

Adapting Elite Sport Mindset Techniques for Senior Leadership Development: A Four-Month Online Program Evaluation

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Abstract

An innovative, integrated learning program focused on building more effective mindset skills and modelled on methods and concepts used in elite sports was examined to determine its impact on the performance of a sample of 20 senior leaders in 2 global organisations. The participants took part in a four-month-long online learning experience set in a unique virtual environment. This learning environment was engineered to help participants develop the skills to adopt a “high-performance” mindset. Both qualitative and quantitative assessment tools were employed to measure participants’ performance before, during, and after their virtual learning experience. On completion, participants and leaders reported that the integrated mindset training improved work and home environments (a 10% average improvement in performance was identified). Surveys comprising four different metrics, namely the Individual Workplace Questionnaire (IWPQ), the Emotional Agility and Leadership Measure (EARL), the Behavioral Inhibition System and Behavioural Activation System scales (BIS/BAS), and the Integrated Mindset Index. Plus, two different sentiment analysis results using IBM Watson and Harvard General Inquirer, which also showed a positive trend. The Integrated Mindset Index was a new assessment index built to review individual progress and reviewed by elite sporting coaches from six sporting codes and the organisations’ leaders. The study sets a precedent for the use of integrated mindset learning in organisational development strategies. This research study sheds light on how you can take the learning methodologies used in elite sports and adapt them to the world of executive education. It also confirms the vital importance of nurturing a growth-oriented mindset in business leaders if they are to perform at peak levels and lead their teams effectively. The program is now being rolled out into a number of other organisations.

Keywords

Mindset, Performance Improvement, Business, Elite Sports, Learning Program

1. Introduction

The research program aims to take techniques developed and often used in elite sport and teach and apply these in business organisations. The techniques have been well documented in the research and also applied professionally in elite sports settings, including domestic cup and title-winning teams, an international team successfully preparing and competing in a FIFA World Cup, as well as several groups of Olympians.

Several aspects were important in the program's focus: the inclusion and application of positive and growth mindset principles typically utilised in elite sport; content built using a virtual reality environment with short multimedia elements, making participant understanding easy as well as making the time taken, shorter; consideration given to the environmental context that contributes to uptake and effectiveness, including genuine leader commitment to support the program, suitable timeframes for involvement and completion of tasks, use of organization communication processes and time available reflective practice and feedback.

Several measures were used as predictors of productivity, performance, and well-being. These included references to sickness and absenteeism, staff turnover, promotion, and exceeding goal achievement. Each provided further evidence of the integrated mindset learning program's impact.

2. Background and Rationale

The Integrated Mindset Learning research program was established to transfer and test mindset practices from elite sport into the business environment. Could such activities help managers in the current business environment? In developing the program, attention was focused on activities such as mindset mastery, reflective practice, and resilience activities. These would be delivered using digital tools, taking account of professional scheduling constraints. Aligning elite sport mental conditioning with business skill needs raises a key question on how and whether training can ensure continuing retention and delivery of any performance gains seen.

There is further justification for this in the existing literature, which links workplace burnout and lower engagement due to significant economic effects: it has been suggested that about USD 322 billion in lost economic value worldwide annually, from employee turnover and decreased productivity [1]. If mindset training supports both resilience and sustained motivation, then organisational benefits will outweigh just culture change. This link between personal development

and economic performance suggests the need to support investment in programs that target emotional agility, the building of an integrated mindset, adaptability, and resilience among leaders.

The analysis of language sentiment added greater depth to this research, not previously seen. This analysis helped uncover participant micro changes by way of attitudinal tone, which would demonstrate positive attitudes towards aspects such as collaboration. Something not explicitly highlighted in the numerical scores emerging from surveys. Analytically, commitment to the program occurred when participants explicitly noticed behavioural changes that impacted both work performance and important personal needs, often outside the workplace. This is consistent with observations from sport, which identify intrinsic enjoyment and perceived opportunity [2].

3. Methodology

3.1. Program Design

The program was created as a four-month online program in a tailored virtual world, combined with regular assessment to identify changes in participants' performance. The program was built using human-centred principles and the AGES learning pedagogy to foster effective skills development. The AGES pedagogy was developed in 2010 by Lila Davachi, currently Professor of Psychology at Columbia University, and colleagues. AGES provides a four-stage model that is a contemporary platform for building lasting learning, taking into account the latest neuroscience research about how we learn and how to optimize memory. The model stands for: Awareness; Generation; Emotion; Spacing. "With just the right amount of attention, generation, emotion, and spacing, learners intensely activate their hippocampus." Also, "varying learning techniques provides additional novelty that can help raise dopamine levels to keep the learner's attention in the learning environment" [3] [4].

