



Data skills and capability gaps

June 2021

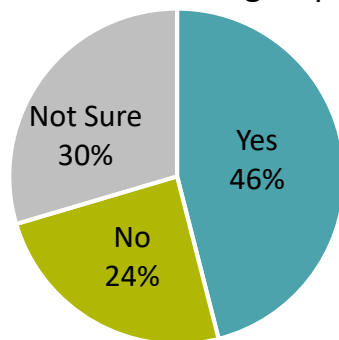
Research Note 03-21



Data was commonly identified as an existing skill or capability gap within APS employees' immediate workgroups

The 2020 APS Employee Census asked respondents if they perceived skills or capability gaps in their immediate workgroup. Of those who did, 24% identified data as a missing skill or capability, making it the fourth most commonly identified capability gap.

Are there currently skills or capability gaps within your immediate workgroup?



What skills or capabilities, if any, are missing within your immediate workgroup?



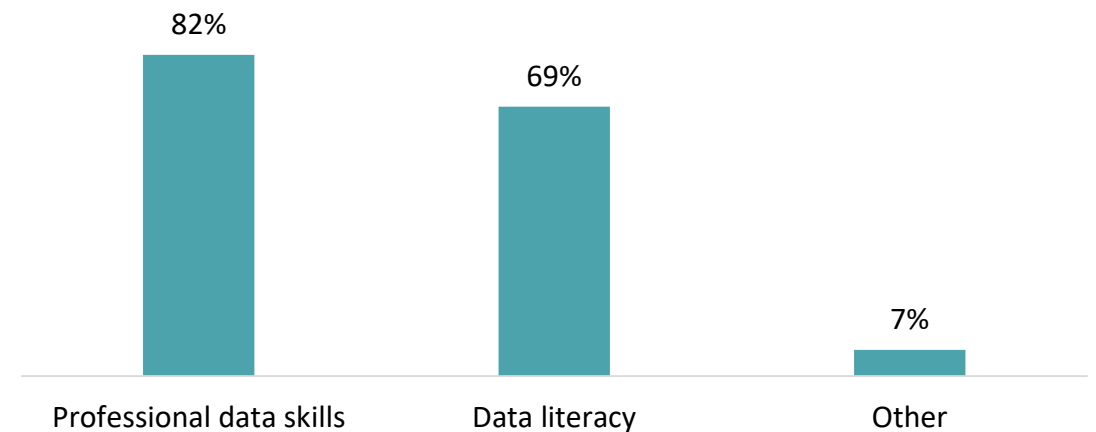
Professional data skills were more commonly identified than data literacy as a missing capability

Respondents who identified data as a skills or capability gap were then asked to select the type of missing data skills or capabilities.

82% of respondents selected professional data skills and 69% selected data literacy.

Around half (53%) selected both as the type of data capability that was missing from their immediate workgroup.

What data skills or capabilities are missing within your immediate workgroup?



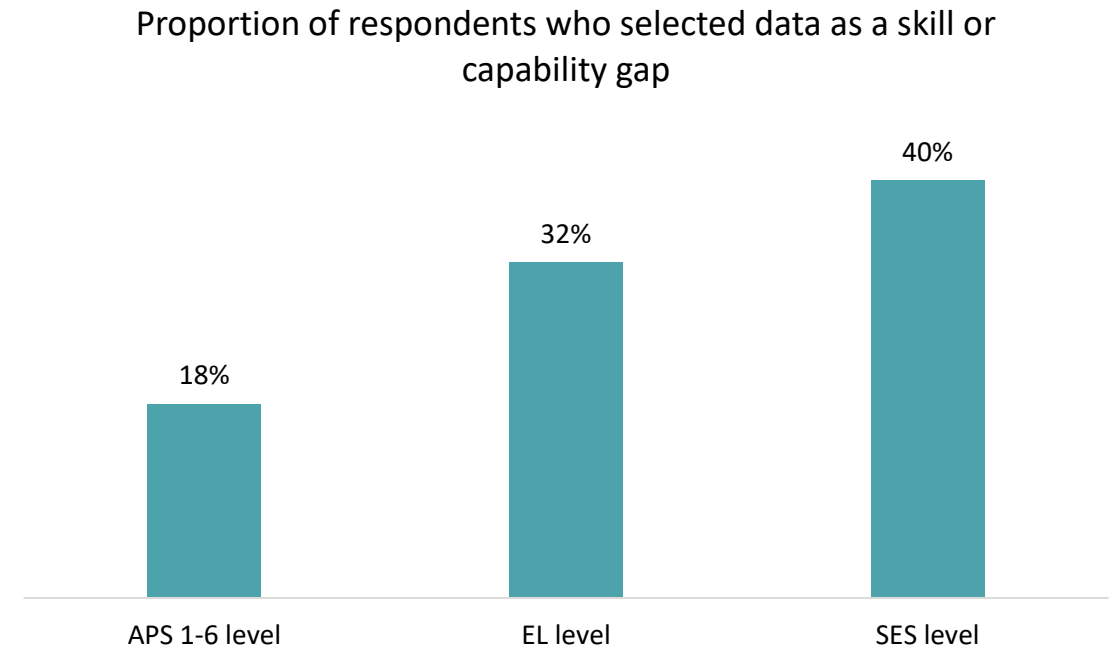
Professional data skills were defined as including data analysis, data science, data mining, data management and analytical and statistical modelling.

