

HISTORICAL DEVELOPMENT OF PRE-EMPLOYMENT PSYCHOLOGICAL TESTING AND PERFORMANCE PREDICTION IN LAW ENFORCEMENT: A NARRATIVE REVIEW

*Tanvi Singh, Assistant Professor, Rashtriya Raksha University, India

*Gaurav Singh, High Performance Analyst, Sports Authority of India, Lucknow

Abstract

The recruitment of law enforcement officers through psychological assessments aims to identify suitable candidates for the profession. Looking into the demanding jobs, the pre-employment psychological testing is considered a performance prediction and identification of less suitable candidates in law enforcement. The present narrative review includes the historical timeline to the contemporary research findings on the pre-employment psychological testing in law enforcement, focusing on the performance prediction and suggested interventions. The methods in the narrative review include the published research articles only in the English language from the databases of Google Scholar, PubMed, and PsycINFO. The keywords used on the search engines were “police AND psychological screening,” “pre-employment psychological testing AND police,” and “law enforcement AND psychological assessment.” The findings present in the study show the evidence of intelligence testing from the early 1900s to the projective test till mid-1900, from the mid-1900s to late 1900, the evidence included the formalisation of guidelines and establishment of validity of the tests. The validity studies showed mixed predictive validity of pre-employment psychological testing, and the evidence was limited. Therefore, the recent psychological research trend has taken a shift to more dynamic assessment: occupational stress, resilience, stress tolerance capacity, and emotional intelligence, and associated interventions to improve these parameters, that has statistically significant correlation with better performance in law enforcement. The present narrative review concludes that the pre-employment testing in law enforcement is a well-established concept, although the reliability, validity, and significant performance prediction through only personality assessment were limited. Hence, the dynamic job-related assessment needs to be prioritized with the periodical wellness programs for law enforcement officers.

Keywords: pre-employment testing, law enforcement recruitment, psychological assessment, police performance prediction

Introduction

The law enforcement job is considered highly stressful, demanding strategic yet dynamic personnel selections (Segovia, 2024; Wilson, 2012). Among the different selection criteria, the pre-employment psychological assessment has been debated as a tool to identify suitable candidates for the law enforcement profession (Dietrich, 2016). The duties of a law enforcement officer are more dynamic in nature since the officers face the traumatic incidents regularly, these have been high-pressure decision-making, long duty hours, chronic stress, unpredictable situations crowd management, all of which can affect the performance, use of unlawful force, and community relations (Harper, 1983; Korre et al., 2014). Therefore, the law enforcement organisations introduced a systematic selection procedure to select the most suitable and appropriate candidates in the profession, which is called the “recruitment process”. The recruitment process in law enforcement organisations depends on the job role or rank. The 31st President of the United States of America, Mr. Herbert Hoover, in 1931, created the National Committee of Law Observation and Enforcement (Wickersham Commission) that studied the details of recruitment systems and also highlighted the spoiled mechanism of recruitment practices. The committee submitted the inclusion of professionalization in the recruitment process of law enforcement (Alpert, 1991). Therefore, the inclusion of more scientific and rigorous methods, such as knowledge-based testing, physical fitness testing, and standard psychological testing was evolved (Wilson & McLaren, 1963). To create an equal and fair opportunity for all candidates, the Law Enforcement Assistance Administration (LEAA) was established in 1997. The LEAA introduced the “Equal Employment Opportunity Commission Guidelines” for the hiring of law enforcement officers.

However, the selection process for law enforcement officers was found to be critical and improvised from time to time. The complexity of community policing and the generational difference have made organizations reconsider reforming the police selection process. In this process, the National Advisory Committee on Criminal Justice Standards changed the selection procedure for police officers in 1973 (Reiss Jr, 1992), focusing on standardised methods and opportunity to include everyone. Despite inconsistency in the selection parameters and validated tools, certain parameters were found consistent, which are physical abilities, medical examination, personal interview, and background investigation (Wilson et al., 2010). Looking into the requirements and true representatives in the profession, the Police Reform Act of 2002

was also introduced, which focuses on the safety reassurance of the public and the recruitment process of officers (Johnston, 2006). Among these initiatives of improving the recruitment process, the pre-employment psychological testing was introduced in the early 1900s to predict the psychological suitability for the law enforcement profession. The study had made an attempt to highlight the historical evolution in the pre-employment psychological testing (Table 1) and associated performance prediction (Table 2).

