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Pádraig O'Moráin



Accepting the discomfort of regret will help set you free

When I see an article in which a famous novelist is being interviewed and lionised, I move on with a fleeting feeling of regret. The regret comes from the fact that I wanted to be that lionised novelist and won't ever be. The feeling is irrational

because I also wanted to be the journalist doing the interviewing and I did, actually, manage to be that. I'm pretty sure that if I had become the lionised novelist I would have regretted not having been the journalist. Why am I telling you this? I'm telling you this because I think the

issue of regret is a strong one in many people's lives. And the richest source of regret is (to paraphrase a line from the Confiteor) what we have failed to do.

Some regrets are fixable. If you wish you had trained to be, say, a pilot or a plumber, it may still be possible to do so.

The toughest regrets are the ones that you cannot do anything about any more, especially when they concern what you might call your "ideal" self. These regrets could concern a career you're too late to have, relationships, a type of personality (wishing you had been an extravert and not an introvert, for instance, though personally I have no regrets about being an introvert).

These "big" regrets may loom larger in older age. In his work on life stages, the psychologist Erik Erikson saw the psychological and emotional condition of people over 65 (this was in 1950) as being one of integrity or despair.

Integrity in this case means that you're essentially at peace and happy, perhaps feeling wise and successful in your life.

If this isn't you, I reckon you have a lot of company.

Despair includes regret, shame and rumination. We're all faulty human beings

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Many of us have unshiftable regrets and in facing them it's essential to remember that we are all faulty – we had no control over our genetic inheritance and neither did our parents or anybody else.

so there's a lot of that about, though I wouldn't use a word as strong as despair to describe it in most cases. Also, we are probably more positive and creative about old age than in Erikson's day.

Still, many of us have unshiftable regrets and in facing them it's essential to remember that we are all faulty – we had no control over our genetic inheritance and neither did our parents or anybody else. Yes, we are responsible for our choices, otherwise ethics and morality fall down. But we make those choices in a world full of contradictory demands between, for instance, work, play, self-development and caring for others, survival and risk-taking.

Research suggests that older people are better able to handle regrets than younger people. But that research concerned relatively minor issues. It seems to me that it's the bigger issues, and the regrets about what is no longer attainable, that can push some older people into feeling a persistent sense of loss.

In dealing with these regrets it is especially important to avoid rumination. When you ruminate you go around and around in your head about the negative aspects of your life or of a relationship.

This isn't the same as planning what to do – it's about rerunning the same old painful movies again and again.

Rumination is linked with depression and with the prolonging and deepening of depression. Often, there's more to depression than this, but rumination makes it worse.

Rumination can also deepen a sense of bitterness and of anger.

Also, rumination may tell you the lie that you actually could have done something about matters that you may not have been able to do anything about, that you could have made things happen when maybe you couldn't have.

Accepting the discomfort of regret, as though it's a pebble in your shoe that you can't get rid of, is an important life skill and becomes more important the older you get. Accepting it frees you to move forward to enjoy and appreciate everything good in your life.

And it enables you to do so without constantly looking over your shoulder at the shadow of what you think might have been.

Pádraig O'Moráin is accredited by the Irish Association for Counselling and Psychotherapy

'It shouldn't be amazing, it should just be the norm'

Emmet Malone

Hospitality and retail remain key areas of employment for people with Down syndrome but the base is broadening

There have been huge improvements in recent years for people with Down syndrome, but not so much that parents don't still tell Aoife Gaffney it is "amazing" when their adult sons and daughters secure meaningful employment they enjoy.

"It shouldn't be amazing anymore, it should just be the norm," she says.

Gaffney is head of employment at Down Syndrome Ireland and ahead of World Down Syndrome Day this Thursday – when the theme will be putting an end to stereotypes – she suggests people's perceptions are beginning to change.

Hospitality and retail remain key areas of employment, she says, for some of the approximately 7,000 people in Ireland with Down syndrome, but the base is broadening as the organisation partners with firms in a wide range of sectors.

And people, in turn, begin to see and appreciate what is actually possible.

Precise numbers are hard to pin down, says Gaffney, but, in 2018, research the organisation conducted suggested about 6 per cent of adults with Down syndrome were in meaningful employment. She estimates the figure might be twice that now, with every individual starting a new job still something of a success story.

"The biggest thing, I think, is just awareness. People with Down syndrome don't generally have a physical disability, so there's not many adaptations that you've got to make to the workplace. So we train up the employer and their staff team to be aware, to be confident and in control as they welcome their new colleague into the workplace."

Gaffney points to members who are working in hairdressing and as barbers, and mentions pharmaceutical manufacturing as a sector in which several very big employers have recently taken on staff. It is not just that the number of jobs available continues to grow at a slow but steady pace, it is that there are more roles that offer the opportunity to fulfil potential and to demonstrate to others what that potential is.

