



ARC CENTRE OF  
EXCELLENCE IN  
**POPULATION  
AGEING  
RESEARCH**

# Leading for Age Diversity: Evaluation of the Ascent Leadership Program



Industry Report



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### *About this report*

This report highlights insights into the Ascent Age-Inclusive Leadership Program that was developed, delivered and evaluated by the Centre of Excellence in Population Ageing Research (CEPAR) in conjunction with an industry partner.

### *About CEPAR*

CEPAR is an Australian Research Council funded program and a unique collaboration between academia, government, and industry. CEPAR is committed to delivering solutions to one of the major economic and social challenges of the 21<sup>st</sup> century. CEPAR's Mature Workers in Organisations research stream is led by Professor Sharon Parker and focuses on the impact of various work designs on worker wellbeing at older ages and investigates barriers to mature workforce participation. The *Include, Individualise* and *Integrate* ("3I") model discussed below is a central research and educational framework used by members of this research stream to facilitate age inclusion within teams and organisations, and the model this leadership program is based upon.

# Foreword

The Centre of Excellence in Population Ageing Research (CEPAR) has been fortunate to collaborate with many Australian and international organisations in our effort to understand what constitutes ‘good’ work across the lifespan. This report is based on one such CEPAR collaboration and provides insights on *leading* for an inclusive workforce.

As our population ages, the plan to ensure Australia’s economic success will inevitably include strategies that harness the contribution of our mature workers. With up to 5 generations currently in the workforce, it is important that these strategies also focus on *age-diversity* to promote cohesion across intergenerational work groups.

Previous research suggests that leaders hold a pivotal role in influencing team productivity and wellbeing. Unfortunately, very few Diversity & Inclusion (D&I) strategies specifically address age as a factor. For example, age is rarely part of inclusive leadership training despite the fact that leaders often do not know how to achieve age-beneficial outcomes. The Ascent Leadership Program presented in this report is an innovative, evidence-based approach to improve how we lead for age-diversity.

We show that leaders do experience challenges in leading age-diverse workforce, but that *Include, Individualise, and Integrate* (“3I”) meta-strategies can be used by leaders to address these challenges. When organisations employ evidence-based leadership development like the “3I” framework, they cultivate the growth of leaders who are motivated and able to build more age-inclusive workplaces.

This report will be of interest to HR, D&I, and Learning & Development professionals. Business leaders wishing to attract and engage an age-diverse workforce may also benefit from these results and adopting a proactive approach to embedding the “3I” model into organisational D&I strategies.

We hope you find our report valuable.

**Sharon Parker**  
ARC Laureate Fellow  
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# Setting the Scene

In Australia, the lack of awareness of initiatives that facilitate work across the lifespan has been highlighted at government and industry level, with a call for more strategies to attract and retain older workers. Despite this, mature workers (workers over 45 years) are too often the victims of discrimination and bias in recruitment, and they're given limited access to working conditions that suit their changing needs. Unfortunately, our collective lack of competency at facilitating work across the lifespan contributes to increased risk of psychosocial harm as we age and provides a barrier to successful career continuity, meaning earlier retirement than is optimal to meet labour force demand.

Increased demand in the labour market and interest in the health and wellbeing of older individuals provide a strong rationale for improving 'aged' work. However, a focus on older workers is not always helpful to break down barriers. The truth is, our global workforce is not just ageing but becoming more *age-diverse*. A more effective approach then is to improve work across our working lives, where individual needs are met at every age. This lifespan approach is useful to assist development of proactive, rather than reactive, strategies to improve psychosocial wellbeing, knowledge sharing processes, and ensure continued care of our workforce.

Our age-diverse workforce currently has up to 5 generations working together. This can present some challenges for leaders, such as the potential for conflict between older and younger workers, age biases and prejudice that are hindering effective talent management, and the need to accommodate age-related needs and abilities. There are also opportunities associated with an age-diverse workforce including improved problem solving and innovation due to the different perspectives, knowledge and abilities of workers of various ages.

Only 8% of global  
CEO's diversity &  
inclusion strategies  
specifically address  
age

Snowden, S. & Cheah, P. K. (2015).  
A Marketplace without Boundaries?  
Responding to Disruption, 18th Annual  
CEO Survey. PwC.



Organisations and leaders are poorly equipped to manage the challenges and opportunities associated with an age-diverse workforce. Only 8% of global CEO's Diversity & Inclusion strategies have been found to specifically address age (Snowden & Cheah, 2015). In Australia, a survey of 922 employees in organisations across all industry sectors showed that only 8% of respondents reported that supervisors in their organisation receive training in how to manage different generations, however, 22% are provided training on unconscious bias (Australian Human Rights Commission and Australian HR Institute, 2018). Addressing unconscious bias is not enough to build age-inclusive workplaces so this highlights the need for leaders to develop the broad array of leadership capabilities required to build age-inclusive workplaces and effectively lead ageing and age-diverse teams.

