

A Behavioural Measure of Employee Engagement in Singapore using IAL’s Business Performance and Skills Survey (BPSS)

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Summary

Employee engagement is integral to skills utilisation in the workforce. Without being engaged, employees have little motivation to deploy or develop their skills and contribute to the workplace. Improving employee engagement therefore underpins the value of skills as advocated in the SkillsFuture Movement and Industry Transformation Policy.

BPSS, IAL’s large scale establishment survey, provides a unique and unbiased measure of behavioural employee engagement. Drawing inspiration from Macey & Schneider (2008), we obtained direct reports from managers on the extent of discretionary effort they observe among their employees, giving us a behavioural measure of employee engagement. In this note we refer to this phenomenon as behavioural engagement.

This research note also provides insights into the sector specific drivers of behavioural engagement. From the analysis, we derive the following sector-specific recommendations for improving behavioural engagement:

Manufacturing and Construction

- Improve non-pay benefits
- Communicate a powerful vision
- Share information about operational challenges (for enhanced participation)
- Enrich jobs with technical skills

Basic Services (Accommodation and food services, wholesale and retail trade etc.)

- Offer more opportunities for promotion and managerial responsibility
- Improve non-pay benefits
- Share information about operational challenges (for enhanced participation)
- Enrich jobs with technical skills

Advanced Services (Finance, ICT, Professional Services etc.)

- Improve non-pay benefits
- Provide opportunities for professional development and experience
- Provide a strong vision and sense of purpose through good managerial skills and practice

“Employee engagement does not mean employee happiness ...

... Employee engagement does not mean employee satisfaction ...

Employee engagement is the emotional commitment the employee has to the organisation and its goals ...

When employees care – when they are engaged – they use discretionary effort.”

Kevin Kruse, Bestselling author and entrepreneur on Forbes.com “What is Employee Engagement?”

Background

A raft of studies and surveys have found that employee engagement in Singapore is not only low but falling. Numerous studies, which include Mercer’s Singapore Employee Engagement Index and AON’s 2018 Trends in Global Employee Engagement Report, provide solid indications of this challenge.

These studies, among others, have led to headlines regarding the costs to employers of “zombie employees” (Channel News Asia, “Zombie employees and the cost of poor engagement at work”).

IAL's Business Performance and Skills Survey (BPSS) collects measures of a specific type of employee engagement in Singapore and also measures of workplace characteristics and practices. This research note provides evidence for the effectiveness of certain workplace practices in promoting this type of employee engagement in various sectors within the Singaporean economy.

A Different Measure of Employee Engagement in BPSS

The majority of employee engagement studies are conducted by consultancies who survey workers, usually from among their clients. They take large samples of employees and ask them questions such as "Do you believe in the goals of your employer?", or "Do you feel you have the opportunity at work to do your best and contribute?" While these provide valuable and useful information, they may be subject to certain types of bias. For example, social desirability bias – the tendency of individuals to answer survey questions in a manner they feel reflects well on them. There is also the question of whether the mental states measured by such questions actually translate into performance in the workplace.

BPSS took a very different approach to estimating employee engagement.

Firstly, BPSS attempted to maintain a representative sample of over 3,700 establishments across the private sector in Singapore.

Secondly, BPSS obtained reports directly from managers and supervisors within the establishments surveyed. The benefit of the approach taken in BPSS is that we can obtain what is sometimes referred to as 'behavioural employee engagement' (Macey & Schneider, 2008¹), which is almost always measured using the notion of discretionary effort (effort given

by the employee beyond that which is required). In BPSS, behavioural employee engagement (referred to from here on as simply 'behavioural engagement') is estimated as *the extent to which supervisors observe the workers in their establishment exhibiting discretionary effort*. For a similar measurement technique that has been published in the highly reputable Academy of Management Journal please see Barrick, Thurgood, Smith & Courtright (2015)².

Specifically, BPSS measures behavioural engagement by asking managers the following questions:

At your establishment, what % of employees/staff ...