Making the program content experiential and self-paced was identified as important for time-poor professionals. This could also demonstrate that online learning can challenge the traditional belief that face-to-face workplace training delivers more effective outcomes. Polaris Research has predicted high rates of growth in online learning, with an annual growth rate of 20.5% from 2022 to 2030. This confirms the long-term viability of online-based learning [5]. The program sample consisted of 20 senior leaders from two global organisations. This small group was important to the research, as it enabled a deeper analysis of behaviour shifts in the four-month period than what would be possible with a larger group. The study structure also helped test the effectiveness of fast-tracking learning in the working environment, where success is also measured in shorter time frames [6] [7]. Not quite as short as elite sport but still shorter than the past. Organisations are also now facing greater workload pressure [8].

Content was built via insights from numerous scientific studies and constructed into seven chapters of learning materials.

The Seven Chapters of the Integrated Mindset Learning Program:

- 1) Introduction to growth mindset and positive emotion
- 2) The roots of the growth mindset & the cultivation of positive emotion and positive mindset
- 3) Who are you? The good, the bad, the ugly & the indifferent
- 4) Improvement insights
- 5) Growth & positive emotion tools
- 6) Growth mindset and positive athlete reflections
- 7) Performance improvement mindset program

The principles of reinforcement, reflection, and repetition were highlighted both implicitly and explicitly in the delivery of the learning. These principles have proven critical in achieving an integrated mindset in world-class athletes. Reinforcement” through bite-sized content segments linked with reflection and repetition, delivered as messages integrated in the learning content, communication with participants, both orally and electronically. Structuring activities in a tailored virtual environment also offered asynchronous engagement, increasing accessibility and giving participants full independence to track their own development.

3.2. Participant Sample

The program sample consisted of 20 senior leaders from two global organisations. This small group was important to the research, as it enabled a deeper analysis of behaviour shifts in the four-month period than what would be possible with a larger group.

The sample of 20 senior leaders from two global companies also created a controlled comparability element, as the organisations were based in different industries. The pressures experienced by the participants in these organisations resembled, to a degree, competition, not dissimilar to an elite sport context. This provided real grounds for using sports-based strategies; leaders who experience the stress and challenges of business life may benefit from strategies that have already been validated in scientific research and in the sports setting.

The two organisations were in different sectors, and the sample of participants was also in diverse roles, therefore providing a wide variety of applications for the future. This enabled the comparison of the programme irrespective of role, seniority, and responsibilities. Workload pressures were relatively high across the board. Somewhat paralleling the usual environment of elite sport, the context of these pressures varied by organisation. One organisation experienced reasonable stability, despite being globally acquired during the research program, while the other faced complex, globally changing regulatory demands and the simultaneous task of acquiring and restructuring. Such environmental distinctions represented a test for the learning program’s flexibility.

3.3. Data Collection Approaches

The collection methods took into account the main themes that emerged from the

research, such as emotional agility, growth mindset, decision making, resilience, continuous learning, and intrinsic motivation; the busy schedules of the participants, plus building a long-term framework for the learning program. Central to this was taking a mixed-methods approach, including gathering both qualitative and quantitative data. This included capturing not only changes in competencies and emotions, but also the rich story of how management and leadership behaviours shifted over time.

Baseline measures were key to assessing any shifts, as were regular measurements throughout the research program. Participants underwent multifaceted assessments using newly developed metrics such as the EARL measure (Emotional Agility, Resilience, Leadership) [9] and the well-regarded IWPQ questionnaire (Individual Workplace Questionnaire) [10] and (Behavioural Inhibition System and Behavioural Activation System) [11] [12], highlighting such aspects as emotional intelligence (integration, emotional intelligence adaptability in communication, as well as performance-related alignment to organisational goals. Data was captured at an individual level, including well-being data, physical and mental self-care behaviours, and the level of engagement of participants.

Measurements were completed prior to the four-month program commencing, using surveys with targeted instruments and structured questionnaires for each participant. This data collection was directed by the literature on both elite-level sporting participation and the workplace, with the focus being to identify subtle changes in mindset and performance. The analysis comprised measures on aspects such as integrated mindset assessments, well-being indicators, and communication adaptability. These were chosen based on considerations such as ease of access for participants, ease of use, validation against historical data from similar populations, and cost-effectiveness. Replication for future groups without imposing a major logistical burden was an important factor [13].