This report presents the findings from the evaluation of the 'Ascent' Leadership Program that was designed and delivered by the CEPAR research team with the aim of developing and empowering leaders to manage the challenges and opportunities associated with an ageing and more age-diverse workforce by applying the *Include*, *Individualise* and *Integrate* ("3I") strategies and behaviours (Parker & Andrei, 2020).

## The "3I" Model

Researchers from CEPAR developed the "3I" framework to assist organisations and leaders in facilitating age-diverse teams via three key meta-strategies (see *Figure 1*). *Include* strategies are those that ensure workers of all ages feel included, are valued and respected, and know that people decisions are made without discrimination or stereotyping. This can be achieved when leaders facilitate group belongingness by encouraging interactions between age diverse colleagues, minimise the reliance on age stereotypes, and when systemic age-biases in the employment life-cycle are removed.

*Individualise* strategies involve identifying and accommodating age-related needs, abilities and preferences to ensure workability, productivity, and retention. This encapsulates the important concept of work design, which refers to how employee tasks and responsibilities can be organised to optimise performance and engagement and minimise psychosocial risks (Parker, 2014). Leaders have been found as well placed to understand the needs, abilities and preferences of their team members, and implement appropriate work design changes (Wegge et al., 2012).

Finally, *Integrate* strategies are those that ensure that the strengths of age-diverse workers are actively used, and that enable collaboration and knowledge exchange between age-diverse team members to innovate, solve complex problems, and by ensuring that mature workers have an opportunity to share their career and organisational knowledge with younger workers before they retire. This is done through effective team design, building psychological safety and clarity around team members' competencies.

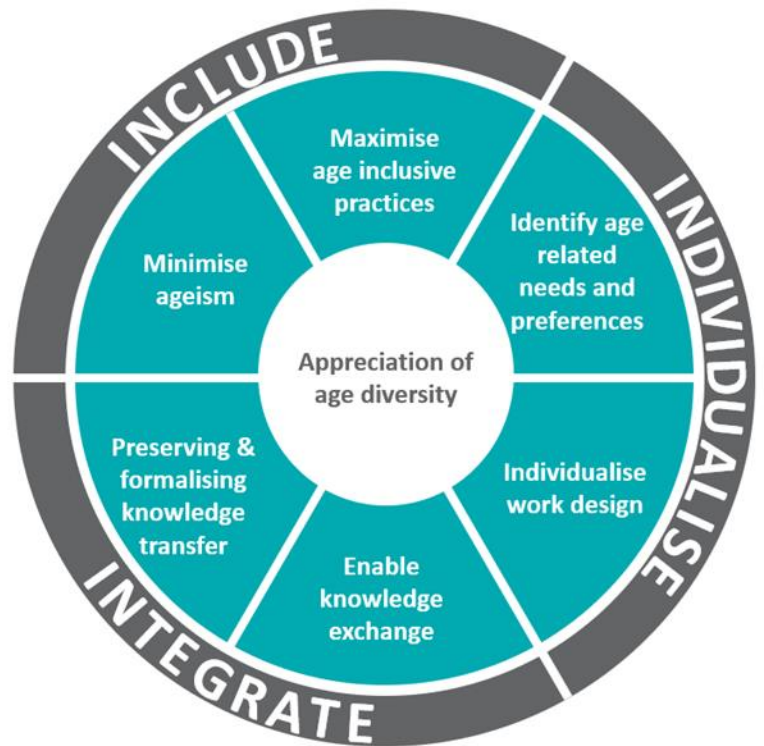


Figure 1: Overview of the “3I” meta-strategies, which the Ascent program was centred around.

In addition to the focus on *Include*, *Individualise* and *Integrate* strategies, leaders' attitudes towards diversity is important. The fundamental beliefs individuals hold about diversity and the degree to which it is perceived as beneficial impact leader motivation to implement inclusive practices and create inclusive, collaborative and cohesive team (Ng & Sears, 2020). Hence, appreciation of age-diversity is the centre of the “3I” model.



# Study & Program Overview

## Brief Study Context

The study was conducted in collaboration with a local government partner organisation in Western Australia. The partner organisation consists of a wide variety of functions and roles from manual, outdoor work to traditional 'white collar' roles in finance and customer service. As such, the organisation is somewhat representative of the general working roles of the Australians workforce.

The need for an age-inclusive leadership program was identified as a result of the following training needs analysis:

- (1) An organisation wide survey that assessed age-inclusive practices and their influence on several organisational outcome measures;
- (2) A series of mature worker interviews that sought to enhance the quality of the survey data by asking for details on several topics relevant to ageing at work;
- (3) A review of existing organisational policies and procedures;
- (4) A leadership workshops that disseminated diagnostic findings and identified a focus area for a development project;
- (5) A collaborative process of refining project objectives and deliverables that included engagement with key leaders and targeted communications to employees with the opportunity to provide feedback to guide the project development.