"The world is changing and the young people themselves don't want to go to a day service, whether it's good, bad or indifferent... they want to be part of the mainstream world," says Prof Michael Shevlin at the Trinity Centre for People with Intellectual Disabilities, a part of the university's department of education.

The centre, which works with people with intellectual disabilities and has had a substantial impact on the employment landscape since its establishment in 2016, seeks to forge links with businesses at a time when a growing number of employers are actively seeking to develop more inclusive workplaces. "What we're trying to do is create almost a movement of change within businesses and support them to make a real shift in the way that they look at who they employ," says Prof Shevlin.

The door has already opened a little, suggests his colleague, pathways co-ordinator Marie Devitt, and the centre seeks to grow the space by working with companies and its own graduates to find matches that are mutually rewarding. The aim is not just to find students work, but work they really want to do. "What we're hoping to do is to shift the mindset based on what these amazing young people can do," she says. "Because they've been so underestimated."

The response, they say, has been very positive with more companies across a range of sectors wanting to get involved.

In professional services, EY's experience of hiring graduates was positive enough. Indeed, it recently published a sort of "how to" guide for other firms, setting out some of the ways in which issues such as recruitment, training and mentoring can be handled as positively as possible. "It's not a rule book by any means," Sarah Connellan, EY's chief operating officer told The Irish Times back in December. "But a practical guidance on how an organisation might go about introducing such a programme based on our learning."

"One of the things we look to do is build a better working world," she said, "and this has been such a positive experience for us, for the employees, for families, everyone has benefited... we'd love to see our clients and other companies look to do the same thing."

The announcement by Minister for Further and Higher Education Simon Harris last month of additional funding for more university places is another significant sign of progress. A unique one, says Prof Shevlin, who believes Ireland are starting to set something of an example on the third-level education front. At that launch, however, even the Minister acknowledged the amount of work left to be done in terms of employment opportunities, saying the numbers are not a source of pride.

That may be changing, but "amazing" will require a good deal more work.



'I thought what? I'm going to be with the HR gang'

Emmet Malone

Liam Foley, who has Down syndrome, is People and Culture Champion with Premier Lotteries Ireland

Recalling his reaction to being made permanent at Premier Lotteries Ireland (PLI), operator of the National Lottery, Liam Foley leaves little doubt about his delight.

He is speaking in a room where many winners fill out one of the claim forms spread across the table and though landing a job straight from college shouldn't feel like a lottery win in such a buoyant economy, the odds are still stacked somewhat against those

who, like Foley, have Down syndrome. From Trim, Co Meath, Foley graduated from Trinity College with a certificate in Arts, Science and Inclusive Applied Practice, a level five qualification, before taking up an internship with the National Lottery where he had previously completed an eight-week programme of one day a week work experience.

Now 26, he had previously worked in a hotel close to his home and had a stint or two as a scarer at a Halloween-themed attraction close to Kells, jobs he recalls fondly and clearly enjoyed.

The current office-based role is different, but he says he loves coming to work and being with his colleagues. His manager, Audrey Chew, says they are all very fond of him too, with his "vibrant personality" having a hugely positive impact on colleagues.

His original stint at the National Lottery in Dublin took him around the house, working in the various departments of an organisation that employs

200 people, but, when the job offer came, all the departments seemed sure of the best fit for him.

"I was on holidays in Gran Canaria when I got a telephone call to say I got a permanent job here," Foley says. "I thought what? I'm going to be with the HR gang. Working with Audrey, the loveliest boss ever. I couldn't believe it."

Foley has a lot going on. He still lives in Trim and commutes to the company's city centre offices three days a week.

"The bus takes an hour," he says, "but I'm very busy on it." He is involved with Special Olympics, both as an athlete and a volunteer, and will be in Turkey this week where, accompanied by members of his family, he will be competing in a number of events at the Trisome Games in Antalya.

When he is in work, his responsibilities are varied, although Chew says he benefits from being given tasks he can get to grips with and become really good at over time. "I do a lot of filing,

typing and I organise events and rooms for interviews – interviews with people within the company," he says.

As part of his role, he has had to master various software packages, most obviously Microsoft Office components, and work with other applications bought in from firms such as Hubspot. He also contributes to internal communications and writes weekly profiles for a newsletter on other members of staff.

His official title is People and Culture Champion, which probably gives a sense of the wide sweep of tasks involved. "When I came here first, when I started this job, I was thinking they might take advantage of me, but they haven't and I like that."

"The people in HR are great. I do find some of the work a little bit hard, but a lot of things are easy. At first, I didn't like to say when I found something hard and when I couldn't do it, it was so stressful. I found it difficult to tell her I couldn't do something and to help me out."

