

Feature Article

IMPACT OF INSTITUTE FOR HUMAN RESOURCE PROFESSIONALS (IHRP) CERTIFICATION ON WORKER-LEVEL OUTCOMES

OVERVIEW

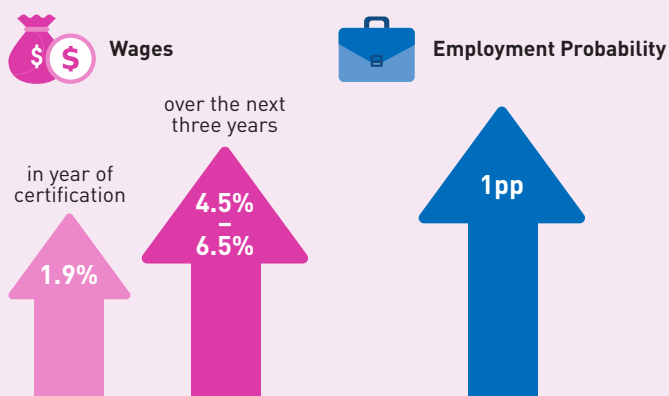
The Institute for Human Resource Professionals (IHRP) was established by Singapore's tripartite partners (i.e., Ministry of Manpower, National Trades Union Congress and Singapore National Employers Federation) to professionalise and strengthen the human resource (HR) practice in Singapore. As part of its efforts to achieve its goal, IHRP implemented a certification programme aimed at enhancing the competencies of HR professionals and creating developmental pathways for these professionals.



FINDINGS

Finding 1:

IHRP certification (i) increased the wages of certified professionals by 1.9 per cent in the year of certification and between 4.5 per cent and 6.5 per cent over the following three years, and (ii) improved the likelihood of being employed by about 1 percentage-point on average.



Finding 2:

The Certified Professional (CP) certification generated sustained wage and employment gains in the years following certification, while the benefits of the Senior Professional (SP) certification were most pronounced in the year immediately after certification.



POLICY TAKEAWAY

The findings suggest that professionalising HR is a labour-market investment with real and measurable returns for professionals who are IHRP certified. By anchoring skills upgrading in recognised professional standards and skills certifications, HR professionals are better able to add value to their organisations and strengthen their employability, supported by continuous professional development and strong professional networks that enable mentorship and the sharing of best practices.



EXECUTIVE SUMMARY

- ▶ The Institute for Human Resource Professionals (IHRP) was established by Singapore's tripartite partners (i.e., Ministry of Manpower, National Trades Union Congress and Singapore National Employers Federation) to professionalise and strengthen the human resource (HR) practice in Singapore. As part of its efforts to achieve its goal, IHRP implemented a certification programme aimed at enhancing the competencies of HR professionals and creating developmental pathways for these professionals.
- ▶ In this study, we examined the impact of the IHRP certification and found that it (i) increased the wages of certified professionals by 1.9 per cent in the year of certification and between 4.5 per cent and 6.5 per cent over the following three years, as well as (ii) improved their likelihood of being employed by about 1 percentage-point on average. In particular, the Certified Professional certification generated sustained wage and employment gains in the years following certification, while the benefits of the Senior Professional certification were most pronounced in the year immediately after certification.
- ▶ The findings suggest that professionalising HR is a labour-market investment with real and measurable returns for professionals who are IHRP certified. By anchoring skills upgrading in recognised professional standards and skills certifications, HR professionals are better able to add value to their organisations and strengthen their employability, supported by continuous professional development and strong professional networks that enable mentorship and the sharing of best practices.