The training needs analysis indicated several challenge areas in adaptive work design, access to inclusive HR practices and intergenerational working. Leadership quality was found to be inconsistent across the organisation and a key driver of employee and organisational outcomes. The Ascent Age-Inclusive Leadership Program was established to leverage the organisational impact of leadership as a tool to address many of the challenge areas.

## Participating Leaders

Leaders from across every organisational directorates who were involved in the direct management of team members within the organisation were invited to participate in the Ascent Program. Although the program was targeted towards middle-management, leaders at all levels could participate.

Thirty-five leaders participated from across the organisation on a voluntary basis. Nineteen leaders also volunteered to contribute to the study as a comparison group. *Table 1* gives a breakdown of participation by key demographic variables.

Voluntary participation was considered essential as participative leadership programs need to be supported at an organisational level to integrate solutions and promote worker (or ‘leader’ in this instance) engagement (Daniels et al., 2017). This voluntary approach also yielded a cohort of very competent and passionate leaders (at baseline measurement) in both the training and comparison groups. In the sense that the leaders who participated in the study were proactive in nature and committed to improving their leadership skills, they were not thoroughly representative of general leadership capability within the organisation, which was found to be more inconsistent at the engagement survey.

*Table 1.* Demographic characteristics of participating leaders

Demographics	Training Group Leaders	Comparison Group Leaders
Age (Mean years)	46.86	45.42
Females (%)	60%	42%
Org tenure (Mean years)	8.84	7.26
Leadership role (Mean years)	11.40	11.50
<b>Role level</b>		
Entry level:	14.29%	36.84%
Middle management:	80%	52.63%
Senior Executive:	5.71%	10.53%

## Leadership Program Overview

The Ascent Leadership Program centred around the “3I” model and consisted of 4 half-day in-person workshops, a follow up ‘booster’ session, and individual coaching sessions (see *Figure 2*). The program was led and facilitated by two CEPAR research staff who are experienced leadership development facilitators.

The program used an activity-based and participatory approach in the workshops to assist leaders in identifying and improving age-inclusive workplace solutions. Each workshop consisted of education and interactive activities focusing on one of the “3I” meta-strategies, followed by homework activities that engaged leaders to apply different leadership strategies and organisational solutions to improve how their team’s work could be redesigned to promote inclusion and thriving. For example, in the *Include* workshop leaders were taught how to address unconscious bias. In the *Individualise* workshop, age-related changes and work design principles were taught. The *Integrate* workshop focused on enabling knowledge exchange and collaboration between age-diverse team members. The final workshop, ‘Skills for Impact’, focused on positive attitudes towards diversity as well as effective communication skills to facilitate leadership, such as listening and questioning skills.

Following each of the 4 workshops, leaders had the opportunity to reflect on their learnings and develop a draft action to implement with their team for improvement in age inclusion. Three months after the final training workshop, a further ‘booster’ session was conducted where leaders presented their finalised action plans and any implementation they had undertaken to date. Group feedback was offered to each leader, as well as support and suggestions to overcome barriers.

The participating leaders were also offered individual coaching sessions with one of the program facilitators via Teams to assist with their action plan implementation and to discuss their reflective thoughts on the program.

The multidimensional nature of the leadership program is in line with best practice (Lacerenza et al., 2017), and evidence highlighting that systems approaches (combining several organisationally focused, work directed, and worker-directed initiatives) are most effective at preventing and controlling job stress (LaMontagne, 2007), particularly stress associated with ageing.

*Pre training survey*

*Post training survey*



*Figure 2*  
Overview of the Ascent Leadership Program and evaluation points.

## Program Evaluation Approach

To evaluate the Ascent program, the research team developed a multifaceted research design, combining both quantitative survey data and qualitative interview data collected at different time points throughout the program. A multi-source approach is needed when working in highly dynamic, applied settings where opportunities for controlling program measures and isolating confounding factors are reduced. A simplified overview of our research approach, including the various sources of data collected to evaluate the proposed program is provided in *Figure 2*.

Data was collected from three different groups: 1. Participating leaders (Training Group) were assessed on knowledge gain, attitudinal and behaviour changes. The leaders received an individual report of their pre-training survey results in the beginning of the program to guide their learning and action plan development; 2. A comparison group of leaders (Control Group) who did not complete the program were surveyed to determine if any changes identified in the participating leaders were as a result of the Ascent program and no other factors; and 3. Team members (Team Member Group) reporting to the participating leaders were surveyed to identify any changes in their experiences and behaviours in the team.

All leaders and nominated team members were invited to complete the pre-and-post training surveys. The pre-training survey was administered to leaders before training commenced but teams had an additional few weeks to complete it. For leaders, the post-training survey was delivered at the end of the booster session. Team members completed the post-training survey in the four weeks following the booster session. The leader comparison group completed the surveys at the same intervals with some leeway provided to ensure adequate number of participants. Details on the measures used can be found in the Appendix.

Qualitative data was collected from participating leaders during coaching sessions and via open ended questions in the post training surveys.

