

The project Longitudinal Validation of the Swedish Police Selection

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Longitudinal Validation of the Swedish Police Selection
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The project presented is a longitudinal criterion based validation project where the overall aim is to evaluate the selection methods in the current selection to the basic police training in Sweden. Special focus is on the psychological assessment methods ability to predict the candidate's future performance during four terms at the Police Academy, during six months as a trainee at a Police authority and during their first year as police officers. The project began in 2007 and is expected to end in 2013. In addition to the immediate utility for the Police selection in Sweden the project is expected to make valuable contributions to the Swedish as well as the international selection psychology, especially in the field of Police selection.

Through meta analyses (e.g., Hunter and Schmidt, 1998) the knowledge concerning which selection methods that generally best predicts future performance is well established. Among the methods that have the highest predictive validity are several psychological methods such as structured interviews, aptitude tests and integrity tests. Integrity test is a kind of personality tests mainly designed to predict counterproductive work behaviours, which often is an important consideration in selection.

In Sweden, quality issues in selection have been neglected since the early 1970:s and the number of validation studies has been very limited (Mabon, 2005). Therefore there is a great need to conduct well done validation studies in Sweden.

One of the largest and most ambitious selections in Sweden is the selection to the basic police training at the Police Academy. The National Police Board is responsible for recruitment and selection to the Academy. Since 1997 Swedish Defence Recruitment Agency (1:st of January 2011 the agency changed name from National Service Administration) participates on consultative basis in the selection process. Annually, two rounds of admission with about 7,000 applicants are accomplished. The number of accepted applicants has varied over the years and is now around 600 per year.

The requirements for prospective police officers are multifaceted. Through out the selection process there is also an objective that the accepted applicants should be representative of the population (e.g. gender and background). The selection process includes a variety of selection methods carried out in several stages. The main stages are: 1) Swedish language test and

interview at a local police station (approximately 90-95 % of applicants), 2) physical tests (approximately 35-45%), 3) psychological and medical examination and interview with police at Swedish Defence Recruitment Agency (approximately 14 -20%) and 4) admission decision (approximately 4-12%). Admission decision is a holistic decision based on the entire selection process where the assessment at the Swedish Defence Recruitment Agency is predominant.

Aamodt (2004) has undertaken a comprehensive meta-analysis of police selection research. According to his analysis, common selection methods generally seems to have lower validity when used in a police context than in other contexts. One of the reasons seems too be the difficulty in finding relevant and reliable criteria for police performance. Another and related reason seems to be the multifaceted nature of police work. Aamodt conclude that there is a great need for further research into police selection

An important aspect of police selection is to find unsuitable candidates. To find those candidates, integrity test could be a valuable tool. It would therefore be useful to study the value of integrity tests in relation to primarily the psychological selection procedures in the Swedish police selection i.e. aptitude tests and semi-structured interview. In Sweden integrity test is a relatively new selection method. The test publisher Assessio has developed the Swedish integrity test MINT, which has shown promising results in validation studies, conducted (Sjöberg and Sjöberg, 2007). It should be noted that the integrity test was not part of Aamodt meta-analysis.

It is important that the methods used in police selection are relevant and reliable. Therefore the Swedish police selection has been studied in different ways (Lilie, Rosmark and Knutsson, 2004), but there have not been any traditional criteria validation studies.

In order to enhance the effectiveness of the Swedish police selection, there were several strong reasons to conduct a major criteria based validation project. Therefore the board of the Swedish Defence Recruitment Agency in 2007 decided to carry out the project “Longitudinal Validation of the Swedish Police Selection”, in cooperation with Stockholm University and the National Police Board. The project began in 2007 and is expected to be completed in 2013 (see Figure 1).

The project has two aims: 1) to illuminate how the selection process to the basic police training at the Swedish Police Academy and the police profession works and how the current selection could be improved, and a broader and scientifically more interesting aim, 2) to increase understanding of how the selection methods semi-structured interview, aptitude test and integrity test can complement each other in order to better predict future performance during both education and work. In addition to the immediate utility for the selection to the Swedish Police Academy the project is expected to make valuable contributions to the Swedish as well as the international selection psychology, especially in the field of Police selection.

Responsible for the project at the Swedish Defence Recruitment Agency is Stefan Annell, also PhD student at the Department of Psychology at Stockholm University, Division of Work and Organizational Psychology. The project is Annell PhD-project and is supposed to end with his dissertation 2013. Supervisor is professor Magnus Sverke and assistant professor Anders Sjöberg, both at the Division of Work and Organizational Psychology. Outside advisor is professor emeritus Bertil Mårdberg.

Figure 1. Timetable for the project

2007

- Project start
- Main planning of the project and planning of the collection of selection data

2008

- Collection of selection data (N = 1429)
- Obtaining consent
- Ethical review of data from the selection process

2009

- Planning the collection of criteria data, including a job analysis and development of forms for self-assessment and assessment made by others.