- 1. ... go above and beyond the 'call of duty' even when not asked?*
- 2. ... put in more hours than you expect throughout the year?*
- 3. ... take up the duties colleague without being asked?*
- 4. ... make helpful suggestions for improving how things could operate within the organisation?*

As such, the measure is comprised of four questions that form a complex measurement of behavioural engagement. Individually, we have found that these four questions have very similar results. In modelling behavioural engagement, we have used all four measures. When reporting baseline results, however, we have chosen the most obvious question '*...going above and beyond the call of duty?*'.

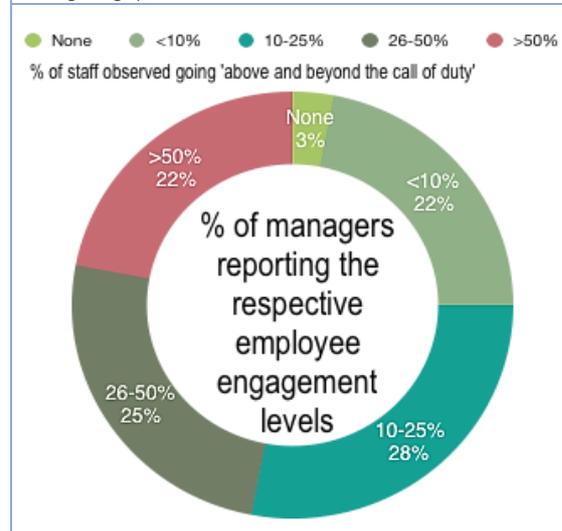
¹ Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and organizational Psychology*, 1(1), 3-30.

² Barrick, M. R., Thurgood, G. R., Smith, T. A., & Courtright, S. H. (2015). Collective organizational

engagement: Linking motivational antecedents, strategic implementation, and firm performance. *Academy of Management journal*, 58(1), 111-135.

Behavioural Employee Engagement in Singapore

Figure 1: Level of behavioural engagement reported among Singapore establishments in BPSS



Across the Singapore commercial establishments surveyed by BPSS, only 22% of managers indicated that they observe 50% or more of their employees going “above and beyond the call of duty” (see Figure 1).

Only 22% of managers indicated that they observe the majority of their employees going “above and beyond the call of duty”, while over 50% reported that they observe less than a quarter of their staff doing it.

A similar number of managers reported that they observe their employees putting in more hours than expected throughout the year or offering solutions to problems without being asked.

Beyond the behavioural engagement index, the data in BPSS allows us to examine the engagement by sectors within the economy and what the likely drivers of behavioural engagement are by conducting regression analysis of the four behavioural employee engagement items in BPSS, on a series of workplace characteristics and practices³. From this, we can draw clearer insights about what

³ For details of the regressions and notes please see the Annex

actions can be taken to increase behavioural employee engagement.

The practises that were generally found to be highly effective in Singapore in improving behavioural engagement were non-pay benefits and the provision of opportunities for career advancement.

For instance, only 19% of establishments who report offering less than 50% of their staff non-pay benefits and opportunities for career advancement report that they observe the majority of their workers going “above and beyond the call of duty”. This number increases to 35% for establishments that offer more than 50% of their staff non-pay benefits and opportunities for career advancement.

Such a broad analysis misses much of the insights to be found from BPSS. What follows is a detailed analysis showing our findings within each of three major sectors of the Singaporean economy.⁴

Manufacturing and Construction

Top three Practices for Manufacturing and Construction

- Non-pay Benefits
- Sharing company information with employees
- Communicating a vision to all employees

The manufacturing and construction industries compose 21% of the sample and contributed more than 23% of GDP to the economy in 2017.

They have a high proportion of foreign workers and also offers the lowest paying jobs of all the sectors surveyed.

Though the percentage of managers in the sector reporting that the majority of their employees go “above and beyond the call of duty” is only 17%, from the regression analysis we found that workplaces that provided non-

⁴ BPSS did not cover the Primary Sector (e.g. agriculture, fishing, mining etc.) as this sector is insignificant in the overall economy makeup.

pay benefits, shared important information with employees, and were able to communicate a vision to their employees were more likely to have higher behavioural engagement than workplaces that did not have those characteristics, all other things being equal.