The same timing was maintained across the various data capture elements. All surveys took approximately 1 hour per participant per month and were scheduled around interview schedules to minimise disruption. Regular contacts were maintained with the organisation's administrative staff, participants, and leaders to follow change trajectories.

The organisation's environmental context and performance expectations were also captured in leader interviews, which were also undertaken at the beginning of the research, every month during the research, and on completion. These helped to provide additional benchmarks for measuring change and progress.

The monthly video interviews (each lasting approximately 1 hour) were a central part of the research. The live video interviews were undertaken and recorded with all participants of both companies, capturing any behavioral changes that occurred. They also provided a mechanism for clarifying specific aspects of the learning program. As the interviews progressed, feedback confirmed that the interviews were significant in motivating participants to keep on track.

Each session was guided by a structured behavioural interviewing framework

identified in the research and supported by the researcher's expertise [14]-[16].

Whilst the interview structure enabled comparisons at different points in time, the interviewer/researcher also ensured flexibility to deal with emerging topics as they arose. Participant feedback in the post-research survey confirmed this was particularly valuable, helping them to deepen their understanding and application of mindset techniques.

A new practical index was created (Integrated Mindset Index) comprising twelve competencies, developed from a detailed review of the research, elite sports mindset coaching, and connected to the learning content. This included many works, including: Ballard, Dewey, Dutta, Dweck, Goleman, Gould, Kang, Lam, Pentland, Peters, Rogers, and Siegel [17]-[28]. The index aimed to capture changes in participants' mindsets through the behavioural interview program and provide a platform for mindset maintenance, both individual-based or in a coach setting. This index was then used to construct a numerical assessment of the changes in the participant interview program (**Table 1**).

Table 1. The twelve elements of the integrated mindset index.

Self-Awareness
Self-Management
Empathy
Social Skills/Communication
Motivation
Learning and Development
Resilience
Health, Well-Being, and Balance
Reflection and Feedback
Growth Mindset
Leadership Moments
Decision-Making Prioritisation and Time Management

The review, testing, and validation of the draft index were undertaken by coaches in six elite sporting codes prior to being used. The coaches included world champions and former Olympians. They covered a wide range of expertise in soccer, basketball, hockey, cricket, rugby league, and cycling.

The coaches were provided with an overview of the research, including hypotheses, structure, and methods. Specifically, they were asked to review the Integrate Mindset Index, assess the twelve elements that had emerged from the comprehensive research review, and consider their relevance and practical applicability in their own elite sport environments. They were also asked to assign a weight to each

of the elements according to significance.

An additional analysis of the interviews was undertaken using sentiment analysis: identifying changes in the use of positive, negative, and neutral language. Analysing tone behaviours, e.g., the level of optimism towards team engagement, which increased following collaborative modules, would allow the researcher to determine whether changes in attitudes corresponded with changes in reported skill acquisition. Several papers helped in constructing this, as well as work undertaken by the researcher in elite soccer to identify an effective program of work using sentiment analysis [29]-[31]. Sentiment analysis software using IBM Watson and the researcher's own "playercomms" AI program, linked to a lexicon General Harvard Inquirer based on natural language processing, was particularly important for this issue, as it minimised its dependence on subjective coding [32] [33].

A consolidated results table was developed to integrate each measurement stream, both qualitative and quantitative, together with a scale to determine a positive, neutral, or negative shift seen in each measure. This consolidated results table is provided in the results section below.

At the end of the four-month program, a 32-question post-research survey was provided to each participant. Each question was constructed as a 5-point Likert scale, plus a free-form text response available for each question. The questions were directly linked to the main elements of the research, including overall program structure, learning program and content, individual changes in behaviour, individual improvements, and levels of performance identified. Prior to the delivery of the survey, input from participants' leaders was obtained, ensuring a practical connection back to the organisation. All participants completed the survey in full.

As time in the program progressed, participants became capable of self-assessing using the learning tools. For example, some participants performed well on decision-making but poorly on collaboration. Recognising these differences allowed the researcher to highlight specific program components to the participants individually (all of whom were non-identifiable in name and role), including sections designed to address particular gaps, without altering the program's structural elements.

One important detail was that all participants demonstrated full commitment over the four months by undertaking all interviews and completing the surveys in accordance with the designed format and timeframe. The engagement commitment was also monitored with data on the number of learning program visits and time captured.

