behaviour is most prominent among those workers who report alienating jobs, feel the most powerless and dissatisfied, and report escapist or coping reasons for drinking.

Data was collected from production workers in 15 mills in the wood product industry in the Pacific Northwest (US). The principal variables used are: background variables (age, educational level, family income), work alienation, job autonomy, capacities index, working conditions, participation in decision making.

The results show no association with workplace skill and participation variables, and the existence of an association with job satisfaction, but not with powerlessness. This suggests that, if an indirect pathway exists from the workplace to problem drinking, it does so by way of job satisfaction and drinking to cope, and not through a sense of powerlessness. Of the workplace variables, only job autonomy shows a direct association with drinking problems and several mental health outcomes, including high stress and anxiety. Powerlessness is not associated with drinking problems. Job satisfaction, however, is associated with both drinking to cope and negative consequences. Finally, drinking to cope, is associated with both problem-drinking variables. Much of the effects of alienating work on drinking problems is indirect and requires the existence of certain psychological attitudes or orientations. Workers engaged in alienating work, translate that experience into a state of felt mechanism with their situation and those who see alcohol as an important coping mechanism are the most likely among the dissatisfied to develop drinking problems. Job autonomy tends to increase an alcohol problem, including both negative consequences and heavy drinking. It is reasonable to assume the existence of a pathway from workplace experiences to job satisfaction, coping and alcohol behaviour.

For the most part, the workplace variables have their effects only indirectly, operating first trough job satisfaction, then through giving drinking to cope reasons for drinking. The only exception is job autonomy, which acts directly on drinking behaviour.

Grunenberg L.; Moore S.; Anderson - Connolly R. and Greenberg E.S.

"Work stress and self-reported alcohol use: The moderating role of escapist reasons for drinking"

in *Journal of Occupational Health Psychology* (Washington DC), 4, 1999, pp. 29-36 ISSN: 1076-8998

Keywords: job dissatisfaction, escapist reasons for drinking, blue and white- collar workers

The aim of this study is to test the interaction effect between work stress and escapist reasons on a heterogeneous sample of blue and white collar workers. It was hypothesised that higher levels of job stress would be associated with higher levels of self-reported drinking (H1) and drinking problems (H2) only for those who endorsed escapist reasons for drinking. For those who did not hold such beliefs, higher levels of job stress were predicted to be associated with lower self-reported alcohol intake (H3) and problems (H4). The study was conducted in a large manufacturing organisation located on the West Coast (US), employing approximately 100,000 blueand white-collar workers. The sample consisted of 3,700 randomly sampled workers employed across all pay codes and positions. Variables were age, gender, family status, job stress, escape reasons for drinking, drinking for enjoyment reasons, alcohol intake, alcohol problems. As compared with other reasons for drinking, escape reasons for drinking alcohol was most strongly correlated with self-reported alcohol problems, whereas for self reported alcohol intake, the strongest associations were with both escape and enjoy reasons for drinking. Work stress does not directly or simply results in increased self-reported alcohol use or alcohol problems. Work stress affects the employee's drinking behaviour differently: those who tend to think of alcohol as a way to cope with stress do report drinking more and having more alcohol-related problems in response to work stress. About 44% of those sampled, however responded to work stress by reportedly drinking less (the non-escapist response). The simplistic notion of "my job is driving me to drink" applies to a fairly small percentage of the sample. The workers who endorse primarily escapist reasons are at the greatest risk for increases in alcohol intake and alcohol-related problems under conditions of higher work stress.

Grunberg L.; Moore S.; and Greenberg E.S.

"Work stress and problem alcohol behavior: A test of the spillover model"

in *Journal of Organizational Behavior* (Chichester), 19, 1998, pp. 487-502 ISSN: 08943796

Keywords: job stressors, drinking behaviour, drinking to cope, job satisfaction

The aim of this study is to assess the spillover model as used to describe the relationship between job stressors and drinking behaviour. In turn, this distress spills over into the non-working life, and the distressed worker is induced to reduce the tension by drinking. Drinking alcohol can become an important device by which workers can escape from, cope with or compensate for the distress produced by stressful work.

It is assumed that looking only for the excapist responses when examining the spillover model may provide only a partial test of the model. Job stressors may also result in a more "proactive" or problem-focused coping response by the worker wherein she/he will be motivated to engage in activities that reduce the actual job stressor (coming into work earlier, talking directly with a supervisor about the workload). The authors suggest that at least two mechanisms exist to explain how workers may respond to job-related stressors; the first is the escapist-spillover model, in the second model other workers who do not believe that alcohol use is a valid coping mechanism, or who are more predisposed to adopt other coping strategies, will respond to stressful job conditions by reducing their alcohol consumption so as not to undermine their attempts to cope with the job stressors in a more proactive, less escapist manner. The model suggested by the authors proposes that specific jobrelated stressors will be associated with lower levels of general job satisfaction (hypothesis 1). The second hypothesis tests both escapist and non-escapist responses to job dissatisfaction. The relationship between job satisfaction and heavy drinking (2a) and negative consequences due to drinking will be moderated by coping reasons for drinking, such that the relationship will be positive for those who do not endorse coping reasons for drinking (i.e. non-escapist response), and negative for those who do believe in coping reasons for drinking (escapist response). The study was conducted in 15 mills in the wood products industry in the Pacific north-west. Respondents were overwhelmingly male (90 per cent) and white (93 per cent) with an overall age of 39,1 years. The data collected from workers in the wood products industry generally support the escapist-spillover model. Five of the nine job stressors used in the research (change in benefits, change in safety, demands, criticism and stuck) are significantly associated with job satisfaction. Job dissatisfaction was significantly related to negative consequences due to drinking, and furthermore, the interaction effect of job satisfaction and coping reasons for drinking on negative consequences was as supposed in hypothesis 2b. Efforts to improve job conditions and job satisfaction may have beneficial effects precisely for the most vulnerable to

problematic drinking. The authors also found some suggestive evidence of a nonescapist response among workers who did not endorse coping reasons for drinking. For these workers, job dissatisfaction was associated with fewer drinking problems. Higher levels of job satisfaction and presumably less job related distress was related to slightly increased drinking problems.

Guinn B.

"Job Satisfaction, counterproductive behavior and circumstantial drug use among long-distance truckers"

in *Journal of Psychoactive Drugs* (San Francisco), 15, 1983, pp. 185-188 ISSN: 0279-1072

Keywords: counterproductive behaviour, job satisfaction, drug abuse

This research investigates the circumstantial drug use in relation to two variables: measure of counterproductive behaviour and job satisfaction. Data was collected through a pencil-and-paper survey instrument-containing items dealing with counterproductive behaviour, job satisfaction and drug use while on the job. Subjects for the study were drawn from a major produce shipping point in the extreme South Texas, where fruits and vegetables are shipped via aerated tractor-trailer for markets across the nation. The incidence of drug use while trucking was high. To more closely identify the relationship between drug use and counterproductive behaviour and the non-relationship with job satisfaction, the sample was divided into two sub-samples according to years of trucking experience. The low experience sub-sample consisted of those truckers with 15 years or less experience whether the high sub-sample consisted of those with 16 years or more experience. There were significant relationships in the low experience sub-sample between occupational drug use and counterproductive behaviour. The lack of significance between drug use and job satisfaction may be due, in part, to the trucker's circumstantial motivation for using drugs as opposed to the recreational motivated worker described in earlier studies.

Gupta N.; Douglas Jenkis G. Jr.

