RESEARCH

Motivation for Employment in Norwegian Adults with Mild Intellectual Disability: The Role of Competence, Autonomy, and Relatedness

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In Norway, very few people with intellectual disability (ID) are employed, and most of them receive a disability pension. This suggests that they may not face a financial need for employment, but participation in the labor market may provide persons with ID with other benefits, such as social inclusion and self-realization. This article explores what motivates Norwegian adults with ID to participate in the labor market. The study is based on qualitative interviews with use of photovoice with seven employees from sheltered workshops and competitive employment, and their employers. A thematic structural analysis revealed the following themes: experience of self-efficacy, having sufficient workload, personal development, self-determination, salary, social relationships, and meaningful employment. These themes were then structured into three categories based on Ryan and Deci’s (2002) self-determination theory: competence, autonomy, and relatedness. Findings suggest that employees with ID value their work for the sense of self-efficacy that it gives them and for the social contact that the work floor provides. Participants reported to experience little autonomy and self-determination at work.

Keywords: Intellectual disability; employment; autonomy; competence; relatedness; motivation

Background

According to the International Classification of Diseases, 11th revision (ICD-11) (World Health Organization 2019), adults with mild intellectual disability (ID) can generally achieve relatively independent living and employment as adults but may require appropriate support. This suggests that individuals with mild ID can be valuable participants in the labor market, given that the necessary supports are in place to provide an adequate person-environment fit. Persons with mild ID experience challenges with cognitive and adaptive functioning, and therefore, accommodation in the workplace may be necessary to facilitate participation in employment. However, a recent Norwegian government report indicates that individuals with ID are commonly excluded from competitive employment (Norwegian White Paper 17 2016). It is estimated that only 2% of adults with ID are in competitive employment, and most adults with ID are in day service centers or without any daytime activity at all. Approximately 10% attend sheltered workshops (Norwegian White Paper 17 2016). However, this scant employment participation for Norwegian individuals with ID is not unique. Studies from other countries, such as the US and Australia, also report troublingly low employment rates for adults with ID (Siperstein, Parker & Drascher 2013; Tuckerman et al. 2012).

This limited employment participation may indicate certain structural barriers in society, such as a lack of knowledge about what constitutes effective support to facilitate employment (Cheng et al. 2018). Moreover, Gilson, Carter, and Biggs (2017) suggest that a primary obstacle to obtaining competitive employment for persons with ID is a lack of adequate training in the required vocational skills during the school years. A study by Kocman, Fischer, and Weber (2018) found that employers see more potential problems for the employment of persons with ID than for persons with other disabilities, indicating that employers’ attitudes may form a significant barrier. Another structural barrier in Norway is insufficient capacity in sheltered employment, as workplaces originally intended for persons with ID are frequently occupied by persons without ID who are outside competitive employment for other reasons (Wendelborg, Kittelsaa & Wik 2017). A consequence of long waiting lists for sheltered employment workplaces may be that persons with ID receive less work training, which may make their transition to competitive employment harder.

The Norwegian welfare system guarantees a disability pension to adults with permanent illness or disability (National Insurance Act §12–6). Even though this disability pension provides a relatively low wage and the cost of living in Norway is high, it does secure a stable income for individuals with ID who remain largely at the periphery of the labor market. A
A systematic review by Kocman and Weber (2018) exploring job satisfaction, quality of work life, and work motivation demonstrated an overall high job satisfaction in employees with ID. However, while predictors of job satisfaction were similar to those for employees without disabilities, the importance of the factors differed. According to Kocman and Weber (2018), monetary and non-monetary remuneration as well as social recognition and support in the workplace were more important for employees with ID, whereas creativity and responsibility were less relevant for the prediction of their job satisfaction. Yet, as Kocman and Weber (2018) point out, employees with ID often have a significantly lower income, and they are more likely to experience negative social interactions and discrimination at the workplace. This apparent inconsistency highlights the need for more information about how adults with ID perceive their work situation and which value they attribute to being employed. Therefore, the authors of this article used Ryan and Deci’s (2002) self-determination theory as a theoretical framework to explore what motivates Norwegian adults with ID to participate in the labor market.

