

WORKERS WITH MENTAL DISORDERS IN A DIGITALISED WORLD OF WORK: CHALLENGES, OPPORTUNITIES AND NEEDS

Mental health includes our emotional, psychological and social wellbeing. People with diagnosed and undiagnosed mental disorders (MDs) cope differently with work and relational demands, e.g. in the context of the new ways of working, new technologies and the current rise of digitalisation at work. This could bring risks for vulnerable groups, like workers with MD, but also opportunities when tailored working needs are met. The article discusses the main challenges people with MDs may face in workplaces, especially in the context of the ongoing changing world of work and gives examples of existing support. It aims to stimulate further discussions focusing on the needs and opportunities for workers with MDs in the modern workplaces.

1. Mental disorders and digitalisation at work: some definitions

The present contribution aims to address how workers with MDs face, interact and relate with ongoing developments in the workplace, like new technology and digitalisation in the workplace. This is a complex and understudied field, with multiple implications. People with MDs cope differently with work and relational demands. This difference may lead them to face specific challenges but also to provide novel views and approaches. In this contribution, we would like to underline the need for tailored approaches to employees with MDs interacting with digitalisation that will take into account their strengths and capacities and not only their vulnerabilities.

Before going further, we need to clarify what we consider as 'mental disorder' and what we mean by 'digitalisation'. In the next paragraphs, you can find some definitions.

1.1 Definitions: Mental disorders

When speaking about 'problems' related to mental health conditions, we may refer to mental disorders (like mental illness) or to 'mild' conditions such as psycho-emotional maladjustment or psychological stress/distress, both work or non-work related. The focus of the present contribution is on the type of mental disorders **that always (per definition) imply distress or impairment in important areas of functioning**, and that are **not work-related by nature**, but could of course be partially impacted by work.

According to the American Psychiatric Association's (2013) 'Diagnostic and Statistical Manual of Mental Disorders', 5th edition (DSM-5), a mental disorder (or mental illness or psychiatric disorder) is a syndrome that significantly affects one's individual thinking, feeling, mood and behaviour. Mental disorders may be temporary, such as post-traumatic stress disorders, or long-lasting, such as personality disorders and schizophrenia. Although people with some mental disorders may present areas of good functioning and excellence, generally significant distress or challenges in social (or occupational) activities and in everyday functioning are reported after becoming aware of the mental disorder. Table 1 lists the major and most common mental disorders in the adult population following the DSM-5 classification.

Table 1.: Major mental disorders in the adult population following the DSM-5 classification

Classification sections	Main/Principal disorders	Main characteristics
Neurodevelopmental Disorders	Autism Spectrum Disorder Attention-Deficit/Hyperactivity Disorder (ADHD)	Individuals could manifest very different conditions with onset in the developmental period (but with effect also in adulthood), inducing developmental deficits that produce impairments of personal, social, school or working functioning.
Schizophrenia Spectrum and Other Psychotic Disorders	Schizotypal (Personality) Disorder Delusional Disorder Brief Psychotic Disorder Schizophreniform Disorder Schizophrenia Schizoaffective Disorder	Individuals interpret reality abnormally. These disorders may result in some combination of hallucinations, delusions, disorganised thinking (and speaking), disorganised or abnormal motor behaviour, and negative symptoms (e.g. diminished emotional expression, reduced ability to experience pleasure, or decreased ability to initiate and persist in self-directed purposeful activities). They impair daily functioning and can be disabling; most of them are lifelong conditions.
Bipolar and Related Disorders	Bipolar I Disorder Bipolar II Disorder Cyclothymic Disorder	Individuals experience extreme mood swings that include emotional highs (mania or hypomania) and lows (depression). Manic/hypomanic episode(s) is a period of abnormally and persistently elevated, expansive or irritable mood and abnormally and persistently increased goal-directed activity or energy, characterised by grandiosity, decreased need for sleep, being more talkative than usual or distractibility.
Depressive Disorders	Disruptive Mood Dysregulation Disorder Major Depressive Disorder, Single and Recurrent Episodes Persistent Depressive Disorder (Dysthymia)	Individuals experience persistent feelings of sadness, loss of interest, and impaired thinking and behaviours. They can experience a variety of emotional (e.g. irritability or emotional outburst), physical, or cognitive (e.g. trouble in thinking, concentrating, making decisions) problems. Individuals may feel as if life is not worth living.
Anxiety Disorders	Specific Phobia Social Anxiety Disorder (Social Phobia) Panic Disorder Panic Attack (Specifier) Agoraphobia Generalised Anxiety Disorder	Individuals with different anxiety disorders share features of excessive fear and anxiety and related behavioural disturbances. While fear is the emotional response to real or perceived imminent threat, anxiety is the anticipation of future threats. Anxiety and fear interfere with daily activities, are difficult to control and are out of proportion to the actual danger. Anxiety disorders differ from each other in the thing or situation that induces fear, anxiety or avoidance, and the associated cognitive ideation. Anxiety disorders are commonly associated with physical health complaints.
Obsessive-Compulsive and Related Disorders	Obsessive-Compulsive Disorder Body Dysmorphic Disorder	Individuals show a pattern of recurrent and persistent thoughts, impulses or images (obsessions), experienced as unwanted and inappropriate (ego-dystonic), that lead them to do repetitive behaviours (e.g. hand washing, ordering checking) or mental acts (e.g. praying, counting, repeating words silently) (compulsions). These obsessions and compulsions interfere with daily activities and cause significant anxiety or distress.
Trauma- and Stressor-Related Disorders	Post-traumatic Stress Disorder Acute Stress Disorder Adjustment Disorders	Individuals may experience intrusive memories, avoidance, negative changes in thinking and mood, and changes in physical and emotional reactions. These disorders are triggered or precipitated by events or circumstances that overwhelm the individual and that often threaten or cause serious injury, neglect or death.
Feeding and Eating Disorders	Avoidant/Restrictive Food Intake Disorder Anorexia Nervosa Bulimia Nervosa Binge-Eating Disorder	Individuals show persistent eating behaviours that negatively impact their health, emotions and ability to function in important life areas. Individuals may focus too much on their own weight, body shape and food, adopting dangerous eating behaviours.
Substance-Related and Addictive Disorders		These disorders affect a person's brain and behaviour and lead to an inability to control the use of a legal or illegal drug or medication.

