
Business Indicators ♦ May 2010

Testing Conventional Wisdom with Statistics: The Relationships between Employee Engagement, Age and Health

Recognizing the link between engaging employees in their work and the outcomes of their organizations, many private and public sector organizations are dedicated to improving aspects in the work environment that make the most difference to the perceptions held by employees toward their job and their organization.

Engagement is defined as employees' commitment to their organization as well as their overall satisfaction with their job and organization.

While the personal characteristics or circumstances that employees carry to their day-to-day work environments may also play a role in engagement, they are largely excluded from managements' work environment improvement efforts.

One obvious reason behind this omission is that these elements lie outside of the realm of the work environment and therefore beyond the sphere of management influence. Moreover, data collected on the BC Public Service reveals the greatest variation in engagement is at the work unit level.¹ From this standpoint, this means employees have more in common with the person working next them than someone

who is the same age or at the same stage of life. Another reason for the exclusion relates to the risks of perpetuating stereotypes that may do more harm than good.

These reasons; however, prevent us from developing a more holistic picture of engagement. In the absence of information, it is human nature to draw conclusions from conventional wisdom or rely on word of mouth, which may or may not be the best reflection of reality. Thus the objective of the current analysis is to explore some of the conventional wisdom associated with personal characteristics thought to have some sort of connection with engagement, specifically employee age and health. In doing so, we hope to develop a clearer understanding of how these characteristics interact with engagement.

This study explores data from a random sample of 2,004 British Columbians collected in 2008 covering a broad cross-section of the employed labour force aged 18 years and over. Respondents were asked questions about their work environment experiences as well as their overall engagement levels (i.e., job and organization satisfaction as well as commitment). The survey also collected a rich array of socioeconomic information to enhance our understanding of how employee engagement may transact with factors external to the work environment. This summary focuses specifically on what we discovered

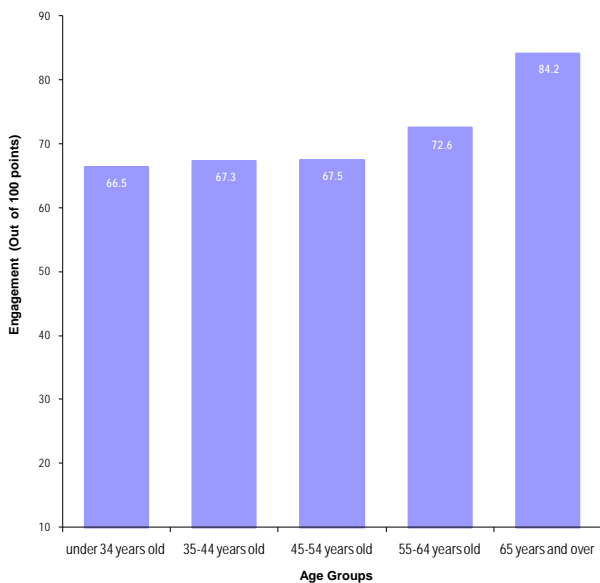
¹The percentile table is available online at:
http://www.bcstats.gov.bc.ca/data/ssa/reports/WES/2009/analYTICS09_11.pdf.

when we explored their engagement data with two characteristics – age and health.²

The oldest employees are the most engaged.

Past studies have found that engagement levels tend to decline with advancing age until employees reach the oldest age group, at which point they start to rise.³ Results from the B.C. survey lend partial support to these previous findings. Respondents who are 65 years of age or older stand out as significantly more engaged than their younger counterparts.⁴ However, rather than seeing declining engagement until the oldest age group, the results show engagement scores holding steady until the 55-64 age category, when they begin to climb (Figure 1).

Figure 1: Engagement is more or less the same across age groups until employees reach 55 years of age.



² The full report is available online at:

http://www.bcstats.gov.bc.ca/data/ssa/reports/WES/2008/analyTICS08_4.pdf.

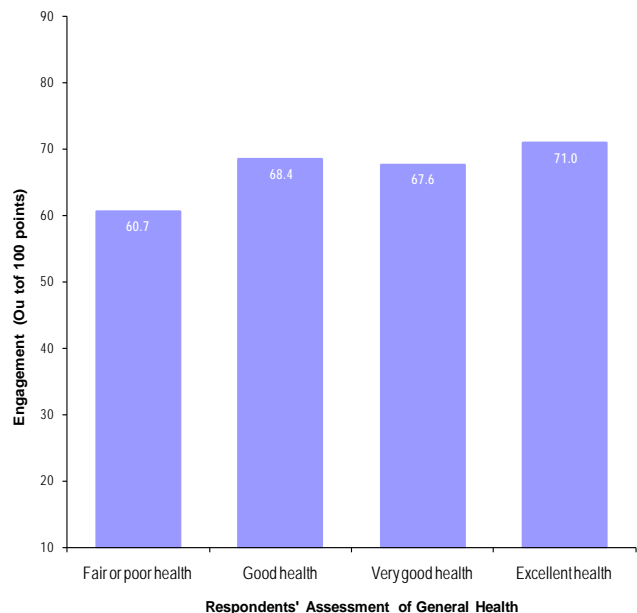
³ Robinson, D., Perryman, S., & Hayday, S. (2004). *The Drivers of Employee Engagement*, IES Report 408. Viewed 18 May 2008, < <http://www.employment-studies.co.uk/summary/summary.php?id=408>>.

⁴ An analysis of variance showed that the effect of age on average engagement scores was significant, $F(4,1906) = 6.053, p < .001$. Post hoc analyses using the Scheffé criterion for significance indicated that the average engagement score for those 65 years and older was significantly higher than for all other age groups, except 55-64 years ($p < .05$).

Those in good to excellent health are more engaged than those in fair or poor health.