Subcategories such as "significant progress" (*i.e.*, at least one significant online engagement per week) were useful for determining whether observed behavioural changes were linked to active, sustained engagement in the program.

Conclusively, adherence rates indicated that participants perceived the program to be relevant. Also acknowledged in post survey responses and helped by

clear organisational and leadership support.

Monthly reflective interviews played a more than evaluative function; they functioned as a motivational source for sustained participation. Participants acknowledged that they felt the interviews served as accountability checkpoints, helping them persevere in spending time learning, often despite conflicting workplace priorities. This finding suggests that the human-centred approach to building the learning program was important in maintaining momentum.

4. Results

Tracking participants' performance over four months confirmed a positive change in mindset using both the quantitative and qualitative measures. As one example, indicators for the Integrated Mindset Index scores calculated from the interview program indicated that the average percentage improvement across all participants was approximately 40% over the four-month period. A review of the interviews using the IMI showed that one group achieved a higher percentage improvement in mindset than the other. (44% and 33%) This difference may show the impact the business environment can have on an individual's ability and level of mindset learning. **Figure 1** provides a summary of the percentage change in mindset using the Integrated Mindset Index.

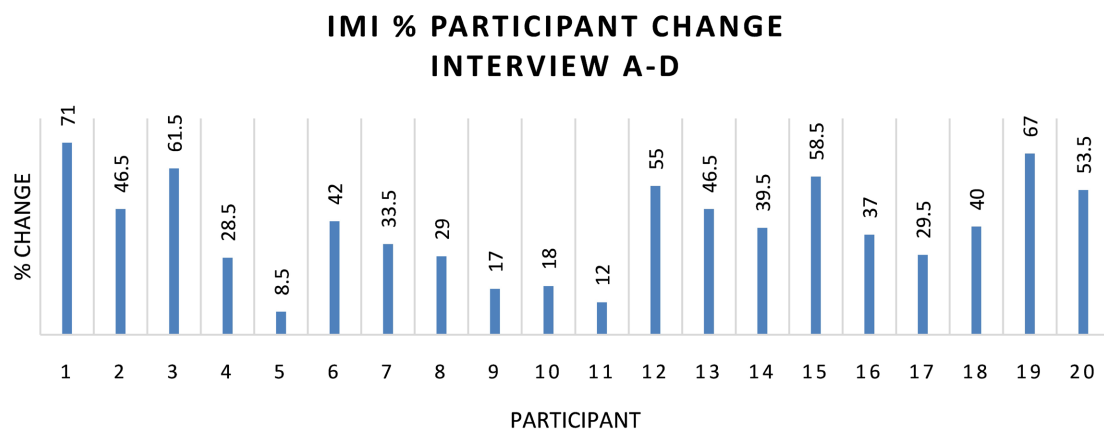


Figure 1. Integrated mindset index % change by participant.

Sentiment analysis confirmed similar findings, too. In some instances, improved positivity coincided with the application by participants of resilience strategies learnt from the program content. Analysing monthly interview transcripts for language changes showed more assertive and solution-oriented narratives and reduced conflict-avoidant narratives over time. This showed that participants' knowledge acquisition and changing attitudes were occurring in response to personal challenges.

Throughout the interview program, an emerging pattern was observed with participants more willing to take on more challenging work with growing confidence in applying the lessons learnt. Some participants noticed themselves apply-

ing new mindset strategies. Many commented on having a better understanding due to the way the content was delivered.

This suggests skill transfer took place and was applied under pressure, similar to elite sport contexts, and is in keeping with the intended design rationale.

Participants also indicated that they found the interviews significant in maintaining commitment to the program and beyond. In the final post-research survey, 85% reported that interviews made them feel more responsible for making changes. This demonstrates an important factor in ensuring success in delivering learning programs. Structural factors beyond curriculum content can affect participants' engagement.

In reviewing changes in mindset, there was a positive shift experienced by the majority of participants. Such things as being more adaptable under pressure, active listening, demonstrating more empathy, and being kinder to colleagues and to themselves saw large improvements. However, not all competency changes demonstrated dramatic improvement. Changes in communication adaptability were seen in 9 out of 20 participants, but typically, communication improvements should take longer because habits can be entrenched, and reframing learning in communication can take a long time [34]. Well-being indicators were slightly better in both groups of participants, together with a reduction in self-reported burn-out symptoms.

The decision to track communication sentiment through the participant interviews may have helped these outcomes. Participants saw these conversations as important to ensure their accountability in implementing their learning in everyday life. In particular, they saw the link between learning and achieving professional goals. An important parallel with elite sportspeople. Similarly, the monthly surveys also turned into reflective moments and motivational reinforcement rather than passive data-gathering. This was a regular observation by participants and stakeholders alike.

