

Training and development for transitional employment in mature-aged manual workers

Hitendra Pillay

Queensland University of Technology

Kathy Kelly

Local Government Association of Queensland

Megan Tones

Queensland University of Technology

Objectives: The purpose of the current article was to explore perceptions of transitional employment and training and development amongst blue collar workers employed in technical, trade, operations or physical and labour-intensive occupations within the local government system.

Methods: The responses of manual workers to two national surveys conducted by the local government association, namely, the Transitional Employment Survey (TES) and the New Initiative Survey (NIS) were analysed for occupational level differences using Chi square tests.

Results: Three quarters of blue collar workers were interested in phased retirement options. Technicians and operators were content

to retain their current jobs, although technicians seemed to display a more self-directed attitude towards training and development. Tradespersons and labourers were interested in changing jobs, and appeared willing to pursue some training and development. A significant proportion of workers were interested in mentoring. Conclusion: Blue collar workers were interested in contributing to the future of the organisation via transitional employment. However, they may require support for their health and training needs.

Keywords: transitional employment, blue collar workers, manual workers, training and development.

In Australia, better retention of the ageing workforce is required to avoid skill and labour shortages in the future, and a potentially unsustainable dependency ratio (Organisation for Economic Co-operation and Development [OECD] 2005). The average retirement age for Australian men is 63 years (Australian Bureau of Statistics [ABS] 2007). However, mature-aged workers in physically demanding occupations tend to seek early retirement between 55 and 58 years of age, due to retrenchment and lack of suitable alternate employment (ABS 2007). As such, retention of the ageing workforce is more challenging in physically demanding occupations compared with roles where physical demands are lower.

This current study focuses on training and development to extend the working lives of mature-aged blue collar and manual workers within Australian Local Government Association organisations. Previous research (Millward & Brooke 2007, Pillay, Kelly & Tones 2006, Pillay, Kelly & Tones 2008, Wooden, VandenHeuval, Cully & Curtain 2001, Yrjanainen 2008) has identified two main issues for blue collar workers in training and development which affect their likelihood of continuing to working beyond retirement from their career jobs. The first is a lower level of interest or opportunity to participate in transitional employment compared with white collar workers (Pillay

et al. 2008); and the second is the limited formal education or lack of recognition of their education, which precludes job mobility out of roles that pose a health risk (Wooden *et al.* 2001). For the purpose of this study, transitional employment is defined as paid employment beyond official retirement and may be part-time or full-time (Pillay, Kelly & Tones 2010).

Ilmarinen (2006) states that work conditions faced by low skilled workers often contribute to injury or disease, which in turn force workers into premature retirement. This is evidenced by the large proportions of older males who retire early due to disability in the European Union (Seitsamo 2007) and Australia (OECD 2005). Australian research has shown that white collar workers with a university level of education are more likely to participate in transitional employment than workers with lower levels of formal education (Drew & Drew 2005). A survey of 2,026 mature-age Australian workers from the healthcare, construction and finance industries reported on by Lundberg and Marshallsay (2007) revealed that at least 80% of participants were interested in transitional employment. So, although mature-aged Australians seem committed to transitional employment, working conditions in different industries may differentially affect workers' opportunities to take advantage of it.

According to Mirowsky and Ross (2005), a higher level of formal qualification accrues cumulative benefits across the lifespan. For instance, access to higher status occupations as a result of a university level of education has the potential to benefit workers via increased training and development opportunities, and decreased likelihood of exposure to physically demanding work conditions or unemployment (Yrjanainen 2008). According to an OECD (2005) report for Australia, employment participation rates are 65% for men aged over 50 years who did not complete secondary school, compared with 85% for those who possess tertiary levels of education. Similarly, Wooden

et al. (2001) notes that prior educational attainment is the most important factor in determining access to training and development, and that blue collar workers are less likely to receive formal training than professionals and managers due to an underlying disparity in education levels.

Training and development has the potential to improve blue collar workers' ability to continue in employment for several reasons: increased likelihood of further participation in training, preparation for alternate jobs, and learning to use equipment and tools to make their jobs less physically demanding (Ilmarinen 2006, Stuart & Perrett 2006). Research conducted within the Local Government Association of Queensland by Pillay *et al.* (2006) indicated that blue collar workers perceive fewer learning needs on their current jobs than white collar workers. However, more recent research within the Australian Local Government Association (Pillay *et al.* 2008, Pillay *et al.* 2010) has revealed that equal proportions of blue and white collar workers who were interested in transitional employment perceived the need for further training and were willing to engage in learning and development.