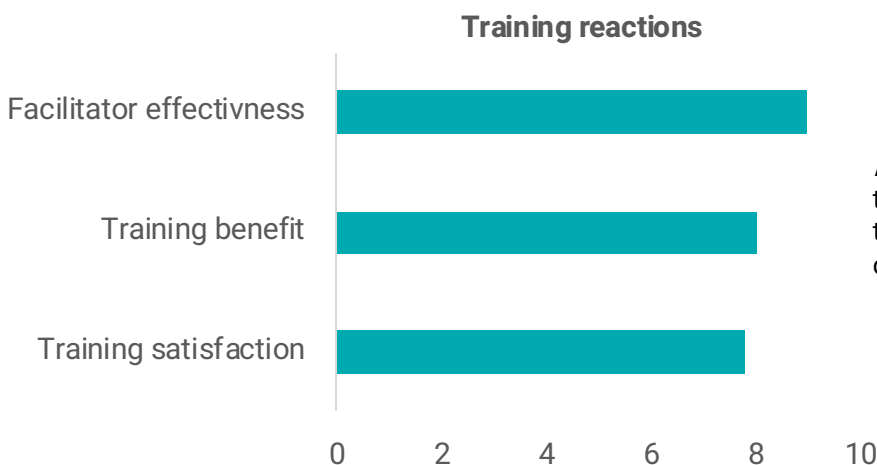
The study was approved by the Curtin University Human Research Ethics Committee (HREC No: HRE2022-0485).

# Program Evaluation & Findings

In this section, we will report results based on the data collected through the sources presented in *Figure 2*. The program was evaluated on five criteria: training reactions, knowledge gain, attitudinal learning, behavioural learning, and team/organisational impact.

## Training Reactions

Looking first at perceptions of the training itself, *Figure 3* shows that participants felt that the program facilitators were knowledgeable, inspired them to actively engage in the workshops, and motivated them to apply program learnings to the workplace (Facilitator effectiveness:  $M = 8.96/10$ ). Training group leaders also reported that the training itself was overall beneficial to their work (Training benefit:  $M = 8.04/10$ ). Finally, trainees tended to enjoy participating in the program (Training satisfaction:  $M = 7.80/10$ ). Additional insights into training reactions were derived from the qualitative data collected, which showed that the leaders appreciated the practical tools and strategies that could be directly applied “on the job”. The interactive workshop activities were perceived as a good way of learning, and the action planning and homework tasks were perceived as worthwhile and very beneficial as these activities stimulated leaders to take action and change their behaviour. These results are encouraging because positive reactions towards training is an antecedent for learning, with trainees more motivated to learn if they think the training is beneficial (Kirkpatrick & Kirkpatrick, 2006). The main critique of Ascent was the length and time commitment that comes with such a comprehensive program.

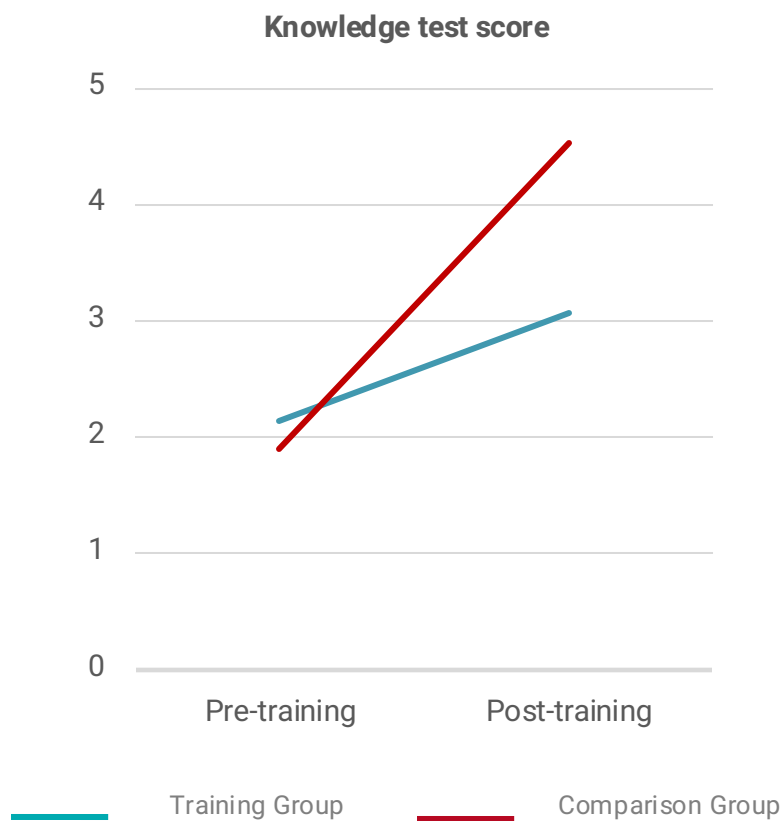


*Figure 3.* Graph of mean score of training group leaders’ reactions to the leadership program, taken directly following the workshops.



