


in partnership with

CIPD
*Championing better
work and working lives*

**youth
futures
FOUNDATION**



RETAINING DISADVANTAGED YOUNG PEOPLE IN WORK

An evidence review

**Practice summary and
recommendations**
April 2022



The CIPD is the professional body for HR and people development. The registered charity champions better work and working lives and has been setting the benchmark for excellence in people and organisation development for more than 100 years. It has more than 160,000 members across the world, provides thought leadership through independent research on the world of work, and offers professional training and accreditation for those working in HR and learning and development.

Youth Futures Foundation is an independent, not-for-profit organisation established with an initial £90 million endowment from the Dormant Assets Scheme to improve employment outcomes for young people from marginalised backgrounds. Its aim is to narrow employment gaps by identifying what works and why, investing in evidence generation and innovation, and igniting a movement for change.



Practice summary and recommendations

Retaining disadvantaged young people in work: an evidence review

Contents

Introduction	2
What makes people leave a job?	4
The role of managers in retention and inclusion	7
Interventions to foster inclusion in the workplace	8
Conclusion	9
Endnotes	10

Acknowledgements

This report was written by Iulia Cioca and Jonny Gifford of the CIPD. It is based on a rapid evidence assessment conducted by Eric Barends, Denise Rousseau, Tony Munton and Emilia Wietrak of the Center for Evidence-Based Management (CEBMA).

Many thanks to Chris Goulden, Helen Knox and Anna Round from Youth Futures Foundation, and to Claire McDermott, Lizzie Crowley, Lutfur Ali, Claire McCartney and Jemeela Quraishi from the CIPD for their advice and feedback.

Publication information

Please cite this report as: Cioca, I. and Gifford, J. (2022) *Retaining disadvantaged young people in work: an evidence review. Practice summary and recommendations*. London: Chartered Institute of Personnel and Development.

This practice summary and the accompanying scientific summary are freely available at cipd.co.uk/evidence-retaining-youth



1

2

3

4

5

6

1 Introduction

Context

Over recent months, economies and labour markets have started to recover from the COVID-19 pandemic. In the UK, for example, job vacancies have hit record highs in most industries.¹ For employers, tight labour markets make it harder to recruit staff and also to retain current employees. In 2021, the UK also saw record levels of employees resigning, as *'turnover/churn that was suppressed during the pandemic was let loose'*.² Young people have faced particular unemployment challenges through the pandemic, and the numbers who are seeking work or who are economically inactive remain high.³ Employers have a crucial role to play in remedying this and can themselves benefit from hiring and developing untapped young talent.

Our companion evidence review on [recruiting disadvantaged young people](#) summarises research insights into what employers can do to attract and help young people into jobs.⁴ However, long-term solutions for youth employment need to do more than secure them work. We need an economy that creates jobs in which young people can thrive and develop, helping them build longer-term careers. For individual employers too, it is clearly not enough to merely recruit employees. Staff turnover can be an opportunity for renewal as well as a risk of losing talent, but the costs of recruitment are undeniable – estimated in the UK at £3,000 per hire for senior managers and £1,000 for other employees⁵ – and the delays and disruption to workflows in the hiring and onboarding processes can also be substantial.

Focus of the review

Workforce inclusion and diversity are vital aspects of building fair economies that work for everyone. In this evidence review, we look at what employers can do to create jobs and organisations in which young people facing disadvantage can thrive. We investigate the factors that influence whether young people stay in or leave their jobs and, related to this, what makes them feel included in an organisation. In particular, the review aims to address the following questions:

- What drives disadvantaged young people to leave or stay in their jobs?
- What can employers do to retain disadvantaged young people?
- What can employers do to build an inclusive work environment for disadvantaged young people?

Which young people are disadvantaged in the labour market?

From a legal standpoint, tackling discrimination is often focused on specific protected characteristics – for example, in UK law, age, disability, gender reassignment, marital status, race, religion or beliefs, sex, pregnancy and maternity, and sexual orientation.⁶ However, people can face disadvantage and discrimination on the basis of factors beyond these, such as socio-economic deprivation. They may also experience barriers related to more than one issue. In this review, we consider two broad categories of disadvantage that young people can face:

- **Factors not related to education or skills:** young people who possess the education and skills required to enter the job market can be disadvantaged because of a characteristic unrelated to their job performance – for example, their age, race, skin colour, gender or disability. This amounts to discrimination.
- **Low levels of education or skill development:** young people can lack the qualifications, education, or social or professional skills needed to enter the job market, due to factors such as poverty, lack of support, drug use, mental health problems, discrimination or other social issues. These factors can relate to subgroup differences in age, race, skin colour, gender, disability, and so on.