Similar findings were reflected in Lundberg and Marshallsay's (2007) survey which indicated that mature-aged workers from physically demanding occupations were prepared to undergo training and development for transitional employment, particularly to less physically stressful jobs. The study found that over a quarter of the respondents indicated a need for training and development in transitional employment, although construction workers were less likely to report that training would increase their productivity in transitional employment than participants from other sectors. Nevertheless, construction workers' responses were more positive for training in computer skills and technology compared with other forms of training such as manual handling or communication skills, as they considered that this would improve their employment prospects into

less physically demanding jobs beyond retirement. About 80% of all respondents indicated that training to improve their ability to mentor other workers in learning would be most beneficial. These results suggested that construction workers, while not representative of all blue collar workers, perceived training and development as a path to alternate jobs.

Despite the potential for training and development to improve the employability of older blue collar workers, there are several obstacles to implementation. For instance, findings from the Australian Social Attitudes survey (Martin 2007) indicated that managers, professional and paraprofessionals have improved learning opportunities, presumably since employers believe there is greater need for development on the job for these employees than for workers in sales, service, trades and labour sectors. Only 18% of low status employees indicated seeking opportunities for advancement compared with 32% of high status employees. Similarly, Martin and Pixley (2005) indicate that 30% of low status employees do not get a chance to use their abilities and qualifications at work, compared with 14% of higher status workers. These findings concur with Lundberg and Marshallsay (2007), who report that approximately one-half of low status respondents indicated that suitable training was not available to them, while three-quarters of respondents indicated that training to counter age bias was warranted in their organisation.

Current study

The impetus for the retention of blue collar workers was an increased difficulty in the recruitment of younger employees in the Australian Local Government Association, which was not a preferred employer for younger workers (Pillay *et al.* 2006). As reported in the literature above, mature-aged workers from blue collar occupations in this Association have limited formal education and transferable skills, and rarely participate in training and development for alternate

employments. However, previous research within local government only served to compare blue and white collar workers' aspirations for transitional employment and training and development. The current study addressed this issue as it focused on four blue collar occupations which faced the most difficulty in attracting workers—namely, technical, trade, operations and labour. Data reported were obtained from the Transitional Employment Survey (TES; Pillay *et al.* 2008) and the New Initiative Survey (NIS; Pillay *et al.* 2010) conducted as part of an Australian Research Council project. The purpose of the project was to identify the aspirations of mature-aged blue collar workers to enable them to remain active and productive in local government following retirement from their careers. The analysis reported in this paper focused on questions related to perceptions of engagement in transitional employment and preparatory training and development.

Method

Procedure

The TES and NIS surveys were developed and trialled with a group of Local Government Association of Queensland employees to ensure the questions addressed the issues under investigation. While the TES asked questions primarily about proposed work arrangements, training and development and employee local government roles and responsibilities in transitional employment, the NIS had an additional focus on employees' perceptions of their current work environment and prior training and development experiences in local government. Although the TES and NIS surveys were developed to address different overall objectives, both surveys included a section on transitional employment aspirations and associated learning and development needs. It was these questions that were analysed separately and presented in the paper. The first question on the TES and NIS, 'Are you interested in transitional employment following your official retirement date?', served as a screening tool. Participants

who did not indicate an interest in transitional employment were omitted from the remainder of the analysis.

Both surveys were uploaded to the Local Government Association of Queensland website and access was given to all sister associations nationally. Employees from the Australian Local Government Association were invited to volunteer to complete the survey over a period of six weeks. To encourage participation, reminders were sent via email, and followed up by training officers.

Sample

A total of 403 manual workers responded to the two online surveys. This group comprised 241 workers over 50 years of age in the TES (41% technical, 12% trade, 24% operations, 23% labour), and 162 workers over the age of 45 years in the NIS (34% technical; 15% trade; 30% operations; 21% labour). The ages of 50 and 45 were selected for the TES and NIS surveys respectively as they correspond to definitions of older workers used by the OECD (2005) and ABS (2007).