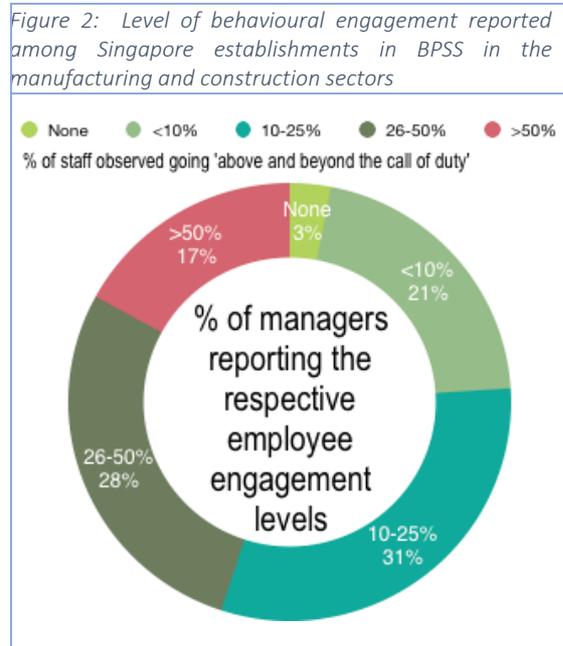
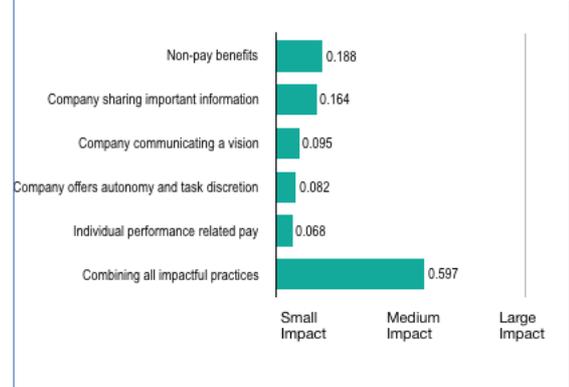


Figure 3 shows the extent to which a one standard deviation change in the adoption of the above identified practices impacted behavioural engagement, other things being equal. Notice that while most practices have a relatively small positive impact on their own, practices could be considered as reinforcing each other to build a strong behavioural engagement culture. The bottom bar in Figure 3 shows that if all five practices were to be used together, the cumulative effect on employee engagement would be more substantial.

Another result concerning a workplace characteristic (see Annex) would suggest that having a larger proportion of technical and associated professional jobs in the establishment is statistically positively associated with a higher level of behavioural engagement. While the proportion of technical and associated professional jobs is not a *practice* that employer can change quickly, this result reflects the link between higher skills and employees' behavioural engagement in their jobs. Employers can take advantage of this link if they increase the skills content of their

business model over time. This could be done through job re-design and investing in automation technologies or up-skilling their business model.

Figure 3: The Impact of a Standard Deviation Change in Adopting Such Practices on Employee Engagement

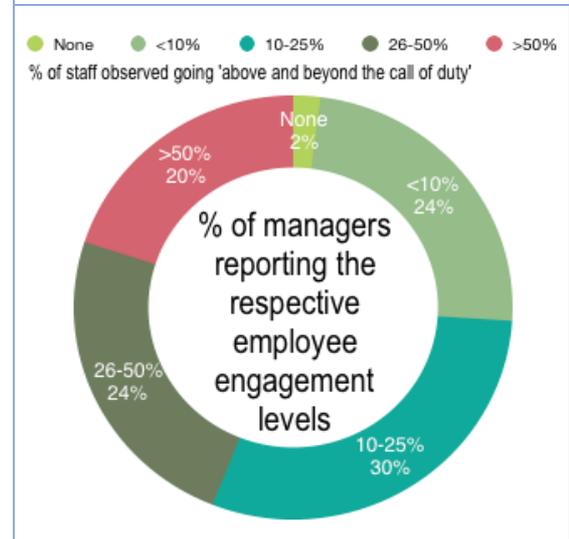


Basic Services



The basic services sector consists of those establishments that produce services, not products, and that do not rely heavily on knowledge work. These include industries like accommodation and food services and wholesale and retail. They comprised 54% of the sample in BPSS and contributed more than 27% of GDP to the economy in 2017.