1

2

3

4

5

6

An evidence-based approach

Practices aimed at managing diversity and making organisations more inclusive require effort and money, so it is important that employers know how effective different approaches are. Evidence-based practice offers well-established approaches that help us cut through untested fads and misleading received wisdom to understand what practices are most likely to be effective. Hard proof of ‘what works’ is sometimes elusive, but we can still identify the practices that give us the best chances of achieving desired outcomes.

This review summarises the best available evidence from the scientific literature on what works in building a climate of inclusion and retaining young people who face disadvantage. In looking for the best available evidence, we found that there is little high-quality research specifically on the target group of disadvantaged young people. However, there is a large body of evidence on what drives turnover and what helps build a climate of inclusion for employees in general, and there is still a lot that can be said and done based on these insights.

The insights and recommendations reflect the findings from over 1,000 empirical studies. Over 100 single studies and meta-analyses were assessed by independent reviewers from the Center for Evidence-Based Management (CEBMA) based on predetermined quality criteria. For more detail on this method and the included studies, see the [scientific summary](#) of the review.

Box 1: Equality, inclusion and diversity: what’s the difference?

Equality, inclusion and diversity are all current terms and it is worthwhile clarifying what they mean. There are important technical distinctions between them, resulting in differences in the outcomes for individuals and in how these can be achieved.⁷

The legal principle focuses on equality and discrimination in how people are treated. In the UK, the Equality Act 2010 states that it is illegal to discriminate against people on the grounds of specific protected characteristics (for example, age and sex). Technically, employers can discriminate on the basis of other characteristics that aren’t legally protected – such as social class – but as these are unlikely to be relevant to job performance, this is very probably unethical and should not happen.

Diversity refers to the demographic makeup of a group and differences between employees. These can be visible, surface-level differences (for example, gender, race, ethnicity or age) or deep-level, not immediately visible ones (for example, level of education, social background or sexual orientation). Individuals may be in a minority due to more than one of these characteristics, and there may be relationships between these characteristics. For example, groups that have historically faced discrimination on the basis of race may also experience socio-economic or educational deprivation.

Even if an organisation is diverse in its makeup and is not overly discriminatory, this does not mean that everyone feels comfortable or accepted. This is where inclusion comes into play. Inclusion is when people feel that they belong to a group, irrespective of their personal characteristics, and that their differences are valued and they can thrive at work. Inclusive workplaces have both fair policies and practices in place and established norms of valuing difference, so that diverse groups of people can work together happily and effectively.

While diversity might be easier to achieve, practices that promote inclusion are key to unlocking the potential of diversity, as we discuss in the next sections.

2 What makes people leave a job?

Maintaining a long-term employment relationship is likely to benefit both the employee and the employer. Unfortunately, there is not much evidence on what works in retaining specifically young people from marginalised groups, since little scientific research has focused on this subgroup. However, the body of research on why people decide to leave a job in general is rich and informative, and we can draw useful insights from this for retaining young people facing disadvantage.

Does being young mean more job-hopping?

A common opinion in the HR profession is that young people at the start of their careers change jobs more often than older, more senior colleagues. Several meta-analyses have looked at whether employees' age is related to the likelihood of turnover – and the majority consistently find there is no relationship. One more recent meta-analysis indicates there may be a relationship (younger people indeed changing jobs more often) but for technical reasons the findings are not conclusive; for example, 'young' was defined rather arbitrarily as below 40 years old.⁸ Overall, we can't say there is a clear relationship between age and employee retention.

Factors influencing employee retention

There is a rich body of research on why people in general decide to leave a job. The decision is influenced by many different factors, which have to do with the organisation, the manager, the employee, or the interaction between all three. However, not all factors weigh the same, so only some are practically relevant in improving employees' retention.

