

What is the value of education? Measuring the impact of the AIPM graduate programs in public safety leadership

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We undertook research to assess the impact of the AIPM graduate programs. Measures of leadership behaviour were taken one year apart, before and after attending an AIPM graduate program. Findings show that the programs had a significant impact on skills in line with the leadership capability framework. This was translated into a return on investment calculation, which demonstrated an immediate organisational return of 164% to sponsoring jurisdictions for sending their employees on these courses. Longitudinal qualitative data suggested, however, that the impact of the graduate program may last much longer than the one year duration of this current research, and when married with workplace learning may be exponential. If the impact of the graduate programs stayed constant for the rest of an individual's career (typically another 13 years after completing their graduate program), then a return on investment of 3326% could be expected. To put a dollar figure on this, this is a return of \$369,751.40, per person, across 13 years, for an upfront investment of \$11,117.

INTRODUCTION

There is considerable anecdotal evidence (e.g. through formal and informal feedback processes at the AIPM) to suggest that the AIPM's graduate certificate and graduate diploma courses are well received by participants, and valued by sponsoring jurisdictions, although the programs have never been formally evaluated for their impact on leaders' behaviour, and the flow-on benefits to organisations.

This is not unusual and there is a dearth of literature available that robustly evaluates the impact of police leadership development (Pearson-Goff and Herrington, 2013; Neyroud, 2010; Kodz and Campbell, 2010). To fill this gap in understanding the AIPM undertook an impact evaluation. This document summarises the evaluation.

METHODOLOGY

A mixed-methods approach was adopted and qualitative and quantitative data were collected from a range of sources including:

- enrolled program participants
- participants' managers
- former students, and
- jurisdictional stakeholders

Leadership was conceptualised using the Police Leadership Capability Framework – a series of behavioural indicators of leadership that had been agreed by the police commissioners of Australia and

The AIPM offers two graduate-level leader development programs: a Graduate Certificate in Applied Management, and a Graduate Diploma in Executive Leadership. These programs are nested (one precedes the other), and are offered to police and emergency service personnel at the inspector rank or equivalent for the Graduate Certificate, and at the superintendent rank or equivalent for the Graduate Diploma.

The graduate certificate is comprised of four subjects. Two are offered through distance learning, and two are offered face-to-face. The graduate diploma comprises eight subjects, the four aforementioned graduate certificate subjects and four additional subjects. Of these additional four, three are offered via distance learning and one face-to-face.

New Zealand as part of the Australian and New Zealand Police Leadership Strategy in 2010 (Victoria Police, 2010). This framework borrows heavily from the Australian Public Service Commission's Senior Executive Leadership Capability Framework (n.d.) and organises leadership behaviour along six domains:

- Shapes strategic direction
- Achieves results
- Builds and manages relationships
- Communicates with influence
- Personal drive and integrity, and
- Policing skills

Under each of these domains there are a range of behavioural descriptors articulating expectations at each rank. For example, under the *shapes strategic direction* domain is the behaviour descriptor “Considers a broad range of options, their implications and ramifications”. Whilst under the *communicates with influence* domain is the behavioural descriptor “Uses communication to motivate and inspire others to action”. This framework forms a clear indication of the commissioners’ collective expectations of the actions of senior leadership in their organisations, and it is therefore a pivotal framework for assessing the impact that the AIPM graduate programs have¹.

We used this capability framework as the basis for developing a questionnaire to ask course participants about their self-reported leadership behaviour. We developed sets of questions to cover the domains, and arranged these questions along a five-point Likert scale. Participants were asked to rate their response from strongly agree to strongly disagree. Questions within each group were designed to be scaled (i.e. summed) to produce an aggregate score for each domain. A series of statistical tests (Cronbach’s α) showed