According to self-determination theory (Ryan & Deci 2002), individuals may experience an extrinsic or intrinsic motivation for their actions. Extrinsic motivation implies that a behavior is motivated by external factors, such as payment or social recognition. Intrinsic motivation suggests that the individual acts out of free will and personal interest, without the need for external rewards. Self-determination theory identifies three basic psychological needs that motivate human action: competence, autonomy, and relatedness. These needs are considered essential to all humans, and individuals will likely show an intrinsic motivation for actions that fulfill these needs.

The need for competence reflects the need to experience that one can effectively interact with the environment, and that one has the opportunity to express one’s capacities (Ryan & Deci 2002). Thus, competence does not reflect a certain skill level but suggests a sense of self-efficacy (Bandura 1982), where the individual experiences confidence in how to handle a situation. Employment may fulfill the psychological need for competence, as employment is considered a central arena for self-realization in adult life. Lysaght, Ouellette-Kuntz, and Morrison (2009) found that employment is a source of pride and satisfaction, and research by Jahoda et al. (2008) suggests that engagement in employment correlates positively with self-esteem. The concepts of self-efficacy, self-realization, pride, and self-esteem can all be seen in relation to the individual’s experience of competence, and employment may play an important part in the fulfillment of this basic psychological need.

Jahoda et al. (2008) found that individuals with ID experience enhanced autonomy when employed in competitive employment, and this is another basic psychological need identified by Ryan and Deci (2002). The need for autonomy is fulfilled when there is congruence between one’s actions and one’s self, and the individual experiences her activities as self-determined (Ryan & Deci 2002). Especially for individuals with ID, it is important to emphasize that autonomy does not require independence. As Ryan and Deci (2002) state, one can rely on others and enact values and behaviors that others have requested but still experience autonomy if those values and behaviors reflect an expression of one’s self. Grant (2008) suggests that employment may provide persons with ID with a sense of purpose and increased autonomy, and the economic benefits of competitive employment may facilitate autonomous choices in other life domains, because more leisure activities may become affordable.

The need for relatedness involves feeling close and connected to significant others, and to experience a sense of belonging. Relatedness may refer to a sense of belonging both at a micro-level (close relationships with others) and at a macro-level (the experience of being part of a community (Ryan & Deci 2002). Competitive employment may offer individuals with ID the opportunity to increase their social networks and to engage in interactions with non-disabled colleagues. However, there is little evidence that these relationships extend outside the workplace (Jahoda et al. 2008). Lysaght et al. (2017) point out that competitive employment may function as an avenue to social inclusion, but that the experience of inclusion depends on successful congruence between the employee’s skills and the social demands of the work environment. Hence, in order for employment to be experienced as something positive, the presence of employment support may be pivotal. Kocman and Weber (2018) also suggest that individuals with ID value social interaction with co-workers higher than non-disabled employees. Thus, employment may be especially important to meet their basic psychological need for relatedness.

According to self-determination theory, individuals experience psychological well-being in the pursuit of actions that nurture the basic psychological needs of competence, autonomy, and relatedness, and they are likely to show an intrinsic motivation for actions that fulfill these needs (Ryan & Deci 2002). However, extrinsic motivation such as salary may play an equally important role in the job satisfaction for individuals with ID (Kocman & Weber 2018).
Aim of the study
With this study, researchers aimed to explore what motivates Norwegian adults with ID to participate in the labor market. For this, researchers investigated how individuals with ID experience that their employment situation contributes to the fulfillment of their basic psychological needs for competence, relatedness, and autonomy.

Method
Design
This study used a triangulation of methods: photovoice, qualitative interviews with employees with ID, and qualitative interviews with employers. Photovoice is a research method where participants with ID are actively involved in the research process (Povee, Bishop & Roberts 2014), as participants take photographs that document various aspects of their lives. These photographs then become input for qualitative interviews. The method gives participants the opportunity to present their experiences visually, which allows researchers to include participants who lack verbal fluency (Booth & Booth 2003).

Due to limited cognitive capacity, persons with ID may experience communicative difficulties in terms of language comprehension, working memory, processing speed, and abstract reasoning (Corby, Taggart & Cousins 2015; Finlay & Antaki 2012; Finlay & Lyons 2002). These difficulties may pose challenges during qualitative interviews. Here, photovoice offers a useful supplement to the qualitative interview as the photographs provide visual support, which may help persons with ID to express their experiences. According to Booth and Booth (2003), the photographs help to concretize matters in a way that corresponds more closely to the respondent’s way of thinking. Photovoice is thus intended to strengthen the respondents’ own voices.