"Substance use as an employee response to the work environment"

in *Journal of Vocational Behavior* (San Diego CA), 24, 1984, pp. 84-93 ISSN: 0001-8791

Keywords: organisational environment, job-distancing and attraction forces, constraining factors

This study proposes a framework for the examination of alcohol and drug use as employee responses to work environments. The framework proposed here could be instrumental in demystifying substance abuse as a response to the work environment. Substance abuse is hypothesised to result from a complex interplay among three forces: distancing forces, attractions and constraints. Distancing forces (work role stress, job characteristic, supervisory characteristics) push the individual away from the organisation, in the direction of substance use. Attractions (job satisfaction, pay, security) pull and constraints (individual, organisational constraints) push the individual toward the organisation. Employees are likely to use substance only when distancing forces are stronger than attractions and few constraints are present. The presence of stressful work environments is likely to motivate employees to avoid the environment physically or psychologically, hence the development of distancing forces. Supervisors can create adverse work environments in many ways: by providing too much or too little structure, by ignoring employee's needs and employee's responses. Substance use results from a dynamic interplay between the distancing forces, attractions and constraints. When the total distancing forces outweigh the total attractions, employees are expected to attempt to distance themselves from work. The specific way that distance is increased depend on the nature of the operative constraints. Through the use of substances, an employee can distance himself psychologically from the noxiousness of the workplace without being physically absent.

Hagihara A.; Tarumi K.; Miller A.S.; Nebeshima F.; Nobutomo K.

"Work stressors and alcohol consumption among white-collar workers: A signal detection approach"

in *Journal of Studies on Alcohol* (New Brunswick), 61 (3), 2000, pp. 462-465 ISSN: 0096882X

Keywords: work stressors, heavy drinking, work environment, Japanese white-collar workers

This study presents another approach to determine how and what work stressors interact to produce excessive alcohol use.

The subjects of this study were Japanese male white-collar workers (20 to 64 years of age) at the head office of a large steel company in Osaka, Japan.

The researchers used 11 items in the questionnaire for work stressors that cover a wide range of work-related stressors common in Japanese white-collar situations (i.e. feeling time pressure, fixed work procedure and repetitive work).

The authors were successful in performing these two procedures: evaluating higher order interactions of independent variables and obtaining basic information to permit dividing the whole group into subgroups on the basis of a statistical measure. Of 11 work stressor and work position variables, four variables (position, work requires advances knowledge and skill, time pressure and clear job purpose or goal) were identified as being significantly related to heavy drinking. The researchers found that heavy drinking was related to a higher order interaction of multiple work and personality factors: "Position" x "Work Requires Advanced Knowledge and Skill" and "Position x "Time Pressure" x "Clear Job Purpose or Goal". Because the Japanese work environment is not a widely encountered model, the external validity of this study might be limited to other male white-collar workers in Japan

Hingson R.; Mangione T. and Barret J. "Job characteristic and drinking practices in the Boston metropolitan area"

in *Journal of Studies on Alcohol* (New Brunswick), 42 (9), 1981, pp. 725-738 ISSN: 0096882X

Keywords: stress on the job, boredom on the job, drinking patterns

Differences in the drinking practices of different occupations are studied, attempting to determine whether any variations may be attributable to some occupations attracting a higher proportion of people from the population subgroups that tend to drink heavily.

The relationship between workers' drinking practices and their perceptions of their job is also studied. The subjects of the experiment are 5314 individuals in 3079 households in the Boston Standard Metropolitan Statistical Area. The data indicates that, across various occupations, few of the respondents' perceptions of their jobs were consistently associated with levels of drinking.

Only stress on the job and the frequency with which a job requires performance of a boring task was significantly related to our measures of drinking. There is a relation between boredom on the job and more drinking, especially in occupations in which the highest proportion of respondents felt that their jobs were boring. Both boredom on the job and stress are related: perhaps boredom can be vied as a form of stress. The results of the study raise the possibility that the influence of specific aspects of a job is relatively minor in comparison with such factors as loss of job, marital instability or dissatisfaction and the possibility that perceived characteristics of a job foster heavier drinking is not ruled out.

Although people who reported higher levels of stress on the job tended to drink more, that does not establish a cause-and-effect relationship between such stress and heavy drinking.

Hurrell J. J. Jr.; Worthington K. A. and Driscoll R. J.

"Job stress, gender and workplace violence: Analysis of assault experiences of state employees"

in *Violence on the job*, by VandenBos G. R. and Bulatao E. Q. American Psychological Association (Washington, DC) 1997, pp. 163-170 ISBN 1-55798-389-5

Keywords: stressors variables, assault experiences, skill underutilization

In this study, the relationship between the occurrence of on-the-job physical assaults and 11 different job stressors in a large sample of state government employees are examined. The stressors variables used as predictors in regression analyses are: role ambiguity, role conflict, intergroup conflict, intragroup conflict, job control, workload, variance in workload, responsibility for people, skill underutilization, mental demands, opportunities for alternative employment. The questionnaire was administered state-wide by representatives of the State Bureau of Employee Health to all active state employees (approximately 7,000 individuals) 9% of the women and 17% of the men in the sample reported being physically assaulted within the past year. 4 of the 11 stressor variables examined were found to be associated with assaults among both men and women. Limited job control, high levels of responsibility for people, limited opportunities for alternative employment and skill underutilization were all found to be significant predictors associated with assault in the model for both sexes. It is possible that the stressor may be causally associated with individualstrain variables that serve as antecedents to violence. Among women, two additional stressors, role conflict and low mental demands were found to be significantly associated with assault. Workers who have client contact appeared to be at increased risk of physical assault, regardless of the worker's gender. This is not surprising and is consistent with other studies that have shown that the greatest risk of physical assault for workers come not from co-workers but from individuals outside the organisation (e.g., customers, clients and patients). Assaults may occur more frequently among highly stressed workers than those experiencing less stress.

Jasinski J. L.; Asdigian N. L.; Kaufman Kantor G.

"Ethnic adaptations to occupational strain: Work-related stress, drinking, and wife assault among Anglo and Hispanic husbands"

in *Journal of Interpersonal Violence* (Beverly Hills), 12 (6), 1997, pp. 814-831 ISSN: 08862605

Keywords: sociodemographic variables, ethnicity, alcohol use, job related stress

This article examines the relationship among work-related stress, alcohol use and wife assault for Anglo and Hispanic Americans. The major questions to be examined in this study include the following: to what extent is work-related stress associated with heavy drinking among husbands in Hispanic families compared to those in Anglo families? To what extent is work- related stress associated with wife assaults among husbands in Hispanic families compared to their Anglo counterparts? Is the relationship between work-related stress and violence mediated by drinking for Anglo and Hispanic husbands? Is work stress associated with wife assaults via heavy drinking for either group? Face to face interviews were conducted with a national probability sample of 1970 people, including an oversample of about 800 Hispanic people. Measures included: ethnicity (Anglo or Hispanic), work-related stress, drinking and violence measures. The sociodemographic variables were: poverty, occupational status and education. Ethnicity should be considered in any analysis that looks at responses to work stress. This research showed that Anglo-American and Hispanic American husbands each experienced different type of work-related stress. The first were more likely to experience troubles with their bosses during the past year, whereas Hispanic husbands were more likely to face extended unemployment. Among Hispanic husbands, all work stressors examined in this study were associated with increase levels of both drinking and violence. In contrast, those same work stressors were associated with elevated levels of drinking, but no violence, among Anglos. Among both Hispanic and Anglo husbands, however, heavy drinking was associated with increased levels of violence. The analyses showed that alcoholmediated effects of work stress on wife assaults were evident only for Anglo American husbands who had been laid off or fired in the previous year.

Jex S.M.; Hughes P.; Storr C.; Conard S.; Baldwin D.C. Jr.; Sheehan D.V.

"Relations among stressors, strains, and substance use among resident physicians"

in *International Journal of the Addictions* (New York), 27(8), 1992, pp. 979-994 ISSN: 0020-773X

Keywords: stressful job condition, work environment, substance abuse

This study investigated the correlations between job-related stress and substance use among resident physicians. Respondents were drawn from a national random sample of 3,000 resident physicians who graduated from a medical school in 1984. The questionnaire included a number of items designed to measure stressors (stressful job conditions) and strain (relations to work environment). The results of this study suggest that associations among job-related stressors, strains and substance use among resident physicians are not strong; nevertheless correlations between substance abuse and strain measures appeared to be somewhat stronger than those involving stressors or job conditions. Correaltions involving benzodiazepines and cocaine were somewhat stronger than those involving other substances. Since benzodiazepines are regularly prescribed to treat stress-related anxiety symptoms, self-treatment could be the link between job related stress and substance among physicians. Johnson V.; Raskin White H.