Classification sections	Main/Principal disorders	Main characteristics
Personality Disorders		Individuals show a rigid and unhealthy pattern of thinking, functioning and behaving, causing significant problems in relationships, social activities, work and school. Individuals may not realise they have a personality disorder because their way of thinking and behaving seems natural to them.
Cluster A	Paranoid Personality Disorder Schizoid Personality Disorder	Cluster A includes individuals with odd, eccentric thinking or behaviour characterised by social awkwardness and social withdrawal.
Cluster B	Schizotypal Personality Disorder Antisocial Personality Disorder Borderline Personality Disorder Histrionic Personality Disorder Narcissistic Personality Disorder Avoidant Personality Disorder Dependent Personality Disorder Obsessive-Compulsive Personality Disorder	Cluster B includes individuals with dramatic, overly emotional or unpredictable thinking or behaviour.
Cluster C		Cluster C includes individuals with anxious, fearful thinking or behaviour.

Expected or culturally expected responses to common stressors, such as sadness or social withdrawal after the death of a loved one, or anxiety and distress after a change in job status (e.g. job loss, job reassignment, job promotion), are not classified as mental disorders. Similarly, the psycho-emotional maladjustments that might be transitionally experienced by a person in the course of his/her life, such as existential crisis or psychological maladjustment after a stressful event or condition, are not considered as mental disorders.

1.2 Definitions: new technology and digitalisation at work

KEY MESSAGE: In recent decades, new technology and digitalised working processes have affected extensive sectors of production and the workforce; it has rendered virtually impossible to be part of the workforce without dealing with the 'changing world of work' and its challenges.

Over the last 30 years, we have witnessed an extensive technological and digital development, which has affected almost every sector and has greatly altered the work landscape. Technology has become an integral part of how companies operate: from increasing profitability, to being competitive in a globalised world, to enhancing safety and health.

EU-OSHA provides in the publication of their research programme on "*Digitalisation and occupational safety and health*" (2019) a list digital technologies, that could challenge workers' safety and health, and its management in the immediate future, at a pace faster than ever before.

New digital technologies	Examples of application
Artificial intelligence (AI)	AI-augmented cobots, decision-support tools
Advanced robotics	Exoskeletons to reduce muscular load
Big data	Monitoring and predictive analytics
Online platforms	Labour supply matching
The Internet of things	Industrial automation
Wearable mobile devices and connectivity	Monitoring and alertness of safe and healthy working environments

The digitalised world, however, does not only entail smart working or cutting-edge technologies; in fact, digitalisation has become part of processes in nearly every sector. These range from the use of computers in every desk job to the more modern applications in precision industry and even precision farming and agriculture, sectors usually considered more traditional and less digitalised.

- EU-OSHA's Pulse survey (EU-OSHA, 2022) offers insights into the post-pandemic workplaces in terms of workers' health and wellbeing and related workplace measures, in combination with the increasing use of digital technologies in the workplace. According to this survey, digital devices and technologies most frequently used in the workplace are: laptops, tablets, smartphones or other portable devices (73% across the EU), desktop computers (60%) and broadband technologies to access the Internet (55%), wearable devices (11%), machines or robots incorporating AI (5%) and robots interacting with the worker (3%).
- Considering the above is not coming as a surprise, the following results provide further insights: a considerable amount of respondents across the EU say that their organisation uses digital devices to **automatically allocate** tasks or working time or shifts to them (30%). A slightly lower number (27%) reply that digital devices are used to have **their performance rated by third parties** (e.g. customers, colleagues, patients etc.) and 25% to supervise or monitor their work and behaviour.
- Moreover, more than half of respondents across the EU (52%) report that the use of digital technologies in their workplace **determines the speed or pace** of their work, 33% say that these technologies increase their workload and 44% declare that this results in them working alone.
- Finally, almost one fourth of respondents say that the use of digital **technologies reduces their autonomy** at work (19%).