Table 1: The most important influences on employee retention or turnover

	Factor of influence	Effect size
Attitudes	General satisfaction	●●●●○
	General commitment	●●●○
	Organisational commitment	●●●○
	Job satisfaction	●●●○
Personal skills	Coping	●●●●○
Organisational context	Job security	●●●○
	Rewards offered (beyond pay)	●●●○
	Internal mobility	●●●○
	Climate	●●●○
	Leadership	●●●○
HR practices	Skill-enhancing HR practices	●●●○
	Opportunity-enhancing HR practices	●●●○
Person–context interface	Social integration	●●●○
	Person–job fit	●●●○
	Job embeddedness	●●●○

Notes: Effect sizes indicate a positive influence on retention/negative influence on turnover: ●●●●● very large; ●●●●○ large, anybody can easily see the difference; ●●●○ moderate, visible to the naked eye of an expert or careful observer; ●●○○○ small, the difference probably needs to be measured to be detected; ●○○○○ very small. For more detail, see the accompanying [scientific summary](#).



1

2

3

4

5

6

Table 1 summarises the factors that have the greatest influence on employees' decisions to leave an organisation (the effect sizes indicate how strong these influences are). As we discuss below, these concern employees in general, rather than specifically young employees from a disadvantaged background. Below we explain what these factors mean.

Attitudes that an employee has regarding their job, or other aspects of working life, include the following:

- **General satisfaction:** how much an individual likes aspects relevant to employment besides their job, such as their career or life in general.
- **General commitment:** how much an individual experiences loyalty for aspects different than the specific organisation (for example, their occupation or career).
- **Organisational commitment:** how much an individual experiences loyalty to the organisation they work for. To increase commitment, employers can help people identify with their organisation and enjoy being part of it, highlight the high costs of quitting (for example, losing social connections or a good salary) and explain how working towards the organisation's goals is 'right' or moral.
- **Job satisfaction:** how much a person likes the job itself and the related aspects that come with it (for example, the colleagues or the office space).

Personal skills relate in particular to the following:

- **Coping:** the employee's strategies of handling demands that exceed resources. For example, if someone has strong coping strategies, they could plan how to manage a particularly busy period at work, which is more effective than coping strategies such as emotional venting.

Factors related to the organisational context include the following:

- **Job security:** how confident the employee is of having stable employment in their current job in the future.
- **Rewards offered (beyond pay):** other rewards beyond pay that are offered to the employee. These include training, benefits or career growth opportunities.
- **Internal mobility:** giving employees the opportunity to change their jobs within the organisation. Examples include job assignments or promotion from 'within'.
- **Climate:** the degree to which employees in a workplace share positive experiences and perceptions. For example, a positive climate could mean that employees perceive the organisation supports them, or that their team works well together.
- **Leadership:** positive behaviours of the leader and good leader-member relationships (for example, a leader who discusses decisions openly with the team and takes in their input when deciding).

HR practices include the following:

- **Skill-enhancing HR practices:** practices aimed at ensuring appropriately skilled employees. These include recruitment and selection practices that are comprehensive and accurately assess job-related skills, and offering extensive and properly designed and delivered training to employees.
- **Opportunity-enhancing HR practices:** practices designed to empower employees to use their skills and motivation to achieve goals. These include flexible job design, establishing work teams, involving employees in decisions and sharing information with them.

Factors at the interface between the person and the context include the following:

- **Social integration:** how linked an individual feels to others in the group. A socially integrated employee feels attached to their peers, is satisfied with them and has good-quality relations with them.



1

2

3

4

5

6

- **Person–job fit:** the degree of match between personal and job characteristics (for example, a person who likes autonomy being in a job which allows for a high degree of autonomy).
- **Job embeddedness:** a broad concept reflecting how ‘stuck’ a person is within the larger system of the organisation and job. A person who is highly embedded has strong connections to people at the job, is a good fit for the job, and would have to give up a lot to leave.

Do the reasons for leaving differ for young people with a disadvantage?

We find little evidence on whether the impact of the factors in Table 1 are different for young people from disadvantaged groups, or indeed for young people more broadly. However, it is likely that they are influential, as for workers in general, and we can also conjecture how they might play out for marginalised young people.

Certainly, it is likely that, as a minority in the workforce, young people from disadvantaged backgrounds have fewer positive social interactions with their co-workers. Another possibility is that, due to unequal access to information – especially through informal channels that depend on social connections – young people from disadvantaged backgrounds lack access to rewards and promotion or career development opportunities.