"The relationship between work-specific and generalized stress and alcohol and marijuana use among recent entrants to the labour force"

in *The Journal of Drug Issues* (Tallahassee), 25 (2), 1995, 237-251 ISSN: 0022-0426

Keywords: changes in alcohol and drug use, full time work transition, alienation, negative affectivity

The study examines changes in alcohol and drug use in relation to the transition into full time work, the effects of work-related stress and the effects of generalised stress among recent entrants to the labour force.

The authors hypothesise that those who transend into a full time job will not increase their level of consumption if they find the job to be the "right fit" and alternatively, their level of consumption will increase if the job is too stressful or too boring. They anticipate differences in the fluctuation of alcohol versus marijuana use decreases with increasing age in the eighteen to twenty four year old range. Data is obtained from a sample of males and females who were originally interviewed when they were eighteen years old and followed up twice more at three year intervals.

The data indicates that when age, gender and marital status were controlled, they are few significant effects of the transition to full-time work on alcohol and marijuana use and problems. Among the women in the sample, those transiting into full-time work status reported an increase in alcohol frequency. Among the men alcohol and marijuana consumption were not significantly related to changes in work or marital status. Among the women who are currently working full-time, results of analyses indicate that the more generalised areas of stress (alienation and negative affectivity) were salient in predicting alcohol quantity and alcohol-related problems, with work satisfaction playing a minor role. Data from this study provide evidence of a stronger role for generalised stress over that of work-specific stress as predictors of changes in alcohol and marijuana use among new entrants in to the labour force. It is suppose that the generalised stress may be more influential than work-related stress in young adulthood. The researchers did not investigate such job-based risk factors as organisational and occupational subcultures. Kaneko M.; Harada N.; Furuya H.; Yoshida T.; Watanabe T. and Okazaki I.

"The effect of work-related stress with change of working conditions for workers with alcohol drinking habit and liver disorder"

in Japanese Journal of Alcohol & Drug Dependence (Kyoto), 31 (1), 1996, 81-94 ISSN: 1341-8963

Keywords: Japanese workers, work-related stress, decision latitude, alcohol consumption, cigarette smoking

This study assess the relationship between working conditions and workers' health, evaluating the effect of work-related stress with change of working conditions for those with alcohol drinking habits and liver disorders. The sample consisted of male workers of a car manufacturing plant, who engaged in car sales work temporarily and then returned to manifacturing work. The measures were working hours, sleeping hours, alcohol consumption and cigarette smoking. Results show that the member of habitual drinkers and heavy smokers and the consumption of alcohol and cigarettes both increased during the sales work and decreased during the manufacturing work. The odds ratio of decreasing "decision latitude" as work related stress was statistically significant for increased alcohol consumption. The increased alcohol consumption was assumed to be associated with work-related stress due to a change of work conditions.

Kawakami, N.; Araki, S.; Haratani, T.; and Hemmi, T.

"Relations of work stress to alcohol use and drinking problems in male and female employees of a computer factory"

in *Environmental Research* (H.W. Wilson), 62, 1993, pp. 314-324 ISSN: 00139351

Keywords: Japanese workers, psychological distress, stress-induced drinking

This is a study on the effects of work stressors on alcohol use and drinking problems in male and female working populations of an electrical factory in Japan. The objectives of this research were to assess the effects of work stressors on alcohol use and drinking problems, comparing their effects on psychological distress, and to examine whether psychological distress mediates their effects according to a theoretical model of stress-induced drinking. The questionnaire survey was conducted through 2581 employees in a computer factory in a suburb of Tokyo. The questionnaires included four groups of measures, i.e. work stressors, alcohol use and drinking problems, psychological distress and other covariates (gender, age, marital status, education, family income and occupation). The subjects' occupation was categorised into two groups, i.e. white-and blue-collar workers (52 and 48%, respectively). A theoretical model of stress induced drinking was built on the basis of previous models. According to this model, objective work stressors cause psychological work stressors, which, in turn, increase psychological distress. At least the psychological distress promotes alcohol use and drinking problems. Male subjects worked significantly longer overtime and had higher scores of job overload and job future ambiguity than female subjects did. The number of drinking problems was significantly greater in males than in females. The different responses of males and females are analysed. Overtime was found to be associated with frequency of drinking, amount of alcohol consumed per day, and drinking problems in male drinkers. It is suggested that overtime and lack of intrinsic work rewards are risk factors for heavy drinking and problem drinking in male Japanese workers. Job future ambiguity was significantly associated with the amount of alcohol consumed per occasion in female drinkers, while the association was weak and not so significant in male drinkers. Higher job centrality in males than in females explain the relevant association between intrinsic work rewards and drinking behaviours observed only in males.

The study failed to support the model of stress-induced drinking, suggesting that depressive symptoms are not likely to be a mediating variable between work stressors and alcohol use problems. It is suggested that the effects of overtime on heavy problem drinking are not likely to be mediated by psychosocial work stressors.

Kjarheim K., Haldorsen T. and Andersen A.

"Work-related stress, coping resources, and heavy drinking in the restaurant business"

in *Work & Stress* (London), 11(1), 1997, pp. 6-16 ISSN: 0267-8373

Keywords: work stress, psychosocial strain, health effects, coping resources

This study investigates the association between work stress, coping resources and heavy drinking in a sample of restaurants workers. The authors concept of job stress was based on a model of psychosocial strain and health effects developed by Karasek. This model postulates that psychosocial strain and subsequent psychosocial problems resulting from the interaction of two types of job characteristics: the demands of the work situation on the one hand, and on the other the environmental moderators of stress, particularly the range of latitude of decision available to the worker facing those demands. The decision latitude concept is viewed as two-dimensional, consisting of task authority (i.e. the control over one's work situation) and skill discretion (i.e. the possibility of using one's skills and competence). These two subdimensions are expected to be correlated, but task authority may be the most important factor for psychological strain, while skill discretion may be more important for motivation and for learning new skills. Difficulty in relaxing after work was introduced as a measure of the effectiveness of the individual's coping resources. Alcohol may help people to "let off steam" and relax at the end of the day. The sample consists of 3204 Norwegian male and female waiters and cooks. Of these, 77% were women, measures of the questionnaire were the usual quantity and frequency of alcohol consumption, and quantity and frequency of occasional higher consumption, job demands, difficulty in relaxing after work, task authority, skill discretion. The results show a positive associations between job stress and difficulty in relaxing on the one hand and difficulty in relaxing and heavy drinking on the other. Difficulty in relaxing after work can indicate inadequate coping capabilities. Alcohol consumption is viewed as a palliative coping strategy reducing the subjective experience of stress. This is because restaurant work involves a high degree of speed, precision, and attentiveness to the wishes of clients and these demands are usually kept constantly until the work ends at closing hours. Thus, waiters and cooks may leave work in a hyper-aroused state, and may use alcohol to reduce this tension. In conclusion, although work stress did not predict heavy drinking, the findings of this article demonstrate the possibility that heavy drinking may be used as a strategy to cope with work stress.

Kop N.; Euwema M. and Schaufeli W.

"Burnout, job stress and violent behaviour among Dutch police officers"

in Work & Stress (London), 13 (4), 1999, pp. 326-340 ISSN: 0267-8373

Keywords: police work emotional exhaustion, depersonalisation use of violence

The study focuses on stressors in police work in general, and more specifically on the lack of reciprocity that officers may experience in social exchange relations with civilians, colleagues and the organisations at which they are employed. The relationships between burnouts and the attitudes of officers and their use of violence is also studied.

Burnout can be described as a set of negative psychological experiences, reflecting a "wearing out" from prolonged exposure to the stress of work. This syndrome consists of three dimensions: emotional exhaustion, depersonalisation and reduced personal accomplishment.