Moreover, the survey showed that home-based teleworking respondents report the increase of lone working (which could be negative or positive, depending on the individual needs and the nature of work) and they were also less likely to report a lack of autonomy or influence, when compared to all workers.

As the results show, it has become impossible nowadays to be part of the workforce without being entangled in some form of technology and its consequences. Moreover, the workforce is destined to become increasingly diverse and dispersed, with a higher likelihood of income and job instability, altered working conditions, and required to acquire new skills to remain employable (Charles et al., 2022). Based on the European Commission's Digital Economy and Society Index (2022), in which the digital performance of Member States in terms of digital competitiveness is tracked, Scandinavian countries and the Netherlands are at the forefront within the EU. As well, a great push in digitalisation efforts was conducted during the COVID-19 pandemic. Nonetheless, the results show many Member States are still struggling to close these gaps: only 54% of working-age EU citizens have at least basic digital skills and only 55% of small and medium enterprises reached at least a basic level in the adoption of digital technologies.

All workers including workers with MD are expected to join and adapt to this altered work landscape.

2. Working with a mental disorder

2.1 Scale of the phenomenon in the EU

KEY MESSAGE: It is hard to calculate the number of EU workers living with MDs because of the underreporting of MDs, which is related to stigmatisation, trust and privacy, and the underdiagnosis of some MDs.

The exact number of people with MD is hard to calculate, and so the number of workers with MDs, as there are many confounders. First and foremost, workers with an MD are not required to disclose their condition for privacy reasons. Moreover, the stigma that still exists regarding the diagnosis of MDs in the general population may prevent them from disclosing their condition. Attitudes towards people with an MD in the workplace have improved, but a pervasive culture of silence around MDs seems to prevail. The lack of awareness in the work setting has implications, as workers are more likely not to involve anyone at work, or disclose mental health issues, citing a reluctance to formalise the issue and fears of negative consequences. In 2017, the Mental Health at Work Report (ILO, 2017) highlighted that less than 25% of managers receives training in mental health. According to the World Health Organisation, mental health training for managers has the capacity to help those in charge recognise and act on mental health conditions at work and foster a better understanding of how job stressors and risk factors affect mental health (World Health Organisation, 2022).

Given this situation, it is difficult to assess the prevalence of MDs in the workforce, and the available figures probably underestimate the extent of the problem.

Nonetheless, the share of workers with an MD has been estimated utilising different sets of data. For example, according to the Organisation for Economic Co-operation and Development (OECD) data (EU27 +UK), in 2021 around 20% of the working-age population suffered from an MD at any given moment (The European House

– Ambrosetti, 2021), while in another European 2018 study this was up to 27%, or approximately 80 million people (OECD/European Union, 2018).

As stated in the 2021 report “Headway 2023 – Mental Health Index” report of the OECD/European Union, 2018:

“Good Mental Health is vital for people to be able to lead healthy and productive lives. Mental Health disorders, in fact, significantly impact on people’s everyday life, including their ability to work, and limiting their capacity to participate in the labour market”.

However, this can lead to a “vicious” circle whereby the longer people are out of work, the more damaging the consequences are. As of 2020, the negative impact of COVID-19 crisis on mental wellbeing can further deepen these consequences, especially amongst young people and people with lower socio-economic status. “

At European level, the Mental Health and wellbeing of workers is increasingly recognized as a relevant issue for stakeholders in the workplace:

- for employers, this can be related to absenteeism, presenteeism and lower productivity, low workforce morale and a poor reputation for the organization, and how Mental Health and wellbeing can be managed: how risks can be mitigated, how Mental Health and wellbeing can be promoted, how return to work can be managed, and how recruitment procedures for people with Mental Health disorders can be managed;
- for workers, issue can be related to pay and social aspects, as well as stigma, recovery and reintegration into work. As the report cites *“mental ill-health can push individuals into poor quality jobs. People with Mental Health issues tend to earn less per hour, have less secure jobs, are less satisfied with their jobs, report strain more often, and enjoy less respect or recognition for their work”.*

Furthermore, the analysis of the EU data shows that up to one-third of those with a mental health disorder has had one or more coexisting mental health disorders, thus increasing the burden of MDs without necessarily increasing the affected population (Wittchen & Jacobi, 2005).

At the same time, more than 44% of employed people aged 15-64 reported facing risk factors for their mental wellbeing at work (Eurostat, 2021). These are risk factors that may affect workers’ psychological response to work and workplace, and may possibly exacerbate underlying MDs. The most often mentioned risk factor was time pressure or work overload, followed by dealing with the public and job insecurity.

Other analyses looked at MDs and associated phenomena such as presenteeism and absenteeism or sick leave.

Presenteeism means being at work, despite ill state, with decreased performance, or the feeling of accomplishing less than desired due to mental (or physical) health problems. This phenomenon is two to three times more likely to occur for workers with MDs. On the contrary, there is absenteeism and sick leave. The data show that 20% to 40% of all workers suffering from moderate to severe MDs have been absent from work in the last four weeks, with increased sickness absence duration compared to workers without MDs (OECD/European Union, 2012).