Table 1: Education level by occupation level for the TES and NIS samples

	University		TAFE		Trade		School		Other	
	TES	NIS	TES	NIS	TES	NIS	TES	NIS	TES	NIS
Technical	28.0%	21.8%	42.0%	40.0%	9.0%	20.0%	16.0%	16.4%	5.0%	1.8%
Trade	3.6%	9.1%	21.4%	18.2%	60.7%	63.6%	10.7%	9.1%	3.6%	.0%
Operations	12.3%	12.5%	29.8%	35.4%	22.8%	14.6%	29.8%	37.5%	5.3%	.0%
Labourer	3.6%	26.5%	12.5%	17.6%	21.4%	8.8%	57.1%	44.1%	5.4%	2.9%

Table 1 shows the education level by occupation for the TES and NIS samples. According to the Australian Standard Classification of Occupations (ASCO), the majority of roles classed as blue collar within local government tend to be lower skilled (ABS 1997). A two way sample by occupation ANOVA revealed a main effect for

occupation ($F= 10.876, p < .01$), and Scheffe tests indicated that technicians possessed a higher level of education than all other blue collar workers. This finding is consistent with ASCO standards, as technicians are classified at the paraprofessional level which requires an Australian Qualifications Framework Diploma or higher level qualification or three years' experience (ABS 1997). The most common level of education for technicians was a Technical and Further Education (TAFE) qualification, although a significant minority in each sample held a university level qualification. Tradespersons were most likely to hold trade qualifications, although approximately one fifth of TES and NIS respondents held a TAFE qualification. According to the ASCO, tradespersons require a Certificate III or higher, and possibly additional practical experience (ABS 1997), so the educational background of tradespersons in the current study matches this definition. The majority of operators were evenly distributed between TAFE and secondary school qualifications, which match the ASCO standards. Operators within the local government are classified as intermediate production and transport workers, which require either a Certificate II or higher or one year experience (ABS 1997). Although the majority of labourers possessed a secondary level education only, over one-quarter of labourers who responded to the NIS reported having some exposure to university level courses.

Results

Seventy eight percent ($N=186$) of respondents from the TES and 77% ($N=126$) of respondents from the NIS indicated an interest in transitional employment as they gave a positive response to the first question. Interest in transitional employment did not vary by education or occupation level amongst blue collar workers for the NIS sample. However, for the TES, the more highly educated blue collar workers including technicians (91%), operators (90%) and tradespersons (79%) were more likely to indicate a preference for

transitional employment than labourers (41%), who tended to possess secondary school education only ($\chi^2_{\text{education}} = 55.854, p < .01$, $\chi^2_{\text{occupation}} = 57.994, p < .01$, as evidenced by a Chi-square test).

The responses of blue collar workers who indicated an interest in transitional employment were retained for further analysis (via the Statistical Package for the Social Sciences—SPSS). Occupation level differences were evaluated for each survey via a series of Chi-square (χ^2) tests. In instances where occupational groups appeared significantly different, follow-up Chi-square tests were conducted to clarify which occupation levels were responsible for the significant finding. The findings from the Chi-square test analyses for the TES and NIS cohorts are presented separately in the next two sections. For each cohort, significant findings are presented in a table accompanied by a description of the analysis.

Findings from the Transitional Employment Survey

Work conditions in transitional employment: Responses to preferred type of work in transitional employment differed for occupation level (see Table 2). Operators were significantly more likely than labourers to want to remain in their current jobs, while tradespersons were significantly more likely than all other blue collar workers to request slightly different employment for transitional employment. Labourers reported no preference for work type significantly more often than all other occupational categories of blue collar workers. The majority of technicians preferred work that matched their current role, while a significant minority reported no preference. Supervision of transitional employment tended to reflect preferred work types, in that requests for greater deviations from current work type were associated with a preference for increased supervisory presence. Technicians were significantly more likely than operators to request partial supervision, while operators requested no supervision more often than labourers. Supervision as required was

significantly more likely to be preferred by labourers compared with other categories of blue collar workers.

Training and development for transitional employment: Several items enquired about preferences for training and development for transitional employment. As shown in Table 2, there was a trend for technicians and operators to attach a very high value to their work related learning and life skills, while labourers were less likely to value to these skills. Laborers revealed a unique profile for training and development, perhaps due to their lower levels of education, or the trend for labourers to request training in new skills or another line of work as evidenced by their responses to questions on work conditions above. Compared with other categories of blue collar workers, they were significantly more likely to request sufficient training for transitional employment which may be due to their uncertainty in alternative employments. In addition, labourers were more likely than other categories of blue collar workers to select the option to undertake training as it was required.

