

TRANSFERABLE SKILLS IN THE WORKPLACE

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Key findings from a survey of UK employers

June 2019



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TRANSFERABLE SKILLS IN THE WORKPLACE

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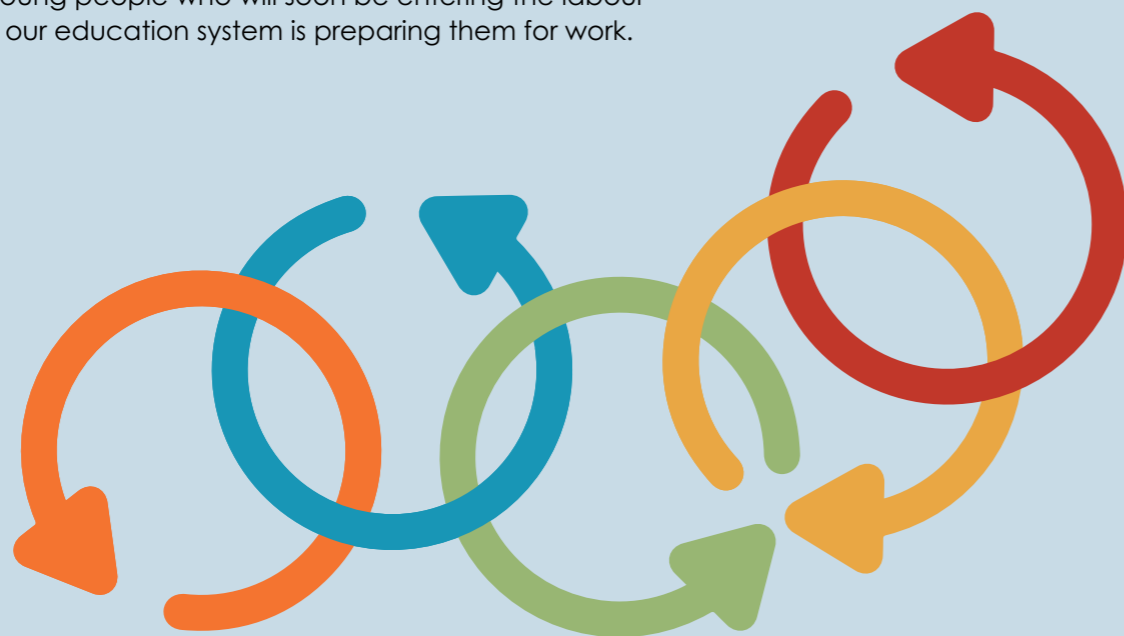
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EXECUTIVE SUMMARY

When assessing the suitability of a job applicant for a new role, employers often need to balance a candidate's job-specific technical skills and experience against other factors, such as their ability to work effectively in teams, communicate with others and solve problems. The latter are what we often term 'transferable' skills and are considered to be increasingly important attributes both in the current labour market and for the future of work.

To learn more about employers' perceptions of these skills, Nesta and the City of London Corporation ran an exploratory survey-based research project with 101 UK employers between November 2018 and January 2019. Our aim was to learn more about the value which employers place on transferable skills, which skills they prioritise and the evidence they look for to identify these skills during the recruitment process. We also conducted follow-up interviews with ten survey respondents to undertake a deeper analysis of some of these questions.

When interpreting the findings of this research, it is important to note that they are based on the views of a small, non-random sample group of UK employers. However, as an exploratory study, these findings point to several avenues for future research and actions for stakeholders working in the field. They also have a variety of implications for young people who will soon be entering the labour market and how our education system is preparing them for work.



KEY FINDINGS

Survey Findings

- Three-quarters (74%) of employers prioritised transferable skills equal to or above technical skills when recruiting new employees.
- **The top 12 transferable skills rated by employers were:¹**
 1. Oral communication/presentation skills
 2. Collaboration and teamwork
 3. Initiative
 4. Problem solving
 5. Organisational skills
 6. Adaptability/flexibility
 7. Independent working/autonomy
 8. Written communication
 9. Critical thinking
 10. Resilience
 11. Creativity
 12. Analysis and evaluation skills
- Most respondents (96%) described **interviews** as 'effective' or 'very effective' in identifying transferable skills. Processes that simulate real work experiences, such as **tasks/assignments** (77%) and **presentations** (71%), were also considered effective/very effective.
- Recruitment process that employers considered to be less effective at identifying transferable skills include **reference checks** (21% 'ineffective' / 'very ineffective') and processes which rely on candidates' self-reporting of skills, such as **CVs** (27%) and **cover letters** (21%).

○ When reflecting on a candidate they had recently recruited:

- 57% of employers indicated that the candidate had continued to demonstrate all of the transferable skills prioritised during recruitment.
- 40% indicated that the candidate had continued to demonstrate only some of the transferable skills prioritised during recruitment.
- 1% indicated that the candidate had not continued to demonstrate any of the transferable skills.
- Most employers had already helped – or had plans to help – the candidate develop the transferable skills they were lacking.

Interview Findings

Employers we spoke to:

- Found it **challenging to accurately assess transferable skills** using traditional recruitment processes and reported that candidates' self-assessments of their skills are often unreliable.
- Considered **interviews** to be a helpful way of gathering evidence of candidates' **oral communication skills** in particular.
- Favoured recruitment processes that require candidates to demonstrate evidence of their transferable skills in **a task that simulates a real working environment**, such as completing an independent problem-solving task.

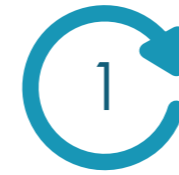
1. Based on total high/very high priority ratings

RECOMMENDATIONS

Nesta and the City of London Corporation are particularly interested in supporting young people to develop the skills they need to thrive in the workforce of the future.

We recommend:

1. More research is needed on the most effective ways to assess transferable skills in job applicants.
2. Schools, businesses and government should work together to develop effective tools for measuring, recording and reporting the development of transferable skills.
3. Employers should work with schools to ensure that careers guidance adequately informs young people about the transferable skills employers are looking for and how they can demonstrate them.
4. Greater focus should be given in schools and in lifelong learning to the sequential and explicit development of transferable skills.



INTRODUCTION

This report summarises the findings of an exploratory survey conducted by the City of London Corporation and Nesta focused on how UK employers prioritise and identify skills when hiring new recruits.

In order to better prepare young people for the future of work, it is important that we learn more about the skills that make people more resilient to changes in the labour market. To this end, this research focuses on what we have termed 'transferable skills' – those skills which are common to and cut across many occupations, such as problem solving, critical thinking and communication. Often these are referred to using other terminology, such as transversal competencies or 'soft skills'.

Many of these transferable skills have been featured in major UK research initiatives, such as the Department for Education's Employer Skills Survey, which in 2017 found that 41% of UK skill-shortage vacancies were attributed to a lack of complex problem solving skills in job applicants. The aim of our research was to learn more about **UK employers' perceptions of these skills**: how they prioritise and identify them, and the extent to which their employees demonstrate them.

For the City of London Corporation, transferable skills are a key component of their broader work on 'fusion skills'. The City have defined fusion skills to include a combination of so-called 'soft skills' as well as technical skills that people will need to thrive in the workforce of the future. This concept builds on the idea that a merging and blending of skills and industries – including arts, design, technology and business – are key components of the current and changing labour market. Previous work by Wallace and Barber (2013) has also explored the concept of 'fusion skills' in relation to the creative industries, noting

that a key aspect is the fusing of expertise, knowledge and experience in individuals.

For Nesta, this study forms part of our ongoing work on skill demands in the labour market and how we can best prepare young people for the future of work. In 2017, Nesta published the *Future of Skills: Employment in 2030* report (Bakhshi, Downing, Osborne and Schneider, 2017) in collaboration with Pearson and the Oxford Martin School. Using a combination of machine learning and trends analysis, this research was able to predict the skills that are highly likely to be in demand in the UK in 2030, such as higher-order thinking and interpersonal skills.

In 2018, Nesta also published the UK's first publicly available data-driven skills taxonomy based on analysis of 41 million job adverts. This work identified a set of 66 'transversal' skills – such as communication, organisational skills and collaboration – that are required in many occupations in the UK today (Djumaliev and Sleeman, 2018).

Building on this work, the present research was designed with the following aims:

- Firstly, to understand how **UK employers prioritise transferable skills** when recruiting new employees
- Secondly, to learn more about **how employers identify transferable skills in job applicants**, including the recruitment processes they use and the evidence they look for

In addition to these primary objectives, this research explores whether new hires have continued to demonstrate the transferable skills that surveyed employers prioritised during recruitment. It also looks at which skills employers have had to invest resources into for continued professional development of their new hires.



SURVEY DESIGN AND METHODOLOGY

To explore the research objectives, participants were initially surveyed using a semi-structured online questionnaire (see Appendix A). The first section of the questionnaire asked participants to reflect generally on employees they had recruited or helped to recruit in the last three years, with a focus on the transferable skills they prioritised and the recruitment processes they used when hiring. The second section of the questionnaire asked participants to reflect on one specific employee they had recruited or helped recruit in the last three years.

In several questions, participants were asked to respond to a list of 20 'transferable' skills.² The curation of this list was primarily

informed by key skills identified in previous Nesta research, including the *Future of Skills: Employment in 2030* report (Bakhshi et al., 2017) and data-driven skills taxonomy (Djumalieva and Sleeman, 2018). Also included in this list were skills that are of particular interest to Nesta or the City of London Corporation, such as resilience and initiative. Recognising that this list is not exhaustive, participants were also provided with a free-text option to identify alternative transferable skills where appropriate.

In the second phase of the research, semi-structured interviews were conducted with ten survey participants, who were asked to elaborate on their initial survey responses and explain what evidence they looked for during the recruitment process to identify the transferable skills that they prioritised.