The research attempts to:

1) identify stressors in police work in relation to rewarding aspects of the job; 2) assess burnout levels of police officers relative to other human service professionals; 3) explore the relationship between burnout and lack of reciprocity with organisation, colleagues and civilians respectively; 4) investigate the relationship between burnout and the attitudes of officers towards the use of violence. Dutch police officers (N= 358) completed a self-report questionnaire. The results showed that for police officers there is a clear and positive balance between stressful and rewarding aspects of their work. Organisational stressors were more prevalent than task-related stressors; most stressors are related to organisational factors. For Dutch police officers the level of emotional exhaustion was relatively low; compared to other jobs within the service sector, police officers report a relatively low level of depersonalisation and a high level of personal accomplishment. Burnout is associated with a lack of reciprocity between investments and outcomes in the relations that officers have with citizens, colleagues and their organisations. Burnout is positively related to attitudes towards use of violence and the use of violence during the officer's duty.

Kristensen Tage S.

"Use of Medicine as a Coping Strategy among Danish Slaughterhouse Workers"

in *Journal of Social and Administrative Pharmacy* (Stockholm), 8 (2), 1991, pp. 53-63 ISSN: 0281-0662

Keywords: environment factors, stressors, coping strategy, relationship to management, high strain

The paper presents the results of a study on the use of medicine among Danish slaughterhouse workers. The use of analgesics and tranquillisers are examined in connection with self-reported symptoms, work environment exposures and other forms of coping. The following points are analysed in the paper: 1) the relationship between stressors at the workplace (work strain, noise, cold and ergonomic factors) and the use of medicine (tranquillisers and analgesics); 2) the relationship between psychological and somatic symptoms and the use of medicine 3) the relationship between the use of medicine and other forms of coping. The main hypothesis was that the use of medicine -as an individual and palliative coping strategy- was directed toward the individual's perceived symptoms and was only associated with work environment factors to the extent that they resulted in symptoms among the workers. The use of medicine should be one component of a coping strategy that comprised other forms of treatment as well as absence from work. The sample consist of 4700 Danish slaughterhouse workers aged 16-59 years. The use of analgesics and tranquillisers was clearly associated with the number of self-reported symptoms. With regard to tranquillisers there was a strong independent correlation with stress symptoms. The prevalence of an analgesics user was significantly higher among workers who had a poor relationship to management or who were also exposed to back strain, cold or draft. Results revealed that the high strain group had the highest drug use; this was not completely confirmed with regards to the low strain group. The use of tranquilliser was associated with poor relations to colleagues, but this independent association disappeared when stress and psychosomatic symptoms were included in the analysis. The findings show that medicine is used to cope with symptoms that are partially work-related.

Lehman, W. E. K.; Farabee, D. J.; Holcom, M. L. and Simpson, D. D.

"Prediction of substance use in the workplace: Unique contributions of personal background and work environment variables"

in *Journal of Drug Issues* (Tallahassee), 25 (2), 1995, pp. 253-274 ISSN: 0022-0426

Keywords: municipal workers, personal background, job characteristics, substance abuse

The purpose of this study is to identify a profile of employees and work-related characteristics that are predictive of substance use at work and illicit drug use away from work. They are two perspectives that can explain the cause of employee substance use: 1) drug and alcohol problems are transported into the workplace - the substance is an "external" problem with respect to the job setting 2) internal factors in the workplace can produce conditions that may lead to substance abuse. The sample used for this study included municipal workers from a large south-western city who were randomly selected from the total city workforce. Substance use at work was defined as any use of alcohol or illicit drugs at work or immediately before going to work, intoxication from alcohol or drugs while at work, or having work-related consequences such as absenteeism or accidents due to alcohol or drug use. The result of the study indicated that substance users both at and away from work were best predicted by a combination of variables from personal and job domains. The personal characteristics and background play a much more salient role than characteristics of the job in determining whether that person uses drugs. Family background, peer associations and self-image have had a lifetime to shape behaviours and should be more powerful influences on behaviours than job characteristics. Factors related to work are important in coming out to a full understanding of

Factors related to work are important in coming out to a full understanding of employee substance abuse. The relationship between job and substance abuse was significant, and the job domain added uniquely to the prediction of substance use after accounting for variance associated with the personal domain. Drug users experienced higher levels of job tension and appeared to be more estranged from work than nondrug users, as reflected by lower levels of job satisfaction, faith in management, job involvement and organisational commitment. In predicting drug use at work, the inclusion of job characteristics clearly enhanced prediction. Although some drug related characteristics were "transported" into the workplace (e.g. previous arrests, mental status, etc.) other predictive variables were the result of workplace conditions such as working alone, high job risk and job involvement.

Markowitz M.

"Alcohol Misuse as a response to perceived powerlessness in the organization"

in *Journal of Studies on Alcohol* (New Brunswick), 45 (3), 1984, pp. 225-227 ISSN: 0096-882X

Keywords: job perceived characteristics, frustrated need for power, employee alcoholism

The study explored the relationship between the perceived characteristics of a job and employee alcoholism. It was hypothesised that employees who perceive their jobs as lacking dimension that permit them to exercise the sufficient power of control to determine job activities and job outcomes will be more likely to experience drinking problems. Alcoholism should be an expression of frustrated need for power. The survey was conducted on 625 full-time employees in 11 different organisations (school district, manufacturing firms, accounting firms and one hospital). Variables were responsibility, autonomy, participation and organisational power. The evidence suggests that stressful job dimensions may be a contributory factor in the development of a drinking problem. The analysis of data from questionnaires demonstrated significant value for perceived job responsibility and lack of personal power in the organisation. Those who place a higher value on their job per se or who view their job as reflection of themselves may be more prone to job-related stress with the tendency to develop a drinking problem. Martin J. K.; Roman P. M. and Blum T. C.

"Job stress, drinking networks and social support at work: A comprehensive model of employees' problem drinking"

in *Sociological Quarterly* (Berkeley), 37, 1996, pp. 579-599 ISSN: 0038-0253

Keywords: job-based relationship, social support, nonrewarding job characteristics

By including group drinking behaviours and measures of the content of job-based relationships, the model of this study taps multiple dimensions of the concept of social support. In this model, the authors assume that stressful or nonrewarding job characteristics, participation in work-based drinking networks and social support levels at work have simultaneous effects on employees' drinking behaviours. They offer two hypothesis: 1) perceptions of high job stress and low job rewards, participation in work-based drinking networks, and low levels of supervisory and coworker support will be positively related to levels of job escape drinking and employees' problem drinking status; 2) high levels of job escape drinking will be positively related to employees' problem drinking status. Completed interviews were obtained from 3,001 respondents with an overall response rate of 62.3 percent. Eligible respondents were restricted to household members eighteen years of age or older, who were currently in paid worked of at least thirty-five hours per week. Measures were problem drinking status, job escape drinking, job stress characteristics, social support at work. The data illustrates that employees' problematic drinking behaviours are influenced by a complex interplay of job stressors, job rewards, participation in work-based drinking networks and systems of social support. The results demonstrate that individuals who drink to induce direct personal effects are prone to heavier consumption of alcohol.

Levels of job stress and job rewards have substancially important effects on employees' reports of problem drinking behaviours via their relationship to attitude supportive of job-escape drinking. Job conditions operate indirectly on problem drinking behaviour by conditioning those justifications that either support or discourage the use of alcohol to escape or modify unpleasant work-related affect. Participation in a group of drinking people was found to have important influences on the development of job escapist definitions of drinking effects. While off-the job social relationships were found to be very important, sources of social support at work were, on balance, the least important of the various work-related influences on employee drinking patterns. The study finds little evidence to substantiate the notion that social support at work provides employees with resources to mediate the otherwise negative effects of job pressure or stress. It is suggested that a new appreciation of the complex interaction between job characteristics, participation in alternative domains (family, church) is more central to the management of workbased stress. Martin J. K.; Roman P. M.