Data literacy was defined as including numeracy and using basic statistics, visualising data effectively and producing evidence for decision making.

SES employees more commonly identified data as a skill or capability gap within their immediate workgroup

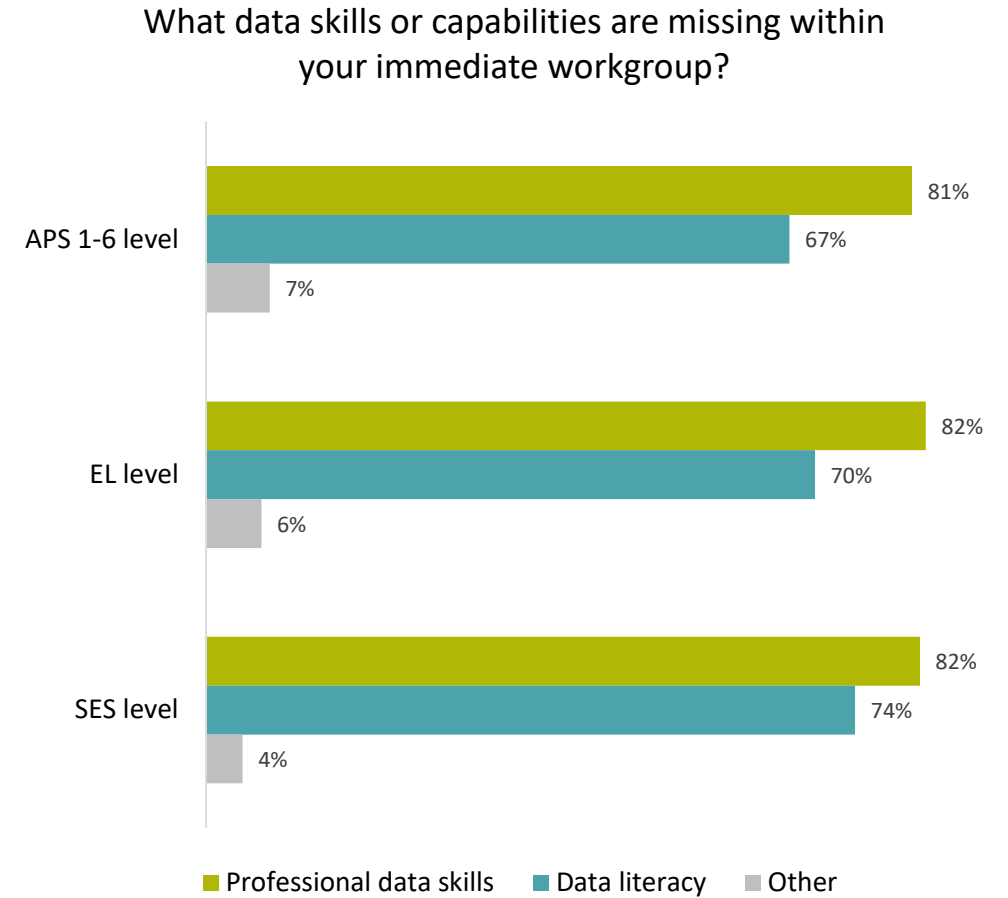
40% of SES-level respondents who perceived missing skills or capability gaps said data skills were missing from their workgroups.

Only 18% of APS level respondents who perceived missing skills or capability gaps selected 'data'.



Employees within the three classification level groups most commonly identified professional data skills as missing

Respondents from APS, EL and SES classification levels more commonly perceived professional data skills as the type of data skill missing from their immediate workgroup.

