



Letter to the Editor

Occupational stress and productivity—A forensic perspective



Over the last two decades, the role of forensic science in the criminal justice system has grown immensely making it a key resource for prosecutors and investigators. As forensic science plays a prominent role in investigations and legal proceedings, the demand for forensic scientists in the laboratories has grown substantially. Forensic laboratories operate at the state or local level within police agencies or state level or at national level. Scientists frequently engage with law enforcement agencies, prosecutors, and sometimes they must encounter victims, offenders, and witnesses during court proceedings. The tasks performed by scientists are often complex, which requires sound technical knowledge and understanding along with continuing education and training. Forensic scientists often operate within the complex managerial and administrative structures within or along with police agency, involving co-workers from different disciplines or backgrounds and education levels. Several studies have been conducted to report the stress level and job satisfaction by forensic scientists in the criminal justice system involved with various roles and responsibilities.

Following organization-specific sources of stress affecting employees has been identified (Frese and Fay, 2001; Johnson et al., 2005);

- (1) Peer Pressure or Stress intrinsic to the job,
- (2) Relationships at work,
- (3) Responsibility within the organization,
- (4) Career advancement,
- (5) Organizational structure.

Furthermore, these conditions may create a stressful working environment for forensic scientists directly affecting the occupational experiences of scientists by increasing work stress and decreasing job performance. Work stress can be defined as the disconnect between job demands and employees' available resources and capabilities. Work stress is correlated with low levels of job satisfaction, often leading to poor job performance.

One key factor is work overload. The longer working hours of forensic scientists may be directly associated with higher levels of stress. Longer workloads are due to large backlog of multiple evidences that must be processed in support of certain cases. Various studies demonstrated that scientists working for longer duration reported greater levels of stress leading to physical illness, psychological problems, wastage of time and resources. Thus, understanding the factors affecting stressful environment and poor job performance may aid in the development of policies to improve organizational output.

Another factor intrinsic to the job is the number of tasks performed by forensic scientist apart from routine analysis job. Forensic scientists must testify the report in the court of law, which requires coordination with police and prosecutors. Such additional task may increase stress because of added responsibility. Sometimes, the scientists are requested to rapidly process evidences to produce report in certain high-profile cases related to homeland security despite large backlogs, and thus increasing stress levels.

Work relationship is one of the primary factors allied with stress among forensic scientists, especially along with the support from administration and management. The administrative and militarized structure of forensic laboratories is well-known to put a substantial amount of stress on the employees involved with law enforcement agencies. The tight controls placed on the scientists by the administration limits the ability of individuals to fully exercise discretion in the field. Due to this, the officers may feel alienated by inability to communicate their needs to the management.

Another key source of stress, particularly in the criminal justice system is the role of individual or officer within a lab or in an organization. High levels of stress among the law enforcement officers have been reported by many researchers' due to conflicting or ambiguous roles and responsibilities which gets aggravated through competing demands with variable standards for completing specific case/task starting from collection of evidences, maintaining chain of custody, performing analytical tests, interpretation of results till reporting at the court of law. Each unit has their own objective/interests and needs concerning typical cases, which may elevate the demands on scientists and raise their overall stress level (Becker and Dale, 2003; Becker and Dale, 2007; Gould and Leo, 2010; Saks et al., 2003). A lack of clear guidelines for conduction of various analysis, often mentioned as role indistinctness further lay more stress and simultaneously decreases job satisfaction. Low levels of job satisfaction and work-related stress may have negative impact on job performance. Therefore, ambiguous role of scientists often increases their work stress and decrease job satisfaction. Apart from these issues, several other factors like gender and racial differences, also elevate the stress level among forensic scientists. Individual-level factors also directly influence the experience of stress. Multiple demographic factors are correlated with reported levels of stress and satisfaction among the employees of law enforcement agencies.

There is a need for careful consideration of rescheduling to minimize negative work experiences and also by recruiting additional staff in order to address lack of resource personnel. Law enforcement agencies and academia are working hand in hand for engendering the workforce for the forensic fraternity. Standardized methodology may be developed with careful consideration with division of role and responsibilities to increase job satisfaction. Individuals having a positive outlook report greater job satisfaction and reduced stress. Officers with advanced degrees may also report higher job satisfaction because of their interest in the field. Scientists with more experience may have less stress and more satisfaction as they are familiar and comfortable with their jobs (Johnson, 2012).

Conflict of interest

The authors have no conflict of interest to disclose.

References

- Becker, W.S., Dale, W.M., 2003. Strategic human resource management in the forensic science laboratory. *Forensic Sci. Commun.* 5 (4).
- Becker, W.S., Dale, W.M., 2007. *The Crime Scene: How Forensic Science Works*. New York, Kaplan.
- Frese, M., Fay, D., 2001. Personal initiative: an active performance concept for work in the 21st century. *Res. Organ. Behav.* 23, 133–187.
- Gould, J., Leo, R., 2010. One hundred years later: wrongful convictions after a century of research. *J. Criminal Law Criminol.* 100, 2010–2028.
- Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., Millet, C., 2005. The experience of work-related stress across occupations. *J. Manage. Psychol.* 20, 178–187.
- Johnson, R., 2012. Police officer job satisfaction. *Police Q.* 15 (2), 157–176.
- Saks, M.J., Risinger, D.M., Rosenthal, R., Thompson, W.C., 2003. Context effects in forensic science: a review and application of the science of science to crime laboratory practice in the United States. *Sci. Justice* 2, 77–90.

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