Table 1: Presents the historical development of psychological testing in law enforcement

Year	Major Historical Development in Law Enforcement Pre-Employment Psychological Testing	Key Psychological Test
1916	Intelligence testing was first applied in police selection in California to evaluate cognitive ability among officers (Terman et al., 1917).	Stanford–Binet Intelligence Test
1922	Early large-scale cognitive screening was conducted among military personnel, influencing later police recruitment practices (Thurstone, 1922).	Army Alpha Intelligence Test
1930	Personality assessment techniques were introduced in intelligence and security services to understand motivation and behavioral tendencies (Banks, 1995).	Thematic Apperception Test (TAT)
1950	Projective personality testing began to be used for psychological screening of police officers (Kates, 1950).	Rorschach Inkblot Test
1954	Standardized psychological and psychiatric evaluation procedures were integrated into police recruitment systems (Blau, 1994).	MMPI and clinical interview methods
1967	National policy recommendations emphasized the importance of emotional stability in police officer selection (Ostrov, 1986).	Emotional stability screening protocols

Year	Major Historical Development in Law Enforcement Pre-Employment Psychological Testing	Key Psychological Test
1971	Psychological services were formally integrated into police departments through the appointment of professional psychologists (Weiss & Inwald, 2018).	Organizational psychological assessment services
1976	The first national conference on law enforcement personnel selection highlighted the importance of psychological evaluation (Weiss & Inwald, 2018).	Standardized recruitment assessment frameworks
1978	Federal guidelines mandated that employment tests used in recruitment must demonstrate validity and fairness (Inwald, 1984, 1985).	Validated psychological testing procedures
1980	A structured background and behavioral history questionnaire was introduced to support personnel screening (Weiss & Inwald, 2018).	Law Enforcement Personnel History Questionnaire
1980	A specialized personality assessment was developed specifically to evaluate behavioral tendencies relevant to police performance (Inwald, 1982).	Inwald Personality Inventory (IPI)
1982	Multiple personality assessment instruments began to be widely used in law enforcement recruitment and evaluation.(E. Inwald, 1982; Ostrov, 1986).	MMPI, 16PF, EPPS, CPI, and TAT
1984	Professional bodies established dedicated committees to guide the development of police psychology practices (Weiss & Inwald, 2018)	Institutional guidelines for psychological evaluation
1985	Psychological Fitness for Duty Evaluation (FFDE) procedures were implemented for serving officers.(Weiss & Inwald, 2010).	Fitness for Duty Evaluation (FFDE)

Year	Major Historical Development in Law Enforcement Pre-Employment Psychological Testing	Key Psychological Test
1989	The MMPI underwent a major revision, resulting in the updated MMPI-2 widely used in law enforcement psychological assessment (Butcher, 2001).	MMPI-2
1992	New survey-based tools were developed to measure integrity, anger management, and behavioral tendencies among officers (Inwald & Gebbia, 1992)	Inwald Survey–5
1995	Assessment tools were designed to identify aggression, violence risk, and behavioral concerns among public safety personnel (Inwald, 1995).	Inwald Survey–8; Hilson Safety/Security Risk Inventory
1999–2000	Research validated multiple psychological instruments for law enforcement recruitment, supporting broader adoption of personality and behavioral assessments (Ones et al., 1993; Weiss & Inwald, 2018).	MMPI-2, CPI, IPI-2, integrity and emotional intelligence measures

The historical development of psychological testing presents evidence that the inclusion of personality assessments started in the early 1900s. The early 1900s period was recognized for applying the available assessments: the Thematic Apperception Test, Binet Intelligence Test, in the law enforcement organization. The focus was on testing the suitability of the test in the profession and its findings for further research purposes. The limitations that were noted in this era was the tests applied were only projective and subjective in nature.

The post-World War II era was recognized for applying the personality tests significantly in order to identify suitable candidates in the law enforcement organizations. The application of the fitness for duty tests was also increased among public safety officers, especially in Western countries. In addition to applying the established tests, this era was also focused on developing specific tests for law enforcement officers to test their suitability in the organization.

Simultaneously, the law enforcement organizations were in progress to hire part-time psychologists for assessment and counseling purposes in case of requirement to the hired officers.

The mid-1900s era was recognized for an increase in terms of the application of psychological tests, and the focus was on the development of the projective and non-projective psychological tests that can be applied to select suitable candidates in law enforcement organizations. Parallel to the development of the test, it also faces criticism on the validity, reliability, and generalizability of the developed test. Hence, it can be concluded based on the evidence that it was the very crucial for the implementation of the psychological testing into the law enforcement organizations. A lot of discussion and debates were held at the conference, and the establishment of the scientific authenticity of the tests began in this era.