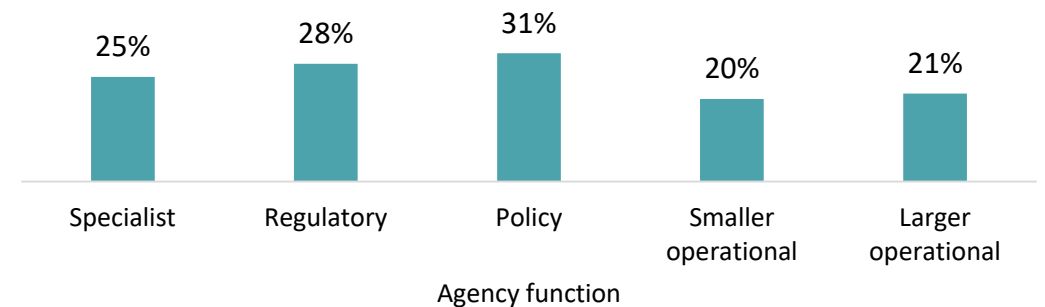
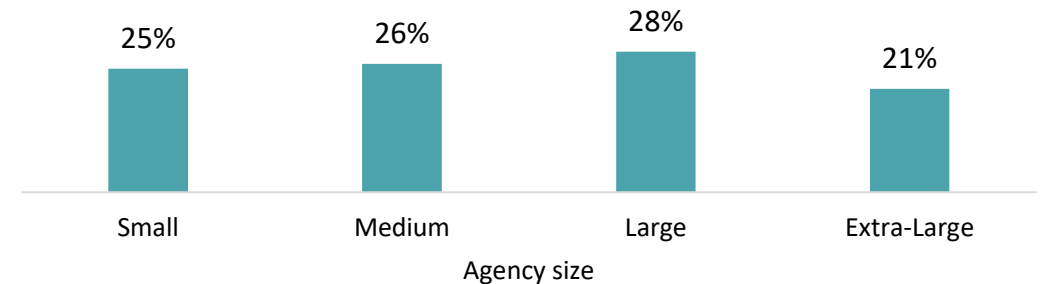


Respondents from various agency functions and sizes had similar perceptions of capability gaps within immediate workgroups

28% of those identifying skills or capability gaps from large agencies identified data as a capability missing from their immediate workgroups. For those from extra-large agencies, it was 21%.

31% of those identifying skills or capability gaps from policy agencies identified data as a capability missing from their immediate workgroups.

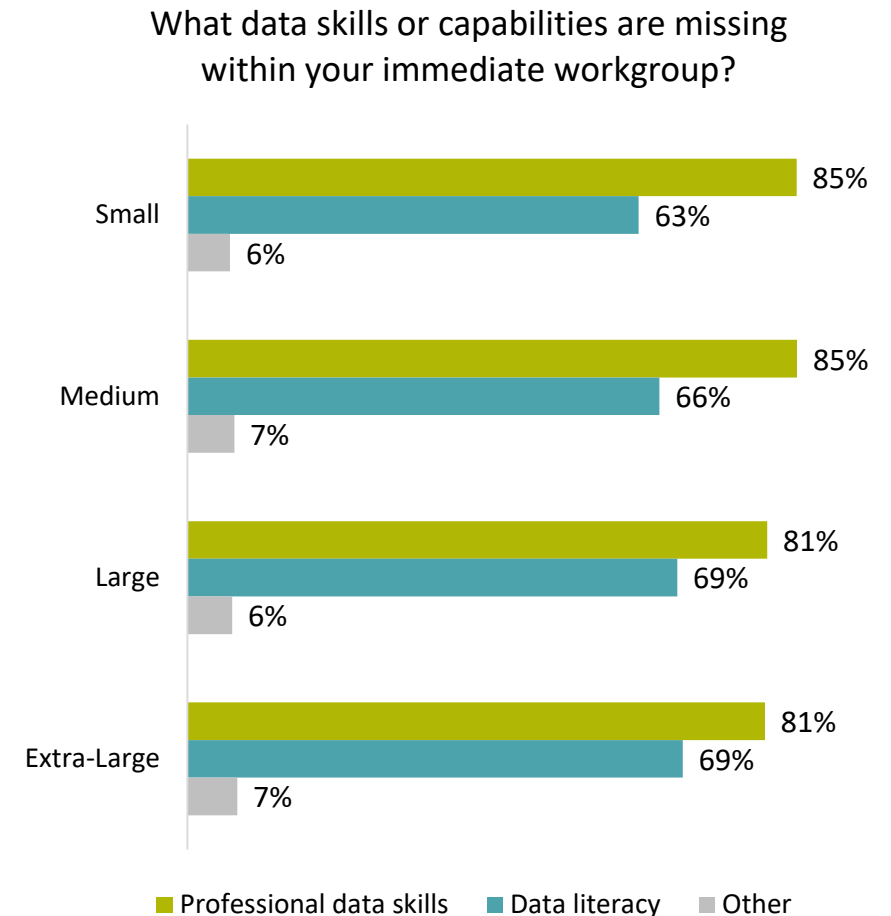
Proportion of respondents who selected data as a skills or capability gap