Figure 4: Level of behavioural engagement reported among Singapore establishments in BPSS in the basic services sector



The estimated percentage of managers in this sector reporting that the majority of their employees go “above and beyond the call of duty” is 20%.

Like manufacturing and construction, the basic services sector tends to have relatively low levels of behavioural engagement. We also find that many of the challenges in manufacturing and construction are shared with basic services.

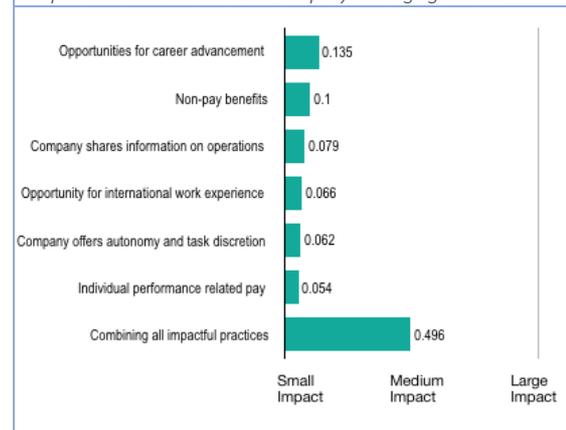
Figure 5 shows that opportunities for career advancement seems to be the most impactful practice in the basic services sector. Like the results in manufacturing and construction, the effects of the various practices seem to be small. However, paying attention to the use of these practices collectively would seem crucial in influencing behavioural engagement.

Other than practices, the regression results in the Annex further suggest that higher levels of behavioural engagement in the basic services sector is associated with business models that make use of more professional and managerial jobs and also more technical and associate professional jobs. In other words, higher levels of behavioural engagement are more likely to be found in high skilled workplaces in this sector.

As mentioned previously, moving towards a higher skilled model is not something management can do overnight. This involves long-term strategic issues. However, our analysis shows that further job-redesign and

investment in automation and technology that increases the skill content of jobs will improve behavioural engagement in the long run. This finding is particularly relevant to the Industry Transformation Maps (ITMs) which leverages four pillars (productivity, jobs & skills, innovation and trade and internationalisation) for growth and competitiveness.

Figure 5: The Impact of a Standard Deviation Change in Adoption Such Practices on Employee Engagement



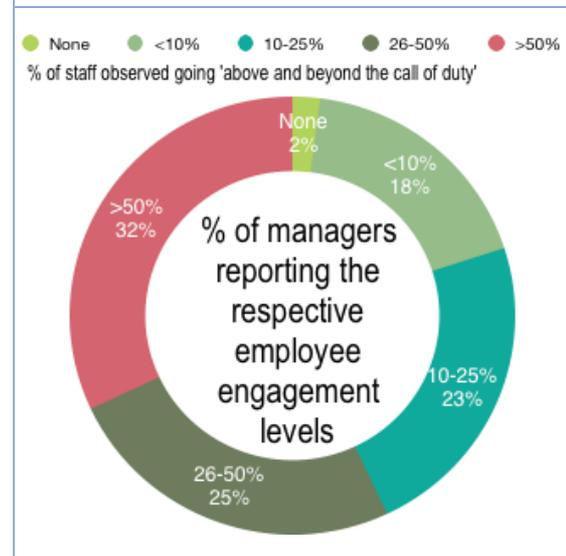
Advanced Services



The advanced services sector includes ‘knowledge-based’ services such as information technology, sharing platforms, media, and research and development, as well as consultation, education, finance and design.

Industries in this sector compose 25% of the sample and contributed more than 32% of GDP to the economy in 2017. They have a lower proportion of foreign workers and generally offer higher paying jobs.

