

Project Summary for IAL Website

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Project Title:	Developing an Impact Evaluation Protocol for SSG’s Jobs and Skills Initiatives
Project Number:	GA20-01
Year of Approval:	2021
Funding Source:	WDARF
Objectives and intended outcomes of the project:	Theory of change, Behavioural change model, Survey development, Baseline dataset, Propensity matching model, 1 online workshop, 2 online industry conferences, 2 publications.
Project Team	
Principal Investigator:	Professor Remus Ilies/ Professor Kai Chi (Sam) Yam
Summary of Project (up to 300 words)	
<p>We aim to develop a novel Impact Evaluation protocol which empirically evaluates the extent to which the launch of the Skills Framework has produced measurable differences in outcomes compared with counterfactual estimates (i.e., in the no intervention scenario). The overarching research question we ask is this: To what extent, do small and medium size employers (companies with 10-200 employees) understand, recognise, develop and pay for skills since the successful completion and launch of the skills frameworks, and what how has this impacted their employees’ productivity, employee engagement and retention. We seek to answer this overall question, through the following research questions:</p> <p>RQ1: How can we clearly define and quantify the desired outcomes of the Skills Framework for employers?</p> <p>RQ2: What are the key predictors of employers that invest in upskilling?</p> <p>RQ3: To what extent, do small and medium employers understand, recognise, develop and pay for skills since the successful completion and launch of the skills frameworks?</p> <p>RQ4: What is the impact of the Skills Framework in terms of productivity, employee engagement, turnover intention, and other key variables?</p> <p>RQ5: How can we explicitly visualize the relationships between key actors, initiatives and outcomes in this upskilling ecosystem?</p>	
Summary of Project Findings, Deliverables and Impacts (up to 500 words)	
<p>The project developed and tested a novel Impact Evaluation (IE) protocol to assess the effectiveness of SkillsFuture Singapore’s (SSG) Skills Framework in shaping SME upskilling behaviors and employee outcomes. Across three complementary studies, the evaluation provides both measurement tools and empirical evidence on how SMEs understand, recognize, develop, and pay for skills following the launch of the Skills Framework.</p> <p>Key Findings. Study 1, based on 25 structured interviews with SME directors, revealed moderate awareness of the Skills Framework (52%) but strong openness to investing in upskilling (68%) when training is practical, cost-effective, and aligned with operational needs. SMEs identified productivity, compliance, and customer satisfaction as primary motivations for workforce development, while cost, time constraints, and operational pressures were the most common barriers. SMEs also expressed a need</p>	

for more industry-specific customization and preferred outreach through brochures, email, and social media.

Study 2 validated the Singapore Employer Upskilling Attitudes & Actions Survey (SEUAAS), a new instrument designed to predict employer upskilling behavior. Survey data from 419 SME directors supported a clear four-factor structure: Upskilling Attitudes, Behaviors, Intentions, and Perceived Control. This accounted for 66.79% of variance. Path analyses aligned with the Theory of Planned Behavior, demonstrating that positive attitudes and perceived control increase intentions, which in turn predict actual upskilling behavior.

Study 3 extended the psychometric robustness of SEUAAS using matched triads of directors, supervisors, and employees (502 employees total) and conducted the impact evaluation. Approximately 44.6% of employees worked in organizations that had used the Skills Framework in the past year. Multi-level modeling showed no significant associations between Skills Framework use and employee engagement or turnover intention. Unexpectedly, a small negative association emerged between Skills Framework use and employee performance, suggesting either that lower-performing firms may be more likely to adopt the Framework, or that the Framework may be less effective than broader upskilling activities in driving performance gains. Longitudinal research is recommended.

Final report

Deliverables. The project produced a scalable IE protocol, the validated SEUAAS measurement tool, and actionable insights on SME motivations, barriers, and communication preferences.

Impact. This work strengthens SSG's ability to quantify ROI, improve accountability, and refine policy learning around national upskilling initiatives. The findings highlight the importance of targeted outreach, SME-relevant customization, and continued evaluation of downstream workforce outcomes.