The late 1900s era was recognized for including the clinical psychologist into the organization as the norms of the psycho-pathological questionnaires (e.g., MMPI) were significantly in use in law enforcement organizations and could only be administered under the supervision of the clinical psychologist to a person having symptoms of personality disorders. Hence, the era has observed the legal constraints and lawsuits of ramifications and enforcement. Which resulted in a major shift from the psycho-pathological test to more job-related behavior tests. Also, the computer-based testing was introduced to limit errors and bias.

Performance Prediction Through Pre-Employment Psychological Testing

The recruitment of law enforcement officers through pre-employment psychological testing always raises questions about the success of performance prediction in later years. The present narrative review presents the perspective of the research findings conducted to test the performance prediction of law enforcement officers.

Positive prediction

A research study was conducted on the under-training cadet administering the MMPI, Nelson-Denny test, Shipley–Hartford, and the motivational Analysis Test. The performance measures were obtained from the training academy. The findings of regression, MANOVA, and Discriminant analysis show that the findings were significantly predictive of the field training performance of the cadets (Mullins & Mains, 1995). Similarly, the undertraining officers from

the University of Alabama Law Enforcement Academy were administered the MMPI and Inwald Personality Inventory (IPI). The findings show that the subjective and objective performance indicators of the academy were related to the subscales of MMPI and IPI. The IPI shows a stronger relationship than the MMPI. The study concluded that the IPI can be useful for the performance prediction and selection of potential law enforcement officers. Although the effect size was found to be modest (Scogin et al., 1995).

Weak or Null Prediction

In contrary, some research studies showed the null or insignificant performance prediction through the pre-employment psychological testing. A study examined 148 recruits in Florida and administered the MMPI and IPI to the newly undertraining candidates. The study concluded that the findings were uncorrelated when compared with the score of the Field Training Officer on the performance parameters (Wright et al., 1990). A recent study was conducted in Australia upon 300 newly recruited police officers, to test the performance prediction through the pre-employment psychological assessment tool, MMPI-2. The findings demonstrate no meaningful association between the Performance Indicators and the MMPI – 2 even after the 7 years of the follow ups. Hence, the researcher concluded that methods should be implemented for the performance prediction of police officers (Marshall et al., 2020).

Study	Sample / Context	Psychological Instruments	Key Findings
(Wright et al., 1990)	148 police recruits undergoing field training in Florida, United States	Minnesota Multiphasic Personality Inventory (MMPI); California Psychological Inventory (CPI)	The analysis revealed no meaningful relationship between personality test scores and recruits' operational performance during field training. The psychological screening measures showed limited ability to predict later job performance among officers.
(Scogin et al., 1995).	69 probationary police officers in the United States	Inwald Personality Inventory (IPI); Minnesota Multiphasic Personality Inventory-2 (MMPI-2)	Some personality scales, particularly within the IPI, demonstrated moderate associations with supervisors' performance evaluations. However, the overall predictive capacity of the psychological assessment battery remained modest and inconsistent.
(Mullins & Mains, 1995)	Police academy cadets in the United States	Nelson-Denny Reading Test; Shipley Institute of Living Scale; MMPI; MAT	Statistical modelling suggested that the combined set of assessments could significantly predict both academy performance and field training outcomes. Despite this, the presence of overlapping predictors prevented the development of a straightforward predictive scoring system.
(Marshall et al., 2020).	Approximately 300 police recruits from an Australian police organization	Minnesota Multiphasic Personality Inventory-2 (MMPI-2) with focus on neuroticism and trauma-related scales	The study did not identify significant associations between pre-employment psychological scores and later mental health outcomes such as psychological injury or work absence. Pre-hire psychological testing was therefore not effective in forecasting future psychological difficulties among officers.

Table 2: The summary of performance prediction through pre-employment testing.