The views expressed in this paper are solely those of the authors and do not necessarily reflect those of the Ministry of Manpower, Ministry of Trade and Industry or the Government of Singapore.¹

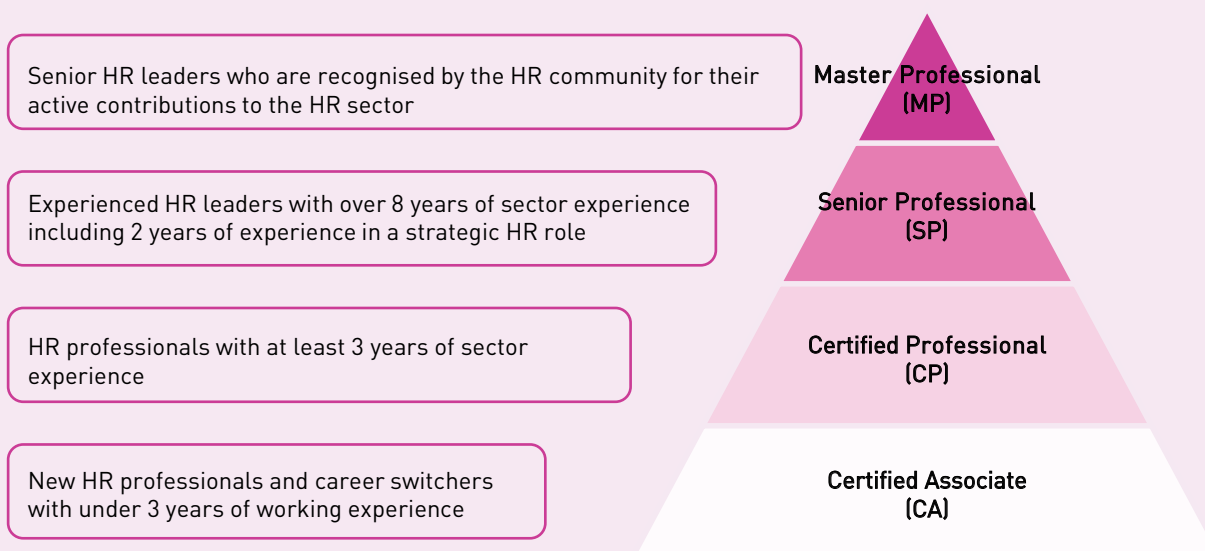
INTRODUCTION

The Institute for Human Resource Professionals (IHRP) was established in 2016 by Singapore's tripartite partners – the Ministry of Manpower (MOM), National Trades Union Congress (NTUC) and Singapore National Employers Federation (SNEF) – to professionalise and strengthen the human resource (HR) practice in Singapore.

A key initiative to achieve this goal is the IHRP certification programme, a national certification framework introduced in 2017 to enhance the competencies of HR professionals and create developmental pathways for them. Designed for HR professionals at various career stages, the programme offers four certification levels, namely: (i) Certified Associate (CA), (ii) Certified Professional (CP), (iii) Senior Professional (SP), and (iv) Master Professional (MP) (Exhibit 1).

This study examines the impact of the IHRP certification on the labour market outcomes (i.e., wages and employment probability) of certified professionals.

¹ We would like to thank Ms Yong Yik Wei, Dr Kuan Ming Leong, Mr Alphonsus Gomez and the IHRP Board for their useful suggestions and comments. We are also grateful to MOM's HR Sector Development Department and IHRP for their inputs to this study. All errors belong to the authors.

Exhibit 1: Types of IHRP Certifications**LITERATURE REVIEW**

In the literature, the effects of HR certification on the labour market outcomes of certified workers are mixed. In the United States (US), Putka et al. (2015) found that certified HR professionals earned higher incomes, experienced faster income growth and had a higher likelihood of full-time employment, relative to their non-certified peers. Similarly, leveraging survey data in Singapore, Milieu Insights (2024) found that certified HR professionals earned higher incomes compared to their non-certified counterparts, after controlling for experience, seniority, firm type and worker demographics.

By contrast, Lester et al. (2010) reported that passing the Professional in Human Resources certification examination in the US had no significant impact on starting salaries or early career promotions of recent graduates, although these individuals were more likely to be employed as HR professionals.

Some of these estimates do not adequately account for selection bias arising from intrinsic differences between certified HR professionals and their non-certified counterparts (e.g., those who pursued certification could be more motivated than those who did not, and this could have contributed to positive labour market outcomes for the certified workers even in the absence of certification). Our study mitigates such selection effects by using longitudinal data and matching techniques to construct an appropriate comparison group for the certified workers.