In this study, the participants’ photographs formed a starting point for qualitative interviews with the participants. The researchers also conducted qualitative interviews with the participants’ employers to gather formal background information about their employment situations.

Participants
Employees with mild ID and their employers were invited to participate in the study. Researchers contacted a service centre in Eastern Norway that provides competitive employment with support and employment in sheltered workshops. Employers recruited participants based on the following inclusion criteria:

- participants have mild ID and verbal skills that allow participation in a qualitative interview with support, and they are able to operate a Polaroid camera;
- participants are in both competitive employment and sheltered workshops;
- participants do not have a comorbid diagnosis of autism spectrum disorder.

The final sample of participants consisted of seven employees, four women and three men, aged 21–58 years old, employed in two different sheltered workshops and three different competitive employments. The data material is anonymized with regard to name, gender, age, and place of work. Participants were the following:

- Ahmed (25): works in a sheltered workshop; his main tasks consist of package assignments for external companies. For future employment, he dreams of working in a printing house. According to his employer, Ahmed is particularly careful in his work execution, and he has well-developed fine motor skills.
- Isabella (22): works in an after-school canteen, where she serves food to 200 children. Isabella runs the canteen with two other employees. According to her employer, Isabella performs the same tasks as the other employees.
- Mia (58): works in a sheltered workshop. Her work consists of sorting parts of old computers. She works eight hours a day and is satisfied with her job. According to her employer, Mia is reliable and conscientious in her work.
- Robert (23): works in the IT department of a sheltered workshop. He has worked there for one year, and his work consists of sorting old computer parts. Robert is a social person who takes responsibility for the social environment in the workplace. In the future, Robert wants to work with IT support.
- Andrea (50): works in a local food store. Andrea has 30 years of work experience from different stores and competitive employment without support. According to the store manager, Andrea is a conscientious employee, and she is a valuable resource in the store.
- Ryan (21): works in the bicycle repair department of a sheltered workshop. Ryan also has external practice in a sports shop, where he does the maintenance of bicycles. Ryan wants to work in a large sports store in the future. According to his employer, Ryan needs a lot of follow-up to complete his work.
- Emily (40): works with food preparation in a kindergarten four days a week. She also works in an office one day a week. Emily wishes to quit her kindergarten job, and would rather have more time at the office. According to her employers, Emily needs some support in her job.
**Data collection**

In this study, participants with ID took an active role in the research process by taking photographs related to their employment situation. Researchers provided participants with Polaroid cameras and guidelines for what to photograph. These guidelines were presented in a pocket file labeled with different topics, where participants placed their photographs in the respective pockets. Examples of such topics were: the best thing about my employment, lunch, colleagues, work tasks, etc. Participants got approximately one week to take their photographs before the interviews were conducted.

The photographs provided structure to the interviews by providing themes for the interview questions, but they also functioned as visual support during the interviews. Thus, the photographs were used as a stimulus during the interviews, since they formed a basis for contextualizing and storytelling about the photographs. The researchers used an interview guide with predefined ideas, and more detailed interview questions were developed based on the content of the photographs. Interviews were performed at the participants’ workplaces. During the interviews with the employees, researchers used an informal communication style, and conversations were centered around the significance of employment. The themes from the pocket files and the photographs were used to strengthen the communication during the interview, with the intent of achieving more detailed descriptions.

In the interviews with the participants’ employers, relevant interview questions dealt with the type and amount of support provided to the employees with ID, employment contracts, work duration, future prospects, etc. Most of the interviews were conducted with both researchers present. All the interviews were conducted at the workplaces and taped on a digital recorder, and transcribed verbatim immediately after completion.

**Ethical Considerations**

Participants with ID received an information sheet and consent form with easy-to-read information about the study. The information sheet included information about the content and purpose of the project and a request to participate. Researchers used pictograms to illustrate the research procedure on the information sheet. The information sheet emphasized that participation was anonymous and voluntary and that research participants were allowed to change their minds without giving a reason. Participants were informed that they could keep the photographs at the end of the project. A declaration of consent was attached to the information letter. Throughout the project, researchers took care to look for signs that could indicate that participants no longer wished to participate.