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turned out, the researchers were screening bones with a cheap test, called shotgun sequencing, before picking out a few for further investigation.

If the bone still preserved DNA, the test turned up many tiny genetic fragments. Very often, those came from microbes that grow in bones after death. But some bones also contained DNA that was recognisably human, and those with a high percentage were flagged for additional tests.

Rohrlach learned that the institute had screened almost 10,000 human bones in this way, and the results of all the shotgun sequencing were stored in a database. It occurred to Rohrlach and his colleagues that they could scan the database for extra chromosomes. "We thought, 'no one's ever checked for these sorts of things'," Rohrlach said.

He and his colleagues wrote a program that sorted fragments of the recovered DNA by chromosome. The

■ Liam Foley, from Co Meath, at work in the National Lottery office in Dublin. PHOTOGRAPH: DARA MAC DONAILL

That, though, subsided as both Foley and Chew say he got used to his new working environment and his colleagues became accustomed to the support he did and, just as importantly, didn't need. "We've seen Liam grow a lot from when he did his work placement," Chew says.

His role, she says, is very real and she plays down the notion that any great accommodations are required. "It depends what you consider an accommodation," she says. "The main thing is just tailoring your communication style."

"With Liam, I would try to be very descriptive with requests to give a very complete, clear instruction and timeline so that he can understand what you want. But once he gets it, he gets it. And when he does, he can certainly deliver."

They discovered that the institute's collection included six bones with extra DNA from chromosome 21 – the signature of Down syndrome. Three belonged to babies as old as a year and the other three to fetuses who died before birth.

Rohrlach also followed up on Cassidy's 2020 study. He used his program to analyse the shotgun sequencing for the Irish skeleton and found that it also bore an extra chromosome 21, confirming her initial diagnosis.

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DNA in ancient bones may help learn more about how prehistoric societies treated people with Down syndrome

CARL ZIMMER

Scientists have diagnosed Down syndrome from DNA in the ancient bones of seven infants, one as old as 5,500 years. Their method, published in the journal *Nature Communications*, may help researchers learn more about how prehistoric societies treated people with Down syndrome and other rare conditions.

Down syndrome, which occurs in one in 444 babies in Ireland today, is caused by an extra copy of chromosome 21. The extra chromosome makes extra proteins, which can cause a host of changes, including heart defects and learning disabilities.

Scientists have struggled to work out the history of the condition. Today, older mothers are most likely to have a child with the condition. In the past, however, women would have been more likely to die young, which might have made Down syndrome rarer, and the children born with it would

have been less likely to survive without the heart surgery and other treatments that extend lives today.

Archaeologists can identify some rare conditions, such as dwarfism, from bones alone. But Down syndrome – also known as trisomy 21 – is a remarkably variable condition. People with it may have different combinations of symptoms, and they may have severe or milder forms. As a result, it's hard for archaeologists to confidently diagnose ancient skeletons with Down syndrome.

"You can't say, 'oh, this change is there, so it's trisomy 21,'" said Dr Julia Gresky, an anthropologist at the German Archaeological Institute in Berlin who was not involved in the new study.

By contrast, it's not tricky to identify Down syndrome genetically, at least in living people. In recent years, geneticists have been testing their methods on DNA preserved in ancient bones. It's been challenging, because

the scientists can't simply count full chromosomes, which fall apart after death into fragments.

In 2020, Lara Cassidy, a geneticist then at Trinity College, and colleagues used ancient DNA for the first time to diagnose a baby with Down syndrome. They were examining genes from skeletons buried in a 5,500-year-old tomb in western Ireland. The bones of a six-month-old boy contained unusually high amounts of DNA from chromosome 21.

Since then, Adam Rohrlach, a statistician then at the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany, and his colleagues have developed a new method to find the genetic signature, one that they can use to look quickly at thousands of bones.

The idea came to Rohrlach when he talked with a scientist at the institute about its procedures for searching for ancient DNA. Because high-quality DNA sequencing is very expensive, it

turned out, the researchers were screening bones with a cheap test, called shotgun sequencing, before picking out a few for further investigation.

If the bone still preserved DNA, the test turned up many tiny genetic fragments. Very often, those came from microbes that grow in bones after death. But some bones also contained DNA that was recognisably human, and those with a high percentage were flagged for additional tests.

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He and his colleagues wrote a program that sorted fragments of the recovered DNA by chromosome. The

program compared the DNA from each bone with the entire set of samples. It then pinpointed particular bones that had an unusual number of sequences coming from a particular chromosome.

Two days after their initial conversation, the computer had their results. "It turned out our hunch was right," said Rohrlach, who is now an associate lecturer at the University of Adelaide in Australia.

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