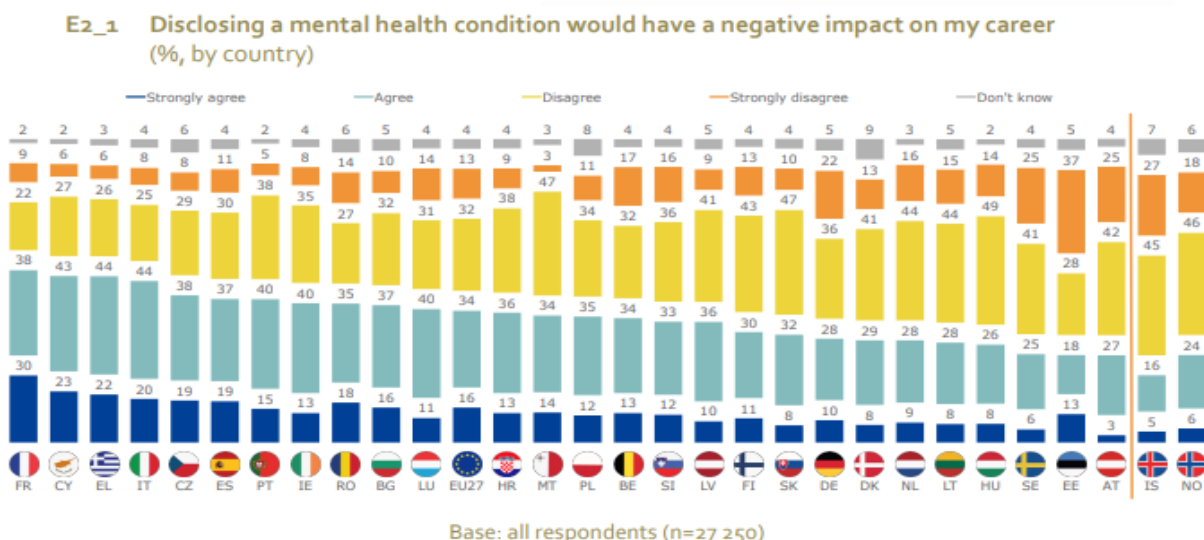
Other analyses showed that sick leave or early retirement due to mental health conditions increased over the last few decades (OECD/European Union, 2018).

2.2 The disclosure of a mental disorder at work

KEY MESSAGE: The disclosure of an MD at work is often difficult for the employee due to stigmas. Employers should stimulate a culture change supporting confidentiality/trust with tailored and strengths-driven approaches facilitating (voluntary) disclosure.

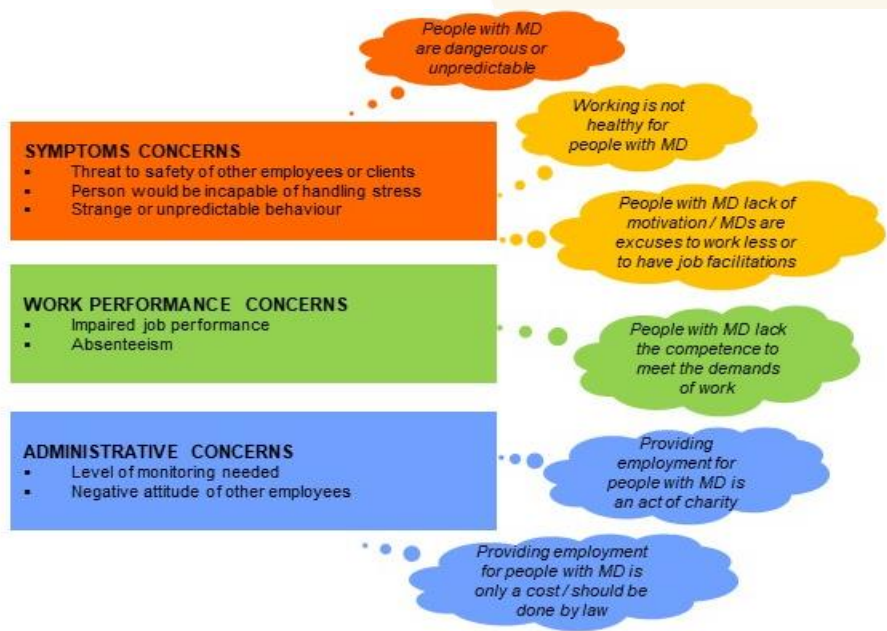
Employees with an MD always face the decision of whether or not to disclose their condition. According to EU-OSHA’s Pulse survey (EU-OSHA, 2022), respondents across the EU are divided in their view whether disclosing a mental health condition would have a negative impact on their career. In some Member States a majority of respondents agree that disclosing a mental health condition would have a negative impact on their career, for example in Italy (63%), Cyprus (66%), Greece (66%) and France (68%).