Table 2: Responses to the Transitional Employment Survey by occupation level

Question	Tech.	Trad.	Oper.	Lab.	Significance
<i>Working conditions in transitional employment</i>					
Do same work as current job in transitional employment	46%	25%	54% ^A	22% ^B	$\chi^2=11.335$, $p<.01^a$
Do slightly different work in transitional employment	16% ^A	46% ^B	16% ^A	9% ^A	$\chi^2=16.085$, $p<.01^a$
No preference for work type in transitional employment	27% ^A	11% ^A	16% ^A	57% ^B	$\chi^2=18.028$, $p<.01^a$
Partial supervision in transitional employment	36% ^A	32%	16% ^B	13%	$\chi^2=10.280$, $p<.05^a$
No supervision in transitional employment	14%	14%	30% ^A	0% ^B	$\chi^2=12.234$, $p<.01^a$
Supervision as required in transitional employment	41% ^A	32% ^A	46% ^A	78% ^B	$\chi^2=12.793$, $p<.01^a$
<i>Training and development for transitional employment</i>					
Very high value on work related learning/ life skills	49%	25%	47%	22%	$\chi^2=9.856$, $p<.05^a$
Medium value on work related learning/ life skills	6%	11%	9%	26%	$\chi^2=9.856$, $p<.05^a$
T&D for new skills/ another line of work preferred	13%	7%	16%	35%	$\chi^2=8.553$, $p<.05^a$
Sufficient level of training/ development needed	17% ^A	32% ^A	14% ^A	48% ^B	$\chi^2=14.339$, $p<.01^a$
Prefer to undertake T&D as required	38% ^A	36% ^A	42% ^A	73% ^B	$\chi^2=13.286$, $p<.01^a$
<i>Mutual roles and responsibilities in transitional employment</i>					
Prepared to commit to greater awareness of the needs of younger workers in transitional employment	11% ^A	11%	28% ^B	13%	$\chi^2=8.828$, $p<.05^a$
Prepared to commit to learning new skills, where possible in transitional employment	55% ^A	25% ^B	42%	65% ^A	$\chi^2=11.388$, $p<.01^a$

Question	Tech.	Trad.	Oper.	Lab.	Significance
Prepared to commit to learning new skills from my colleagues in transitional employment	15%	14%	7% ^A	35% ^B	$\chi^2=9.971$ $p<.05^a$
Personally undertake to assist other staff to learn new skills in transitional employment	54%	32% ^A	46%	70% ^B	$\chi^2=8.153$ $p<.05^a$

^a small effect; ^b medium effect; ^{AB} significant difference between occupational groups
 NB: Tech.—Technician; Oper.—Operator; Trad.—Tradesperson; Lab.—Labourer

Mutual roles and responsibilities in transitional employment: The final set of questions related to mutual roles and responsibilities between employees and local government in transitional employment. The majority of items which revealed significant differences for occupation levels related to learning. Technicians and labourers were significantly more likely than tradespersons to indicate that they would learn new skills where possible, while a greater proportion of labourers compared with operators reported that they would learn new skills from colleagues. Operators indicated that they were prepared to be more aware of the needs of younger workers more often than technicians. However, labourers were the most likely to report that they would assist other employees to learn new skills, although a significant difference was only detected between labourers and tradespersons.

Findings from the New Initiative Survey

Unlike the responses to the TES, the NIS did not reveal a varying interest in transitional employment according to blue collar occupation level. However, there was a tendency for labourers who responded to the NIS to have a higher level of education than the labourers who participated in the TES. This may explain why the NIS found a greater proportion of labourers interested in transitional employment.

Table 3: Responses to the New Initiative Survey by occupation level

Question	Tech.	Trad.	Oper.	Lab.	Significance
<i>Working Conditions for Transitional Employment</i>					
Interested in part-time transitional employment	51%A	13%B	29%	32%	$\chi^2=11.353$, $p<.01^a$
Would like same career in transitional employment	61%A	21%B	43%	47%	$\chi^2=9.948$, $p<.05^a$
<i>Training and Development for Transitional Employment</i>					
Would like training and development for transitional employment immediately	0%	13%A	2%B	0%B	$\chi^2=8.433$, $p<.05^a$
Would like training and development for transitional employment when I am ready	63%A	13%B	22%B	21%B	$\chi^2=14.442$, $p<.01^b$
Formal qualifications/ recognition for training and development should be optional	56%A	17%B	16%B	24%	$\chi^2=11.545$, $p<.01^a$
Interested in technical training and development	50%A	13%B	12%C	0%C	$\chi^2=23.173$, $p<.01^b$
Interested in trade training and development	0%	21%A	4%B	6%B	$\chi^2=11.866$, $p<.01^a$
Interested in professional training and development	38%A	4%B	8%B	9%	$\chi^2=12.783$, $p<.01^b$
Prefer to develop skills face to face and online	44%A	0%B	27%C	15%D	$\chi^2=13.372$, $p<.01^b$
Prefer to develop skills on the job	50%A	13%B	22%	32%	$\chi^2=7.893$, $p<.05^b$
Training and development should be available in working hours and own time	44%A	17%	10%B	9%B	$\chi^2=12.014$, $p<.01^a$
Prepared to assist in the training and development of other workers	88%A	54%B	71%	65%B	$\chi^2=10.409$, $p<.05^a$
Prepared to train other workers in my field	97%A	50%B	65%C	62%B	$\chi^2=19.861$, $p<.01^b$

a small effect; b medium effect; ABCD significant difference between occupational groups