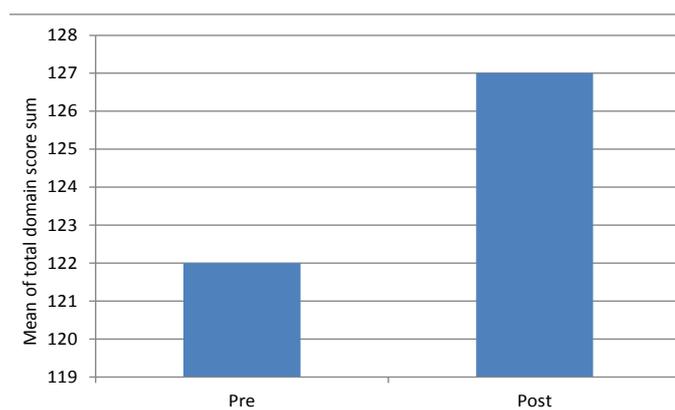


Figure 1: Leadership Capability Framework Domain Score - Pre-Post Comparison

that this was appropriate for the first five domains, but we chose to analyse the data around ‘policing skills’ separately (see full report for further details).

We surveyed all participants on AIPM graduate certificate and graduate diploma courses between March 2012 and November 2013 before they started their course, and three months after the completion of their enrolment. These two data collection points are referred to as time 1 (T1 – pre) and time 2 (T2 – post). In

practice T1 and T2 were about a year apart. We had a response rate of 34%, which is par for the course in this type of research (e.g. Herrington and Pope, 2013), and equated to 70 matched pairs. We also interviewed 30



former AIPM graduate program participants who had completed their studies in 2010 and 2011. The purpose of these interviews was to assess, qualitatively and longitudinally, the impact of the AIPM’s programs on behaviour and workplace practices. These interviews also allowed insight into how individual learning and associated behaviour changes translated into organisational outcomes and capacity. We also interviewed the managers of participants who had completed both our pre- and post- surveys to triangulate self-report data from participants themselves. Collecting these data necessitated a complex administrative task and multiple opportunities for attrition, and we were only able to match nine managers with nine participants in the end. This means that this group can only be regarded as a convenience sample and as such findings may not be generalizable across the sample. Finally we interviewed twelve jurisdictional stakeholders (typically at the assistant commissioner level), drawn from eight of the nine police stakeholder jurisdictions. This allowed an organisational-eye-view of impact and the perceived organisational benefit from this.

FINDINGS

When asked at T2 (three months after the end of their graduate program) most participants confirmed that they had consciously made changes to their leadership behaviour as a result of the course, largely around building and managing better relationships (including better supporting and empowering their staff, and developing others), and a commitment to engage more fully in self reflection. That is not to say that such changes had been smooth sailing, and the vast majority noted that they had faced some difficulties, most frequently around being able to carve out time to practice their leadership actively.

A series of statistical tests showed that participants’ self-reported behaviour was more in line with the expectations of the leadership capability framework at T2, than at T1.

In other words there had been a significant improvement in self-reported leadership following the program.

This was corroborated by managers' assessments, suggesting that leadership behaviour was observable in the workplace and that self-reported behaviour was not an overly optimistic inflation of reality. In fact, whilst the analysis showed that in most domains managers' perceptions agreed with participants' self-reported behaviour, in two domains - achieves results, and personal drive and integrity - managers had a higher opinion of individuals.

There were notable benefits for one's operational work (which we could loosely define as characterising the 'policing skills' or 'industry relevant skills' domain) following the course. Whilst operational activity is not the focus of the AIPM's graduate programs, the operational context is clearly embedded within the programs' learning outcomes (see full report for a curriculum analysis).

Accordingly, participants noted significant gains in their confidence about their tactical and operational skills at T2; their effectiveness at making operational



decisions at T2; and their abilities in coordinating complex events. And importantly, given the focus of the AIPM programs around exercising one's use of leadership rather than simple rank authority, participants reported a statistically significant shift in this regard too, and at T2 there was a reduction in self-reported behaviour associated with use of simple authority.

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Not all participants enrolled in AIPM graduate programs complete their studies, which raises the question of whether a positive impact can be achieved through partial completion of the course. An assessment of the impact of the program for those who completed the full program (both the distance education and face to face elements), and those who did not (completing only the face to face elements) found

that completers fared significantly better in the shapes strategic direction domain. This underscores the importance of participants completing all elements of the course if they are to maximise their leadership development across all aspects of the capability framework.