General/transferable skills³

Skills that are common to many occupations e.g. teamwork, communication and organisational skills

Unless otherwise stated, the results reported in this survey are expressed in percentages (%) and based on an unweighted sample size of

Technical skills³

Skills that are very specific to certain occupations e.g. accounting, machine operation, data science and legal research

101. Any percentage totals that do not equal 100% are due to rounding.

2. Adaptability/flexibility; Analysis and evaluation skills; Collaboration and teamwork; Creativity; Critical thinking; Cultural awareness; Entrepreneurial skills; Independent and active learning; Independent working/autonomy; Information and data literacy; Initiative; Leadership/people management; Networking/relationship-building; Oral communication/presentation skills; Organisational skills

(planning, time management, deadlines, prioritisation, multi-tasking); Problem solving; Resilience; Risk taking; Teaching/coaching/mentoring; Written communication (see Appendix B)

3. Definitions of general/transferable skills and technical skills were provided throughout the survey where this terminology was used.

PARTICIPANTS

The survey was disseminated online through Nesta and the City of London Corporation's professional networks between November 2018 and January 2019. A total of 101 UK-employed respondents completed the full survey, all of whom had been responsible for recruiting someone at their organisation in the past three years.

A non-random convenience sampling method was used for both the survey and telephone interviews, and thus the results of this research cannot be generalised to the broader UK employer population or industry groups. Those who completed the survey were a self-selecting group of voluntary participants who responded to an online or word-of-mouth invitation. Of the survey respondents, 36 expressed interest in hearing more about the research and were invited to complete a follow-up interview. Of these, ten agreed to participate and were interviewed via telephone in February 2019.

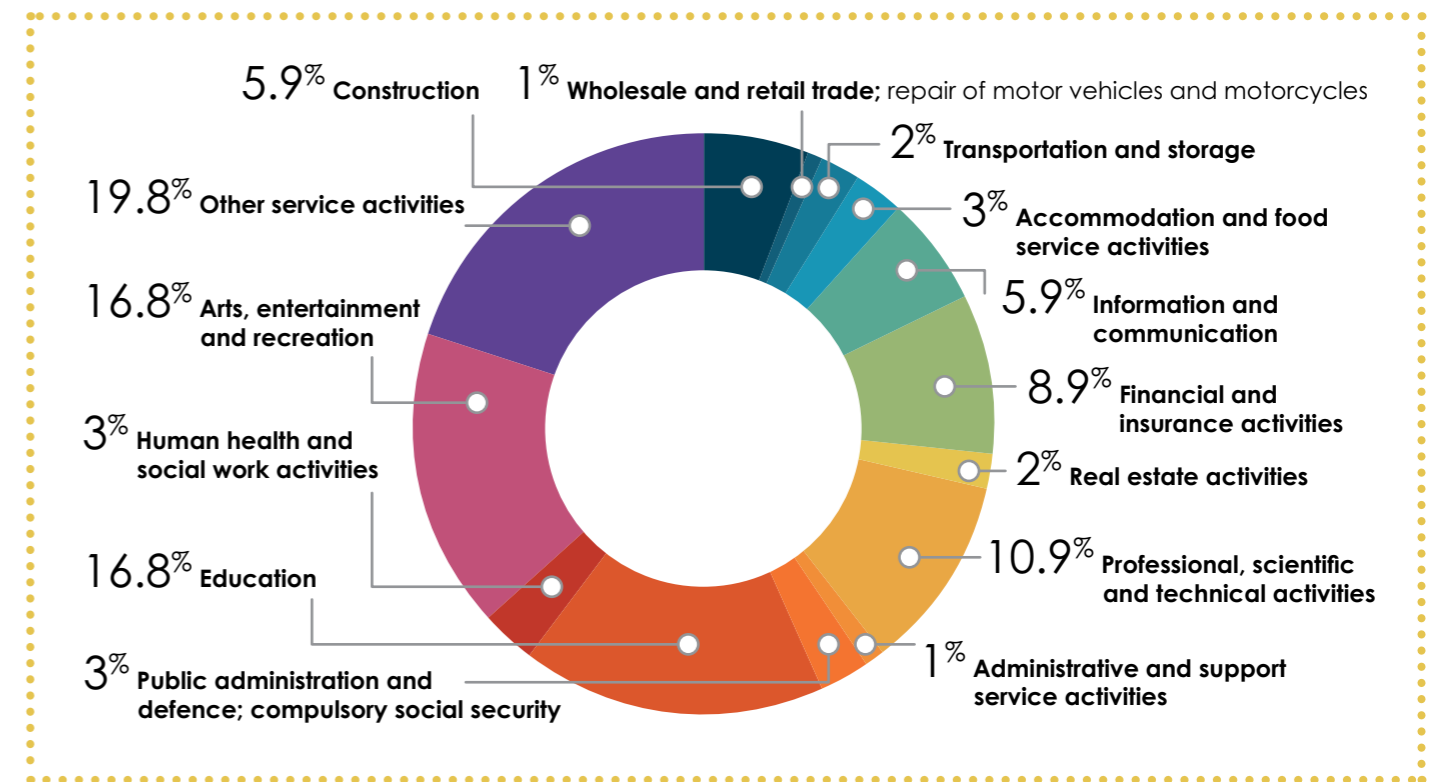
An outline of the survey participants' demographics and background is provided below.

Survey respondent demographics

Participants represented a broad range of industries and organisation sizes. They all had experience recruiting candidates, including at different job levels.

Using the UK's Standard Industrial Classification (SIC) list,⁴ participants were asked to identify which industry sector they currently work in. **Figure 1** illustrates the breakdown of survey responses by industry sector, from a total of 101 participants. 20% of respondents were employed in 'other service activities',⁵ which was the most frequent response, closely followed by 'arts, entertainment and recreation' and 'education', both with 17% of respondents.

Figure 1: 'Q4: What sector is your organisation in?'



4. Further details about the SIC categories can be found at: <http://resources.companieshouse.gov.uk/sic/>

5. 'Other service activities' is a broad SIC category which includes a wide array of industries, including

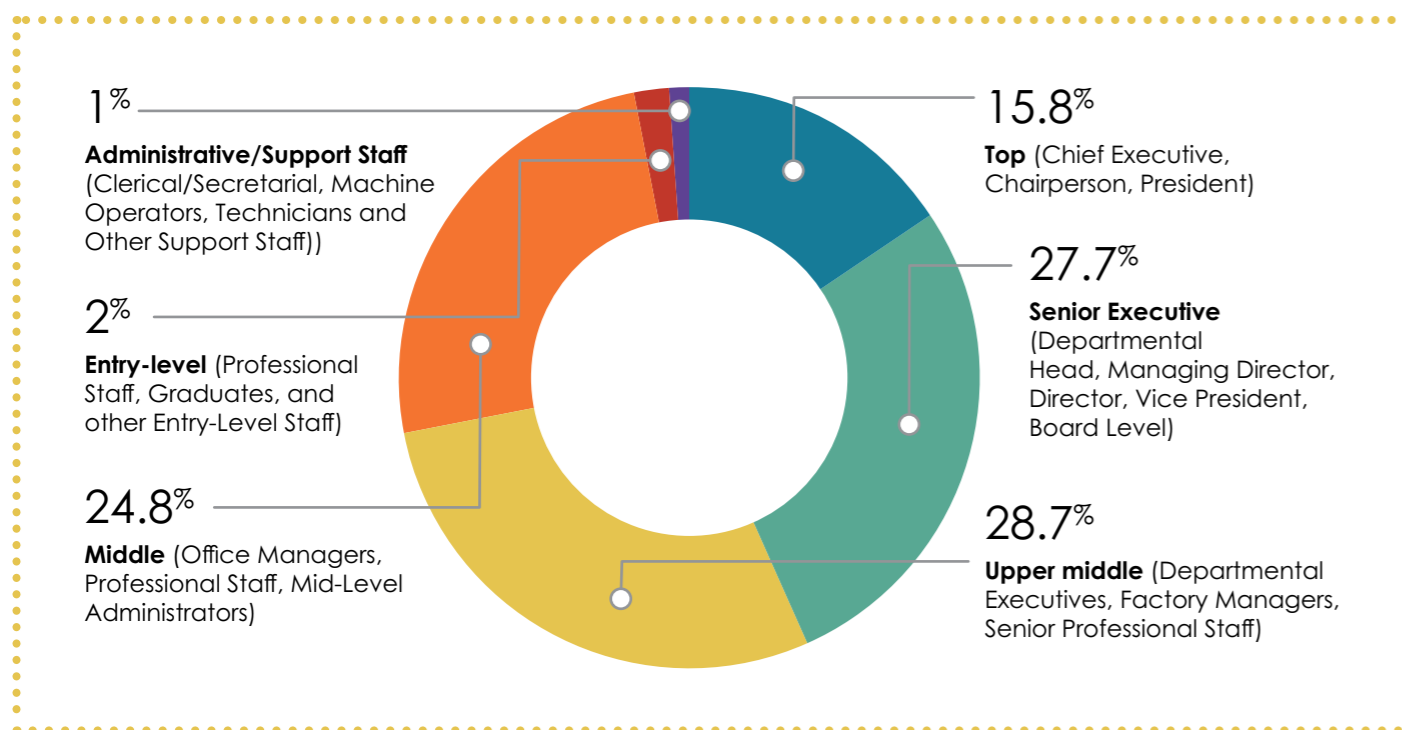
trade unions, religious and political organisations, the repair of communication and consumer electronics, hairdressing and beauty treatments, and physical well-being activities. A full list is available at <http://resources.companieshouse.gov.uk/sic/>

Respondents were also from a range of organisation sizes, spanning from zero employees to 2,500+. Only 1% of respondents reported being from an organisation with zero employees, which was the category chosen least frequently. The category with the most responses was an organisation size of ten to 49 employees (29%), closely followed by an organisation size of 2,500+ (27%). Small organisations of one to nine employees made up 16% of responses, organisations with 50 to 249 employees made up 17% of responses, organisations with 250 to 499 employees made

up only 4% of responses, and medium-large organisations with 500 to 2,499 employees made up 7% of responses.