Aside from a lack of inclusion, fewer career development opportunities might also be a result of biased assessment and selection decisions, as discussed in our companion evidence review on [recruiting disadvantaged young people](#). Reducing bias in performance evaluations and selection processes, as well as distributing information through formal channels that reach the entire workforce, could be good complementary strategies for employers to improve retention.

Regarding employees from ethnic minorities, there is no evidence that they are more likely to leave their jobs than other employees.⁹ However, there is some evidence that employees from ethnic minorities leave due to different reasons than the majority. Research conducted in the Netherlands indicates that employees with a non-Western cultural/ethnic background more often leave an organisation for two reasons:¹⁰

- 1 Due to a perceived lack of career opportunities – often, the internal selection methods used to award career opportunities can be biased against ethnic minorities and other characteristics, so employees might rightfully perceive a lack of such opportunities.
- 2 Due to negative social interactions with colleagues and supervisors – this confirms the particular importance of inclusion for the retention of disadvantaged or minority groups.

Recommendations for practice

- Don’t assume young people are likely to switch jobs more often. Work to improve their retention through the same practices as for other employees: clarify expectations from both sides and deliver on the promises made when hiring.
- Make sure you are familiar with the main factors that drive employee turnover. Assess these in your workforce to determine which ones pose the highest risks. Split your data and look at what young employees from a disadvantaged background report as reasons for leaving a job. Act on those factors to retain your current employees.
- To improve retention of young employees from ethnic minorities, pay particular attention to their social interactions. Assess how satisfying or positive these are through surveys and individual discussions.
- As a measure to improve retention for all employees with a disadvantage, take steps to minimise bias in your assessments for promotions and career opportunities by using structured processes.



1

2

3

4

5

6

3 The role of managers in retention and inclusion

The aphorism that ‘people join an organisation but leave their boss’ is partly backed up by evidence. We also find that the style that managers adopt in leading their team members affects inclusion.

Adopt a transformational leadership style

Specifically, team members are likely to experience an inclusive climate if the manager has a transformational leadership style. This means the manager leads by creating a shared vision and empowers people to pursue it, encouraging divergent thinking and responding to the individual needs of their team members.¹¹ These same behaviours are also associated with increased job satisfaction and organisational commitment of team members,^{12, 13} factors that play an important role in retention, as discussed in the previous section.

To build an inclusive climate, managers can also give more responsibility to their team members, while also ensuring they have access to resources to deal with those responsibilities.^{14, 15}

Be an authentic leader

Another leadership characteristic that benefits inclusion is authenticity: managers who are self-aware, transparent, inclusive of different perspectives in their decision-making, and who demonstrate integrity are more likely to have team members who feel included.¹⁶ These behaviours are consistent with a transformational leadership style: working with managers to adopt and improve them can help employees feel more included.

Use participatory decision-making

In line with the two sets of behaviours discussed above, leaders who involve team members in decisions are more likely to help build an inclusive climate.¹⁷ By asking for others’ input, listening to divergent opinions and giving them the possibility to choose their preferred option, managers help employees feel more included in the workplace.

Recommendations for practice

- Build managers’ awareness of their role in fostering inclusion: they might feel it’s a matter of organisation-level practices and policies, but their role in fostering inclusion in their team is crucial.
- Assess where managers currently stand: are they leading in ways that foster inclusion? You can use surveys to measure inclusive climate¹⁸ or perceptions of managers’ behaviours, such as participative decision-making, and can analyse the data to establish which and whose behaviours need to change.
- Focus leadership development initiatives on behaviours and leadership styles that are associated with an inclusive climate: being authentic, providing a vision and empowering people to participate in decision-making.



1

2

3

4

5

6

4 Interventions to foster inclusion in the workplace

The evidence review did not find studies on how management interventions affect the inclusion of marginalised young people. However, studies on inclusion and diversity interventions in general give insights that are likely to be relevant. We summarise these below, as they are likely to work for improving the inclusion of young people too.

Diversity training

Possibly the most widespread intervention to enhance inclusion, diversity training refers to any instructional programme aimed at helping diverse groups of people work together more effectively. A high-quality authoritative meta-analysis showed that diversity training works in the short term, prompting more inclusive attitudes and behaviours. However, as time passes, people's behaviours and attitudes revert to how they were originally. Despite people remembering the new information they learned during diversity training, the effects on inclusive behaviours fade.