NB: Tech.—Technician; Oper.—Operator; Trad.—Tradesperson; Lab.—Labourer

Work conditions in transitional employment: When asked about potential work arrangements in transitional employment, significant differences emerged between technicians and tradespersons, while the responses of operators and labourers fell between the two extremes (see Table 3). Specifically, technicians were more likely than tradespersons to be interested in part-time transitional employment within their current careers.

Training and development for transitional employment: Blue collar workers in the NIS did not vary by categories of occupation in their reported training needs. Consistent with a lower proportion of interest in maintaining the same career in transitional employment, tradespersons who reported a need for training and development requested to participate immediately to build additional capacities. However, they also requested more technical 'trade content' in training more often than other blue collar workers. For both the above items, significant differences were observed between tradespersons, and operators and labourers.

Technicians exhibited a unique pattern in preferences for the training and development items. They were more likely than other categories of blue collar workers to indicate that they would commence training when they were ready. The other significant differences between technicians, tradespersons and operators suggested that technicians preferred formal qualifications and recognition to be optional rather than compulsory. With regards to training content, the findings revealed that a greater proportion of technicians were interested in technical and professional training content compared with other categories of blue collar workers.

Participants were asked which training modalities they preferred including face-to-face, online learning and on-the-job training. Technicians were more likely to endorse all of these modes compared with tradespersons, while operators and labourers were also less likely to respond to face-to-face and online learning. Compared with

operators and labourers, technicians reported that they were more likely to commit to training and development during both work hours and their own time. Together, these findings for technicians may be consistent with an interest in pursuing alternative employment within a professional role or updating technical skills. Significantly fewer technicians than all other categories of blue collar workers indicated an interest in training other workers within their own work area.

Discussion

The findings show that blue collar mature-aged workers in the current study are a heterogeneous group in terms of prior education level, interest in transitional employment and perceived training and development needs. Despite these differences, the findings indicate that almost 80% of blue collar workers value transitional employment opportunities, which was a comparable proportion for white collar workers as reported by Lundberg and Marshallsay (2007). In addition, blue collar workers did not vary by occupation category in their reported need for training and development to participate in transitional employment. The blue collar workers' apparent commitment to training and development was supported by an earlier analysis of NIS data (Pillay *et al.* 2010), which found no difference in blue and white collar workers' reported need for training and development provided that they were interested in transitional employment.

Technicians: The technician category presented a unique group amongst the blue collar workers, as they reported the highest level of education, and their work environment was more likely to be indoors and less physically demanding than for other categories of blue collar workers. The TES findings indicated that technicians valued their work-related learning and life skills very highly, and were interested in furthering their skills under appropriate supervision to seek transitional employment. Support for this self-directed learning

by the technicians was also evident in the NIS findings. Perhaps the higher level of education enables the confidence to undertake self-directed training and development. The findings of an interest in upgrading skills in their current field or pursuing professional opportunities suggest that technicians may intend to upgrade from technical to professional occupations. As such, the majority of technicians may be confident and motivated to learn for transitional employment. The potential to progress to more advanced technical or professional roles may account for the surveyed technicians envisaging staying within their current careers as part-time employees when they progress to transitional employment. Sharing knowledge and skills with co-workers and acting as mentors were also valued by mature-aged technicians as a possible role for them in transitional employment.

Tradespersons: Similar to the findings for technicians, tradespersons saw transitional employment as an opportunity for change. Their responses suggested lower confidence and self-directedness than technicians, possibly due to differences in educational backgrounds. Findings from both the TES and NIS studies suggested that tradespersons were interested in transitional employment that differed from their current work environment, that is, they were seeking a change. Furthermore, both surveys indicated that tradespersons were the least willing of any blue collar category to value on-the-job learning, and training or mentoring other workers. This is an interesting finding that requires further investigation because most training for trade occupations has a significant component of on-the-job training. Often lack of support for on-the-job-training and other resource and time deficiencies compromises workers' capacity to do additional formal learning and such experience during transitional employment could devalue the benefits of informal learning and knowledge sharing. However, tradespersons were less likely to request training and development in their responses to the NIS compared with other blue collar workers.