Figure 1: Disclosing a mental health condition would have a negative impact on my career (% , by country)



The principal reason for disclosure is to ask for a job reassignment or adaptation in order to perform better at work. Changing job, or job site, or the way things are done may enable a qualified individual with an MD to have a well fit opportunity for employment. Disclosure of an MD at work may be also motivated by the idea of serving as role models and to sensitise others, decreasing the stress of ‘hiding’ an MD, or enabling the employers to understand their symptoms, crisis, hospitalisation periods or absenteeism. Some of the reasons for not disclosing may relate to shame and stigma around MDs, fear of losing hiring or promotion opportunities, protecting one’s own privacy, fear of negative reactions by employers or co-workers, or fear of receiving different (and lower) evaluation standards. When talking about stigma, we refer to a complex phenomenon composed of three dimensions: knowledge (ignorance or misinformation), attitudes (prejudice) and behaviours (discrimination) (Thorncroft et al., 2007). Figure 1 presents some of the most common stigmas related to workers with MDs (Brohan et al., 2010; Krupa, 2009).

Figure 2 Most common stigmas related to workers with MDs:



Another aspect that is worth having in mind is that disclosing (or not) an MD at work could create a different working climate depending on who is aware of the MD. For example, there could be a diagnosed MD that both the employer and the person are aware of, or an MD that the worker does not want to disclose, or an MD that is evident to the employer or to the colleagues, such as a personality disorder, but is ego-syntonic¹ with the

¹ **Ego-syntonic behaviors** are behaviors that are aligned with your personal values and self-image. For example, if you are a dedicated athlete, working out daily is considered desirable for you; in the same way a certain eating disorders, like Anorexia Nervosa, encounters the problem of patients who believe that their eating behavior is perfectly normal, i.e. ego-syntonic. **Ego-dystonic** is the

person. For example, people with personality disorders are often not self-critical about their way of acting, feeling or thinking. They may not perceive that there is something ‘wrong’ and often think that the problem lies in the other persons (colleagues, friends, employers, etc.)

Ellison and colleagues (2003) suggested that disclosure of MDs is more likely to occur either in times of crisis when the person is not able to conceal his/her illness or at times where the person feels valued and secure in the workplace. In this sense, occupational health professionals may play a key role in facilitating employees to disclose their MD and agreeing upon reasonable requests in keeping with personal preferences, legal requirements and organisational considerations.

2.3 The impact of the COVID-19 pandemic

KEY MESSAGE: The COVID-19 pandemic had an important impact on work, especially the spread of digitalised telework, and on the increase of mental disorders.

The COVID-19 outbreak has made working from home (WFH) the new way of working for millions of employees in the EU and around the world. Due to the pandemic, many workers and employers had to switch, quite suddenly, to remote work often without any preparation.

Early estimates from Eurofound (Ahrendt et al., 2020) suggested that due to the pandemic, approximately 50% of Europeans worked from home (at least partially) as compared with 12% prior to the emergency. EU-OSHA’s Pulse survey shows that in 2022 17% of employed respondents continued to work from home. It is interesting to note how WFH is not a new phenomenon and many European countries adopted WFH regularly before the pandemic. However, WFH has become more normalized now also in the countries less used to it, partially thanks to digitalisation, new technologies and pandemic needs.

In relation to mental disorders, a recent paper (Santomauro et al., 2021) quantifies the impact of the COVID-19 pandemic on the prevalence and burden of major depressive disorder and anxiety disorders globally in 2020, including studies from western Europe (n=22) and high-income North America (n=14), Australasia (n=5), high-income Asia Pacific (n=5), east Asia (n=2) and central Europe (n=1). The study found that the decrease in human mobility and the daily SARS-CoV-2 infection rate were significantly associated with higher prevalence of major depressive disorder and anxiety disorder. Particularly, after adjustment for the COVID-19 pandemic, the estimated prevalence of major depressive disorder changed from 193 million people to 246 million people, with an increase of 27.6% new cases, while the estimated global prevalence of anxiety disorders moved from 298 million to 374 million people, with an increase of 25.6% new cases globally.

The combination of the growing amount of telework and the increase of mental disorders, both as a consequence of the pandemic, could significantly affect OSH. In this line the results of EU-OSHA’s OSH Pulse, show that more than four in ten respondents across the EU agree that their work stress has increased as a result of the COVID-19 pandemic. Further data on MD, e.g. depression in relation to WFH or lone working as a result of digitalisation are not available. Preferences could be dependent on individual needs related to autonomy, influence over the workplace or the availability of social contacts at the workplace. The diversity of individual needs is also referred to in the next paragraph through the concept of “neurodiversity”.

2.4 The concept of neurodiversity

KEY MESSAGE: A significant diversity exists within human populations in a broad range of conditions. This “neurodiversity” must be properly addressed, because it may bring about potential benefits at the workplace.

The concept of neurodiversity refers to the diversity of neurological and cognitive functioning that exists within human populations. This diversity encompasses a range of conditions, including autism spectrum disorders (ASD), attention deficit hyperactivity disorder (ADHD), dyslexia, and others. In recent years, there has been growing recognition of the potential benefits of neurodiversity in the workplace.

opposite, for example stealing money to buy drugs, lying to a physician in order to get a prescription for painkillers and engaging in actions that simply don’t fit with your values and beliefs. (retrieved from internet <https://therehab.com/learning/ego-syntonic-and-ego-dyntonic> and Wikipedia, 30th October 2023)

By embracing neurodiversity and creating more inclusive workplaces, organizations can tap into the potential of a previously untapped pool of talent and benefit from increased productivity, creativity, and innovation. Despite the specific challenges those neurodiverse individuals may encounter in the workplace or while performing certain tasks, they can become valuable and unique strengths for a company with appropriate adaptations (Brinzea, 2019).