Resilience Training and Performance Enhancement

The current shift of the research trend in the pre-employment psychological testing and performance prediction of law enforcement officers recommends applying more resilience training, stress management, and coping strategies instead of applying psychological tools for performance predictions (McCraty & Atkinson, 2012). It is established that the initial screening alone is not sufficient to predict the later risk and performance. Hence, the law enforcement agencies are focusing on the “Performance enhancement” training programs in the training academies (Arnetz et al., 2009). The performance enhancement training modules includes mental health and well-being program for the officers. In an experimental study, the officers were taught stress management and self-regulation techniques, and the researchers found a significant effect of the training when compared to the control group (McCraty & Atkinson, 2012). In addition, an experimental study concludes that the group of officers completed the “Heart Math.” An app-based training program indicated a 24 – 25 % better score in stress management skill and vitality measures. These kinds of training modules teach the officers to handle the job-related pressure dela with stress and anxiety in an effective way, and ultimately contribute to the job performance enhancement (Weltman et al., 2014).

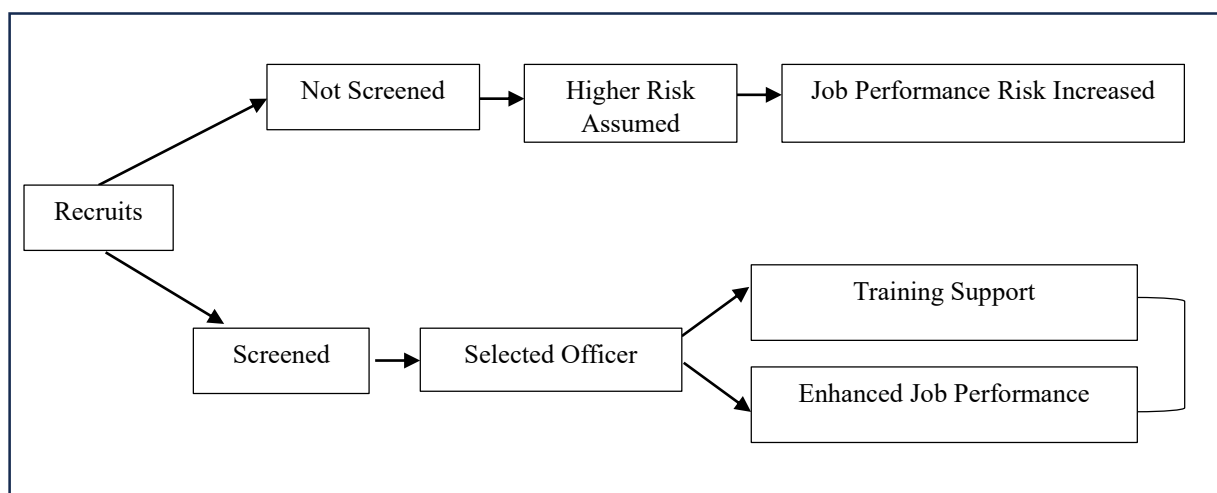


Figure 1: Presentation of pre-employment psychological testing and training support

Discussion

The present study aimed to review the historical development of the concept of pre-employment psychological testing in predicting the job performance of law enforcement

officers. After reviewing the existing literature, it is evident that the pre-employment psychological screening might be helpful to some extent but has limitations. Alone, predicting some traits of personality is not always accurate and not significantly correlated with performance parameters of a large magnitude. Whereas the dynamic test, including job-related parameters and behavioral-related assessment, followed by the resilience and stress management emotion regulation training, had better results in job performance enhancement. Therefore, the law enforcement organizations are now focused more on implementing the training module in the early training of the officers. It also added a perspective that the scientific authenticity of the administered tests is important to establish. The validity of some assessment tools has raised the concern of the generalizability of the findings and does not strongly contribute to the performance prediction of law enforcement officers. The legal and ethical considerations are also important to consider. The implementation of the pre-employment psychological test must comply with the laws; the screening is desirable, but it must navigate the costs, civil rights, and organizational policies. A professional oversight and the standard guidelines are necessary. Since the pre-employment testing is not sufficient to eliminate and identify the performance-related risk, the post recruitment the training on resilience and other important job-related psychological parameters is important. Although the existing literature shows that the focus was on screening, the scope of implementing training modules and establishing their scientific authenticity for generalizability has future scope of work. More research is required globally, including longer follow-ups, to determine the performance enhancement of law enforcement officers.

Conclusion

The evidence of the pre-employment psychological testing in law enforcement officers was traced in the early 1900s and gradually shifted from intelligence testing to structured personality tools. Although the predictive analysis shows mixed results, no single tool was sufficient to predict the job-related performance. The law enforcement organizations shifted to using more dynamic job-related assessment tools rather than depending on personality tools. Although the implementation of the training module of resilience and stress management has shown positive effects on performance enhancement, it is recommended to be part of an overall approach

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