The tradespersons who did indicate a need for training emphasised the provisioning of training as and when necessary.

Unfortunately, both the TES and NIS respondents provided limited information with respect to the forms of work and training and development that may be appropriate to mature-aged tradespersons and what forms of human resource development, support and incentive may be necessary. The majority of tradespersons specified their education level as “trade”, which suggests that their formal training is aligned to their occupation and therefore highly specialised. As such, because of the specificity of trade qualifications, they may be less transferable than other TAFE or university qualifications and perhaps more difficult to articulate the forms of training and development that may suit ageing tradespersons. The other possibility is that, via a strong professional identity nurtured through their education and work experiences, tradespersons have strong and close identity with their work role, and are reluctant to undertake transitions to alternate jobs.

Operators: Despite the lower level of education of operators compared with technicians, operators were similarly willing to participate in transitional employment, as observed in both the TES and NIS findings. Operators’ strongest preference for transitional employment was to remain in one’s current job as a mentor, and this was a finding common to both survey groups. There seemed to be interest in a nurturing and training role to younger workers in their area. Operators according to OHS studies are more likely to suffer from financial and health issues in mature age because of their long hours of sitting, exposure to whole body vibration, and working in difficult postures (Yrjanainen 2008), and were more likely to endorse gym membership and savings advice options in the human resource development, support and incentives question.

Findings from the TES indicated that a significant minority of operators were interested in learning new skills and sharing skills

with other workers for transitional employment; however, they were least likely to report colleagues as a source for learning. It is possible that the work environment of operators reduces opportunities for contact with colleagues and skill sharing. The work tasks of operators may be perceived as less physically demanding than labourers. Although operators were keen to learn and develop to seek transitional employment, like the tradespersons, their aspirations for training and development were not clearly defined.

Labourers: Results from the TES indicate a need to motivate an interest in transitional employment amongst labourers who in general lacked motivation to engage with work beyond retirement. By contrast, labourers who participated in the NIS were more willing to participate in transitional employment. However, the discrepancy in interest in transitional employment between the TES and NIS groups reported by labourers suggests that the underlying issue was a lack of formal education amongst the labourers who completed the TES. As a result of their limited education, labourers from the TES sample appeared less confident in their ability to develop work-related learning and life skills, and were less directed in their career options for transitional employment. This is consistent with other research on manual workers with limited formal education (Stuart & Perrett 2006). The responses of labourers interested in transitional employment suggested a strong commitment to training and development, as well as assisting others to learn. This was reflected in both the TES and NIS data sets. However, unlike tradespersons and operators, the work environment for labourers appeared to be more conducive for skill sharing, as a higher proportion of labourers from the TES reported that they would both learn from and assist the learning of colleagues through a learning community type of approach.

A less distinctive pattern for labourers' training and development preferences was observed in the NIS data, possibly due to the possession of an education level comparable with tradespersons

and operators in the NIS sample. In general, response patterns of operators and labourers were comparable for the NIS, and in between the extremes of technicians and labourers. Comparable with the TES, a statistically significant minority of labourers responded to on-the-job training in the NIS.

Limitations

The current study had small numbers in the cohorts of labourers and tradespersons, which was further reduced by excluding respondents not interested in transitional employment. Given that much communication about opportunities for learning and development happens through online communications, limited access to technology may partly explain the small sample size of these groups as the survey was available only online. The sampling technique may have also enabled a bias towards blue collar workers with higher levels of formal education, as was observed amongst the labourers in the NIS data set.

In addition, participants who indicated lack of interest in transitional employment were not required to complete the remainder of the survey. So it was not possible to compare responses of participants who were either interested or not interested in transitional employment on working conditions and training and development issues covered by the TES and NIS. Lastly, the education level classification “TAFE” did not distinguish between certificate and diploma level qualifications, which may have produced greater variation between the higher status technical and trade occupations, and the lower status operator and labour occupations in terms of education level and interest in transitional employment.

Implications for management/human resources and trainers of adult learners

Findings from the current study hold implications for management and human resource personnel generally within the Australian Local

Government Association, but particularly for educators and trainers of mature-aged workers in blue collar settings. The most significant finding from the current study was that for blue collar workers, occupation type influences preferences for work conditions, training and development, as well as other issues related to transitional employment. Second, the underlying education level of blue collar workers appeared to affect their level of interest in transitional employment. Therefore, it would seem logical that interest in transitional employment could be increased amongst blue collar workers if education levels were upgraded.