However, addressing neurodiversity at the workplace also presents challenges, including the need for appropriate accommodations and support for neurodiverse employees. For example, individuals with ASD may benefit from clear and explicit communication, structured work environments, and sensory accommodations. People with ADHD may benefit from flexible work schedules, clear expectations, and positive reinforcement. Dyslexic individuals may benefit from assistive technologies and accommodations for reading and writing tasks. It is therefore crucial that organizations develop a comprehensive strategy for neurodiversity employment that includes awareness training, job coaching, and other forms of support to facilitate the inclusion of neurodiverse individuals in the workforce (Krzeminska et al, 2019).

To potentially address some of these challenges, the German Research Center for Artificial Intelligence (DFKI) has embarked on a new venture known as KI-KOMPASS Inclusive, which aims to establish a facility for AI-assisted support technologies and inclusion in the workforce in the next five years. The initiative will offer a variety of training and advisory services, and people with disabilities will have the opportunity to participate in an advisory capacity via an all-encompassing advisory committee. Most of all, the project intends to advance and fortify the inclusion of people with disabilities in the labour force by using AI-assisted support technologies (BAG BBW, 2020).

Two other relevant examples are the Canadian CCOHS' initiative on "[Understanding and supporting neurodivergent workers](#)" (CCOHS Corner, OHS Canada Magazine 2023) and Australia's Institute of Health & Safety work on "[Do OHS management systems disadvantage neurodivergent workers?](#)" (Australian Institute of Health & Safety, 2023).

2.5 Challenges and opportunities

KEY MESSAGE: For people with MDs, employment is an important and widely recognised factor for wellbeing and recovery. Employers should support workers with MDs through employment programmes that could promote a competent, capable and diverse yet productive workforce.

People with MDs might face various challenges at work. Beyond difficulties related to the MD disclosure such as fear of having a salary reduction, socio-relational effects and stigma, they might face problems in recovering and job reintegration after an acute episode; they might turn down a job because of their MD (Mental Health Foundation, 2002; Wahl, 1999) or stop themselves from looking for work because they anticipate discrimination (Thornicroft et al., 2009). The disclosure of an MD in the workplace can also lead to discriminatory behaviours from managers and colleagues such as micro-management, lack of opportunities for advancement, over-infering of mistakes to illness, and gossip and social exclusion (Corrigan et al., 2001). Moreover, workers with MDs might be more susceptible to distress related to job performance and productivity, deadlines, acquiring new competences, multitasking or working in teams, as they might be more prone to relational problems.

On the other side, employers of people with MDs also face challenges related to the costs for absenteeism and decrease in productivity. Moreover, employers are required to facilitate the disclosure to the occupational physician, to act for reducing the risk factors of crisis or hospitalisation and to promote job reintegration.

In terms of smart working specifically, the challenges are for both employer and occupational physicians in defining the homeplace as a workspace (for instance, in terms of safety measures).

Employment is an important and widely recognised factor for recovery (see for example, Pai et al., 2021). Giving space to MDs at the workplace and interactions among staff making it discussable may promote a safe and secure working environment and may foster the possibility to address the needs of workers with MDs. This might support staff with MDs to feel good and satisfied about themselves, improve or develop skills, competence and experience, foster autonomy, and give a source of purpose allowing them to contribute to households and to feel actively part of the society.

The opportunity for employers is to support employment of people with MDs with programmes (Table 2) that help them to get, maintain and excel in jobs. In this way, employers could support a competent, capable and diverse yet productive workforce. As an example, people with bipolar disorder are known to be highly creative and innovative, while people with anxiety disorder are often very precise and scrupulous. MDs are present at

all levels of occupational hierarchy and across jobs. People with MDs might gain high-level positions and excel in their activities.

Table 2. Examples of evidence-based employment support programmes for people with MDs