Longer term impact in the workplace

We assessed the longitudinal impact of the program through interviews with former students. Of this group six (out of 30) had been promoted since finishing their



graduate course, and eight had acted at higher levels. For some, the impact of the program had been profound:

"It wasn't just a script or a set of proscriptions that I got out of the graduate diploma, but a whole way of policing. The self-reflection was good...and the course was life changing, because I learnt to open up to myself."

Ongoing self-awareness was an oft-cited outcome from the graduate programs, as was changing one's relationship with one's colleagues, which was thought to have benefits for the organisation not only in terms of individual wellbeing, but also in terms of the team dynamics of the group for whom the participant was responsible. Morale, productivity, sick leave, and generally having people turn up to work who wanted to be there were attributed by former participants to their changed leadership as the result of their studies. By being more reflective, participants felt in a better position to communicate with their staff, and as such had a better chance of dealing with issues that could become troublesome.

Other longer term outcomes from the graduate programs included the development of organisational strategies, development of stakeholder and partnership operating procedures, and the implementation of new policies. All of which had considerable flow on benefits for the organisation. Moreover, some interviewees suggested that the impact of the programs increased over time, and that there was a compound effect, leading to exponential improvements in leadership over the medium-long term. It takes at least ten years, or 10,000 hours

of dedicated practice to become an expert in a given field (Day et al., 2013), and as such there is logic that

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one's leadership would get better over time and as such that the impact of a program would increase rather than decrease with an opportunity for practice. Of course some participants may have difficulty implementing the personal and behavioural changes they would like in their workplace. Others may question whether leadership is really the right road for them and/or leave their organisation altogether. And still others may forget new ways of doing things and revert to old habits. It is difficult to reliably estimate the longer term impact of the graduate programs without repeating this research (specifically the questionnaire administered at T1 and T2) at regular intervals over the next 10-15 years. This would require a significant investment by all involved. Nonetheless, in the absence of such research the qualitative data hints that the impact of the AIPM graduate programs could last, and even increase, over time.

Return on Investment

Calculating an organisational return on investment (ROI) from leadership development is notoriously diffi-



cult. It is very difficult to quantify, in a dollar figure, the impact that a change in leadership behaviour has on an organisational bottom line. Particularly in policing and emergency services where operational activity is not measured in dollar terms in the first place. Nonetheless, return on investment is seductive for those facing difficult budgetary decisions, and as such people have dedicated time and effort to coming up with a workable formula (Philips and Philips, 2007). We applied one widely used formula to the AIPM graduate programs using the findings from this research (Avolio et al., 2010; Cascio and Broudeau, 2011). Of course all ROI calculations are

imbued with a range of assumptions, and readers are advised to consult the full report for an overview of these².

We calculated that if the impact of the program on participants' changes in behaviour last for just one year, the return on investment to a jurisdiction is 164%. Of course the qualitative data noted above suggests that the impact of the AIPM graduate programs lasts for longer than a year, and may last for the remainder of a participants' career, which tends to be 13 years after they have left the AIPM. The ROI across 13 years is 3326%. If we were to put a dollar figure on this, we base it on the average price to police jurisdictions of enrolling a member in the graduate certificate or graduate diploma. This is \$11,117³. If the ROI is 164% the dollar return would be \$18,231 per participant in one year. If the ROI was 3326% the dollar return to the organisation would be \$369,751.40, per person over 13 years. That is a good return for a very modest up front cost.

Of course, the actual duration of the training effect is unknown, and may lie anywhere between one and 13 years, or it may last 13 years but diminish in magnitude over time, or it may even increase over time due to a compound effect. Comprehensive longitudinal research - using the same pre-post measures - is needed to assess this. Nonetheless the return on investment calculations provided here, outline the potential scale of return from leadership development. And in actual fact there is a strong case to be made that these estimates are on the conservative side: There are numerous flow-on, trickle-down and compound improvements that are not effectively captured here.