Labourers who responded to the TES indicated a high preference for training and development to support them engaging in transitional employment. This finding concurs with Gelade, Catts and Gerber (2003) who identified several criteria for good practice in training educationally disadvantaged mature persons. They suggested that the selection of learning content that is relevant to the learner motivates and encourages involvement. Furthermore, small class sizes and practical learning without formal assessment enables the educationally less advantaged mature labourers to build on their achievement through small steps (Gelade *et al.* 2003). The process of learning is facilitated by tutors who are skilled at reassuring learners and identifying their needs which was recognised by many of the technicians and tradespersons (Gelade *et al.* 2003).

The informal community learning described by Gelade *et al.* (2003) can be applied to on-the-job training to initiate mature-aged blue collar workers in learning and development and gradually lead them to participate in formal education. The other option adopted by Local Government in Queensland is to provide opportunities for recognition of prior learning as a stepping-stone to articulation into formal education. However, the potential of informal or on-the-job learning may be limited by job tasks in routinised jobs, or constraints imposed by occupational health and safety regulations, as may be the case for tradespersons, operators and labourers. Thus, informal learning

may not be sufficient to train blue collar workers for alternate jobs, although it has been used in German settings (Rowald & Kauffeld 2009). Given blue collar workers' interest in mentoring, especially by the operators, informal or formal learning could be incorporated for training trainers, which is also supported by Australian literature (Lundberg & Marshallsay 2007, Pillay *et al.* 2010).

Blue collar workers' preference to remain in their current or a similar job for transitional employment can become problematic, as the current study showed for tradespersons and operators. While minimising potentially harmful work conditions has been shown to improve the work ability of mature-aged workers (Ilmarinen 2006), such measures may be too late to retain blue collar workers who are either of advanced age or living with health problems. At present, the Local Government Association of Queensland has adopted several different in-house schemes aimed at improving mature-aged workers' abilities. These include online self-assessment of prior experience and skills, recognition of prior learning, industry approved courses, mixed age teams and induction programs (Pillay *et al.* 2005). These strategies could also be targeted to blue collar workers with limited formal education or who are reluctant to commit to retraining, and this approach is more likely to be successful than formal training with external providers.

Previous analysis of the TES has revealed that blue collar employees with a TAFE or university education report greater comfort with external training providers (Pillay *et al.* 2008). Recommendations to improve training access amongst mature-aged employees from non-professional or non-managerial occupations in Australia proposed by the OECD (2005) include encouraging mature-aged workers to take advantage of current training opportunities and the creating of additional training opportunities, as well as increased employer-funded training, possibly via partnerships with trade unions and governments. Smith and Billett (2004) further suggest

the recognising of organisations that contribute to employee development, educating employers about the merits of investments in training, subsidising training, and industry regulation to ensure consistent access to training and development.

Further research and conclusions

The current study focused on the relationship between occupation levels of blue collar workers and their aspirations for transitional employment and its associated training and development. The findings reveal that occupation level produced differing profiles of transitional employment aspirations. Further, education level affected intention to participate in transitional employment. However, transitional employment aspirations of blue collar workers are also affected by other factors that influence retirement decisions such as health and finances. It would be useful to undertake a more comprehensive study that takes these other factors into consideration. European research on working conditions and work ability provide some ideas about possible methods for such studies (e.g. Ilmarinen 2006). It would also be valuable to plot the impact of education and training on blue collar workers' lives which would necessitate longitudinal research.

References

- Australian Bureau of Statistics [ABS] (1997). 'Australian standard classification of occupations (ASCO): second edition', Catalogue No. 1220.0, Canberra: Australian Bureau of Statistics.
- Australian Bureau of Statistics [ABS] (2007). 'Retirement and retirement intentions', Catalogue No. 6238.0, Canberra: Australian Bureau of Statistics.
- Drew, D. & Drew, J. (2005). 'The process of participation and phased retirement: Evidence from mature-aged workers in Australia', Brisbane: Post Pressed.
- Gelade, S., Catts, R. & Gerber, R. (2003). *Securing success: Good practice in training people aged 45 and over who are disadvantaged in the labour market*, Canberra: Department of Education, Science and Training.