"Job satisfaction, job reward characteristics, and employees' problem drinking behaviors"

in *Work and Occupations* (Thousand Oaks), 23 (1), 1996, pp. 4-25 ISSN: 07308884

Keywords: job environment, job satisfaction, job rewards, job autonomy, alcohol use

The aim of this article is to test a work-related model of problem drinking behaviours that incorporates the mediating effects of job satisfaction along with job characteristics that have been used prominently in earlier research and that focuses attention on multiple indices of problem drinking behaviour as a more appropriate theoretical alternative than alcohol consumption per se. The researchers hypothesise that to general characteristics of jobs and workers will combine to affect the individual functioning and well being, including problematic and/or maladaptive patterns of alcohol consumption. These are: stressful and or non-rewarding job characteristics and levels of job satisfaction. Two hypothesis were formulated: 1) perceptions of high job stress and low job rewards will be positively, although weakly, related to indicators of employees' problem drinking status, 2) levels of reported satisfaction with work will be negatively related to indicators of employees' problem drinking status. The sample includes household members 18 years of age or older who were currently in paid worked of at least 35 hours per week. The analyses illustrate that employees' problematic drinking behaviours are indeed influenced by a complex interplay of job stressors, job rewards, and work-related affects. The data reported and revealed the consistently significant role played by self-reported job satisfaction. It was found that only modest evidence that job characteristics have important direct effects on employees' reports of problem drinking behaviours. Task complexity was not significantly related to either daily drinking, job-escape drinking, or problem drinking. Job autonomy, on the other hand, produced a statistically significant independent effect on only one of our variants of problem drinking. When the influences of job pressure on a daily basis and job-escape drinking is considered. increases in job pressure significantly increased the likelihood of both escapist and daily drinking. An unexpected positive relationship between job autonomy and daily drinking was find, and this may indicate that an understanding of autonomy as an altogether positive feature of work may be inappropriate. The autonomy may adds responsibility, uncertainty, and accountability for adverse outcomes associates with one's job, any or all of which may add up to stress. Both stressful conditions of work and lowered job satisfaction are risk factors for the development of problem drinking.

Martin. Jack K, Terry c. Blum, and Paul M. Roman

"Drinking to cope and self medication: Characteristics of jobs in relation to workers' drinking behavior"

in *Journal of Organizational Behavior* (Chichester), 13, 1992, pp. 55-71 ISSN: 0894-3796

Keywords: coping, self-medication drinking, escapist reasons, job pressure, emotional stress

The article contains a variety of bibliographies on the principal alcohol-related studies. The research examines three aspects of alcohol usage: the simply frequency-quantity of drinking, escapist reasons for drinking or definitions of drinking effects on the individual drinker and a combination of heavier drinking with escapist-oriented definitions of drinking, which is labelled " self medication". Occupational influences on reported escapist reasons for or definitions of drinking that have been associated with problem drinking are examined.

Furthermore, the research tries to understand how job characteristics influence drinking behaviour by examining the effects of jobs on an index of self-medicating behaviour. The analysis is based on a model where four different characteristics of job are assumed to have predictable effects on workers' drinking behaviour. The job characteristics that are examined include perceived levels of autonomy, extrinsic rewards, job pressure and the amount of physical effort expended on the job. The data for this analysis were collected in 1973 by the Institute for Social research at the University of Michigan for the Quality of Employment Surveys. The sample is based on interviews with 1455 respondents (986 employed men).

The researchers conduct a three-step logic of analysis. First, a model of the sources of alcohol consumption is estimated with escapist-related reasons for drinking and job characteristics as predictors. Second, in an attempt to determine whether job characteristics operate indirectly on consumption through escapist reasons for drinking, escapist drinking is regressed on the four job characteristics (autonomy, levels of extrinsic reward, job pressure and physical effort required.). Finally, a model of the job-related sources of self-medicating drinking behaviour is estimated. The analyses indicate in a national sample of employed men, job characteristics operates on alcohol consumption by conditioning a set of justifications supportive of the use of alcohol to avoid and escape unpleasant emotional stress. Workers appear to make an accommodation to their work environments, which in turn influences, their drinking behaviour. Drinking for coping/escapist reasons is associated with higher levels of alcohol consumption. In the data alcohol consumption was strongly associated with escapist reasons for drinking. Work characterised by high levels of pressure and low levels of extrinsic rewards is significantly and independently related to this self-medical drinking.

McCreary D. R. and Sadava S. W.

"Stress, Alcohol Use and Alcohol-Related Problems: The influence of negative and positive affect in Two cohorts of Young Adults"

in *Journal on Study on Alcohol* (New Brunswick), 61 (3), 2000, pp. 466-474 ISSN: 0096882X

Keywords: drinking behaviour, stress, alcohol use, young adults

These present study tries to explain whether stress predicts alcohol use, whether stress predicts positive and negative affect; whether stress affects predicts alcohol use and alcohol use predicts alcohol problems. The sample consist of two cohorts (574 and 239 subjects) of randomly selected young adults between 18 and 35 years of age. The measures were stress, negative life events, alcohol use, alcohol problems, positive and negative affect dimensions. Findings showed that stress was not predictive of alcohol use in either cohort, and as such, the proposed mediational relationship could not be tested. However, in the older cohort, positive affect and hostility acted as significant intervening variables, allowing two pathways for an indirect association between stress and alcohol consumption. The model showed that stress is more strongly predictive of an increased vulnerability to alcohol-related problems that to alcohol use (i.e. even after controlling for the relationships between stress, affect and alcohol use, stress was a significant predictor of alcohol-related problems in both age cohorts). That stress is not a strong, direct predictor of alcohol use, following the thinking of the researcher, it should not be surprising: there are many pathways to drinking behaviour (family history and peer group influence), just as there are numerous factors that mediate the stress-alcohol use relationship (increased of social support). Alcohol consumption, frequency of intoxication and adverse consequence scores are considerably higher in the younger sample. This would suggest that drinking is a normative behaviour in younger men and women, and that older people may drink for different reasons than to younger people.

Moisan, J.; Bourbonnais R.; Brisson C.; Gaudet M.; Vézina M.; Vinet A. and J. P. Grégoire

"Job strain and psychotropic drug use among white-collar workers"

in *Work & Stress* (London), 13, 1999, pp. 289-298 ISSN: 0267-8373

Keywords: high psychological demand, low decision latitude, white-collar workers, social support

The aim of this study is to measure the association between simultaneous exposure to high psychological demand and low decision latitude at work and the use of prescribed psychoactive drugs among white-collar workers. The second objective was to determine whether social support at work modified this association.

Psychological demand encompasses workload, (quantity and pacing of work) time constraints, the level of concentration required and the frequency of interruptions. Decision latitude covers two factors: skill discretion and decision-making power. Moreover, social support at work from colleagues and supervisors might reduce the effect of job strain on mental health.

The participants, 65 years of age, were workers under working a minimum of 35 hours per week in any of eight organisations in the public sector in the Greater Quebec City Area of Canada. Furthermore, participants had to have the same position for a least one-year.

An 18-item self administered questionnaire was used to measure psychological demand and decision latitude, the participants related variables include age, gender, education, family income, employment status occupation, cigarette smoking, alcohol consumption and psychological activity.

Workers exposed to high psychosocial demand combined with low decision latitude are the group most exposed to job strain. A total of 65.3% (N=1820) fell into one of the two medium-exposure groups: that is, high psychological demand combined with high decision latitude. The other factors positively associated with psychotropic drug use were social support at work, age, education, stress associated with events that occurred during the last 12 months and the sedentary nature of the work.

The association between gender, family income, employment status, occupation, cigarette smoking and alcohol consumption and psychotropic drug use were not stationary significant. The results of the study assessed that job strain might be a determined factor related to the psychotropic drug use among white-collar workers. Social support at work did not appear to modify the association between psychotropic drug use and exposure to high psychological demand combined with law decision latitude.