Figure 2 summarises the job levels of survey respondents, which were fairly evenly spread across 'senior executive' (28%), 'upper middle' (29%) and 'middle' (25%). 'Top' was also chosen frequently, with 16% of responses. There were very few responses from 'entry-level' (2%) and 'administrative/support staff' (1%).

Figure 2: 'Q5: Which of the following most closely matches your job level?'



These survey respondents had responsibility for recruiting employees at a range of different job levels over the last three years. Unsurprisingly, the responses were concentrated at the mid-tier job levels and below: 66% of respondents had recruited someone at 'entry-level' and 59% had

recruited someone at 'middle' level. 30% of respondents had recruited a new employee at 'administrative/support staff' level, 24% had recruited an 'intern' and 21% had recruited an 'apprentice'. Respondents had also recruited candidates into more senior roles, including 'top' (16%), 'senior executive' (28%) and 'upper middle' (29%) positions.⁶

6. Respondents were able to select multiple options when answering this question, so the total number of

responses to this question was higher than the total number of respondents.



RESULTS

Part A: How do UK employers prioritise transferable skills?

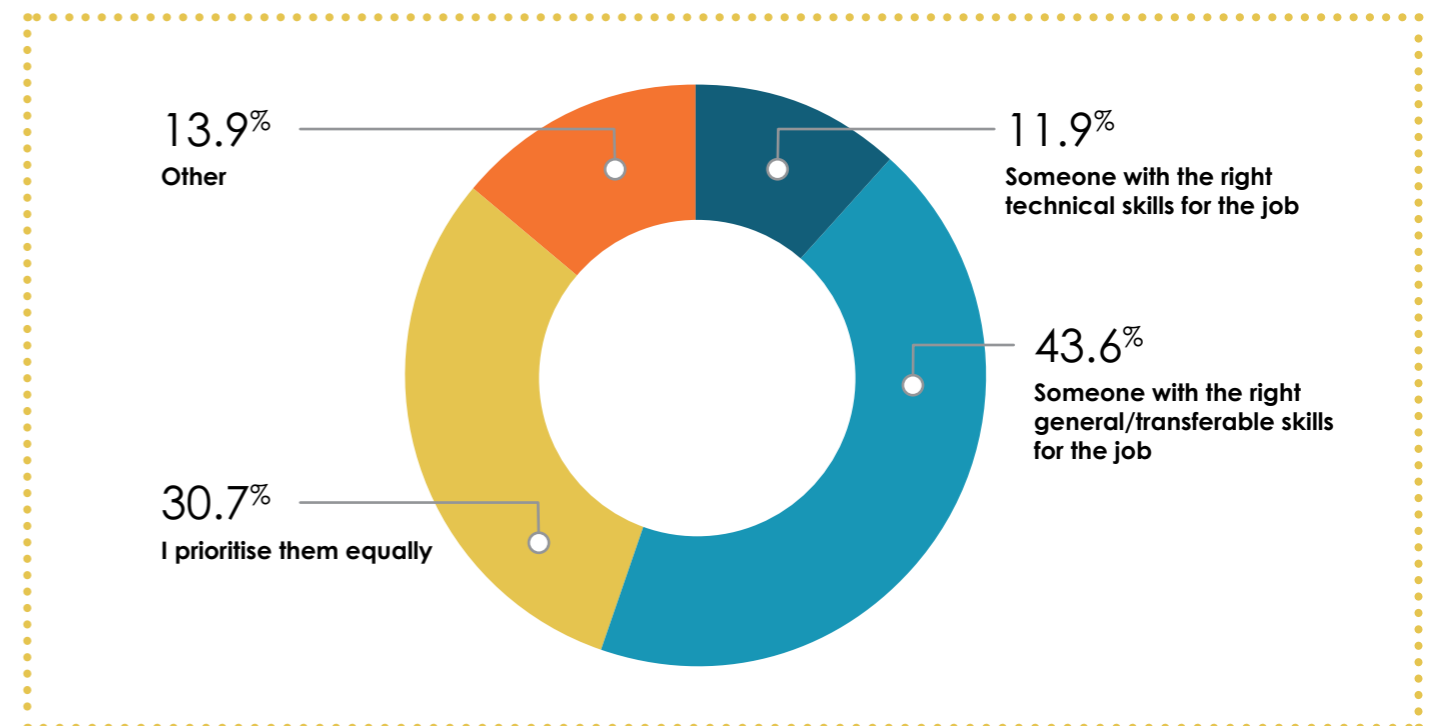
Transferable vs. Technical skills

The majority of employers (74%) we surveyed prioritised transferable skills equal to or above technical skills when recruiting. When asked to identify their top priority when hiring someone new, 44% of surveyed participants said they would prioritise someone with the right 'general/transferable' skills for the job. By contrast, only 12% of respondents said they would prioritise someone with the right

'technical' skills for the job. 31% of respondents said they would prioritise these skill sets equally.

Of the respondents who selected 'Other' (n=14 participants), three noted in their free-text response that the way they prioritise these skill sets is dependent on the role they are recruiting for. Six respondents referred to themes relating to attitude, motivation or commitment to the role.⁷

Figure 3: 'Q.7: What is your top priority when hiring someone new?'



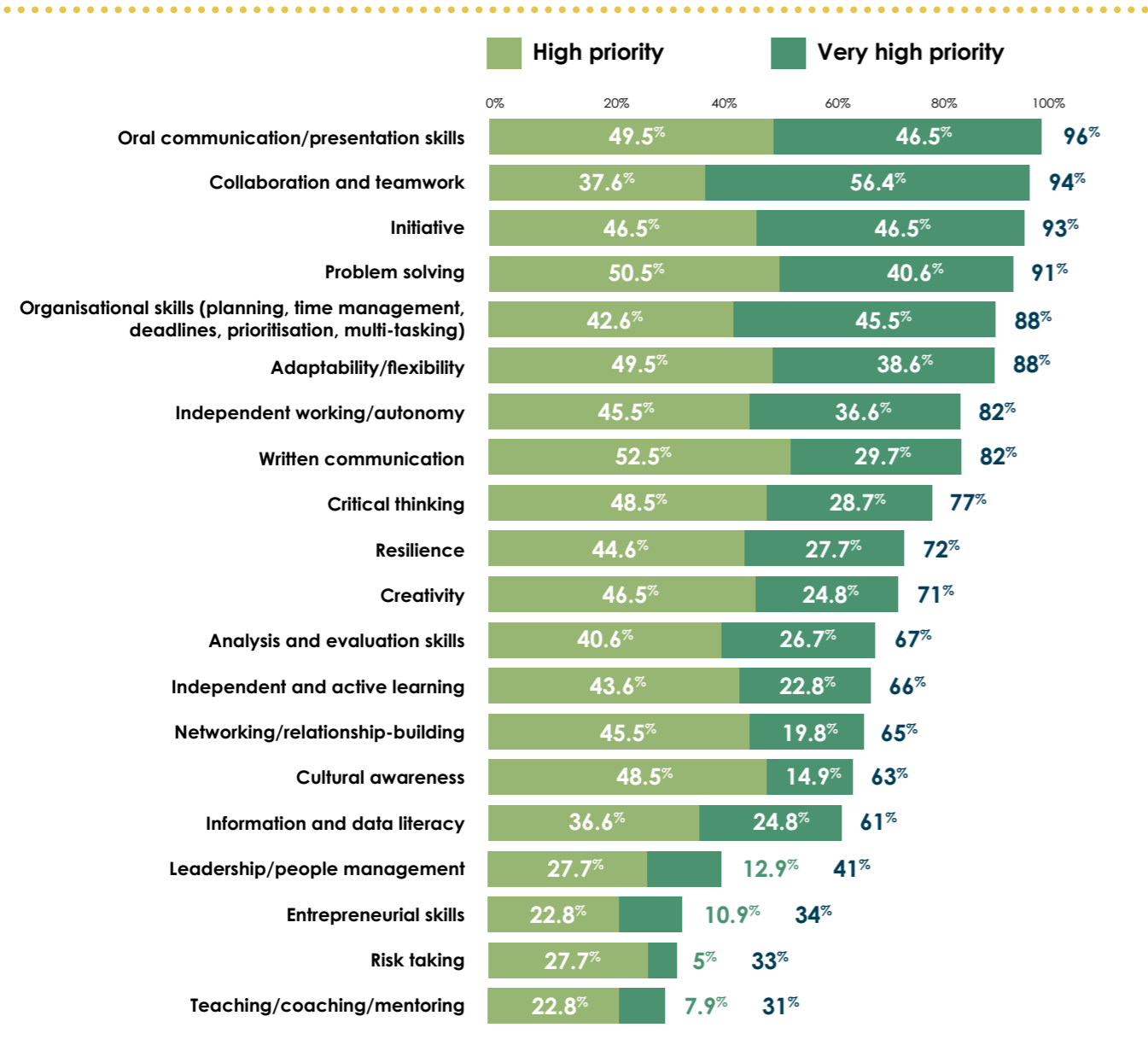
7. Based on respondents who selected 'Other' and mentioned 'attitude', 'motivation', 'interest', or 'commitment' in their free text response.

Employers' prioritisation of transferable skills

Using a rating scale (very low – very high priority), participants were asked to indicate how they would prioritise transferable skills when recruiting new hires. **Figure 4** summarises the ranking of these skills based on the combined percentage of respondents who identified each as a 'high' or 'very high' priority. The 12 most highly ranked skills were oral communication/presentation skills (96%),

collaboration and teamwork (94%), initiative (93%), problem solving (91%), organisational skills (88%), adaptability/flexibility (88%), independent working/autonomy (82%), written communication (82%), critical thinking (77%), resilience (72%), creativity (71%), and analysis and evaluation skills (67%). Based on this scale, the lowest ranked skills included entrepreneurial skills (34%), risk taking (33%) and teaching/coaching/mentoring (31%).