Figure 6: Level of behavioural engagement reported among Singapore establishments in BPSS in the advanced services sector



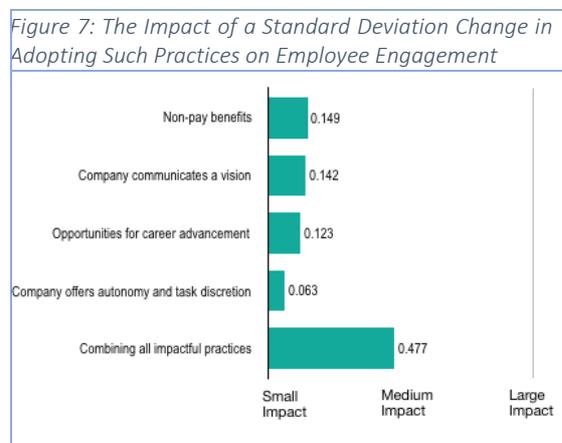
The estimated percentage of managers in this sector reporting that the majority of their employees go “above and beyond the call of duty” is 32%.

This sector shows the highest levels of behavioural engagement. It is a unique sector that presents some unique challenges. A very telling finding is that behavioural engagement in this sector is positively associated with both the number of high paying jobs and the number of low paying jobs. This suggests that the presence of some low paying jobs in the sector may actually be a motivator for employees.

This rather unusual finding becomes more understandable when we see from the regression results (see Annex) that the presence (and level) of managerial and professional jobs are a very strong motivator as are opportunities for career advancement within the establishment.

Arguably, it is not pay or even technical skills that are the primary driver for behavioural engagement within this sector. It is the provision of career and development opportunities for employees who are faced with a highly competitive but potentially rewarding sector.

Figure 7 provides an overview of workplace practice effects. As mentioned before, the non-pay benefits factor is strong but tends to be over-looked in research and policy. Also, we find that being able to cultivate a strong corporate vision and shared sense of values is a strong factor behind the high level of behavioural engagement in this sector.



Concluding Remarks

There are other interesting results worth noting from the results shown in the Annex. Putting the above narrative together we suggest the following conclusions and implications:

1. *The important effects of workplace practices should not be overlooked.* The positive influence of non-pay benefits and practices that increase worker autonomy on behavioural engagement is evident across all three sectors from our analysis even after controlling for the pay and status associated with the jobs offered by the establishments analysed. These practices have generally been under-recognised and under-valued. They are under recognised because employers have a simple assumption that pay is the *only* important thing in enticing commitment from their employees. It is well known that for some employees, especially for the younger ones, having flexibility and more leave are highly valued as part of the package of employment.
2. *The provision of opportunities for upward mobility is a powerful motivator of behavioural engagement in the services sector, particularly the advanced services sector.* In sectors characterised by large numbers of knowledge workers, we find that opportunities for career advancement, the availability of managerial and professional positions and high pay are associated with behavioural engagement. At the same time, it is surprising to find that having a ‘high potential’ programme appears irrelevant to behavioural engagement in Singaporean workplaces though the type of high potential program employed has not been explored in this analysis and therefore may still be an important factor. Nevertheless, this finding suggests that practices that are able to facilitate and co-ordinate the progression of workers to higher levels of responsibility and pay beyond traditional talent management programs are worth exploring.

3. *With the exception of the advanced services sector, job status is less of a driver of behavioural engagement than is the opportunity to use technical skills through the provision of technical and associate professional positions in the establishment.* It is not just managerial job opportunities that spur behavioural engagement in manufacturing, construction and basic services, nor is it the provision of high pay jobs, but it is the up-skilling and

enrichment of rank and file jobs with technical skills. The Industry Transformation Maps and SkillsFuture are both movements aimed at facilitating good jobs. Investment in new technologies that automate repetitive and low skilled work along with the adoption of new business models that enhance value-add are likely to improve behavioural engagement in these sectors.