CONCLUSION

This research represents a methodologically robust evaluation of the AIPM's graduate programs, draw-

There is a strong case to be made that these estimates are on the conservative side: There are numerous flow-on, trickle-down and compound improvements that are not effectively captured here.

ing on multiple sources of data. Findings indicate that these programs have a significant impact on leadership behaviour in line with the expectations of sponsoring organisations. Whether this impact is sustained over the long term is not yet known, although there is some evidence that it is, and may even develop further. The financial implication for organisations considering whether to enrol their leaders in one of these graduate

programs is dwarfed by the return on this investment over the long term. This coupled with the ongoing debate about the professionalization of the police and emergency services should be a compelling argument in favour of these programs for those tasked with ensuring the leadership development of employees. There is certainly a need for further research on police leadership development, and a need to develop more comprehensive measures of leadership impact. This evaluation is, to the best of our knowledge, the first methodologically rigorous evaluation of public safety leadership development in the world, and as such provides a good staging post for future research in this area.

REFERENCES

Australian Public Service Commission (n.d.). *Senior Executive Leadership Capability Framework*. Available at http://www.apsc.gov.au/data/assets/pdf_file/0006/4020/framework.pdf. Accessed 18th December 2013.

Avolio, B., Avery, J. and Quisenberry, D. (2010). Estimating return on leadership development investment. *The Leadership Quarterly*, 21, 633-644.

Cascio, W. and Boudreau, J. (2011). *Investing in people: financial impact of human resources initiatives*. New Jersey: Pearson Education Inc.

Day, D., Fleenor, J., Atwater, L., Sturm, R. and McKee, R. (2013). *Advances in leader and leadership development: A review of 25 years of research and theory*. *The Leadership Quarterly*, <http://dx.doi.org/10.1016/j.leaqua.2013.11.004>.

Herrington, V. and Pope, R. (2013). *The impact of police training in mental health: an example from Australia*. *Policing and Society*, <http://www.tandfonline.com/doi/abs/10.1080/10439463.2013.784287>.

Kodz, J., and Campbell, I. (2010). *What works in leadership development? A rapid evidence review*. London: National Policing Improvement Agency.

Neyroud, P. (2010). *Review of police leadership and training*. London: Home Office.

Pearson-Goff, M. and Herrington, V. (2013). *Police leaders and leadership development: A systematic literature review*. Sydney: AIPM. <http://www.aipm.gov.au/wp-content/uploads/2012/09/Police-leaders-and-leadership-development-A-systematic-review.pdf>

Phillips, J. and Phillips, P. (2007). *Measuring return on investment in leadership development*. In K. Hannum, J. Martineau, and C. Reinelt. *The handbook of leadership development evaluation*. San Francisco: Wiley and sons.

Victoria Police (2010). *Australian and New Zealand Police Leadership Strategy*. Project Document. Melbourne: Victoria Police.

Endnotes

1 The Australian and New Zealand Police Advisory Agency (ANZPAA) is currently developing a professionalization strate-

gy, in which they are developing an agreed set of practice standards for performance at each rank. This work is ongoing, and not publically available, although draft *Training and Education Guidelines for police manager and police executive* suggests that it reflects closely the *Police Leadership Capability Framework*.

2 In basic terms all return on investment formulas set out to subtract the costs of the program from the benefits. In leadership development in particular, the main points of contention revolve around how one conceptualises these two values, what data is relied on to reach these values, and what assumptions are contained therein. Moreover, the scope of these measures is necessarily limited to evaluating interventions within a set of simplifying assumptions and as such can only ever provide a partial picture of the value of the program.

3 This figure is relevant only for Australian and New Zealand police. It has been calculated by summing the annual police jurisdictional contributions to the AIPM, with the (discounted) tuition fees for this group, and dividing this number by the minimum participant commitment identified by the jurisdictions for 2014. One figure is presented for both the graduate certificate and the graduate diploma, although in reality the graduate diploma costs more (because it involves eight rather than four subjects). This has been done for parsimony and the resulting calculation can therefore be regarded as a guide only. Non-police and international organisations are catered for differently in the AIPM pricing model.

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The full version of the Report can be downloaded here: <http://tinyurl.com/kth3nez>



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