Figure 4: 'Q.8: Assuming candidates have the same level of technical skill, how would you prioritise the following general/transferable skills? When answering this question, please consider these skills relative to each other.' ('High priority' and 'Very high priority' responses only)⁸



8. Note: This graph excludes 'very low priority', 'low priority', 'neutral', 'I don't know' & 'Does not apply'

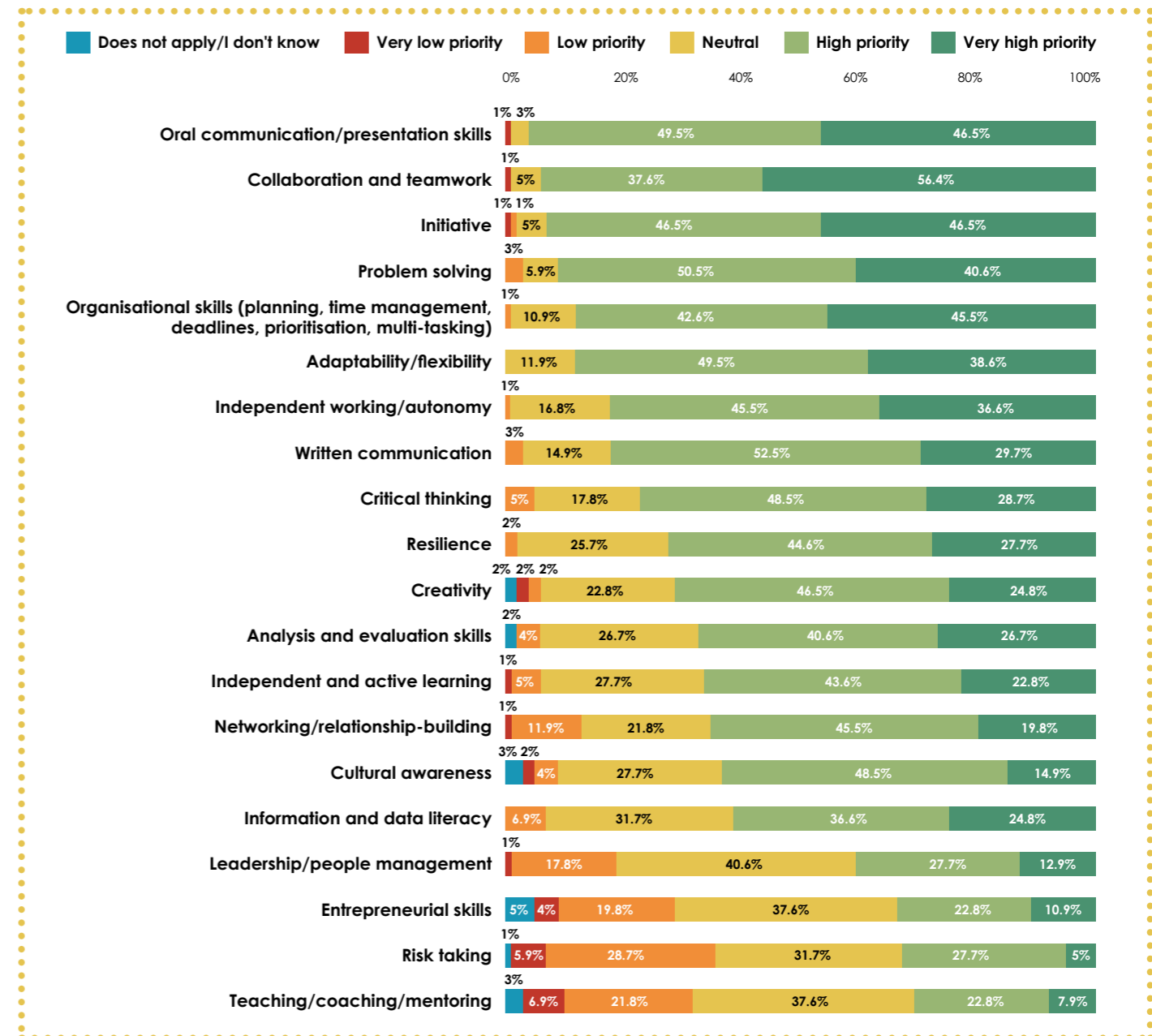
responses. For a full summary of responses, please see Figure 5.

When asked if there were any skills not included in the list that they would describe as a 'high' or 'very high' priority, 22 respondents (22%) opted to identify additional skills in a free text response. No clear themes emerged from these responses, which ranged from commercial awareness and numeracy, to attitude, empathy, ambition and emotional intelligence. Two respondents noted that their prioritisation of transferable skills would vary based on the role they were recruiting for.

While respondents prioritised transferable skills in different ways, it is important to observe

that, on balance, employers clearly place considerable value on the vast majority of skills on the curated list. **Figure 5** provides a full summary of employers' responses, including 'low' and 'very low' ratings. With the exception of risk taking, more employers rated each skill as a 'high/very high priority' than a 'low/very low priority'. Indeed, very few respondents (<7%) described any one skill as a 'very low priority'. The three skills with the highest combined percentage of 'low' and 'very low' ratings were risk taking (35%), teaching/coaching/mentoring (29%) and entrepreneurial skills (24%).

Figure 5: 'Q.8: Assuming candidates have the same level of technical skill, how would you prioritise the following general/transferable skills? When answering this question, please consider these skills relative to each other.'



The finding that employers rate many of these transferable skills as highly important is consistent with economic research that has shown that non-cognitive skills, including social skills and leadership skills, are increasingly in demand in the labour market (Deming, 2015; Heckman and Kautz, 2012; Heckman, Stixrud and Urzua, 2006). The results are also closely aligned with findings from survey research in the US, which has repeatedly found that oral communication, teamwork, collaboration and problem-solving are among the skills most valued by employers (see Casner-Lotto and Barrington 2006; Jerald 2009; NACE 2015).

Moreover, many of these transferable skills – including those that were lower priorities for our survey respondents – are likely to be in demand in the future world of work. Nesta's *Future of Skills* report found that skills such as complex problem solving, active learning, critical thinking, teaching others and interpersonal skills are highly likely to be in demand in the UK workforce in 2030 (Bakhshi, et al., 2017). Research by the McKinsey Global Institute has also predicted a future rise in demand for creativity, initiative-taking, entrepreneurship and leadership skills (Bughin et al., 2018).

Box 1: Employers on the value of communication skills

Oral and written communication skills were key priorities for surveyed employers. During follow-up interviews, seven respondents explained why these skills are important for success in their organisation. Three of these employers noted the importance of oral and written communication skills in **client-facing roles**, where employees need to build professional relationships and explain complex products and situations to clients in an accessible way. Others noted that good communication skills

are important to the **internal functioning, management and collaboration of a team**, with one noting that his organisation operates entirely online, necessitating strong written communication skills between team members. These skills are likely to continue to be in demand in the future of work, with research by Nesta and McKinsey predicting a rise in demand for interpersonal (Bakhshi, et al., 2017) and advanced communication (Bughin et al., 2018) skills by 2030.

INDUSTRY SPOTLIGHTS

Industry Spotlight 1: Arts, Entertainment and Recreation Sector^{9,10}

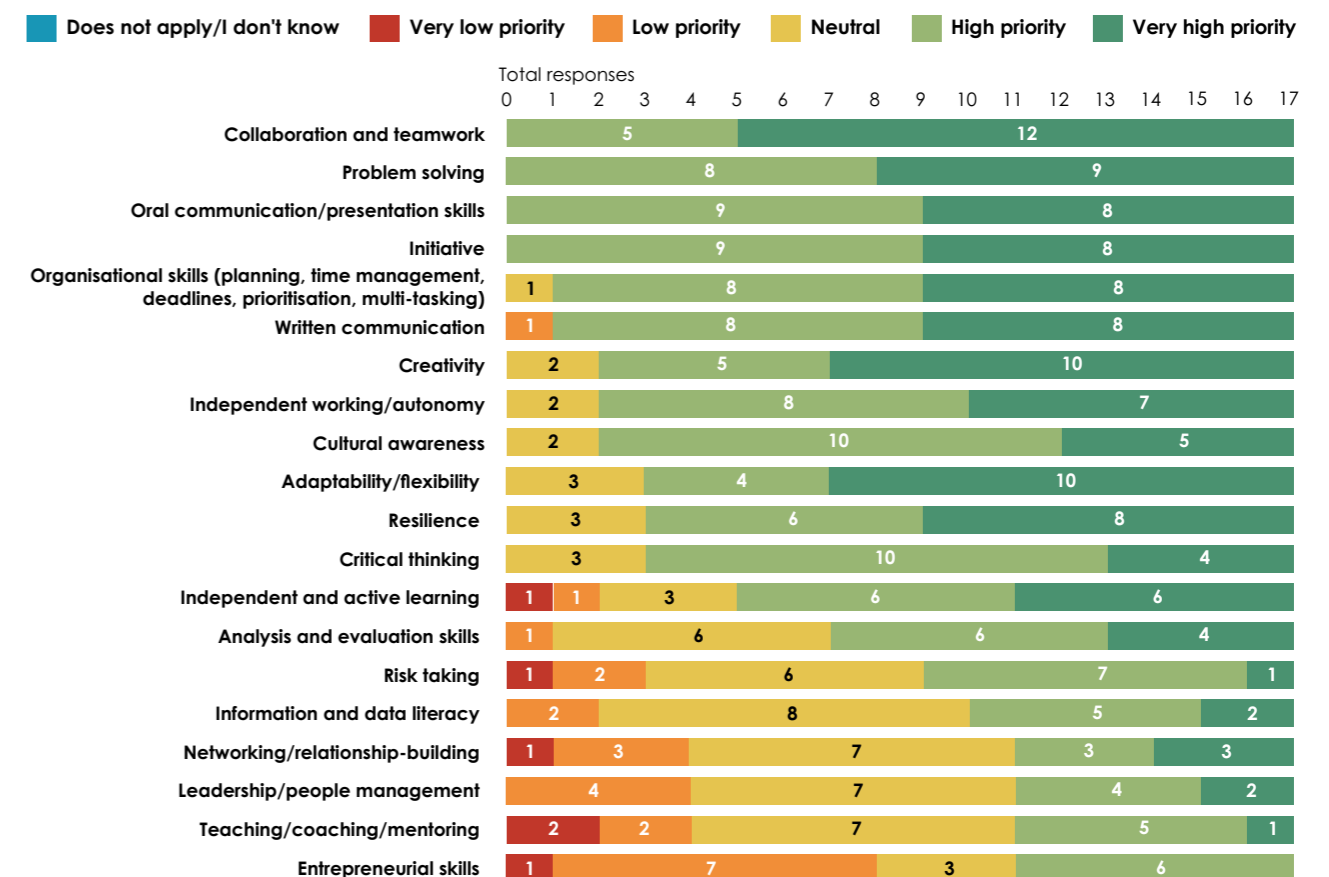
Transferable skills that were of highest priority for the general survey population were also high priorities for respondents from the arts, entertainment and recreation sector. All 17 respondents from this sector identified collaboration and teamwork, problem solving, oral communication/presentation skills and initiative as a 'high' or 'very high' priority when recruiting new employees. Other top skills included organisational skills, written communication, creativity, independent working/autonomy and cultural awareness.