Annex

	ALL	Manuf' & Construction	Basic Services	Advanced Services
Constant	0.226 *** (0.059)	0.183 (0.120)	0.216 *** (0.084)	0.299 ** (0.131)
Company performance related pay (z-score)	-0.098 *** (0.016)	-0.059 (0.037)	-0.099 *** (0.022)	-0.092 *** (0.033)
Individual performance related pay (z-score)	0.055 *** (0.017)	0.068 ** (0.034)	0.054 *** (0.024)	0.027 (0.034)
Share options for employees (z-score)	-0.033 ** (0.017)	-0.034 (0.037)	-0.049 ** (0.024)	0.003 (0.030)
Opportunities for career advancement (z-score)	0.111 *** (0.018)	0.031 (0.037)	0.135 *** (0.026)	0.123 *** (0.036)
Non-pay benefits (e.g. childcare, insurance etc.) (z-score)	0.133 *** (0.017)	0.188 *** (0.035)	0.100 *** (0.024)	0.149 *** (0.035)
Opportunity for international work experience (z-score)	0.055 *** (0.018)	0.060 (0.041)	0.066 ** (0.027)	0.025 (0.032)
Employees create own teams (z-score)	-0.010 (0.016)	0.035 (0.033)	-0.026 (0.022)	-0.010 (0.032)
Company shares information on operations (z-score)	0.086 *** (0.016)	0.164 *** (0.034)	0.079 *** (0.022)	0.038 (0.032)
% of senior positions that were internal promotions (z-score)	0.047 *** (0.016)	0.055 (0.036)	0.058 ** (0.024)	0.034 (0.029)
Company offers autonomy and task discretion (z-score)	0.069 *** (0.016)	0.082 ** (0.033)	0.062 *** (0.023)	0.063 * (0.033)
Company communicates a vision (z-score)	0.072 *** (0.016)	0.095 *** (0.036)	0.024 (0.022)	0.142 *** (0.032)
A formalised employee development budget (dummy)	-0.012 (0.035)	0.015 (0.074)	0.026 (0.050)	-0.130 * (0.067)
A high potential staff program (dummy)	-0.005 (0.041)	0.025 (0.086)	-0.056 (0.060)	0.075 (0.075)
% of jobs PME(z-score)	0.142 *** (0.017)	0.012 (0.049)	0.154 *** (0.025)	0.133 *** (0.028)
% of jobs technician and ass. prof.(z-score)	0.100 *** (0.015)	0.063 * (0.032)	0.135 *** (0.021)	0.049 (0.033)
% of jobs offering >\$6,000 (z-score)	0.049 *** (0.017)	0.038 (0.055)	0.004 (0.025)	0.097 *** (0.026)
% of jobs offering <\$1,900 (z-score)	-0.014 (0.016)	-0.013 (0.032)	-0.042 * (0.022)	0.073 * (0.038)
Ln Establishment size	-0.076 *** (0.020)	-0.088 ** (0.037)	-0.080 *** (0.029)	-0.056 (0.044)
Adj. R2	0.168	0.147	0.152	0.175
N	3672	757	1978	917

Notes:

Independent variable: discretionary effort index (aggregated and standardised index consisting the four items: "What % of employees in your establishment do you observe (1) going above and beyond the 'call of duty'; (2) taking up the tasks of a colleague without being asked; (3) offering solutions to unsolved problems without being asked; (4) working longer hours than required without being asked")

Basic Services consists of SSIC: Accommodation and Food Services, Wholesale and Retail Trade, Real Estate and Administrative and Support Service

Advanced Services consists of SSIC: Information and Communication, Financial and Insurance, Professional Services, Health and Social Work

CSPP

Centre for Skills, Performance and Productivity (CSPP) is a research centre of the Institute for Adult Learning. CSPP specialises in skills research in relation to workplace performance and productivity. The approach is interdisciplinary employing both quantitative and qualitative research techniques.

The views and analysis presented in this Research Note are those of the authors as researchers. The content of the Research Notes is intended for discussions and generating ideas. They are not necessarily the views or policy prescriptions of the Institute for Adult Learning (IAL) or the Government of Singapore.

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