EMPIRICAL METHODOLOGY

Our study focused on local workers who received the IHRP certification between 2018 and 2024. Specifically, we examined the impact of IHRP's CA, CP and SP certifications. We did not study the MP certification as the purpose of this certification is to provide special recognition to top HR leaders for their active contributions and thought leadership, rather than to further improve their professional standards. We also excluded workers with two or more IHRP certifications, as such individuals could confound the results for the majority of IHRP-certified professionals who only had one certification. The final sample comprised 8,350 unique local workers who received IHRP certifications.

Summary statistics showed that certified professionals differed from their non-certified HR professional counterparts in several ways (Exhibit 2).² For instance, they were more likely to be female and employed in the services sector. Given inherent differences in the characteristics of certified and non-certified professionals prior to certification, we used Coarsened Exact Matching to construct a comparable control group for the certified professionals from among the HR professionals who did not receive IHRP certification. Specifically, we matched non-certified individuals to certified individuals based on key observable characteristics in the year before certification, including age, gender, firm size and other employment characteristics (e.g., sector of employment).

² To analyse the impact of IHRP certification, for certified professionals, we included two other groups apart from those who were already HR professionals. The first group comprises those who were not yet HR professionals at the point of certification and the second group comprises those who were HR professionals but subsequently left HR. For the control group of non-certified HR professionals, we identified them based on HR-related Singapore Standard Occupational Classifications (SSOCs) (i.e., 1212, 2423, 2424 and 41102) from MOM's Occupational Wage Survey.

Exhibit 2: Summary Statistics of Certified Professionals and Non-Certified HR Professionals

	CA N = 2,274	CP N = 5,112	SP N = 964	Non-Certified HR Professionals N = 22,227
Average age (Years)	27	35	43	41
Share of females (%)	77%	81%	71%	70%
Median monthly wage (\$)	\$2,952	\$7,132	\$14,988	\$6,645
Median firm size (Number of workers)	281	471	505	292
Sector distribution (%)				
Manufacturing	5%	7%	8%	18%
Construction	3%	3%	2%	6%
Services	91%	88%	88%	75%

Note: The summary statistics for IHRP-certified professionals reflect their characteristics in the year before certification. The shares may not sum to 100 per cent because of (i) rounding and (ii) the exclusion of workers from "Other Industries" (including agriculture and utilities).

We then used a staggered difference-in-differences (DiD) regression to estimate the impact of IHRP certification on wages. This allowed us to compare the labour market outcomes of IHRP-certified individuals with our comparable control group of non-certified HR professionals.

$$Y_{itc} = \alpha_{ic} + \tau_{tc} + \sum_c \sum_k \gamma_{kc} \text{treated}_i \times \text{event time}_k \times \text{cohort}_{ic} + X_{itc} + \varepsilon_{itc}$$

Where:

- Y_{itc} represents the outcome variable (i.e., log mean monthly wage) for individual i in calendar year t for cohort c ³
- α_{ic} are individual \times cohort fixed effects
- τ_{tc} are time \times cohort fixed effects
- treated_i is a dummy variable which takes the value of 1 if an individual is IHRP-certified
- event time_k are event time fixed effects representing the three years before an individual is IHRP-certified and up to three years after certification (i.e., $k = 0$ is the year of certification)
- cohort_{ic} are dummy variables for whether an individual i belongs to cohort c
- X_{itc} are time-varying control variables (e.g., age, firm size, sector)
- ε_{itc} is the regression error term

γ_{kc} is the coefficient of interest and represents the causal impact of IHRP certification on the wages of workers in cohort c in time k (where $k = 0$ is the year of certification), relative to the base period (i.e., the year before certification, $k = -1$). The pre-treatment periods were included to test the parallel trends assumption (i.e., in the absence of the IHRP certification, the treatment and control groups should follow the same underlying trend over time). To obtain an aggregated effect in the k^{th} year after treatment across all cohorts, we averaged $\gamma_{k,2018}, \gamma_{k,2019}, \dots, \gamma_{k,2023}$ and $\gamma_{k,2024}$.