Similar patterns were also observed in the quantitative data captured. Both groups improved their overall mindset scores. Group A achieved higher levels of improvement across the board, although when comparing each work environment, Group B was experiencing more turbulence at the organisational level. In Group B, three individuals appeared to find the environment particularly challenging, and this played out with their resilience scores slightly dipping in the timeframe. (EARL; BIS/BAS; IWPQ surveys) Leaders from both groups were not surprised by these results, suggesting that those who did experience a dip would have been struggling more without the program. Furthermore, the results would likely have been lower for many others in the group without access to the program. So, in other words, the program stabilised and enhanced the mindset during a very challenging work period (NB. During the program timeline, both organisations agreed not to deliver any other training interventions).

Participant post-program surveys reflected key learning. Changes in adaptive decision-making, more effective collaboration, and a greater willingness to "go the

extra mile” were highlighted in particular. So too was achieving a better balance in work-life.

Table 2 provides some of the key changes observed through self-reflection post-implementation. Similar changes were also reported by the participants’ leaders separately.

Table 2. Number of participants shifting to positive responses—top ranking.

Rank	Question	Number of Participants Shifting to +IVE Responses (N = 20)
1	When I see an injustice, I speak up	10
2	I find it hard to prioritise and get distracted easily	9
2	I tend to dwell on things that go wrong	9
4	I don’t take time out regularly to reflect on life	8
4	I try to communicate honestly and openly	8
6	I don’t eat well, rest and keep healthy	7
6	I naturally help people who are struggling	7
6	I live for today and plan for tomorrow	7
6	I’m known for telling good stories	7

The compelling aspect of the research demonstrated that performance improvement results were achieved in just four months. In the post-research survey, participants were asked how a set of practical improvements presented in the learning program and referenced in many of the interviews had impacted their performance in terms of percentage improvement. The practical improvements included rest, communication, emotional intelligence, and the use of devices. The average across the participants was 10% freeing up 4 hours a week. Thirty per cent considered the improvement and freed up time to be over 15%. All participants confirmed some improvement in performance. Also relevant was the fact that the majority of the participants were applying their newfound learning long after the program had been completed.

No detrimental effects on financial performance for the companies were reported. In fact, both groups achieved organisational and personal goals in the time period, with no staff turnover or sickness/absence. The program appears to provide a solution for long-term capability-building of participants. Differences between the groups do, however, raise questions about rolling out such a program without a review of the environment and individual change readiness.

Table 3 was created to assist in comparing individual participant outcomes from each analytical tool from the baseline survey/interview to the final survey/interview. Outcomes were logged as follows: ** = highly positive, * = positive, 0 = neutral/negative, and 00 = most negative.

Table 3. Comparison of participant outcomes derived from each analytical tool.

	IWPQ	BIS/BAS	EARL	IMI	SENTIMENT	LEADER	COMMITMENT	OVERALL
A								
1	**	0	*	**	0	**	**	**
2	00	0	*	*	00	**	*	*
3	**	*	*	**	**	*	**	**
4	**	*	*	**	**	**	*	**
5	**	0	**	**	0	**	**	**
6	**	0	**	**	0	*	**	**
7	*	0	*	**	**	*	**	*
8	0	0	**	*	00	0	0	0
9	*	*	*	**	**	**	**	**
10	**	0	**	0	*	00	**	*
B								
1	**	*	0	0	0	0	0	0
2	**	*	0	**	0	0	**	*
3	0	0	*	*	*	*	0	*
4	0	*	*	*	00	*	**	*
5	**	0	0	**	**	**	**	**
6	**	0	**	**	0	*	**	**
7	00	*	0	*	*	0	0	0
8	**	0	*	*	00	**	0	*
9	**	0	**	**	0	*	*	*
10	0	*	0	**	0	*	*	*

5. Discussion

The results presented in Section 4 offer an opportunity to assess how the program's design and the participant composition combined to create the changes. The four-month time frame; the continual, consistent, and varied measurement solutions; and regular connection to encourage mindset adjustment seemed to be more than an intervention but more of a developmental model where behavioural change is encouraged to be more long-term. Connecting the virtual learning program with reflective opportunities affected engagement among participants, even under considerable work pressures. This combination is particularly relevant because many corporate learning programs fail when moving from workshop formats to more extended contact. In this research program, however, there is convincing evidence that introducing elite sport coaching principles in a modular, self-paced system can affect momentum without tiring out participants.