## Knowledge Gain

Looking next at knowledge acquisition, which was assessed using a knowledge test, *Figure 4* shows that the training group leaders scored statistically significantly better in the post-training knowledge test than the pre-training knowledge test (MT1= 2.13/5; MT2= 3.06/5), and statistically significantly better than the control group leaders in the post-training test (but no difference between the two groups was found in the pre-training knowledge test). This indicates that the leaders' learning of *Include, Individualise* and *Integrate* strategies, as well as age-related changes across the lifespan, improved as a result of the Ascent program.



*Figure 4.* Graph of means of age-inclusive leadership knowledge before and after the Ascent leadership program for training group and control group leaders.

## Attitudinal Learning

Attitudinal learning was assessed by measuring the leaders' degree of appreciation of age-diversity as well as stereotypical beliefs.

Figure 5 shows that training group leaders' score on appreciation of age-diversity did not statistically improve after the training, though their scores were trending in a positive direction. ( $M_{T1} = 4.04/5$ ;  $M_{T2} = 4.20/5$ ).



Figure 5. Graph of means in leader appreciation of age-diversity scores before and after the leadership program for training group and control group leaders.

Although there was no improvement in appreciation for age-diversity as a result of the training, it is important to note that appreciation of age-diversity was high before the training program amongst all leaders, making statistically significant gains difficult to obtain. The comparison group leaders did not score better in the post-training survey than in the pre-training survey either.

Changes in stereotypical beliefs were assessed measuring both positive and negative stereotypes towards younger and older workers.

As *Figures 6 and 7* indicate, training group leaders' expression of positive age stereotypes did not statistically change after the training ( $M_{T1} = 3.92/5$ ;  $M_{T2} = 3.85/5$ ) indicating that leaders came to the training with a high number of positive stereotypes that they held about old and young workers alike. However, their level of expressed negative stereotypes about old and young workers decreased post-training, suggesting that training was successful in lowering the negative stereotypical beliefs that leaders held about both old and young workers ( $M_{T1} = 2.56/5$ ;  $M_{T2} = 2.37/5$ ).

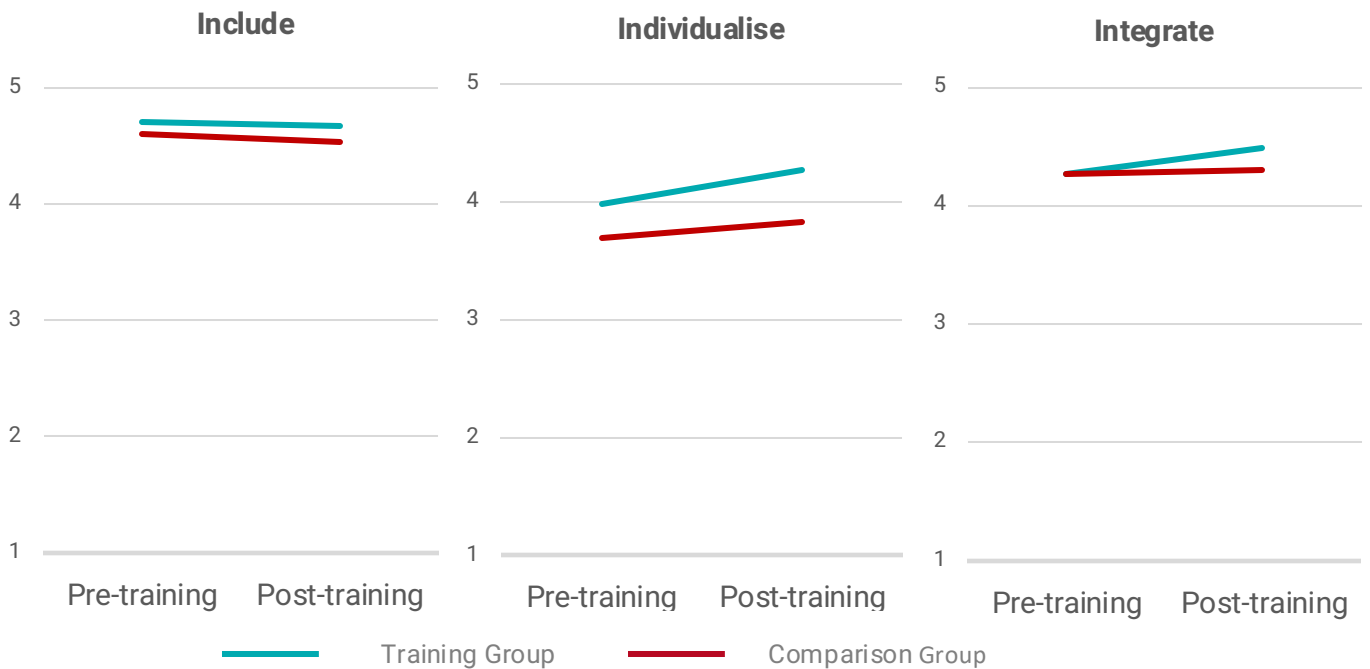


*Figures 6 and 7.* Graph of leader mean positive and negative age stereotype beliefs before and after the leadership program for training group and control group leaders..