While this conclusion may seem disconcerting, there are ways to make diversity training more effective. To increase its impact, employers should commit to it as a mandatory learning activity for employees, without turning it into a tick-box exercise in compliance. To support this, they should focus training on building awareness and practising new skills, and dedicate enough time for employees to complete it.

All the same, training will never be enough on its own, so it should be part of a wider set of initiatives focused on equality, inclusion and diversity (for example, mentoring programmes, fair selection procedures or facilitating discrimination complaint processes).

Support networks

Another popular practice to leverage diversity and foster inclusion is to develop support networks that connect employees who share a common characteristic, trait or interest. Today, support networks go beyond race as the common tie to include communities of employees who share ethnicity, gender, sexual orientation or other characteristics. Support networks can work both as emotional support, by providing a safe space to discuss topics regarded as sensitive, and as an instrument for groups of employees to accomplish specific goals, such as representation.

However, despite their popularity, there is a lack of evidence on the effects of support groups in helping inclusion. So far, it appears they are not associated with people's intentions to leave an organisation,¹⁹ so their effectiveness might be limited.

Effective interventions need more than compliance

Regardless of the intervention per se, the motivation behind it plays a role in how effective it is. Initiatives focused on leveraging diversity to achieve business-related outcomes help employees from minority groups feel satisfied with their career and stay in the organisation. Alternatively, when diversity initiatives are driven by the need to be compliant, minority employees are more likely to leave their jobs. Employees need to see a true concern for them in order to benefit from diversity initiatives.



1

2

3

4

5

6

Recommendations for practice

- Offer diversity training, not as a standalone, tick-box activity, but as part of a wider set of diversity initiatives.
- Dedicate enough time and resources to diversity training so that it can focus on raising awareness about differences, but also practise skills.
- Make diversity training compulsory – despite being less popular, it will become more effective. At the same time, emphasise the reason for the training – that is, to foster genuine change in the organisation, rather than it being a tick-box compliance exercise.
- Explore whether employees would like to build support networks. If so, work alongside them to make this happen, but otherwise prioritise other diversity practices that have been shown to be more effective.
- Whichever diversity initiative you implement to improve inclusion, make sure it is driven by a true concern for employees and an understanding of the value of diversity. If there's no other motivation except for compliance, initiatives are more likely to fail.

5 Conclusion

Workforce equality, inclusion and diversity is a hugely important area for organisations, and often it is assumed that by simply having a diverse workforce, benefits will follow, both for employees and employers. However, the reality is less straightforward: diversity brings opportunities, but also risks for individuals and for organisations. To reap the benefits and retain a thriving diverse workforce, employers must actively engage in managing diversity through purposeful practices that are genuine attempts at improvement, rather than compliance exercises. By doing so, organisations will foster a climate of inclusion, where employees can participate and contribute equally, despite any differences. Previous research by the Youth Futures Foundation explores factors that influence employer engagement with the youth market, such as commitment from senior leaders, and gives pointers on how to create the right conditions.²⁰

Potentially effective diversity management practices include diversity training and support networks. However, while the first is effective in the short term and can teach people new knowledge for the long term, the second is not yet studied enough to make conclusions about its true impact. Regardless of the practice adopted, it should be evidently driven by more than just a desire to be compliant; otherwise benefits are reduced.

Managers have an important role in managing diversity and driving inclusion. By adopting specific leadership behaviours, such as setting a long-term vision, being authentic, empowering team members with the resources they need to act independently, and making decisions with everyone's participation, they help all employees feel included in the workplace.

Finally, when it comes to deciding to leave a job, employees who are young or who belong to an ethnic minority are just as likely to do so as the majority of the workforce. While ethnic minority employees might give more weight to negative social interactions and lacking career opportunities, in general many factors drive employees' decisions to switch



1

2

3

4

5

6

jobs. An overview of the most practically relevant factors is a good starting point to assess what drives turnover in each organisation.

For employers looking to retain and include young employees from disadvantaged backgrounds, the above conclusions are useful starting points in deciding which practices to implement. However, there is little evidence available specifically on this population. Working with employers, the CIPD and the Youth Futures Foundation intend to fill these gaps with further original research.