The small-scale, participant sample helped to test out deep impact findings. The involvement of participants from varying professional backgrounds (marketing, production, finance, logistics, human resources), two different industries (FMCG;

sport and entertainment), and two different countries (Australia, New Zealand) provided a wide range of operating conditions and different job expectations. This gave the dataset sensitivity to the environmental conditions, showing how organisational culture and external pressures can magnify or dampen the take-up of mindset strategies from the perspective of the organisational environment. In environments where adaptive experimentation had become an accepted part of leadership cultures, program ideas became hard-coded and easily transferable into a measurable skill that applied. Where hierarchies, work structures, or operational inflexibility restricted space to move more flexibly, some gains could still be observed, but needed to be purposefully sustained through measures such as monthly accountability interviews. This diversity emphasises the need to view outcome data not as one or the other, but as both intrinsic participant progression, as described by the Integrated Mindset, and contextual environmental changes that will apply, independent of intervention, in the “real world organisation” field.

This is where the multi-dimensional nature of the Integrated Mindset Index has strength. Improvements in participant scores, particularly when supported by sentiment analysis, provided strong evidence of real change in behaviour that would not be available from competency ratings alone.

Reviewing participants’ language patterns highlighted how attitudes in real situations were changing. This is supported by sports psychology research. It is known that self-talk and narrative framing can be important for improving performance under pressure [35]. In fact, the alterations in communication measured by sentiment analysis provided a strong indicator that learning was occurring unconsciously.

Participants also reported an impact on their day-to-day work. Improved ability to prepare for and undertake more complex assignments; being more adaptable; being more confident in decision-making are tangible outcomes from undertaking the program. These were achieved with no recorded decrease in organisational performance indicators in what was a high-pressure business cycle. This takes on even greater significance given the macroeconomic instability both organisations involved were experiencing. Organisations that train their people to combine composure and responsiveness as circumstances shift are better positioned for stability. Of course, analysis must be circumspect. Perhaps some tailoring might be required for consistent outcomes across diverse environments, although at this stage, the tailoring required has not been identified, known, or understood. The one possible restriction is environmental readiness. This includes organisational beliefs and values, its openness to experimenting and innovating, and having the support structures to enable and influence uptake rates in such a learning program.

6. Conclusions

The integrated mindset training program confirmed behavioural changes among senior executives from two global organisations. The majority of participants (17/20)

experienced real change impacting productivity, performance, and well-being.

In addition, the differences observed across the two groups of participants highlight how organisational culture and operational flexibility impact the extent to which mindset principles can become part of everyday decision-making.

The findings also raise some other interrelated aspects. The analysis revealed quantifiable improvements for most participants in most categories. The monthly qualitative interviews provided examples of participants incorporating such aspects as resilience strategies to address unforeseen challenges; taking on leadership moments that would not have occurred pre learning program; changing communication styles to impact relationships positively. And even adapting and adopting concepts learned and using these in the home environment. Sentiment analysis adds further weight to such change. Organisation's leaders also observed such changes in participants and the impact such improvements had, such as greater collaboration, being calm under pressure, and preparedness for complex assignments.

The most significant outcome of the program emerged from the post-survey undertaken by all participants and then discussed/verified with leaders: an average 10 per cent improvement among participants, leading to 4 hours of freed-up time per week. This is worth serious consideration, particularly as subjects like productivity, the four-day working week, work from home, and AI are now at the heart of the debate in constructing a successful business of the future.

On completion of the program and after reviewing the results, the two leaders confirmed that no turnover, no sickness, and no absence were seen in the twenty participants who undertook and completed the study. Several were also promoted, and goals were often exceeded despite additional pressures. Leaders from both organisations recommended that participants could use any freed-up time to reduce work pressure, to provide more thinking time, to foster deeper connections, and create time for reflection. The learning program provided an experience that enabled high levels of engagement despite participants' workloads. When complemented with feedback sessions, such as monthly interviews, this is likely to achieve lasting cognitive reframing and skill deployment. Taking this approach, participants are not judged or directed but instead encouraged to build their own personal approaches to help achieve outcomes.

By focusing the research on 20 senior executives, the initiative achieved behavioural change and at the same time tested the program in different organisational contexts. The research program provides evidence that adapting elite sport mindset techniques for senior leadership development is relevant.

The program structure was connected with how positive outcomes progressed. In other words, the implicit application of rigorous change management processes [36].