Notably, 12 of the 17 survey respondents (71%) rated collaboration and teamwork as a

'very high priority', and over half (n=10) also described creativity and adaptability/flexibility as a 'very high priority'.

Like the broader survey group, skills that were a lower priority for respondents in this industry sector included networking/relationship-building, leadership/people management, teaching/coaching/mentoring and entrepreneurial skills. For each of these, only six of 17 respondents (35%) rated them as a 'high' or 'very high' priority. Notably, almost half (n=8) rated entrepreneurial skills as a 'low' or 'very low' priority.

Figure 6: Skill priorities for respondents from the arts, entertainment and recreation sector (n=17) NB: data is displayed in counts



9. When interpreting these industry-level results, it is important to be very cautious about making direct comparisons with findings for the full survey population (Figures 4 & 5) as the number of survey respondents representing this industry area is small (n=17) and should not be taken to be representative of this

industry sector as a whole. Broad similarities between results for this industry area and the full survey population have been noted.

10. A full list of sub-industries/occupation areas included in this SIC category is available here: <http://resources.companieshouse.gov.uk/sic/>

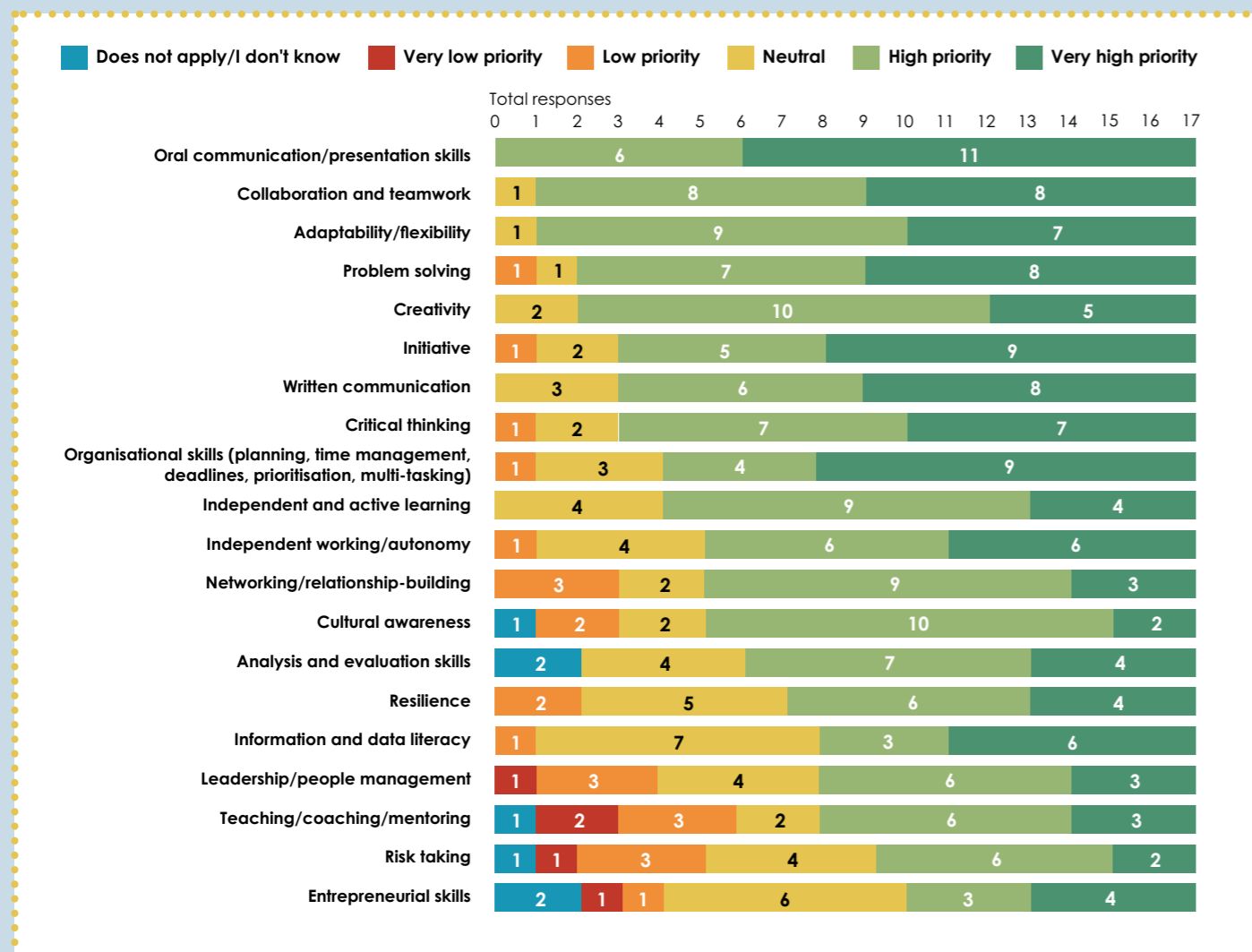
Industry Spotlight 2: Education Sector^{11,12}

All 17 respondents working in the education sector ranked oral communication/presentation skills as a 'high' or 'very high' priority, with other top skills including collaboration and teamwork, adaptability/flexibility, problem solving, creativity, initiative, written communication and critical thinking. Most of these skills were also high priorities for the full survey population.

Like the wider sample group, fewer respondents from this sector placed a 'high'

or 'very high' priority on teaching/coaching/mentoring, risk taking and entrepreneurial skills. The low prioritisation of teaching/coaching/mentoring is perhaps surprising for the Education sector, with five of the 17 respondents describing it as a 'low' or 'very low' priority. This may reflect the fact that many roles in this sector do not involve frontline teaching or learning delivery.

Figure 7: Skill priorities for respondents from the education sector (n=17) NB: data is displayed in counts



11. When interpreting these industry-level results, it is important to be very cautious about making direct comparisons with findings for the full survey population (Figures 4 & 5) as the number of survey respondents representing this industry area is small (n=17) and should not be taken to be representative of these

industry sectors as a whole. Broad similarities between results for these industry areas and the full survey population have been noted.
12. A full list of sub-industries/occupation areas included in this SIC category is available here: <http://resources.companieshouse.gov.uk/sic/>

Part B: How do UK employers identify transferable skills in job applicants?

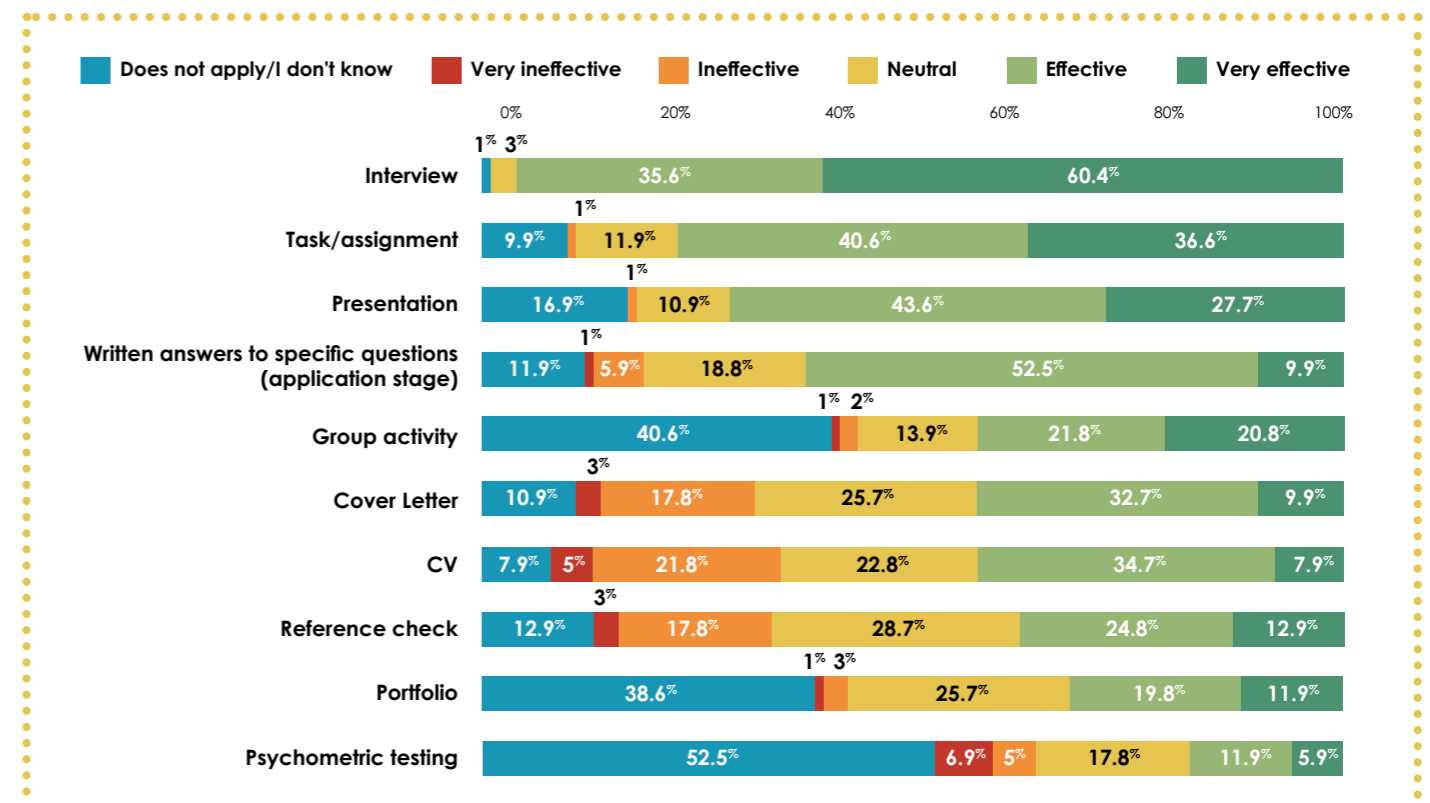
Employers' perceptions of recruitment processes