Unlike age, health is a variable that may have a two-way relationship with engagement. That is, it is well-accepted that good health may positively influence engagement. However, it is also possible that low levels of engagement may lead to stress and, ultimately, poor health. In other words, health may be both a predictor and an outcome of engagement. Figure 2 shows that there is, indeed, a relationship between health and engagement. Those who described their health as “good”, “very good” or “excellent” had significantly higher average engagement scores than those who described their health as “fair” or “poor”.⁵

Figure 2: Those in good to excellent health are more engaged than those in fair or poor health.



Given the positive relationship between health and engagement, one might be surprised that older workers are more engaged than their younger counterparts. Interestingly, employed

⁵ An analysis of variance showed that the effect of health on average engagement scores was significant, $F(3,1967) = 6.037, p < .001$. Post hoc analyses using the Scheffé criterion for significance indicated that the average engagement score for those in “fair” or “poor” health was significantly lower than for all other health categories ($p < .05$).

British Columbians over 65 years of age are the least likely of all, except for the under 34 age group, to describe their health as “fair” or “poor” (6%), and a quarter of them describe their health as “excellent” (Table 1). This suggests that those employees who remain in the workforce beyond the age of 65 years are generally in good health and that they are more likely than those in other age groups to leave employment if their health falters than to persist in their jobs.

Table 1: Older members of the employed labour force are generally in good health.

| Age groups | Percentage distribution of responses | | | | Total |
|---------------------|--------------------------------------|------|-----------|-----------|-------|
| | Fair or poor | Good | Very good | Excellent | |
| Under 34 yrs | 4% | 21% | 45% | 30% | 100% |
| 35-44 yrs | 8% | 25% | 39% | 28% | 100% |
| 45-54 yrs | 8% | 29% | 37% | 26% | 100% |
| 55-64 yrs | 11% | 30% | 39% | 20% | 100% |
| 65 yrs and Over | 6% | 34% | 34% | 25% | 100% |
| All Age Groups | 7% | 26% | 40% | 27% | 100% |
| Number of responses | 135 | 486 | 767 | 513 | 1,900 |

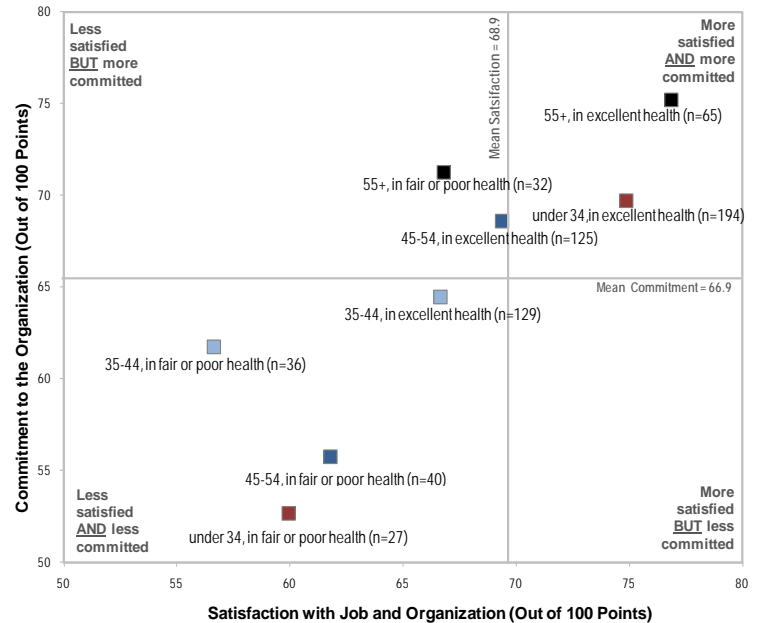
Note: Due to rounding, percentages in this table may not sum to 100%.

Figure 3 compares mean scores along the commitment and satisfaction dimensions of engagement for workers in “fair” or “poor” health and workers in “excellent” health, by age group. It shows the very high commitment and satisfaction levels of British Columbia’s oldest workers who are in “excellent” health. It also shows that those who are 55 years and over and who continue to work in spite of “fair” or “poor” health, do so because they are highly committed to their organizations, rather than because they are particularly satisfied with their organization or job.

While excellent health appears to make a difference for most respondents, it is not enough to move those between the ages of 35 and 44 years above the average on either the commitment or satisfaction dimension. It is

clear, however, that lower mean scores on both dimensions of engagement are related to being in “fair” or “poor” health, particularly for the youngest workers in B.C.’s employed labour force.⁶

Figure 3: In every age group, healthier workers are more engaged than their counterparts who are in fair or poor health.



Exploration of the relationship between engagement and demographic variables has, in some cases, confirmed findings from other studies. In other cases it has challenged our assumptions about engagement. It would be interesting to know how much of the steady rise in engagement with age is related to increasing identification with organizational outcomes and how much stems from, for example, an increase in commitment to the organization due to increasing employee investment in organization benefits

⁶ Independent samples t-tests confirmed that organization commitment is significantly lower in the under 34 age group for those in “fair” or “poor” health, compared to those in “excellent” health ($t(219)=2.463, p<.05$). Job and organization satisfaction were also significantly lower for those in the under 34 age group in “fair” or “poor” health compared to those in “excellent” health ($t(219)=2.769, p<.05$).

(e.g., pensions) over time or increasing attrition bias of those who those less engaged.

In this study, what is most clear is healthy older members of the workforce are a highly engaged cohort. These individuals should not be overlooked as a potential pool of labour helping to mitigate predictions of looming labour shortages in the BC economy. What is not clear yet is why younger workers are less engaged. Analysis of respondent data collected using this survey will dig into these results in the near future.