Mental Health problems such a depression or anxiety and physical health problems such as a history of myocardial infarction may represent a step in the causal chain between exposure to job strain and psychotropic drug use. For the first time a research demonstrate an association between job strain and psychotropic drug use over a period of 2 days.

Neil C.C.

"Relationship between perceived workplace problems and alcohol consumption among single men in new resource communities"

in *Contemporary Drug Problems* (New York), 16 (2), 1989, pp. 227-264 ISSN: 00914509

Keywords: environmental stress, reasons for drinking, Australian workers, ethnic background

The study analyses the relationship between perceptions of job stress and certain aspects of alcohol consumption within a particular alcohol subculture. It tries to explain the links between one form of environmental stress, that arises from the workplace, and self-reported frequency of alcohol consumption, reasons for drinking and symptoms of dependency. Two predictions are tested: 1) those workers who are personal-effects drinkers who report workplace problems which may be stressful are likely to drink more frequently than other workers, especially when country of birth is taken into account; 2) the same workers are also more likely to report symptoms of alcohol abuse than other workers. The data were collected in a survey of single men in six Australian towns that varied in size and complexity. All the towns personnel employed by large multinational companies involved in either iron-ore extraction or export. Measures included: reason for drinking, frequency of drinking, symptoms of alcohol dependence, workplace problems and workplace supportiveness of supervisor and workmates. The analysis failed to support the initial hypothesis of a significant association between frequency of drinking and workplace problems, regardless of whether or not reasons for drinking were taken into account. The study confirm that the ethnic background is important to understanding of drinking behaviour and suggests that job characteristics that facilitate to inhibit problem drinking may play a more important role in drinking behaviour.

Nowack M. K. and Pentkowski A. M.

"Lyfestyle habits, substance use and predictors of job burnout in professional working women"

in *Work & Stress* (London), 8 (1), 1994, pp. 19-35 ISSN: 0267-8373

Keywords: dental health profession, coping strategies, global lifestyle practices, burnout

This study explored specific psychosocial factors and health habits (including selfreported alcohol, cigarette, prescription/non prescription drug use) associated with predictors of job burnouts in a large cross sectional sample of employed women in the dental health profession (N=879). It compared differences particularly in work and life hassles (stress, type A behaviour, lifestyle practices, health habits, coping strategies and job burnout between high and low users of alcohol, nicotine and other non-prescription drugs. It was hypothesised that women reporting greater use of these substances would experience significantly higher perceptions of hassles (stress), less frequent practice of health- enhancing habits and practices (e.g. physical activity/exercise, eating/nutritional practices) more frequent use of dysfunctional coping strategies and higher levels of job coping (emotional exhaustion, depersonalisation, lack of accomplishment) compared to non-users. Participants for this study were professional and administrative staff working in orthodontic offices. Measure were stress, coping style, cognitive hardiness, global lifestyle practices, social support, type A behaviour, psychological well-being, response bias, measurement of self-reported substance abuse. Three separate items were used to assess self-reported alcohol consumption, cigarette smoking and use of other drugs for recreational purposes. Except for somewhat lower smoking prevalence rates, self-reported use of alcohol and other drugs appeared to be generally consistent with previously published research and national surveys for working women; high levels of self-reported substance use (smoking, drinking, other drugs) were significantly associated with poor overall lifestyle practices and eating/national habits and high self reported substance use of alcohol and cigarettes were not significantly associated with measures of daily life hassles or job burnout. However, women who reported using non -alcohol-related drugs did report significantly higher levels of daily life hassles and depersonalisation than those who did not. In the study, little evidence was found of an association between daily hassles, job burnout, and self-reported substance abuse. Women who reported using non-alcohol-related drugs did report significantly higher levels of daily life hassles and depersonalisation that those who did not. Thus, women in this study who expressed feelings of being cynical toward others, less customer-service oriented, less caring and more critical of others tended to be those reporting use of non-prescription and prescription drugs for recreational purposes. This study did not differentiate between true alcohol-dependent females and

moderate drinkers; thus it can be argued that the present study does not adequately address the hypothesis that substance use is associated with stress and job burnout.

Richman J.A.; Flaherty J.A.; Rospenda K.M.

"Perceived workplace harassment experiences and problem drinking among physicians: Broadening the stress/alienation paradigm"

in *Addiction* (Abingdon), 91(3), 1996, pp. 391-403 ISSN: 09652140

Keywords: medical environment drinking outcomes perceived abusive experiences

This article affirms that a broadened conceptualisation of stress and alienation which incorporates abusive work relationships has a utility for explaining male and female drinking outcomes in both high and low status occupations. The data presented focus on particular dimensions of perceived abusive relationships experienced during the internship year of medical training. The authors theorised that medicine constitutes a profession in which heavy work demands, time pressure and lack of control involving uncertainty factors in diagnosis and treatment may be perceived as inherent to the nature of the occupation in general and training process in particular. Personality vulnerabilities brought into the medical environment would interact with perceived abusive experiences in the prediction of deleterious coping styles such as the use and abuse of alcohol. The sample derives from a cohort of 184 medical students entering a state college of medicine in 1987. The sample of interns was 66.5% male and 33.5% female. Measures were: sexual harassment (I have experienced unwanted sexual advances, I have experienced discomfort listening to sexual humour), discriminatory treatment and psychological abuses. The data showed that stressors such as overwork and lack of control did not significantly relate to deleterious drinking outcomes. Most of the perceived abusive experiences did significantly predict one or more of the drinking outcomes in either men or women or both. Drinking outcomes were most strongly predicted by perceived abusive experiences in interaction with personality deficits brought into the medical environment. The data showed that perceived sexual harassment, discriminatory treatment and psychological humiliation related to various drinking outcomes in men and women, controlling for drinking prior to the internship year. Personal vulnerability (narcissism) brought into the training environment somewhat influenced the later reporting of abusive experiences by males but not by females.

Richman J. A. et al.

"Workplace harassment and the self-medication of distress: A conceptual model and case illustration"

in *Contemporary Drug Problems* (New York), 24(1), 1997, pp. 179-201 ISSN: 00914509

Keywords: workplace factors, coping methods, interpersonal stressors

This study presents a new model of psychosocial links between workplace harassment experiences and the self-medication of distress by using alcohol or other substances. They are significant links between negative interpersonal aspects of work and deleterious alcohol outcomes. Scope of this work is also to elucidate the particular social processes under which harassment in the work environment may translate into the use and abuse of alcohol. The model of the link between harassment and the self-medication of distress begins with the premise that harassment victims who are subject to cognitive appraisals involving self-blame and who experience resulting depressive affects will be at risk for dealing with these negative emotions by self-medicating them with alcohol or other substances. Then authors suggest that a number of factors put people who experience workplace harassment at risk for using alcohol and other substances to medicate their feelings: social reactions to certain types of harassment, the presence or absence of particular social supports, and the individual's previous patterns of alcohol or substance abuse. Four case studies are presented, that illustrate the importance of the factors described above.

Richman J. A.; et al.

"Sexual harassment and generalized workplace abuse among university employees: Prevalence and mental health correlates"

in *American Journal of Public Health* (Washington), 89 (3), 1999, pp. 358-363 ISSN: 00900036

Keywords: university occupation, workplace stressors, sexual harassment, workplace abuse

This report studies the prevalence and mental health correlates of sexual harassment and generalised workplace abuse among men and women in four university occupational groups. This study hypothesised that interpersonal workplace stressors involving sexual harassment and generalised workplace abuse are highly prevalent and significantly linked with mental health outcomes including symptomatic distress, and the use and abuse of alcohol and other drug use. Employees in four university occupational groups (faculty, student, clerical, and service workers N=2492) were surveyed by means of a mailed self-report instrument. The prevalence of harassment and abuse and their association with mental health status was studied. The data show high rates of harassment. In the service and clerical groups, males experienced significantly higher rates of sexual harassment in general and gender harassment in particular, while in the faculty group, females experienced significantly higher rates than males. Physical aggression was experienced most frequently by male and female service workers and, to a lesser extent, clerical workers. Although the strength of associations between harassment and abuse on the one hand and mental outcomes on the other ranges from small to substantial and the number of comparisons made was large, there is an overall pattern of negative mental health outcomes. Moreover, interpersonal stressors in the workplace may have delayed effects on their mental health.