Using a rating scale, survey respondents were asked to rank the effectiveness of a range of popular recruitment processes when identifying transferable skills in candidates (results summarised in **Figure 8**). When interpreting the results of this question, it is important to note the high proportion of 'Does not apply/I don't know' responses, which reflects the fact that most organisations will not have experience using all recruitment processes. This was most pronounced for the psychometric testing (53%), group activity (41%) and portfolio (39%) options. It is thus important to be cautious when directly comparing the perceived efficacy of these different processes.

The vast majority of respondents (96%) described interviews as 'effective' or 'very effective' in identifying transferable skills, with no respondents describing interviews as 'ineffective' or 'very ineffective'. Tasks/assignments and presentations were also rated positively, with roughly three-quarters of respondents identifying them as 'effective' or 'very effective' in identifying transferable skills.

Relatively speaking, recruitment processes with the largest proportion of 'ineffective' and 'very ineffective' responses include CVs (27%), reference checks (21%) and cover letters (21%). However, it is important to note that, overall, more respondents assigned these three processes an 'effective/very effective' rating than an 'ineffective/very ineffective' rating.

Figure 8: 'Q.10: In your organisation, how effective have you found the following recruitment processes to be in identifying general/transferable skills?'



Thirteen participants (13%) opted to identify other recruitment processes that they would describe as 'effective' or 'very effective' in identifying transferable skills. Responses included meeting the team/other staff,

meeting with stakeholders, referrals, personality profiling, work trials/shadowing, case studies, certifications and observing the candidate's performance in his or her current role.

Employers' use of recruitment processes to identify evidence of transferable skills

During follow-up interviews, 10 survey respondents were asked to explain how they use these recruitment processes to identify transferable skills in new hires and what evidence they look for. These interviewees worked in five industry sectors: arts, entertainment and recreation; education; administrative and support service activities; professional, scientific and technical activities; and financial and insurance activities. A summary of key findings from these interviews is outlined below.

Several employers noted that **the way candidates describe their own transferable skills during the recruitment process is often not an accurate indication of their skills 'on the job'**. A Creative Director from a technology company in the arts sector summarised this challenge, noting:

"Everyone's very good at telling people how adaptable they are and how good they are at solving problems, but really you only get a sense of how good they are when they're on the front line and they are having to deal with a project that's in meltdown, or a shorter deadline than they had expected."

Other respondents acknowledged that often candidates "know the answer that you're looking for" or "pretend that they're better at something than the actually are" when articulating their own skills. This phenomenon, known as 'impression management', is well-documented in the human resource management literature (Macan, 2009). For this reason, many respondents we interviewed felt that CVs were largely unhelpful in effectively identifying transferable skills, although could be used as a filtering device to identify relevant industry experience, qualifications

and writing skills. Two employers also noted that they found numerical 'ratings' of skills on CVs (e.g. 'Problem solving = eight out of ten') to be meaningless due to the ambiguity of the scale used.

Most employers expressed some degree of **confidence in assessing communication skills**, which were identified as a top priority in the survey results. This was particularly the case for oral communication skills, which employers were able to identify during interviews and presentations. One respondent noted that even an initial telephone screening interview can be "quite a useful gauge of communication" as it allows employers to pick up on "basic cues", such as whether the candidate rambles, closes sentences, answers questions and engages in a dialogue with the interviewer. This is consistent with research which has found that both conventional and behavioural interviews can assess social skills, including communication skills (Salgado and Moscoso, 2002). CVs, application forms and written tasks were also identified as useful indicators of a candidate's written communication skills and attention to detail.

While the majority of employers agreed that assessing other transferable skills can be very challenging, many identified **tasks and assignments which simulate a real working environment** as a helpful way to identify these skills in prospective candidates. Examples of such tasks included solving an assigned problem, drafting a press release, completing an 'options analysis', doing a case study, drawing a process map, researching a profile of a start-up and completing a presentation. Employers used these varied tasks to identify a broad range of transferable skills, such as problem solving, critical thinking, adaptability/flexibility, time management, communication, resilience, analytical skills, independent working and creativity. For example, one consultant from the professional, scientific and technical sector described asking candidates to complete a 40-minute independent problem-solving exercise:

"I'd say it gives a reasonably good indication [of a candidate's skills], because when you have people who don't finish the task at all it shows that this isn't the right environment for them in terms of the pressure and trying to solve a problem by yourself when nobody is around to help you. But I wouldn't say it's a perfect method."

Several other employers also acknowledged that while such tasks can be helpful, they are not an exact science. For one employer, this was because task conditions are not always reflective of the daily working environment, meaning that "they only give a hint or suggestion – they don't give you unequivocal proof that this person is great at thinking critically". Two other respondents noted that effectively assessing resilience can be challenging because of the time limitations of interviews and because tasks are "not really hard enough to require a whole lot of resilience".

A few employers also sought evidence of candidates' transferable skills through **competency-based interview questions**. One strategy consultant from the arts, entertainment and recreation industry described her efforts to identify entrepreneurialism in candidates by asking about a time they created something they were proud of: "if in their answer they have demonstrated some level of initiative and passion, even if it's not around anything directly related to technology, then that's incredibly valuable for us." To assess resilience, one employer gave the example of asking candidates to speak about a time they had experienced failure.

A small selection of other recruitment processes were mentioned by individual employers, such as trialling a prospective employee as a contractor, getting a reference from a previous employer to assess skills such as initiative and responsibility, and looking for evidence of past leadership or management experience as an indication of a candidate's skill set.

Box 2: A lifetime skills tracker?

In light of the reported challenges associated with assessing transferable skills using traditional recruitment processes, we asked our ten interviewees the following:

"If there was a tool which could show how people have developed transferable skills across their lifetime – including their strengths and weaknesses – would this be helpful when recruiting new employees?"

Interestingly, while employers acknowledged that such a tool could be useful, many also expressed the concern that a generic skills tracker might not be sensitive to the myriad ways in which people can demonstrate proficiency in transferable skills. Respondents felt that, if such a tool existed, it would need to factor in the multiple ways and styles that people can be creative, solve

problems, communicate and show initiative. For example, one employer noted that good communication skills can be shown through both personability and directness: "I'm quite jovial and 'jokey' in my style. I have a colleague who is very serious and straightforward. We're both very good communicators, but we have very different styles."

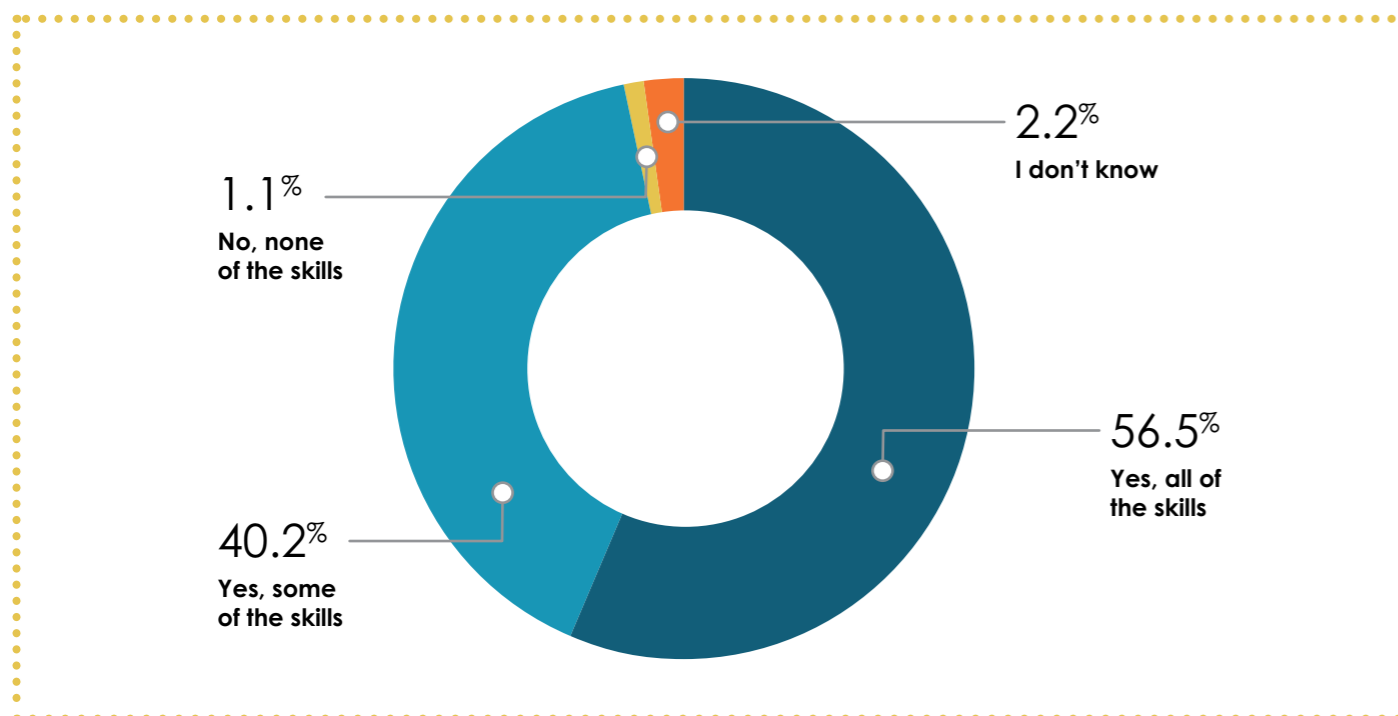
Some respondents also felt that there would need to be transparency around what the tool is actually 'showing', with one CEO in the Education sector commenting: "You wouldn't just want to reject people with a 'weak' score if you didn't agree with how it was done." Indeed, it was felt that a skill 'scoring' or 'ranking' system would need to transparently indicate the method of assessment, so that employers could assess whether it was applicable to how they would expect that skill to be demonstrated in their own work environments.