The type of data skills missing from employees' immediate workgroups varied by agency size

Respondents from both smaller and larger agencies most commonly identified professional data skills as the type of data skills that were missing from their immediate workgroups.

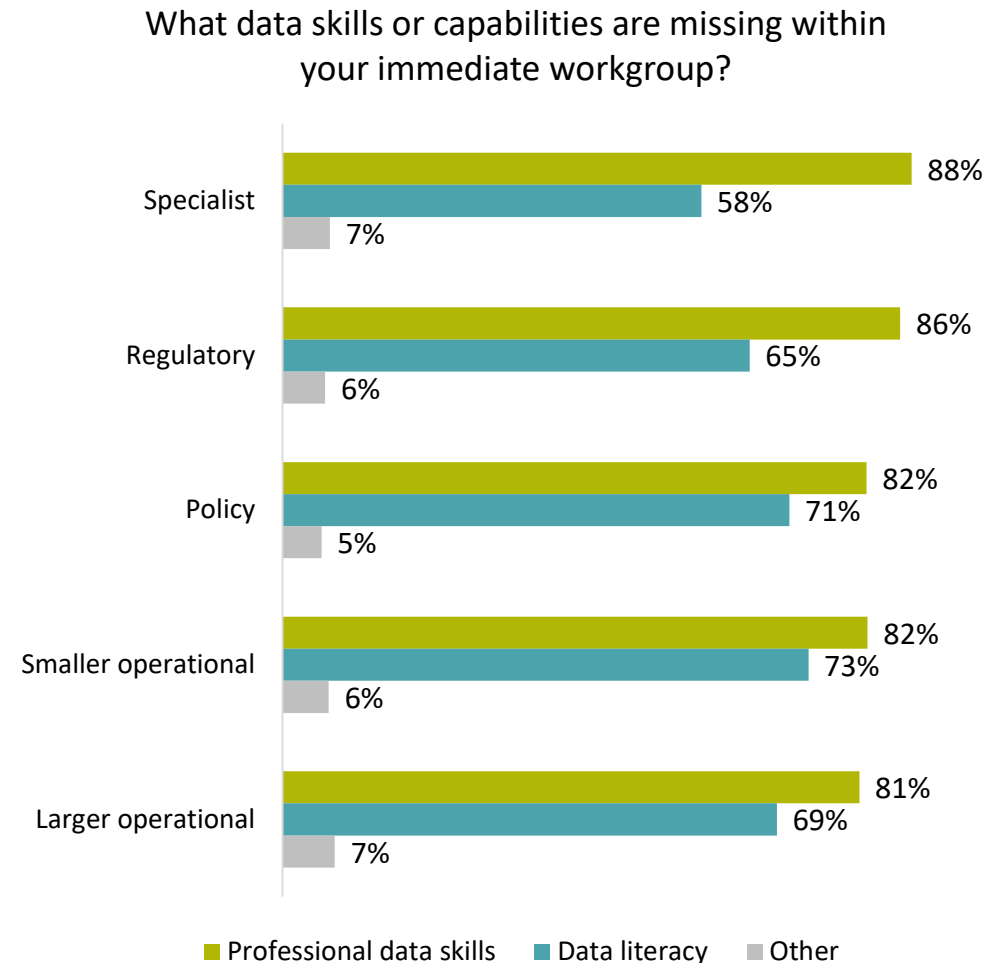
The proportion of respondents identifying data literacy as a missing capability, however, increased with agency size.



The type of data skills missing from employees' immediate workgroups varied by agency function

Of those who said that data skills were missing from their immediate workgroups, larger proportions of respondents from specialist and regulatory agencies perceived professional data capability gaps.

Smaller operational and policy agencies had the largest proportions identifying data literacy as missing from the immediate workgroups.



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