Romelsjo A.; Hasin D.; Hilton M.; Bostrom G.; Diderichsen F.; Haglund B.; Hallqvist J.; Karlson G.; Svanstrom L.

"Relationship between stressful working conditions and high alcohol consumption and severe alcohol problems in an urban general population"

in *British Journal of Addiction* (Abingdon), 87 (8), 1992, pp. 1173-1183 ISSN: 0952-0481

Keywords: low control, high psychological demand, cardiovascular disease, alcohol consumption

This study investigates both the relationships between stressful working conditions, unemployment and high alcohol consumption and severe alcohol problems in a random sample of the general population in an urban area. The sample included 2838 respondents (1344 males and 1494 females); the questionnaire included five questions about the usual consumption of liquor, fortified wine, table wine, strong beer and beer and one question about occasions with a high-alcohol intake. The stressful working variables were: psychological demands, work control, low work control, and high psychological demands (high strain) unemployment. Some of the association, expressed as age-adjusted odds ratios, were positive and some were negative when high alcohol consumption was the endpoint, but there was a clear variation by sex and social class. Generally the positive associations were stronger among male nonmanual employees, the odds rations for the measures low control, high psychological demands and high strain, were increased, but imprecise, when severe alcohol problems was the endpoint but not generally with high alcohol consumption as dependent variable. The association between low control and high psychological demands at work and the prevalence of cardiovascular disease was stronger among blue-collar workers than among white-collar workers. An association between experiences of unemployment and high alcohol consumption in males, but was not found in females. The authors found a mixed pattern of associations between measures of stressful conditions and high alcohol consumption. The strong but imprecise associations between such conditions and severe alcohol problems in males. after exclusion of earlier inpatients with alcohol diagnosis and of high consumers of alcohol suggest that stressful working conditions can contribute to alcohol-related problems.

Schnall P.L.; Pieper C.; Schwartz J. E.; Karasek R. A.; Schlussel Y.; Devereux R. B.; Ganau A.; Alderman M.; Warren K.; Pickering T.G.

"Relationship between "job strain," workplace diastolic blood pressure, and left ventricular mass index: Results of a case-control study"

in Journal of the American Medical Association, 263 (14), 1990, pp. 1929-1935

Keywords: risk factors, left ventricular mass, New York workers, hypertension

This study was designed to test the hypothesis that job strain (defined as high psychological demands and low decision latitude on the job) is a risk factor and for increased left ventricular mass. This is a case study of working men conducted at seven New York work sites employing at least 150 men (white collar and blue collar). The subjects were between 30 and 60 years old, without evidence of coronary heart disease, were employed more than 30 hours per week and educated in the United States.

The principal finding of this study is the confirmation of the hypothesis that exposure to job strain increases the likelihood of being classified as having hypertension. Job strain reflects an interaction of two variables that both have to exceed a threshold level before an effect on blood pressure can be detected. Job situations where the level of work demands exceeds the individual's ability to control or deal with those demands creates a challenge that activates the sympathetic nervous system and leads to an elevation of blood pressure at work. Long term exposure (over years) to job strain is hypothesised to ultimately result in a sustained elevation of blood pressure that then causes structural change in the cardiovascular system. Schnall P.L.; Schwartz J.E.; Landsbergis P.A.; Warren K.; Pickering T.G.

"Relation between job strain, alcohol, and ambulatory blood pressure"

in *Hypertension* (Dallas), 19 (5), 1992, pp. 488-494 ISSN: 0194-911X

Keywords: psychological work demands, low levels of control, hypertension

In this research job strain is modelled as an interactive variable in which jobs characterised by high levels of psychological work demands (working fast and hard) and low levels of control over the work process (little authority and low skill level) are considered stressful. Job strain is the principal independent variable because it previously has shown to be predictive of an increased risk of coronary heart disease as well as psychological symptoms such as exhaustion and depression. The sample consists in workers between 30 and 60 years old, employed more than 30 hours per week, without a second job of 15 or more hours per week, and had been at their current work site for at least 3 years before being approached for this study. Two scales were used to define job strain: job decision latitude and psychosocial job demands. Decision latitude was defined as the sum of two subscales each given equal weight. Skill discretion and decision authority. The second scale is psychological job demand. The results are consistent with the hypotheses. AmBP is highest during working hours. Job strain adds an important dimension to our understanding of the impact of work on blood pressure. Exposure to job strain is associated with an increase in work time AmBP of almost 7 mmHg systolic and 3 mmHg diastolic alter controlling for other known risk factors for hypertension. Furthermore only those jobs characterised by a combination of high demands and low control are associated with an increase in blood pressure This latter finding fosters the argument that it is the combination of high work demands and low control that constitutes the risk factor and suggests there may be a threshold effect as well. Job strain results in a generalised and persistent arousal beyond the immediate situation that initially provokes it. Furthermore job strain has a greater effect on blood pressure with an increase in age. The study shows that there is a strong interaction effect of job strain and alcohol on systolic AmBP at work. Alcohol use and age are only related to AmBP among those in high-strain jobs is intriguing. Maybe high-strain work is a vulnerability factor, substantially altering an individual's susceptibility to other traditional risk factors. The study doesn't assess an interaction of job strain and smoking on AmBP.

Seeman M. and Anderson C. S.

"Alienation and alcohol: The role of work, mastery and community in drinking behavior"

in *American Sociological Review* (Albany), 48, 1983, pp. 60-77 ISSN: 00031224

Keywords: USA metropolitan community, drinking problems, social isolation, alienation in work, powerless

Using a sample of 450 employed males in a metropolitan community, the correlates of drinking behaviour, and of drinking problems are examined. The research is based on the alienation model. There are three forms of alienation: powerless, social isolation, and alienation in work; work is crucial to personal identity: work drives people to drink when it undercuts the requisites for self-engagement - when it is boring, physically or mentally exhausting, monotonuos, or so highly supervised, stressful, or uninformed as to generate the kind of anxiety that may lead to or aggravate alcoholism. As with work alienation, where maybe drinking could be a consequence and a cause of work problems, the powerlessness-drinking relationship is also potentially reciprocal. Men don't drink to reduce anxiety: men drink primarily to feel stronger; those for whom personalised power is a particular concern drink more heavily.

The authors hypotheses that social isolation was that it would not itself explain very much about drinking, but might well be an important mediating factor. Thus, an interaction phenomenon is predicted: social integration serves as a buffer against either 1) the translation of powerlessness into drinking or 2) the generalisation of a problem job to problem drinking. With respect to work experience, multiple indices again were developed: intrinsic satisfaction on the job, job satisfaction, occupational striving and success, career mobility. The result shows that work experience is unrelated to drinking, but the sense of powerlessness is consistently with either drinking frequency or being drinking. Both subscores of powerlessness (personal inefficacy and luck ideology) show a tie between high powerlessness and heavier drinking per occasion. Powerlessness is consistently a factor in drinking; the workbased measures are essential irrelevant to drinking; if anything, strong network ties coincide with heavier drinking rather than inhibiting it. They find that the data is generally in keeping with their prediction that problem drinking is more closely related to personal inefficiency than to a generalised luck ideology. The sense of powerlessness is related to the experience of drinking problems quite apart from the sheer quantity of alcohol consumed.

Steffy B. D. and Laker D. R.