Employees' performance post-recruitment

Survey respondents were asked to reflect on whether a recently recruited employee had continued to demonstrate the transferable skills they prioritised through the recruitment process once he/she had started work (Figure 9). Over half of respondents¹³ (57%)

were satisfied that their new employee had continued to demonstrate all of the transferable skills they were looking for during recruitment. Two-fifths (40%) felt that the new employee had demonstrated some skills, but not all. Just 1% stated that their employee had demonstrated none of the skills.

Figure 9: 'Q16: Since the employee started work, has the employee continued to demonstrate the desirable general/transferable skills that you prioritised during recruitment? If the employee has not started work yet please select 'does not apply'.' (n=92)¹⁴



The results suggest that the vast majority of surveyed employers are using recruitment processes which have helped them to identify at least some transferable skills in selected

candidates. This is consistent with commentary from the ten employers we interviewed, who felt that the recruitment processes they used were often helpful but not infallible.

13. NB: 'Does not apply' responses have been excluded from this analysis, therefore total respondents = 92

14. NB: 'Does not apply' responses have been excluded from this analysis, therefore total respondents = 92

Of those who felt the recruited employee had not continued to demonstrate all of the prioritised skills (n=38), most had already helped – or had plans to help – the employee develop the necessary skills. Six (16%) had already helped the employee develop all of the necessary skills, 15 (40%) had helped the employee develop some skills, and 12 (32%) had not yet given them any extra support, but

planned to in the future. Only four respondents (11%) had no plans to help the employee develop these required skills.

At the time of the survey, the range of transferable skills that these employers reported having already invested time, money or resources into developing in their recently recruited staff member are listed below:

- Organisational skills
- Independent working/autonomy
- Information and data literacy
- Leadership/people management
- Critical thinking
- Cultural awareness
- Time management
- Independent and active learning
- Oral communication/presentation skills
- Networking/relationship-building
- Resilience
- Written communication
- Adaptability/flexibility
- Teamwork
- Initiative
- Analysis and evaluation skills
- Risk taking
- Situational analysis

Some of the skills that were mentioned more than once included organisational skills, independent working, information and data literacy, leadership/people management, critical thinking, cultural awareness, time management and active learning. It is important to note that the employers we surveyed may have also had active plans to support employees' development of other transferable skills not listed above, but had not

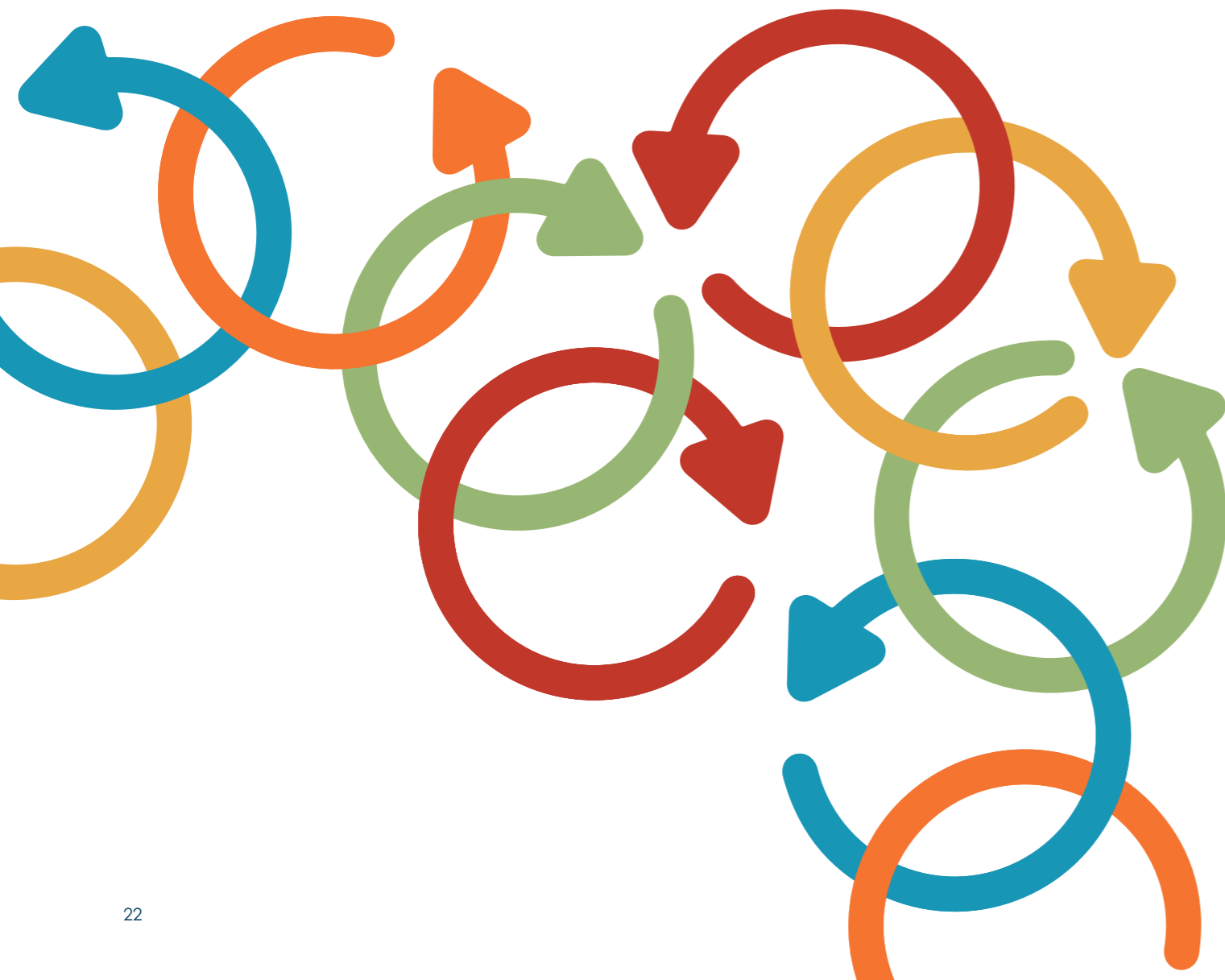
yet actioned these development plans at the time of the survey.

While these findings are particular to employers' experiences with one recent candidate, their willingness to invest resources in developing these transferable skills in their new hires can be read as further indication of the value placed on these skills in the workplace.



CONCLUSION

The findings of this study are consistent with broader research which has highlighted the growing value placed on transferable skills in the labour market, particularly higher-order cognitive, social and interpersonal skills (Bakhshi et al., 2017; Deming, 2015; Heckman, Stixrud and Urzua, 2006; Heckman and Kautz, 2012). They also shed new light on employers' preferred approaches to identifying transferable skills in job applicants and some of the limitations of traditional recruitment methods in eliciting reliable evidence of these competencies.



RECOMMENDATIONS

These findings not only have implications for employers' recruitment practices, but also for young people entering the labour market and education systems as they seek to develop these skills in young people.

Based on the findings of this research, we recommend:

- 1. More research is needed on the most effective ways to assess transferable skills in job applicants.** While employers we interviewed were actively using a range of methods to identify employees' transferable skills, they acknowledged that these did not always give them an accurate indication of a job applicant's skill level. This was particularly the case for self-reported measures, such as CVs. Further research and knowledge sharing in this area will help employers deploy more reliable methods for identifying these skills when recruiting and make the process more efficient and accurate.
- 2. Schools, businesses and government should work together to develop effective tools for measuring, recording and reporting the development of transferable skills.** Collaboration between these bodies will ensure that assessment tools are responsive to the needs of both employers and those working in educational settings. For instance, employers we spoke to acknowledged that a skills assessment tool could be useful for recruiting and placing people within their organisation, but only if there was transparency around the method of assessment underlying any 'scoring' or 'ranking' system for transferable skills. Such assessment tools could help educators and learners reflect on strengths and areas for development.
- 3. Employers should work with schools to ensure that careers guidance adequately informs young people about the transferable skills employers are looking for and how they can demonstrate them.** Young people need to be made
- 4. Greater focus should be given in schools and in lifelong learning to the sequential and explicit development of transferable skills.** Skills such as oral communication and problem solving are not only valued by UK employers today, they are also likely to be in demand in the future and may help young people be more resilient in a labour market where technical skills are rapidly evolving (Amaral et al., 2018; Bakhshi et al., 2017; Bughin et al., 2018; Deming and Noray, 2018; Djumalieva, Richardson and Sleeman, 2019, forthcoming). To encourage best practice, government should support more research into how to develop these skills and ensure existing evidence on 'what works' is used by learning providers. Opportunities to develop these skills could be provided through the curriculum, extracurricular activities, work experience, cultural learning, and community and family learning.