6 Endnotes

- ¹ National Statistics. (2022) *Vacancies and jobs in the UK: February 2022*. 15 February.
- ² Boys, J. (2021) *The great resignation – fact or fiction? CIPD Voice*. 21 February.
- ³ Williams, J., Alexander, K., Wilson, T., Newton, B., McNeil, C. and Jung, C. (2021) *A better future: transforming jobs and skills for young people post-pandemic*. IES Report 568. Brighton: Institute for Employment Studies.
- ⁴ Cioca, I. and Gifford, J. (2022) *Recruiting young people facing disadvantage: an evidence review. Practice summary and recommendations*. London: Chartered Institute of Personnel and Development.
- ⁵ CIPD. (2021) *Resourcing and talent planning*. Survey report. London: Chartered Institute of Personnel and Development.
- ⁶ Government Equalities Office and Equality and Human Rights Commission. (2013) *Equality Act 2010: guidance*. London: Crown Copyright.
- ⁷ Green, M. and Young, J. (2019) *Building inclusive workplaces: assessing the evidence*. London: Chartered Institute of Personnel and Development.
- ⁸ Rubenstein, A.L., Eberly, M.B., Lee, T.W. and Mitchell, T.R. (2018) Surveying the forest: a meta-analysis, moderator investigation, and future-oriented discussion of the antecedents of voluntary employee turnover. *Personnel Psychology*. Vol 71, No 1. pp23–65.
- ⁹ Ibid.
- ¹⁰ Hofhuis, J., Van der Zee, K.I. and Otten, S. (2014) Comparing antecedents of voluntary job turnover among majority and minority employees. *Equality, Diversity and Inclusion: An International Journal*. Vol 33, No 8. pp735–49.
- ¹¹ Ashikali, T. and Groeneveld, S. (2015) Diversity management in public organizations and its effect on employees' affective commitment: the role of transformational leadership and the inclusiveness of the organizational culture. *Review of Public Personnel Administration*. Vol 35, No 2. pp146–68.
- ¹² Judge, T.A. and Piccolo, R.F. (2004) Transformational and transactional leadership: a meta-analytic test of their relative validity. *Journal of Applied Psychology*. Vol 89, No 5. p755.
- ¹³ Jackson, T.A., Meyer, J.P. and Wang, X.H. (2013) *Leadership, commitment, and culture: a meta-analysis*. *Journal of Leadership & Organizational Studies*. Vol 20, No 1. pp84–106.
- ¹⁴ Brimhall, K.C., Barak, M.E.M., Hurlburt, M., McArdle, J.J., Palinkas, L. and Henwood, B. (2017) Increasing workplace inclusion: the promise of leader–member exchange. *Human Service Organizations: Management, Leadership & Governance*. Vol 41, No 3. pp222–39.
- ¹⁵ Brimhall, K.C. (2019) Inclusion is important... but how do I include? Examining the effects of leader engagement on inclusion, innovation, job satisfaction, and perceived quality of care in a diverse nonprofit health care organization. *Nonprofit and Voluntary Sector Quarterly*. Vol 48, No 4. pp716–37.



- ¹⁶ Cottrill, K., Lopez, P.D. and Hoffman, C.C. (2014) How authentic leadership and inclusion benefit organizations. *Equality, Diversity and Inclusion: An International Journal*. Vol 33, No 3. pp275–92.
- ¹⁷ Brimhall et al (2017); Brimhall (2019) – see note 14 and 15.
- ¹⁸ See our CIPD evidence review, Green, M. and Young, J. (2019) *Building inclusive workplaces: assessing the evidence*. Research report. London: Chartered Institute of Personnel and Development.
- ¹⁹ Friedman C. (2020) The relationship between disability prejudice and disability employment rates. *Work*. Vol 65, No 3. pp591–98.
- ²⁰ Youth Futures Foundation. (2021) Employer engagement in the youth labour market: research summary. London: Youth Futures Foundation.



CIPD

Chartered Institute of Personnel and Development
151 The Broadway London SW19 1JQ United Kingdom
T +44 (0)20 8612 6200 **F** +44 (0)20 8612 6201
E cipd@cipd.co.uk **W** cipd.co.uk

Incorporated by Royal Charter
Registered as a charity in England and Wales (1079797)
and Scotland (SC045154)

Issued: April 2022 Reference: 8237 © CIPD 2022