Control group leaders did not show any statistically significant changes in positive or negative stereotype beliefs.

## Behavioural Learning

Behavioural learning was determined by exploring changes in leaders' *Include*, *Individualise* and *Integrate* related leader behaviours. As *Figures 8, 9, and 10* indicate, training group leaders' scores on *Include* behaviours did not statistically improve after the training ( $M_{T1} = 4.71/5$ ;  $M_{T2} = 4.68/5$ ). However, scores on *Individualise* behaviours statistically significantly improved after the training. ( $M_{T1} = 3.99/5$ ;  $M_{T2} = 4.27/5$ ). Further, leaders scores on *Integrative* practices also significantly improved after training ( $M_{T1} = 4.26/5$ ;  $M_{T2} = 4.49/5$ ).



*Figures 8, 9, and 10.* Graphs of mean leader score in Include, Individualise and Integrate behaviours before and after the training program for both training group and control group leaders.

Of note is that scores within the *Include* meta-strategy behaviours were very high at baseline before the training program, indicating a possible ceiling effect. The comparison group leaders did not score statistically better in the post-training survey than in the pre-training survey in any “3I” meta-strategies.

In sum, these results show that the Ascent program was successful in altering leader *Individualised* behaviour to meet the needs and preferences of their team, and *Integrative* behaviours to enable knowledge exchange processes within their teams. Leader *Inclusive* behaviours remained high and stable throughout the program.

## Team and Organisational Impact

To determine the training effect on team members of leaders attending the program and on the overall organisation, we used both quantitative and qualitative measures. Perceived degree of psychological safety, intergenerational contact quality, information exchange within the team, and age bias were measured as indicators of team impact. *Figure 11* indicates that there was no statistical evidence of improvement in these team impact factors, though scores were trending in the positive direction. Age bias remained low and stable throughout the program.



*Figure 11.* Graph of pre-and-post training mean scores of team impact variables as rated by team members .

We now turn our attention to the qualitative data regarding team and organisational impact. The individual coaching sessions conducted with nine leaders provided evidence for emerging positive team and organisational impact resulting from participation in the Ascent program. The key themes identified from the interviews are presented in *Table 2*.

The main impact was centred around *Integrate* strategies where leaders reported both enhanced collaboration and information exchange between members of their team, as well as between leaders attending the Ascent program. Overall, there is some emerging evidence supporting the team and organisational impact of the age-inclusive leadership program.

Table 2. Key team and organisational impact themes from interviews.

	Impact theme	Theme description
<b>Team impacts</b>	Information exchange & collaboration	Three leaders indicated collaboration and information exchange between team members had improved.
	Team morale	Two leaders stated they felt team morale had improved since attending the program.
	Engagement	Two leaders stated there are signs of positive engagement in their team.
	Ownership	One leader commented that team members show more ownership since providing more agency as a leader.
<b>Organisational impacts</b>	Customer satisfaction	One leader mentioned that the internal customer rating had improved from about 90% to 95% since implementing part of the action plan.
	Social capital	Seven leaders expressed that the development program had enhanced the collaboration between the leaders in the program, extended their network, and reduced the siloed nature of how the organisation is operating.

## Summary of Program Findings

The findings presented above suggests that the *Ascent Leadership Program has been successful in increasing age inclusive knowledge, leader ability to individualise work and integrate work processes, as well as decreasing the amount of negative age-related stereotypes leaders hold.*

While positive trends in other measures (e.g., leader age-diversity beliefs, team member perceptions of psychological safety, and intergenerational contact quality) were observed, these changes were not strong enough to reach significance levels. Leaders remained high and stable on these measures before and after training.



# Key Learning & Recommendations

In this section we discuss key take-away messages identified in the Ascent program evaluation process.

## **Use best practice leadership program design and delivery**

Our evaluation study suggests that positive training outcomes can be achieved when best practice in diversity training and leadership development program design and implementation is applied. This include training needs analysis, feedback and de-brief sessions, usage of multiple delivery methods with a strong focus on practice based and interactive activities, time-spaced workshops with multiple training sessions, and face-to-face delivery in a psychologically safe environment (Bezrukova et al., 2016; Lacerenza et al, 2017).

## **Focus on *Include* is a good start, but we also need to *Individualise* and *Integrate***

Our leaders were well aware of potential biases and strategies to combat discrimination, and were actively engaged in behaviours that sought to *Include* their team members as their pre-program scores were high and there were no measured benefits to further education and action in this area. However, the significant improvement in *Individualise* and *Integrate leader* behaviours suggests the need for continued leader development in these areas. This finding is consistent with previous CEPAR literature that suggests the “3I” model represents a linear process from *Include* to *Integrate*, where organisations use gains achieved in one category as a foundation for improvement in the next (Chong et al., 2023). In this way, integrative strategies are unlikely to yield improvements if inclusive strategies are not yet embedded. This finding is also indicative of previous CEPAR benchmarking research which canvassed individuals from Australian organisations and suggested that, while organisations have improved discriminative practices for mature workers, there is still some distance to go before individualised work design and true team cohesion is achieved (Andrei et al., 2019).