Programmes	Features	Advantages
<p>Individual Placement and Support (IPS) Started in the USA, underwent randomised controlled trials in 6 European countries and currently implemented in Belgium, Czechia, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Netherlands, Norway, Spain, Sweden, Switzerland and UK https://ipsworks.org/index.php/what-is-ips/</p>	<p>Helps people with MDs to quickly choose, secure and keep competitive employment while providing ongoing individualised long-term support. IPS aims to place people in jobs that match their talents and interests.</p>	<ul style="list-style-type: none"> IPS programmes are highly effective; and they increase competitive employment rates.
<p>Clubhouses Originating in the USA, spread in Denmark, Estonia, Finland, France, Germany, Iceland, Ireland, Italy, Netherlands, Norway, Poland, Romania, Sweden, and other countries all over the world https://clubhouse-intl.org/</p>	<p>Community-based centres open to individuals living with an MD that offer supported employment programmes but also supported education programmes.</p>	<ul style="list-style-type: none"> Increase employment rate; and, especially supported education programmes can enhance job prospects.
<p>Organizations at a national level in several European countries</p>	<p>Pro Mente (Austria), StAB (Germany), Social enterprises (Italy), PFZW (Poland), DUOday (Ireland, Belgium, other 10 European countries and worldwide), Integra (Spain)</p>	<ul style="list-style-type: none"> Create public awareness of the issues of mental health, social well-being and prevention; help individuals with disabilities to be employed; Several approaches, such as: employment inclusion, partnering with mentors, programs aimed at adolescents and young adults with MDs.
<p>American with Disabilities Act (ADA) USA https://www.ada.gov/</p>	<p>Provides reasonable adaptations (e.g. telecommuting, scheduling flexibility, sick leave, breaks and noise reduction), when requested, to an employee with a disability as long as it does not cause undue hardship on the employer. Possibly the most famous proven example globally.</p>	<ul style="list-style-type: none"> Low cost and easy to implement; reduce costs; foster people with undisclosed MD to feel more comfortable in the workplace; encourage those who are not fully functioning in the workplace due to MD to ask for adaptations; and reduce presenteeism and thus support productivity.
<p>EU Practitioner PES toolkit (implementation in 2023) Accessible Practitioner Toolkit from the Public Employment Services (PES) across Europe, to combat labour market discrimination against persons with disabilities and further their effective participation in the labour market. Launched in 2021 as a key output of the European Commission's new Disability Employment Package and key initiative of the EU Strategy for the Rights of Persons with Disabilities: https://ec.europa.eu/social/main.jsp?catId=1484&langId=en</p>	<p>Practical guidance, with country examples, to better support vulnerable social groups and the integration of persons excluded from the labour market.</p>	<ul style="list-style-type: none"> Useful irrespective of a particular operational delivery model and within differing national contexts it aims inspire with new practices or ways of implementation provides inputs for the development or adaptation of strategies, structured under six action areas, all supported by a broad range of practical examples.

3. Mental disorders in a changing world of work: barriers and facilitators

KEY MESSAGE: There is a need for a person-centred tailored approach to employees with mental disorders facing demands of changing workplaces that will promote the expression of individual needs and take into account individual strengths and capacities and not only vulnerabilities.

Within this complex framework, does the changing (digitalised) work environment affect employees with MDs in terms of vulnerability or would it create advantageous circumstances for people with MDs to excel and mobilise their resources to the working process? We think the answer is equivocal.

Generally speaking, based on the literature, we could identify the following aspects related to the increased digitalisation:

- On the one hand digitalisation creates challenges for workers with MDs, such as requiring high cognitive abilities, work and private life interference, increased workload, longer working hours, continuous updating of programmes and digital information overload, social isolation, presenteeism, increased requirements for education, specialisation and new skills to acquire, impacting on existing jobs (phasing out).
- Digitalisation facilitates workers with MDs: it provides greater flexibility and autonomy, better work-life balance, reduced contact with the public, which could be a source of additional distress, and increased quality and efficiency.

However, when speaking of MDs and digitalisation, generalisations are often meaningless: what could be a challenge for a worker with one type of MD might in turn be a facilitator for a worker with another MD. The relationship with technology should not be seen as unique or monolithic but tailored to the needs of individuals.

Technology and digitalisation may help to smooth out or prevent important relational problems, such as anger, relational manipulations, unrealistic expectations, frustrations and engulfment², which are frequently present in almost all MDs and especially the cluster B personality disorders. For example, the communication with the employer and the working group that is mediated by digital means may protect from relational contacts, but it may also expose to intrusive communication (e.g. company chats) if people are not able to maintain clear boundaries between working and private life. The right to be disconnected may be more difficult to exert for people with some MDs. For example, workers with some types of MDs such as psychosis or some forms of anxiety disorders may find it difficult to close this channel, and they may show impulsive behaviours of hyper-control of the communication and presenteeism. On the contrary, people with schizoid personality traits may enjoy and feel safe when doing digital work in isolation and may perceive emails or chats as disturbing intrusions.

Another aspect of digitalisation that could be challenging for workers with MDs is the management of workload fluctuations. For example, when there is little work, people with MDs could experience a complicated relationship with the 'machine', for instance, looking at the PC waiting for an email in order to see if something arrives and then they immediately answer. This mechanism could create stress, and foster presenteeism; depending on the type of MD, there could be an impulsive mechanism of addiction, but if the person is unable to immediately respond to all the requests this could lead to feelings of inadequacy or failure.

On the contrary, when the workloads are excessive, precisely because the requests arrive in digital version (e.g. by email) without the mediation of the human relationship, people with MDs can experience "reactions crisis", feel too crushed and show impulsive reactions such as giving up everything or quitting. In these cases, it is important, for example, to make a tailored plan based on the needs of the worker, with realistic objectives that can be reached on time.

Thus, when looking at the relationship of MD workers with digitalisation, it could be valuable to adopt an individualised perspective based on each person's (or category of MD) fragilities and resources, as the Job Demand-Resources model (Bakker & Demerouti, 2007) suggests.