The employers received the same information about the project as their employees, and their written consent was also obtained.

Since this study used photovoice as a research method, participants took photographs of their workplaces, and this required specific ethical considerations, as it could happen that participants wanted to take photographs of colleagues or staff. Therefore, participants with ID received written and oral instructions that, when wanting to photograph other persons, they needed to ask their permission first. Employers at the participating workplaces were also asked to inform their other employees of the research project. Employees who did not wish to be photographed could inform their employer of this.

The Norwegian Social Science Data Services (NSD) approved this study.

**Data analysis**

Data analysis was conducted through a combination of data-driven inductive and deductive processes, with a focus on the following theoretical categories: competence, autonomy, and relatedness. The primary data material consisted of the photos taken by the employees, combined with interview transcriptions. The photos supported and supplemented the interview data from the employees, and the employers’ data were used to strengthen the reliability of the researchers’ interpretations of the interview data from the employees.

A thematic structural analysis was used to identify themes in the collected data (Lindseth & Norberg 2004). Using condensed descriptions, the researchers captured the essential meaning of the experiences that were expressed by the participants. The meaning units were further condensed into themes, which were then assembled into categories (see Table 1). To strengthen the reliability of the data analysis, researchers collaborated during the entire analytical process: researchers started out by identifying themes separately, and then worked together to reach agreement on the choice of themes.

**Results**

Data analysis led to the identification of several themes related to work motivation and work experiences of employees with ID. These themes were categorized based on Ryan and Deci’s (2002) self-determination theory and structured into three main categories of competence, autonomy, and relatedness. Within the competence category three themes were identified: experience of self-efficacy, having sufficient work load, and personal development. Within the autonomy category, self-determination in the work place and salary form the main themes. Social relationships with colleagues and meaningful employment were identified as central themes within the relatedness category. Examples from the interviews are used to illustrate the themes, and these are then discussed on a theoretical level.
Competence

Experience of self-efficacy

Confidence in one’s own mastery seems essential for the experience of competence. In our interviews, several participants related how repetitive work tasks made them feel competent and secure in their work, as illustrated by the following example:

Interviewer: And otherwise, do you do the same tasks in the morning as in the afternoon?
Mia: Yes, I do.
Interviewer: The same kind of tasks?
Mia: Same kind of tasks all the time.
Interviewer: Yes. And how do you feel about that?
Mia: I think that’s a good thing.
Interviewer: Yes.
Mia: I think it’s nice. I like it like that.

Jiranek and Kirby (1990) suggest that variation and challenging work tasks may play an important role in the job satisfaction of employees, but this does not necessarily seem to be the case for our participants. On the contrary, several participants expressed that they enjoyed the predictability that well-known work tasks offer, and performing the same tasks again and again seemed to provide them with a sense of competence and self-efficacy. Thus, experiencing confidence through mastering repetitive tasks may be more important to employees with ID than being challenged to perform new tasks. Indeed, several participants expressed anxiety at the prospect of not mastering a given task, as illustrated by the following transcript where Ahmed is asked how he deals with difficult work tasks:

Interviewer: But, what do you do when a task is too difficult for you?
Ahmed: Then I ask Mary [employer] what I’m supposed to do.
Interviewer: Yes.
Ahmed: Either someone else has to take over, or I have to do something else. So that I don’t destroy things or it gets difficult...
Interviewer: But how do you feel about asking for help then?
[-]
Ahmed: Then I get all quiet, and then I become shaky, and I get nervous, and [inaudible]...

This example emphasizes the importance of a just-right match between demands and competencies to prevent cognitive overload and stress in employees with ID, and therefore, a thorough assessment of the employee’s strengths and needs is paramount.

Data analysis further indicates the duration of exposure to work tasks as an important factor for the experience of self-efficacy. Employees who have been in the same workplace for a longer time feel more skilled at their job, which fills them with a sense of self-efficacy and competence:

Robert: Yes, when I first started here last year, I didn’t understand anything. But then I learned a lot about it all, and now I’m in control of everything.
Interviewer: So, in the course of one year, you learned all these tasks?
Robert: Yes. I can see that my progress has improved a lot as well. I’ve gotten many different tasks.
[-]
Interviewer: So how do you feel about that, mastering things that not everyone else can do?
Robert: Yes, I'm proud of that, to put it that way.