APPENDICES

Appendix A: Online Questionnaire

The Skills Survey: What are employers looking for?

N.B. The following definitions were given in hover-over text for each mention of the phrase:

• **General/transferable skills:** General/transferable skills are common to many occupations e.g. teamwork, communication and organisational skills.

• **Technical skills:** Technical skills are very specific to certain occupations e.g. accounting, machine operation, data science and legal research.

1. Have you been responsible for recruiting anyone at your current organisation in the last three years? Yes No

Background information

2. Are you currently employed in the United Kingdom?

Yes No

3. How many employees are in your organisation?

Zero (the business has one or more owners/proprietors but no employees)
 1 – 9 10 – 49 50 – 249
 250 – 499 500 – 2,499 2,500 +

4. What sector is your organisation in?

For further details about these categories, please see this website.¹⁵

- Agriculture, Forestry and Fishing
- Mining and Quarrying
- Manufacturing
- Electricity, gas, steam and air conditioning supply
- Water supply, sewerage, waste management and remediation activities
- Construction
- Wholesale and retail trade; repair of motor vehicles and motorcycles
- Transportation and storage
- Accommodation and food service activities

- Information and communication
- Financial and insurance activities
- Real estate activities
- Professional, scientific and technical activities
- Administrative and support service activities
- Public administration and defence; compulsory social security
- Education
- Human health and social work activities
- Arts, entertainment and recreation
- Other service activities
- Activities of extraterritorial organisations and bodies

5. Which of the following most closely matches your job level?

- Top (Chief Executive, Chairperson, President)
- Senior Executive (Departmental Head, Managing Director, Director, Vice President, Board Level)
- Upper Middle (Departmental Executives, Factory Managers, Senior Professional Staff)

- Middle (Office Managers, Professional Staff, Mid-Level Administrators)
- Entry-Level (Professional Staff, Graduates, and other Entry-Level Staff)
- Administrative/Support Staff (Clerical/Secretarial, Machine Operators, Technicians and Other Support Staff)
- Intern
- Apprentice
- I don't know

6. Which job levels have you had responsibility for recruiting for over the last three years? Select all that apply.

- Top (Chief Executive, Chairperson, President)
- Senior Executive (Departmental Head, Managing Director, Director, Vice President, Board Level)
- Upper Middle (Departmental Executives, Factory Managers, Senior Professional Staff)

- Middle (Office Managers, Professional Staff, Mid-Level Administrators)
- Entry-Level (Professional Staff, Graduates, and other Entry-Level Staff)
- Administrative/Support Staff (Clerical/Secretarial, Machine Operators, Technicians and Other Support Staff)
- Intern
- Apprentice
- I don't know

Skills in the workplace

7. What is your top priority when hiring someone new?

- Someone with the right technical skills for the job.
- Someone with the right general/transferable skills for the job

- I prioritise them equally
- I don't know
- Other – Write In:

.....

15. <http://resources.companieshouse.gov.uk/sic>

8. Assuming candidates have the same level of technical skill, how would you prioritise the following general/transferable skills?

When answering this question, please consider these skills relative to each other.

Entrepreneurial	Very low priority	Low priority	Neutral	High priority	Very high priority	I don't know	Does not apply
Written communication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oral communication/presentation skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Independent working/autonomy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Organisational skills (planning, time management, deadlines, prioritisation, multi-tasking)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adaptability/flexibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leadership/people management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Networking/relationship-building	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Creativity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Problem solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Critical thinking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Information and data literacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Initiative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Collaboration and teamwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resilience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Risk taking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teaching/coaching/mentoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Independent and active learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analysis and evaluation skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cultural awareness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entrepreneurial skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Are there any other general/transferable skills, not listed above, that you would categorise as high or very high priority?

Write in:

Your recruitment process

10. In your organisation, how effective have you found the following recruitment processes to be in identifying general/transferable skills?

	Very ineffective	Ineffective	Neutral	Effective	Very effective	I don't know	Does not apply
CV	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cover Letter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Written answers to specific questions (application stage)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Task/assignment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Group activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Portfolio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychometric testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Are there any other recruitment processes, not listed above, that you would categorise as effective or very effective in identifying general/transferable skills?

Write in:

Specific employee example

12. Which of the following most closely matches the role/level this employee was recruited for?

- Top (Chief Executive, Chairperson, President)
- Senior Executive (Departmental Head, Managing Director, Director, Vice President, Board Level)
- Upper Middle (Departmental Executives, Factory Managers, Senior Professional Staff)
- Middle (Office Managers, Professional Staff, Mid-Level Administrators)
- Entry-Level (Professional Staff, Graduates, and other Entry-Level Staff)
- Administrative/Support Staff (Clerical/Secretarial, Machine Operators, Technicians and Other Support Staff)
- Intern
- Apprentice
- I don't know

13. Which (if any) of the following general/transferable skills did you prioritise when recruiting this individual? Select all that apply.

- | | |
|--|--|
| <input type="checkbox"/> Written communication | <input type="checkbox"/> Information and data literacy |
| <input type="checkbox"/> Oral communication/presentation skills | <input type="checkbox"/> Initiative |
| <input type="checkbox"/> Independent working/autonomy | <input type="checkbox"/> Collaboration and teamwork |
| <input type="checkbox"/> Organisational skills (planning, time management, deadlines, prioritisation, multi-tasking) | <input type="checkbox"/> Resilience |
| <input type="checkbox"/> Adaptability/flexibility | <input type="checkbox"/> Risk taking |
| <input type="checkbox"/> Leadership/people management | <input type="checkbox"/> Teaching/coaching/mentoring |
| <input type="checkbox"/> Networking/relationship-building | <input type="checkbox"/> Independent and active learning |
| <input type="checkbox"/> Creativity | <input type="checkbox"/> Analysis and evaluation skills |
| <input type="checkbox"/> Problem solving | <input type="checkbox"/> Cultural awareness |
| <input type="checkbox"/> Critical thinking | <input type="checkbox"/> Entrepreneurial skills |
| | <input type="checkbox"/> I don't know |
| | <input type="checkbox"/> None of the above |

14. Are there any other general/transferable skills, not listed above, that you prioritised when recruiting the individual?

Write in:

15. Which parts of the recruitment process were most useful in identifying the general/transferable skills that you prioritised?

- | | |
|--|---|
| <input type="checkbox"/> CV | <input type="checkbox"/> Group activity |
| <input type="checkbox"/> Cover Letter | <input type="checkbox"/> Psychometric testing |
| <input type="checkbox"/> Written answers to specific questions (application stage) | <input type="checkbox"/> Reference check |
| <input type="checkbox"/> Interview | <input type="checkbox"/> I don't know |
| <input type="checkbox"/> Presentation | <input type="checkbox"/> Other – Write In: |
| <input type="checkbox"/> Task/assignment | |
| <input type="checkbox"/> Portfolio | |

16. Since the employee started work, has the employee continued to demonstrate the desirable general/transferable skills that you prioritised during recruitment?

If the employee has not started work yet please select 'does not apply'.

- | | |
|--|---|
| <input type="checkbox"/> Yes, all of the skills | <input type="checkbox"/> Does not apply |
| <input type="checkbox"/> Yes, some of the skills | <input type="checkbox"/> I don't know |
| <input type="checkbox"/> No, none of the skills | |

17. Which general/transferable skills has the employee struggled to demonstrate that you thought they would be able to demonstrate? Select all that apply.

- | | |
|--|--|
| <input type="checkbox"/> Written communication | <input type="checkbox"/> Collaboration and teamwork |
| <input type="checkbox"/> Oral communication/presentation skills | <input type="checkbox"/> Resilience |
| <input type="checkbox"/> Independent working/autonomy | <input type="checkbox"/> Risk taking |
| <input type="checkbox"/> Organisational skills (planning, time management, deadlines, prioritisation, multi-tasking) | <input type="checkbox"/> Teaching/coaching/mentoring |
| <input type="checkbox"/> Adaptability/flexibility | <input type="checkbox"/> Independent and active learning |
| <input type="checkbox"/> Leadership/people management | <input type="checkbox"/> Analysis and evaluation skills |
| <input type="checkbox"/> Networking/ relationship-building | <input type="checkbox"/> Cultural awareness |
| <input type="checkbox"/> Creativity | <input type="checkbox"/> Entrepreneurial skills |
| <input type="checkbox"/> Problem solving | <input type="checkbox"/> I don't know |
| <input type="checkbox"/> Critical thinking | <input type="checkbox"/> Other – Write In: |
| <input type="checkbox"/> Information and data literacy | |
| <input type="checkbox"/> Initiative | |

18. Has your organisation invested time, money or resources into helping this individual develop the skills that you identified in question 17?

- | | |
|--|---|
| <input type="checkbox"/> Yes – for all of these skills | <input type="checkbox"/> No – and we do not intend to in the future |
| <input type="checkbox"/> Yes – some of these skills | <input type="checkbox"/> I don't know |
| <input type="checkbox"/> No – but we intend to in the future | |

19. Please state which skills your organisation invested time, money or resources into helping this individual develop.

Write in:

Final questions

20. Would you like to be contacted with further information about this survey? This may include information about the results of the survey and follow-up questions for some respondents.

Please indicate whether or not you are happy to be contacted by email with further information in relation to this survey by ticking the box below.

- Yes No

21. What are your contact details?

First Name:

Last Name:

Company Name:

Email Address:

Appendix B: List of transferable skills used in the online questionnaire

- Adaptability/flexibility
- Analysis and evaluation skills
- Collaboration and teamwork
- Creativity
- Critical thinking
- Cultural awareness
- Entrepreneurial skills
- Independent and active learning
- Independent working/autonomy
- Information and data literacy
- Initiative
- Leadership/people management
- Networking/relationship-building
- Oral communication/presentation skills
- Organisational skills (planning, time management, deadlines, prioritisation, multi-tasking)
- Problem solving
- Resilience
- Risk taking
- Teaching/coaching/mentoring
- Written communication

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