The short-term evaluation interviews and tracking surveys were particularly effective in encouraging the building of self-reflection skills, keeping them engaged, and reinforcing the application of learning. These processes also reinforced the

notion of openly sharing performance improvement opportunities without fear of judgment. Participants identified these touchpoints as important motivators. All of these aspects combined are likely to enable greater retention and influence changes in participants' mindsets for the long term. That's the ultimate goal!

The possibilities of this program being replicated elsewhere are an exciting proposition. To do so, however, consideration needs to be given to an organisation's context. The research program's small sample helped achieve significant benefits. However, even the different outcomes seen between the groups in this sample suggest the need to assess an organisation's readiness for such a program.

As a postscript, several organisations are now undertaking the learning program in its entirety, supplemented by a sophisticated maintenance app. Initial findings appear to follow the trend of the original research. This places the program as a highly useful strategic tool for organisations experiencing change in workplace conditions.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- [1] Gallup (2024) State of the Global Workplace. <https://www.gallup.com/workplace/349484/state-of-the-global-workplace.aspx>
- [2] Scanlan, T.K., Carpenter, P.J., Simons, J.P., Schmidt, G.W. and Keeler, B. (1993) An Introduction to the Sport Commitment Model. *Journal of Sport and Exercise Psychology*, **15**, 1-15. <https://doi.org/10.1123/jsep.15.1.1>
- [3] Davachi, L., Kiefer, T., Rock, D. and Rock, L. (2010) Learning that Lasts through AGES. *NeuroLeadership Journal*, No. 3, 53-63.
- [4] Conway, M. (2022) Human-Centred Learning Takes a Giant Step Forward. *Training & Development*, **49**, 32-35.
- [5] Polaris (2025) E-Learning Market Share, Size, Trends, Industry Analysis Report Segment Forecast, 2025-2034. <https://www.polarismarketresearch.com/industry-analysis/e-learning-market>
- [6] Baer, J. (2023) The Time to Win: The New Guide to Customer Experience and Business Growth. <https://www.thetimetowin.com/>
- [7] Hyken, S. (2023) Today's Customer Has a Need for Speed. *Forbes*.
- [8] PWC (2024) Global Workforce Hopes & Fears Survey.
- [9] Conway, M. (2022) Developing "Earl": A Contemporary Approach to Building High Performing Organisations. *Training & Development*, **49**, 32-35.
- [10] Koopmans, L., Bernaards, C.M., Hildebrandt, V.H., de Vet, H.C.W. and van der Beek, A.J. (2014) Construct Validity of the Individual Work Performance Questionnaire. *Journal of Occupational & Environmental Medicine*, **56**, 331-337. <https://doi.org/10.1097/jom.000000000000113>
- [11] Carver, C.S. and White, T.L. (1994) Behavioral Inhibition, Behavioral Activation, and Affective Responses to Impending Reward and Punishment: The BIS/BAS Scales. *Journal of Personality and Social Psychology*, **67**, 319-333. <https://doi.org/10.1037//0022-3514.67.2.319>