³ Cohort refers to the individuals who obtained the IHRP certification in the same year. There are seven cohorts in our sample (i.e., those who received their certification from 2018 to 2024).

To study the impact of IHRP certification on employment, we ran the following probit regression to measure the probability of being employed in the years of and after certification for IHRP-certified professionals and their matched counterparts:

$$Pr(Y_{ik}) = \beta_k \text{treated}_i + X_i + \varepsilon_i$$

Where:

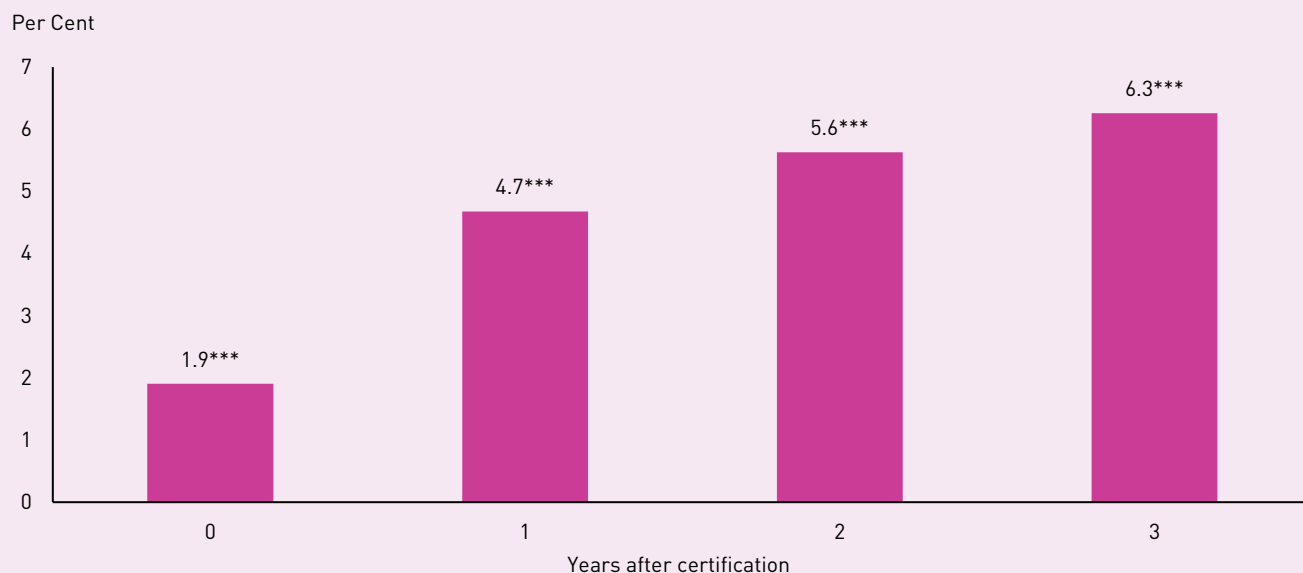
- Y_{ik} is a dummy variable for whether individual i is employed (i.e., at least nine months in employment) in event year k (where $k = 0$ is the year of certification)
- treated_i is a dummy variable that takes the value of 1 if an individual is IHRP-certified
- X_i are control variables in the year before certification (e.g., age, number of months worked, firm size, sector)
- ε_i is the regression error term

We studied the probability of being in employment up to three years after certification. In the probit regression, β_k is the parameter of interest and represents the impact of IHRP certification on employment probability in event year k .

RESULTS

We found that attaining IHRP certification (CA, CP or SP) led to higher wages relative to the control group (Exhibit 3). In particular, wages increased by 1.9 per cent on average in the year of certification, and by a larger 4.5 per cent to 6.5 per cent over the next three years. The higher wages commanded by certified professionals likely reflected the stronger HR competencies acquired from certification, with wages continuing to grow after certification. The gradual wage increase over time potentially indicates that the certified professionals needed time to more fully apply and demonstrate their enhanced skills to their employers.

Exhibit 3: Average Effect of IHRP Certification on Wages, by Years after Certification



Source: Authors' estimates

Note: *** indicates statistical significance at the 1 per cent level.