## **We need to minimise the reliance on both negative and positive stereotypes**

We found that leaders' negative stereotypes towards older and younger workers reduced after the Ascent program. Our finding is consistent with a similar program completed in Germany, who reported a reduction in negative stereotypes towards older workers after the program (Jungmann et al., 2020). Combined, our studies suggest that age-focused development programs may assist in changing work-related negative stereotypical thinking. Negative stereotypes are fixed, pessimistic views that are believed to represent a group of people. Similarly, while positive stereotypes are favourable, they are still biased beliefs and may be damaging in an age context because they do not capture the very individual way that people change across the lifespan. Our leaders' overall levels of positive stereotypes were high across both old and young workers, which may reflect the social acceptability of their content and an unawareness of their impact. It is worth considering ways that future programs might impact a change to positive stereotypes. One suggestion to achieve this is to engage 'slow your thinking before you act' type techniques that use examples of *positive* stereotypes to allow more consideration of their negative impact and resistance to change. Taken with the finding that the program reduced the already low levels of negative stereotypes in our sample, we suggest that more explicit learning for both types may be beneficial.

## **3I leader behaviours link to effective psychosocial hazards management**

Categories within the "3I" model map to Australian Work Health and Safety codes of practice on psychosocial risk. For example, *Include* strategies correspond to hazards addressing *discrimination* and *promoting a respectful work environment*, *Individualise* strategies correspond to the many hazards addressing *work design* and *workload management*, and *Integrate* strategies correspond to hazards addressing *communication* and *consultation*. By fostering inclusivity, tailoring work arrangements to individual needs, and promoting knowledge sharing and collaboration among age-diverse team members, leaders can mitigate psychosocial risks and promote thriving at work. We are therefore confident that the Ascent leadership program represents a comprehensive intervention to address psychosocial hazards with an ageing and diversity lens.

### **Team and organisational training impact may take time to manifest**

While the qualitative data indicated that the Ascent program improved *Integrate* behaviours of team members in terms of collaboration and information sharing, our quantitative evaluation showed there were no statistically significant changes observed in the team impact measures three months after the completion of the training workshops. Ideally, these measures would be a marker of embedded behaviour change by the leaders, and a larger sample size may have produced statistically significant results to reflect this. It may be the case that not enough time had passed from the completion of the leadership program and the measurement of team member outcomes. The training must first lead to a behaviour change in the leader, which the team members then need to notice before it can positively impact their experience. Hence, it may take some time before the impact takes place (Shamir, 2011).

### **Age-specific vs broader diversity leadership training**

Feedback received from participating leaders indicated a desire that future training programs focus more broadly on how to effectively manage diversity in general and on multiple facets of diversity, rather than focusing on age alone. However, development of any generalised program should consider the trade-off of benefits. Our results show that leaders did not have thorough knowledge of the challenges and benefits associated with managing an ageing and age-diverse workforce. Increased education on ageing issues can assist leaders in reducing biases and encourage expansion of unique ideas and solutions to manage both the needs of their workers and leverage team strengths. We therefore suggest that inclusive leadership programs include educational components on specific diversity dimensions (such as age, gender, LGBTQI+ status, etc.) as well as *Include*, *Individualise* and *Integrate* behaviours that are relevant for enhancing inclusion for all dimensions of diversity.

Based on this, the research team have developed a Master Class in “Leading for Diversity and Inclusion” that teaches the “3I” leadership meta-strategies and behaviours and covers knowledge of all key dimensions of diversity and not just age.

### **Need to engage leaders with less diversity & inclusion capabilities in training**

Due to the participatory approach of this research and leadership program, range restriction was observed in our participating leaders, where only highly engaged and reflective leaders volunteered to take part. For example, participating leaders had high levels of appreciation of age-diversity, as evidenced by their baseline scores, and hence, we did not observe any significant differences between pre and post measures. This suggests the leaders who volunteered to participate in the Ascent program already had reasonably positive attitudes towards age-diversity, and may have engaged with their teams in a manner reflective of their attitudes. A cohort like this is typically unlikely to yield significant results post training, as leaders were close to the measurement ceiling already. In this light, our statistically significant results across several evaluation criteria may be seen as an indication of a highly effective leadership program.

Although retaining a small group of high achieving leaders is good news for our partner organisation and employees, the challenge for organisations wishing to implement similar development programs becomes motivating less engaged leaders to value and participate in diversity initiatives to improve overall organisational outcomes. Hence, efforts need to be made to encourage leaders who have less capabilities and less positive attitudes towards diversity to attend this type of leadership programs.