- Ilmarinen, J. (2006). 'Towards a longer work life! Ageing and the quality of worklife in the European Union', Helsinki: Finnish Institute of Occupational Health, Ministry of Social Affairs and Health.
- Lundberg, D. & Marshallsay, Z. (2007). 'Older workers' perspectives on training and retention of older workers', Adelaide: National Vocational Education and Training Research.
- Martin, B. (2007). 'Cultures of work: Do Australian workers all have the same goals?', in D. Denemark, G. Meagher, S. Wilson, M. Western & T. Phillips (eds.), *Australian social attitudes 2: Citizenship, work and aspirations*, Sydney: UNSW Press: 125–147.
- Martin, B. & Pixley, J. (2005). 'What do Australians feel about their work?', in S. Wilson, G. Meagher, R. Gibson, D. Denemark & M. Western (eds.), *Australian social attitudes: The first report*, Sydney: UNSW Press: 42–61.
- Millward, C. & Brooke, L. (2007). 'Should we work longer? Public expectations about older workers and retirement', in D. Denemark, G. Meagher, S. Wilson, M. Western & T. Phillips (eds.), *Australian social attitudes 2: Citizenship, work and aspirations*, Sydney: UNSW Press: 147–173).
- Mirowsky, J. & Ross, C.E. (2005). 'Education, cumulative advantage, and health', *Ageing International*, 30(1): 27–62.
- Organisation for Economic Co-operation and Development [OECD] (2005). 'Ageing and employment policies: Australia', Paris: OECD.
- Pillay, H., Tones, M. & Kelly, K. (2005). 'Exploring employment factors affecting early labor force exit of mature Australian workers', technical report.
- Pillay, H., Kelly, K & Tones, M. (2006). 'Career aspirations of older workers: An Australian study', *International Journal of Training and Development*, 10(4): 298–305.
- Pillay, H., Kelly, K. & Tones, M. (2008), 'Exploring work and development options to reduce early labour force exit of mature aged Australians', *International Journal of Training Research*, 6(2): 20–39.
- Pillay, H., Kelly, K. & Tones, M. (2010). 'Transitional employment aspirations for bridging retirement: Implications for training and development', *Journal of European Industrial Training*, 34(1): 70–86.
- Rowald, J., & Kauffeld, S. (2009). 'Effects of career related continuous learning on competencies', *Personnel Review*, 38(1): 90–101.

- Seitsamo, J. (2007). 'Retirement transition and well-being: A 16-year longitudinal study', *People and Work Research Reports, No. 76*, Finnish Institute of Occupational Health, Health and Work Ability Centre of Expertise, Helsinki, Finland.
- Stuart, M. & Perrett, R. (2006). 'Learning in a restructured industrial environment: Older workers "displaced" from the British steel sector', in T. Tikkanen & B. Nyhan (eds.), *Promoting lifelong learning for older workers: An international review*, Luxembourg: Cedefop: 224–239.
- Smith, A. & Billett, S. (2004). *Mechanisms for increasing employer contributions to training: An international comparison*, Adelaide: National Centre for Vocational Education Research.
- Wooden, M., VandenHeuval, A., Cully, M. & Curtain, R. (2001). *Barriers to training for older workers and possible policy solutions*, Canberra: Department of Education, Training and Youth Affairs.
- Yrjanainen, M. (2008). 'Who needs up-skilling? Low skilled and low qualified workers in the European Union', Dublin, Ireland: European Foundation for the Improvement of Living and Working Conditions.

About the authors

Professor Hitendra Pillay is in the School of Learning and Professional Studies, Faculty of Education, at Queensland University of Technology. His research interests include adult education, industry-based training, learning and cognition, spatial problem solving, and technology based learning environments.

Ms Kathy Kelly is the Training and Development Manager for the Local Government Association of Queensland Inc. Her research interests include enabling older workers to acquire formal recognition for their skills and knowledge towards professionalism.

Mrs Megan Tones is a research assistant in the School of Learning and Professional Studies in the Faculty of Education and Institute for Health and Biomedical Innovation at Queensland University of Technology. Her research interests include lifespan developmental psychology, adult learning, engagement, industry-based training, worker wellbeing, and learning and cognition.

Contact details

Professor Hitendra Pillay, School of Learning and Professional Studies, Queensland University of Technology, Victoria Park Road, Kelvin Grove, Brisbane, Australia, 4059

Tel: +61 7 3138 3030 Fax: +61 7 3864 8265

Email: h.pillay@qut.edu.au

Ms Kathy Kelly, Local Government Association of Queensland Inc., Local Government House, Newstead, Brisbane, Australia, 4006

Tel: +61 7 3000 2233 Fax: +61 7 3252 4473

Email: kathy_kelly@lgaq.asn.au

Mrs Megan Tones, Queensland University of Technology, Victoria Park Road, Kelvin Grove, Brisbane, Australia, 4059

Tel: +61 7 3138 8649 Fax: +61 7 3864 8265

Email: m.tones@qut.edu.au