We also found that IHRP certification increased the probability of being employed by about 1 percentage-point (pp) on average relative to the control group (Exhibit 4).⁴ This indicates that attaining the certification strengthened both worker employability and job stability. Our finding that the employment benefits only materialised in the years following certification suggests that the newly-certified workers needed time to apply their enhanced knowledge and demonstrate the value of the certification to their employers.

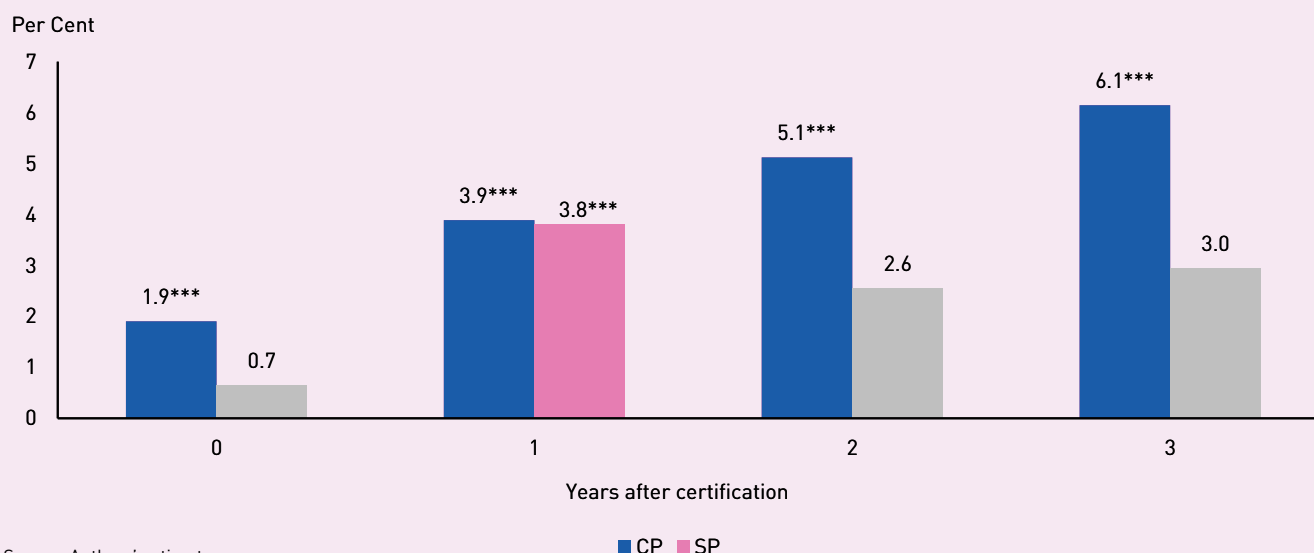
⁴ The higher likelihood of employment reflects a higher probability of IHRP-certified professionals either staying in the same firm or moving to a different one compared to their non-certified counterparts.

Exhibit 4: Average Effect of IHRP Certification on Probability of Being Employed, by Years After Certification

Source: Authors' estimates

Note: * and ** indicate statistical significance at the 10 per cent and 5 per cent levels, respectively. The grey-shaded bar reflects a statistically insignificant effect.

Focusing on the impact by certification types, we found that both CP and SP certifications led to higher wages, although the effect of the latter tapered off over time (Exhibit 5).⁵ In particular, attaining CP certification led to wage increases of 1.9 per cent in the certification year, followed by a larger increase of 4 per cent to 6 per cent over the next three years. For workers attaining SP certification, the impact peaked at 3.8 per cent in the year after certification. The difference in the persistence of the impact likely arose because SP-certified workers tended to be older and more experienced, and hence might depend on other attributes (e.g., professional networks) rather than the attainment of the certification to drive their labour market outcomes over time.