2010

- Ethical review of criteria data
- Spring 2010, data collection from the Police Academy, (N about 760)
- End 2010 - beginning 2011, data collection from field training, (N about 750)

2011

- Analysis of selection data
- Preliminary. 1:st technical report published
- Analysis of criteria data from the Police Academy
- Preliminary. 2:nd technical report published
- End 2011-beginning 2012, data collection after one year of employment (N about 745)

2012

- Analysis of criteria data from field training and after one year of employment
- Preliminary. 3:rd technical report published

2013

- Article accepted in a Nordic journal
- Thesis completed
- End of project

Design and methodology

Participants

The original participant group consists of the 1429 applicants to the Police Academy, tested at the Swedish Defence Recruitment Agency in the spring 2008. Criteria data will be collected for 792 of those applicants who began police training in autumn 2008. Methodologically, the current round has two advantages: it is unusually large and the impact of restriction of range can be assumed to be relatively limited, since acceptance rate in relation to the number tested at Swedish Defence Recruitment Agency was relatively high. At the initial assessment, consent was collected from 95 % of the applicants for a more extensive criteria data collection, and at the same time a general consent providing the ability to collect certain data from the entire study group.

Data

The project includes data from the selection process and criteria data. Data from the selection consists of information from all the selection methods used during the entire selection process and a number of background characteristics, including the integrity test MINT (see Figure 2). Note that MINT-results were not used in the selection process.

Figure 2. Overview of data from the selection process

Data from The National Police Board

- SweSAT (An aptitude test for higher education)
- Applied educations (three traditional educations in Stockholm, Umeå and Växjö and a distance education)
- Language test (Swedish)
- Interview by a police at a local police station
- Assessment of the application documents.
- Physical tests (e.g. running and motor coordination test)
- Police pair interview at the National Service Administration
- Team assessment (a joint assessment by a psychologist and a pair of police interviewers)
- Admission decision

Data from the Swedish Defence Recruitment Agency

- Information about gender and age
- Medical tests (vision, colour vision, hearing, strength) and medical examination by a physician.
- Psychological assessment: An aptitude test deigned to measure general mental ability (g), a computer based biographic questionnaire and a psychological assessment, performed by psychologist based on a semi-structured interview.
- A background form (only used to collect data for the project):
 - Data corresponding to the application documents (e.g. grades and study and work experience)
 - Demographic data relevant the objectives of representativeness (e.g. foreign background, educational level and place of residence)
 - Questions on potentially alternative predictors (e.g. questions about driving and legal punishment)
 - An integrity test, MINT, intended to measure important characteristics for working life (integrity and three of the big five dimensions: stability, agreeableness, conscientiousness)

Police Academy

- Information about which applicants that started training at the Police Academy in autumn 2008

According to Hogg and Wilson (1995) the best measure of police officers job performance is structured supervisor ratings, while objective data, i.e. data from files, mainly is satisfactory to capture the difficulties at work. In the project, criteria data consist of objective data and subjective data in the form of self-assessments and assessments made by others, e.g. teachers, trainee supervisors and immediate superior leaders. In cooperation with the Police Academies and the 21 police authorities in Sweden, forms for self-assessment and assessment of performance made by others were developed especially for the project on the basis of a job analysis. To this part of the project professor Victor Catano from Saint Mary's University provided valuable support and experiences from the Canadian police.

In the project, criteria data will be collected on three occasions: after two years of police training in the spring of 2010, after six months of field training at the end of 2010 and after one year of employment as a police officers at the end of 2011. At each data collection the goal is to get two assessments made by others for each study person. By this routine and by the collection of criteria data at several occasions there will be good opportunities to handle reliability shortcomings and missing data in criteria. The self-assessment form contains measures of performance but also other measures about work environment (e.g. support and work demands) and some alternative criteria (i.e. turnover intention and job satisfaction).

Analysis

Data will be analyzed statistically with different multivariate methods, primarily logistic regression, multiple regression and exploratory and confirmatory factor analysis.

Reporting

The project will be reported in Swedish, in three technical reports and a in an article in a Nordic journal. This work will also form the basis for Annell thesis. After the projected is finished the plan is to publish scientific articles based on data from the project, in English, in international journals in the field.

The plan is that the two first technical reports will be published during 2011. The first based on data from the selection and the second based on criteria data from the Police Academy.

References

- Aamodt, M.G. (2004). *Research in law enforcement selection*. Boca Raton: Brown Walker Press.
- Hogg, A., & Wilson, C. (1995). *Is the psychological screening of police applicants a realistic goal? – The success and failures of psychological screening (Report Series 124)*. Adelaide: National Police Research Unit.
- Lilie, E., Rosmark, B., & Knutsson, A. (2004). *Att följa upp poliser! – En sammanfattning av Pliktverkets polisuppföljningsprojekt*. Karlstad: Pliktverkets rapportserie, rapport nr 14. (In Swedish)
- Mabon, H. (2005). *Arbetspsykologisk testning – om urvalsmetoder i arbetslivet. (2:a reviderad upplagan)*. Stockholm: Psykologiförlaget. (In Swedish)
- Schmidt, F.L., & Hunter, J.E. (1998). The validity and utility of selection methods in personal psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin*, 124, 262-274.
- Sjöberg, S., & Sjöberg, A. (2007). *Measuring integrity, manual svensk version*. Stockholm: Assessio.

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