In this line, the employment support programme for people with MDs such as the ClubHouse International (<https://clubhouse-intl.org/>) adopts an individualised approach that, for example, involves part-time work, with rigid and repetitive, non-discretionary tasks, where the first step is the creation of a manual, where each step

² Engulfment (psychology): extreme distress and anxiety related to feelings of being taken over by an external force and associated fear of close personal relationships (based on: <https://psychologydictionary.org/engulfment/>)

is guided by a tool. Then, the worker is supported by tutor figures who have an essential role especially in 'new' situations, such as starting situations or situations of job change, tool change, PC change or work from home problems.

It should be underlined that those programmes are mainly applied to jobs in the tertiary sector, especially clerical, and not to other types of jobs in the primary or secondary sector.

As a general note: it is important to emphasize the role of occupational safety and health (OSH) risk assessment in the EU, and - following the requirements of the 'Framework Directive' for occupational safety and health (EU Council Directive 89/391) - the obligation of all employers to assess risks and implement preventive measures aiming to protect all workers' (physical and mental) health and safety. In this context, documents such as the EU strategy for the rights of persons with disabilities³ and the Communication on a comprehensive approach to mental health⁴ aim to implement further actions supporting effective functioning of people with mental health disorders, in general and in the work context.

3.1 Concluding remarks and final implications

KEY MESSAGE: More (and longer) research is needed to evaluate specific populations, and to investigate the phenomenon further at EU level. On a practical level, coordinated collaboration between occupational physicians, clinical psychologists and employers is required. And last, it is important to remember an effective approach asks for both organisational measures - based on OSH risk assessment- as well as a tailored individual measures: there is no one-size-fits-all solution, since no MD or individual is the same and we should act accordingly.

The sensitivity of the topic in combination with the specific needs of people experiencing MDs and different work arrangements, are important to be taken into consideration in the future follow up actions. In the first place more research is necessary, and especially larger methodologically sound studies with longer follow-up (longitudinal studies). Preferably this would be organised via European wide studies in collaboration with member states and relevant European organisations. This way, evidence-based literature will become available which is essential to draw practical and policy conclusions or recommendations, and so being able to enhance the policy uptake of latest scientific insights and so the science-to-policy process.

On a practical level, it is important to be able to recognise mental health problems among workers at an early stage, referring to as well the more 'mild' psycho-emotional issues, as well as related to a potential non-work related underlying mental disorder, all with the aim to prevent any difficulties as much as possible.

In order to facilitate this, first the role of the occupational physician should be regarded. Often, due to the lack of specific tools available and a basic underestimation, mental risks are not sufficiently investigated by the occupational physician during health surveillance, especially if the worker tends to conceal the disorder or is unaware of his/her disorder.

It would therefore be appropriate for any doctor, and in particular the occupational physician, to be able to pick up on indirect signs of mental disorders such as sleep quality disorders, addiction to any kind of substance, and signs of somatisation of anxiety states. Once the problem has been intercepted, the specialist must be supported to implement appropriate preventive and reintegration measures.

Next, coordinated collaboration between the domains of occupational medicine and clinical psychology and the revision of surveillance protocols that shed more light on psychosocial risks, particularly those related to the use of new technologies and their management, could be useful in this regard.

Second, it needs to be emphasized that work organisation and processes have an important role in either improving mental health at work (including MD) or mitigating its consequences. For an effective approach, measures are needed on organisational level as well as on individual level, tailored to the workers' needs. For example, the effect of individual therapy sessions will not last without a changes at work.

The most challenging, but important aspect of the implication for **clinical practice** is the fact that no mental disorder or individual is the same. Recalling what the 'mental health in the digital world of work' resolution

³ Union of equality: Strategy for the rights of persons with disabilities 2021-2030:
<https://ec.europa.eu/social/main.jsp?catId=1484&langId=en>

⁴ https://health.ec.europa.eu/publications/comprehensive-approach-mental-health_en

states, we have seen how digitalisation has brought both positive and negative consequences. On a positive note, it has caused more flexibility, autonomy and better work–life balance. On a negative note, there is blurring of the line between work and life ('bringing work home'), greater intensity of work and technology-related stress. To complicate matters further, what could be a positive consequence for one individual may be a negative unintended consequence for another.

The key concept is that both positives and negatives should be addressed in relation to the specific MD. There is no one-size-fits-all solution, and only a joint effort between occupational physician, clinical psychologist, employer and worker can properly address the issue

As said before, the opportunity for employers is to support a safe and healthy employment of people with MDs with programmes that help them to get, maintain and excel in jobs, and so to support a competent, capable and diverse yet productive workforce. MDs are present at all levels of occupational hierarchy and across jobs. For illustration, some well, known examples of people with MD that excelled in their activities.

Examples in real (working) life:

Well-known examples of people with MDs who excelled in their fields, just to name a few, are:

- John Nash, mathematician (<https://livingwithschizophreniauk.org/john-nash/>);
- JK Rowling, writer (<https://bostoneveningtherapy.com/jk-rowling-on-overcoming-depression/>);
- Katelyn Ohashi, gymnast <https://www.youtube.com/watch?v=r7LHqOW4X8E>; ~
- Lady Gaga, singer (<https://www.today.com/popculture/lady-gaga-opens-about-battling-ptsd-i-was-secretly-freaking-t178030>).

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