# Concluding Statement

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This industry report presents findings from the evaluation of a complex age-inclusive leadership program conducted with a partner government organisation in Western Australia. ***Our results provide emerging evidence for the valuable place of formalised leadership development for ageing and age-diversity.*** While program refinement will be made based on feedback from participants, we recommend that organisations look at implementation of a similar program and suggest the utility of the “3I” model as a descriptive tool to facilitate learning and strategy development to improve work and reduce psychosocial risk. Further, the success of the participatory nature of our action planning and implementation provides an indication of the importance of combining formal education with hands-on action planning implementation for holistic leadership development.

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# Appendix

## Survey Measures

A 5-point Likert scale from 1 = Strongly agree to 5 = Strongly disagree was used for all measures except where otherwise stated.

### Leader Measures

***Training Reactions*** were measured using Grohmann and Kauffeld (2013) Questionnaire for Professional Training Evaluation. This scale consisted of two sub-scales measuring training satisfaction and utility. *Training satisfaction* was measured by one item “I enjoyed the training very much”, while the *training utility* was assessed by two items. An example item is “Participation in this kind of training is very useful for my job.” *Facilitator effectiveness* was assessed by three items developed by the project team. Participants had to indicate the extent to which they agreed with the statement: “The training facilitators are: 1) knowledgeable; 2) inspire me to actively engage and contribute in the workshops; 3) motivate me to apply what I have learnt in the workshops in the workplace”. These measures used a 10-point rating scale (1 = “completely disagree”, 10 = “completely agree”), and were only administered to the training group leaders in the post-training survey.

***Knowledge Gain*** was measured using a knowledge test comprising of 5 multiple choice items. These items targeted key content areas covered in the training.

### ***Attitudinal Learning***

*Appreciation of age-diversity* included three items adapted from Hentschel et al. (2013). An example item is “Teams are more effective when they include people of different ages”.

# Appendix

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*Age stereotypes* were measured based on age stereotypical beliefs presented in Finkelstein et al. (2013) study using two different sub-scales. One sub-scale measured negative stereotypes including five items measuring negative stereotypes towards old (e.g., “set in their ways”) and five items testing negative stereotypes towards young (e.g., “unreliable”). The second sub-scale measured positive stereotypes using three items assessing positive stereotypes towards old (e.g., “hard working”) and three items measuring positive stereotypes towards young (e.g., “enthusiastic”). Participants were asked the degree to which they agree that “compared to young (old) workers, old (young) workers are [positive or negative stereotype inserted]”.

***Behaviour Learning*** was measured using 3 items probing leadership behaviours relevant for each of the “3I” categories with an adapted version of the 3I scale from Chong et al. (2023). An example for *Include* was “I conduct performance appraisals that are free from age bias.” An example for *Individualise* was “I facilitate team members to have their job redesigned to one that better fits their needs”, and an example for *Integrate* is “I encourage team members of different ages to share knowledge.”

## **Team Member Survey Measures**

***Perceived Age Bias*** was measured by four items adapted from the Perceived Age Bias scale by James et al. (1994). An example item was “I have sometimes been unfairly treated at work because of my age.”

***Psychological Safety*** was measured by three items from Edmondson’s (1999) 7-item scale. An example item is: “If you make a mistake in my team, it is often held against you.”

# Appendix

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***Intergenerational contact quality*** was measured using a 3-item scale adapted and shortened from Fasbender and Wang (2017). Respondents had to indicate to what degree the contact they have with colleagues of a different age is Positive, Cooperative and Productive.

***Information elaboration*** was measured using four items from Kearney and Gebert (2009). An example item is: “The members of my team complement each other by openly sharing their knowledge.”

# Appendix

## Study Limitations

As with all practical research, our evaluation study also experienced some limitations. The small sample size is one of the main limitations as the size of our sample might not have provided sufficient statistical power to detect pre-post training changes for the evaluation measures (Aron & Aron, 1999). This is characteristic of intervention research in general where the difficulties in obtaining an adequate sample size are reflected in the very few published intervention studies.

While the study design included a leader control group to establish causality (i.e., when we make sure the changes observed in post-training evaluation scores were the result of the program and not any other factors), a team member control group was not included. Several attempts were made to collect data from the team members of control group leaders but with limited success. While future studies should have a team member control group in order to infer causality, it was less of an issue in this study as the team member measures were not statistically different in the post-training survey. As there were no changes in the team outcome measures, there was no need to compare them to a control group. Other factors hindering causality claims include the non-randomised design as participants were not randomly allocated to training and control groups, reducing the ability to make causal inferences. As it was challenging to get leaders to participate in any capacity given their workload, it was better to allow entry to volunteering leaders to maximise the possible leader training group sample size.

The generalisability of results to other organisations and industries is unknown due to the limited sample size. As previously discussed, leaders who attended the program had positive attitudes towards diversity and displayed some *Include*, *Individualise* and *Integrate* leadership behaviours prior to the training, which suggest the sample used may not be a good representation of leaders in general.