Exhibit 5: Average Effect of CP and SP Certification on Wages, by Years After Certification

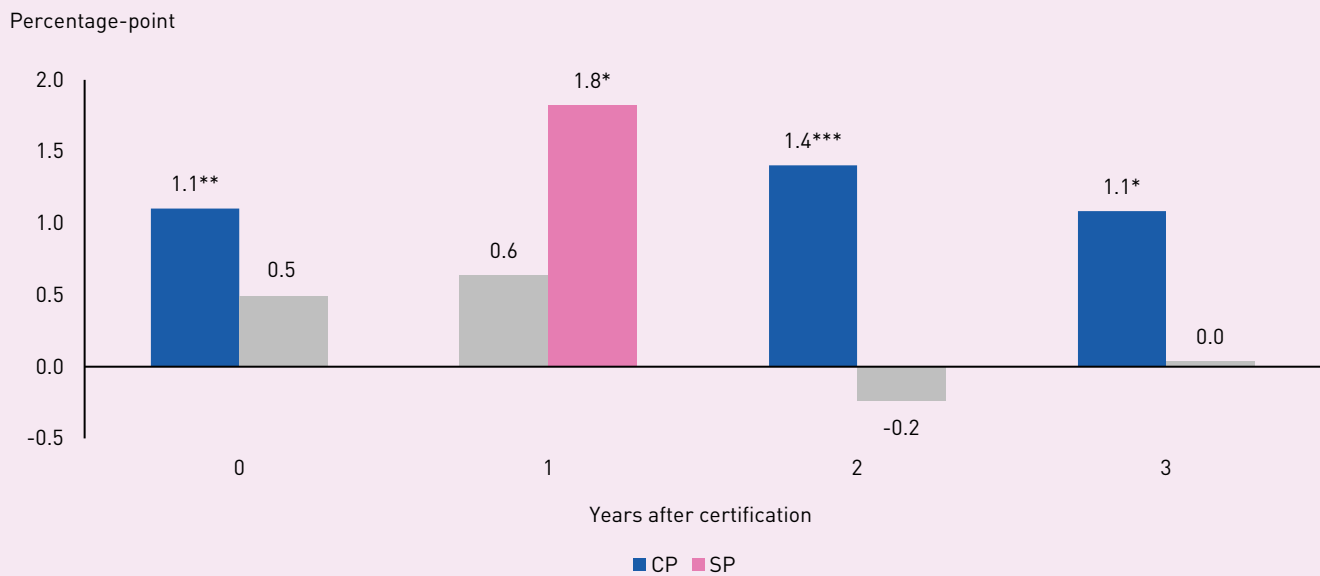
Source: Authors' estimates

Note: *** indicates statistical significance at the 1 per cent level. The grey-shaded bars reflect a statistically insignificant effect.

Similarly, CP-certified workers were more likely to be employed across most years, with a 1.1pp to 1.4pp increase in their probability of being employed compared to the control group (Exhibit 6). For SP-certified individuals, there was a statistically significant 1.8pp increase in their employment probability in the year following certification.

⁵ We could not establish the causal impact of CA certification due to a failure of the parallel trends assumption. As CA certification is open to professionals from diverse backgrounds (including non-HR ones) with less than three years of work experience, CA-certified workers may not have been fully comparable with our control group of HR professionals.

Exhibit 6: Average Effect of CP and SP Certification on Probability of Being Employed, by Years After Certification



Source: Authors' estimates
Note: *, ** and *** indicate statistical significance at the 10 per cent, 5 per cent and 1 per cent levels, respectively. The grey-shaded bars reflect a statistically insignificant effect.

CONCLUSION

IHRP certification plays a meaningful role in strengthening the capabilities of HR professionals in Singapore. Our study found that certified professionals experienced higher wages and improved employment prospects relative to a comparable group of non-certified HR professionals. In particular, CP certification generated sustained wage and employment gains in the years following certification, while the benefits of SP certification were most pronounced in the year immediately after certification.

The findings suggest that professionalising HR is a labour-market investment with real and measurable returns for professionals who are IHRP certified. By anchoring skills upgrading in recognised professional standards and skills certifications, HR professionals are better able to add value to their organisations and strengthen their employability, supported by continuous professional development and strong professional networks that enable mentorship and the sharing of best practices.

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