"Workplace and personal stresses antecedent to employees' alcohol use"

in *Handbook on job stress (special issue*), by Perrewe P. L., *Journal of Social Behavior and Personality* (Corte Madera) 6, 1991, pp. 115-126 ISSN: 0886-1641

Keywords: health care employees, coping, job stressors, recent stressful life events, employment insecurity

This study evaluates the impact of workplace and personal stresses on alcohol use in a large heterogeneous sample of more than 8,600 health care employees. The study focused on factors antecedents to heavier alcohol use and the use of alcohol to relax. Three categories of explanatory variables were hypothesised to be antecedent to heavier drinking: 1) job stressors, 2) recent stressful life events 3) employment insecurity. The study further controlled for six variables that may explain differences in alcohol use. These include sex, race, age, organisational tenure, body-mass and socially desirable responding.

The sample consist of 10,000 health care employees representing 51 small to mediumsized hospitals. The response rate for each hospital exceeded 85%.

Alcohol use, role stressors, recent life stress and employment insecurity and other variables were used.

The hypotheses that alcohol use increases with greater workplace and personal stressors, was tested. Results suggest that heavier drinkers were male and older. Use of alcohol to relax was greater among younger employees, men and minorities. Socially desirable responding was associated with less reported alcohol use. While employment insecurity and recent stressful life events predicted both dependent outcomes, role stresses were not predictive, except for the finding that role overload was associated with using alcohol to relax. Results thus support most of the hypothesised antecedents of alcohol use, except for work-role stressors. Job stressors may lead to greater alcohol intake among those who cope this way, but for individuals who employ other tactics such an exercise and meditation, job stressors may not explain alcohol intake.

Takeshita T.; Maruyama S.; Morimoto K.

"Relevance of both daily hassles and the ALDH2 genotype to problem drinking among Japanese male workers"

in *Alcoholism: Clinical and Experimental Research* (Baltimore), 22(1), 1998, pp. 115-120 ISSN: 0145-6008

Keywords: Japanese occupational population, stress levels, genetic polymorfism, drinking pattern

This study investigates the effects of genetic polymorphism in the ALDH2 and ADH2 genes and stress levels in males in a Japanese occupational population. Subjects were 388 male workers in a metal plant in Japan with 457 male and 151 female workers. The demographic variables used in this study included age, job position, and job type. Drinking frequency, mean amounts of alcohol consumption per occasion and kinds of alcohol beverage were measured. Both heavy and problem drinking have been associated with various characteristics, including age, gender, marital status, education levels, states of employment, and work stress. High levels of stresses and permissive attitudes toward drinking would accelerate the middle-aged to drink. Small, but continuos stress as assessed by the daily hassles scale can well predict problem drinking among middle-aged workers. There is a significant contribution of both stresses and ALDH2 polymorphism to the prevalence of problem drinkers in a general population.

Tsukamoto K.; Hayashi T.; Suzuki T.; Abe K.

"Work-setting factors and reasons for drinking in Japanese male workers: A questionnaire survey"

in *Stress Medicine* (Chichester), 13(4), 1997, pp. 245-250 ISSN: 0748-8386

Keywords: Japanese male workers, job environment, lubricant function, relationship with colleagues

The aim of the research is to study the reasons for drinking in Japanese male workers analysing 20 work-setting items resulted in four main worksetting factors: quality of work, relationship with supervisors, work quantity/environment and relationship with colleagues. The finding in this study indicates that drinking acts as a lubricant, reducing friction and helping things go smoothly in a relationship based on mutual reliance and interdependence. Those who drunk to reduce frustration were less satisfied with all the four work setting-factors. It appears that drinking is more likely to occur to reduce the strain associated with work overload. Vasse R. M.; Nijhuis F. J. N.; Kok G.

"Associations between work stress, alcohol consumption and sickness absence"

in *Addiction* (Abingdon), 93 (2), 1998, pp. 231-241 ISSN: 09652140

Keywords: absenteeism, alcohol drinking [psychology], occupational diseases [psychology], stress, buffering effect

This study propose and tests an interactional model which states that work stress and alcohol drinking behaviour interact in predicting sickness absence. Work stressors are defined as working conditions that are negatively evaluated by workers (e.g. high work pressure or bad relationships with supervisor). Stress is defined as a state of negative emotional feeling (i.e. feeling tense, nervous, hurried or downhearted); alcohol use was defined as the number of glasses that are drunk per week. The authors hypothesised that work stressors would predict stress, that stress would predict higher alcohol use, furthermore stress and alcohol use were hypothesised to interact in their prediction of sickness absence. They expected that the combination of stress and excessive alcohol use would be associated with higher stress absence and abstinence and stress to be associated with higher sickness absence. Participants were blue-collar workers from two Municipal Garbage Collecting Departments and whitecollar workers from a Pharmaceutical Company. Measurements included sickness absence, stress, work stressors, alcohol drinking behaviour and socio-demographic characteristics (gender, age, education and marital status). The results showed that when there was no stress the association between alcohol consumption and sickness absence was not significant; in the case of stress however both abstinence and excessive drinking were associated with increased sickness absence compared with moderate drinking. Only two of the hypothesised associations were not supported, namely the moderating effect of the individual differences variables on the association between stress and alcohol and the direct association between work stressors and alcohol consumption. It was not found a significant association between excessive drinking and sickness absence.

The association between work stressors and stress was confirmed. The type of work stressors related to stress did not differ for blue - and white-collar workers. In both work-sites work pressure was by the largest stressor. Others were work content, negative influence of work and private life and relationship with

supervisor/colleagues. The association between stress and alcohol is confirmed. Work stressors had no direct associations with alcohol consumption. Work stressors have only indirect association with alcohol consumption through the increase in perceived stress. The association of sickness absence with excessive drinking was in the predicted direction but not significant. The result suggest that moderate drinking has a buffering effect on the association between stress and sickness absence and that abstinence is at least as unhealthy as excessive drinking.

Vinet A.; Vezina M.; Brisson C. and Bernard P. M.

"Piecework, repetitive work and medicine use in the clothing industry"

in *Social Science and Medicine* (Oxford), 28 (12), 1989, pp. 1283-1288 ISSN: 0277-9536

Keywords: female sewing machine operators, time constraints, repetitive work

This article examines medicine use among female sewing machine operators in the clothing industry. The potential effects of severe time constraints on workers' health are studied. Medicine use is considered to be an indicator of non-specific morbidity. The data allowed for a distinction between time constraints and repetitive work. Two categories of factors can influence medicine use. The first category consists of sociodemographic characteristics, economic and cultural factors. The second category of factors relates to the health status of the respondents: those who declared themselves healthy used fewer medicines than the ones who reported some health problems. In the ladies' clothing industry the hypotheses were that: 1) the piecework paid operators would present a higher percentage of medicine users than the hourly paid; 2) operators who did repetitive work would present a higher percentage of medicine users than those who sewed the whole garment. Women selected into the study were between the ages of 45 and 70, natives of Canada, spoke French and lived in the metropolitan region of Montreal. The study reveals that the probability of using stomach medication was higher for pieceworkers than among women that received and hourly wage; the probability was also higher for women who did repetitive work than from women who did non-repetitive work. The study contributes to make visible health problems associated with a rigid work organisation and, in this sense, adds to the evidence that stress at work can be deleterious to health.

Watts D. W.; Short A. P.

"Teacher drug use: a response to occupational stress"

in *Journal of Drug Education* (H.W. Wilson), 20 (1), 1990, pp. 47-65 ISSN: 00901482

Keywords: Texas, teaching profession, job overload, professional autonomy

The purpose of this article is to examine the relationship between occupational stress and drug use with particular attention to the teaching profession. A stratified random sample of 500 Texas teachers was surveyed, regarding working conditions, colleague and supervisory relationships, job satisfaction, rigidity of attitudes and drug use. They are significant relationship between measures of stress and selected drug use. Alcohol use in the past month is associated with job overload, while working relations are correlated with amphetamine use. Teachers report higher rates than a national sample of lifetime alcohol, amphetamine, and tranquilliser use and higher rates of alcohol use in the last year and last month. Some measures of lifetime drug use (alcohol, LSD, amphetamines) were weakly correlated with professional autonomy. While drug use may be a function of stress in the working environment of school, lifetime drug use, probably drug use prior to teaching, may be a stressor on colleague relations and perceived autonomy.