- [12] Jorm, A.F., Christensen, H., Henderson, A.S., Jacomb, P.A., Korten, A.E. and Rodgers, B. (1998) Using the BIS/BAS Scales to Measure Behavioural Inhibition and Behavioural Activation: Factor Structure, Validity and Norms in a Large Community Sample. *Personality and Individual Differences*, **26**, 49-58. [https://doi.org/10.1016/s0191-8869\(98\)00143-3](https://doi.org/10.1016/s0191-8869(98)00143-3)
- [13] Conway, M. (2025) Can an Elite Sports Mindset Program Be Used in Business to Improve Individual Performance? Examining the Impact on Performance of a Structured Mindset Program on a Sample of Senior and Middle Executives in Two Global Organisations. Doctorate Research Swiss School of Business Management.
- [14] Kallio, H., Pietilä, A., Johnson, M. and Kangasniemi, M. (2016) Systematic Methodological Review: Developing a Framework for a Qualitative Semi-Structured Interview Guide. *Journal of Advanced Nursing*, **72**, 2954-2965. <https://doi.org/10.1111/jan.13031>
- [15] Dweck, C. (2022) Interview Questions to Identify Growth Mindset Candidates. <https://www.youtube.com/watch?v=2NDWkiduINA>
- [16] Conway, M. (2012) Interview Structure from the 100 Leaders Program. <https://www.dailytelegraph.com.au/newslocal/the-hills/see-100-leaders-at-castle-hill-and-be-inspired-on-the-big-screen-at-event-cinemas-/news-story/1c6de8e01b8a031fe4c934f93f4a13feXVenture>
- [17] Ballard, J. (2024) Mastering the Art of Communication: Building Productivity and Collaboration. *Forbes*. <https://www.forbes.com/councils/forbescoachescouncil/2024/05/20/mastering-the-art-of-effective-communication-building-productivity-and-collaboration/>
- [18] Dweck, C.S. (1986) Motivational Processes Affecting Learning. *American Psychologist*, **41**, 1040-1048. <https://doi.org/10.1037//0003-066x.41.10.1040>
- [19] Dweck, C.S. and Leggett, E.L. (1988) A Social Cognitive Approach to Motivation and Personality. *Psychological Review*, **95**, 256-273. <https://doi.org/10.1037//0033-295x.95.2.256>
- [20] Dweck, C.S. (2009) Developing Talent through a Growth Mindset. *Olympic Coach*, **21**, 4-7.
- [21] Goleman, D. (1998) Working with Emotional Intelligence.
- [22] Gould, D. and Carson, S. (2008) Life Skills Development through Sport: Current Status and Future Directions. *International Review of Sport and Exercise Psychology*, **1**, 58-78. <https://doi.org/10.1080/17509840701834573>
- [23] Kang, M. and Sung, M. (2017) How Symmetrical Employee Communication Leads to Employee Engagement and Positive Employee Communication Behaviors: The Mediation of Employee-Organization Relationships. *Journal of Communication Management*, **21**, 82-102. <https://doi.org/10.1108/jcom-04-2016-0026>
- [24] Lam, L.T. and Kirby, S.L. (2002) Is Emotional Intelligence an Advantage? An Exploration of the Impact of Emotional and General Intelligence on Individual Performance. *The Journal of Social Psychology*, **142**, 133-143. <https://doi.org/10.1080/00224540209603891>
- [25] Kim, T., McFee, E., Olguin, D.O., Waber, B. and Pentland, A. (2012) Sociometric Badges: Using Sensor Technology to Capture New Forms of Collaboration. *Journal of Organizational Behavior*, **33**, 412-427. <https://doi.org/10.1002/job.1776>
- [26] Peter, S. (2012) The Chimp Paradox. Vermilion.
- [27] Rodgers, C. (2002) Defining Reflection: Another Look at John Dewey and Reflective Thinking. *Teachers College Record: The Voice of Scholarship in Education*, **104**, 842-

866. <https://doi.org/10.1111/1467-9620.00181>
- [28] Siegel, D.J. (2020) *The Developing Mind: How Relationships and the Brain Interact to Shape Who We Are*. Guilford Publications.
- [29] Conway, M. (2020) *Essential Skills—On-Field Communication*. Football Coaches Australia.
- [30] Wankhade, M., Rao, A.C.S. and Kulkarni, C. (2022) A Survey on Sentiment Analysis Methods, Applications, and Challenges. *Artificial Intelligence Review*, **55**, 5731-5780. <https://doi.org/10.1007/s10462-022-10144-1>
- [31] Vinkers, C.H., Tjebkink, J.K. and Otte, W.M. (2015) Use of Positive and Negative Words in Scientific PubMed Abstracts between 1974 and 2014: Retrospective Analysis. *BMJ*, **351**, h6467. <https://doi.org/10.1136/bmj.h6467>
- [32] IBM (2024) What Is Sentiment Analysis? <https://www.ibm.com/think/topics/sentiment-analysis>
- [33] Hunt, E. (1963) A Computer Approach to Content Analysis: Studies Using the General Inquirer System. *AFIPS'63 (Spring)*, Detroit, 21-23 May 1963, 241-256.
- [34] Singh, B., Murphy, A., Maher, C. and Smith, A.E. (2024) Time to Form a Habit: A Systematic Review and Meta-Analysis of Health Behaviour Habit Formation and Its Determinants. *Healthcare*, **12**, Article No. 2488. <https://doi.org/10.3390/healthcare12232488>
- [35] Hatzigeorgiadis, A., Zourbanos, N., Galanis, E. and Theodorakis, Y. (2011) Self-Talk and Sports Performance: A Meta-Analysis. *Perspectives on Psychological Science*, **6**, 348-356. <https://doi.org/10.1177/1745691611413136>
- [36] By, R.T. (2005) Organisational Change Management: A Critical Review. *Journal of Change Management*, **5**, 369-380. <https://doi.org/10.1080/14697010500359250>