Thus, introducing new tasks on the work floor may improve the skills level of employees with ID and create a feeling of mastery, but the pace by which such new tasks are introduced needs to match individual capacity, in order to avoid anxiety and experiences of incompetence. Self-efficacy has been defined by Bandura (1982) as 'judgments of how well one can execute courses of action required to deal with prospective situations', or, in other words, how competent one feels to deal with a certain task at hand. It is important to clarify here that self-efficacy relates to one's own perceptions of personal competence and not to how others perceive one's competence. Bandura (1982) stated that perceived self-efficacy affects the individual's coping behavior, self-regulation, and stress reactions, and this may explain why self-efficacy plays a central role in the basic psychological need for competence as described by Ryan and Deci (2002).

Having sufficient workload
In order to feel competent, one needs to have opportunities to use one's skills. In competitive employment, such occasions are generally plenty, but in sheltered workshops, having too little to do may form a challenge. This is illustrated in the following examples from interviews with Isabella and Andrea, who currently work in competitive employment with support, but who were previously in a sheltered workshop:

Isabella: It was good to work in [the sheltered workshop], but it was kind of ... there wasn't so much to do there.
Interviewer: I see.
Isabella: But here, there is more to do. [...] 
Interviewer: Yes. And how is that, that there is more to do?
Isabella: [When there is] more to do, then I like to work and be active.
Interviewer: Yes, so that is a good thing?
Isabella: Yes. [...] But for example, when it's a job where there is not that much to do, then I'm just standing there doing nothing, so I don't like that. I like to work.

Andrea: But I don't miss the packing department at all, it was very boring there. Just sitting around and stuff.
Interviewer: Yes. Because now, in the store, you go around and ...
Andrea: And in the packing department, if there's nothing to do there, then they just sit around and play games.

These examples illustrate the importance of having a real job with real tasks in order to feel competent. According to Ryan and Deci (2002), competence refers to having the opportunity to express one's capacities. Participants in this study seemed to have a clear perception of what it means to be an employee. Sheltered employment did not provide them with the same feeling of competence as they experience in competitive employment, because the sheltered employment did not give them sufficient opportunity to use their skills. Yet, in competitive employment, the higher work pace and the need for multi-tasking might also present a workload that may be too substantial for some employees with ID. This is illustrated in the following example from the interview with Emily, who experienced a stressful situation when asked to handle several tasks simultaneously:

Interviewer: And have you experienced situations that you thought were difficult?
Emily: Yes, as a matter of fact I had a situation here where I was supposed to do two things at the same time. I was supposed to cook porridge, and at the same time peel eggs, and then the porridge got burned. And I found that ... it became a bit difficult.

[...]
Interviewer: Yes. How did that day turn out for you, when the porridge got burned?
Emily: Well, things got calmer after a while, but at the time ... when I was in the midst of it, it was pretty unpleasant. [...] It made me kind of nervous.

These examples demonstrate the need for the just-right amount of work so that employees can experience competence. While sheltered employment may provide too little to do for employees with ID, competitive employment may tip the balance in the other direction if the employer does not provide sufficient individualized support. Feeling competent at the job presupposes a workload that matches the employees' capacities, and both sheltered workshops and competitive employment may pose challenges in trying to accomplish this match.

Personal development
While participants in this study highlighted the benefits of repetitive and predictable work tasks for their experience of competence, personal development and learning new skills was also mentioned by several of the employees with ID. Especially employees in sheltered workshops talked about their need to learn necessary skills for work life, so that they could find competitive employment later. In the following fragment, Ahmed talks candidly about why the sheltered workshop is important to him:
Interviewer: But what would you say this job means to you?
Ahmed: Well, it means that I need to learn before I can go out in the field, that I get to learn things first.

Employer: Out in the field?
Ahmed: Yes, out in the field, like a real job and stuff. It's like...

Interviewer: And you learn all this here?
Ahmed: Yes. [...] Because it would be really difficult for me. I think I would probably get fired after two days or something.

Interviewer: You think so?
Ahmed: Yes, for being late or something (laughs).

Interviewer: So, you feel you need to be here first for a while?
Ahmed: Yes. You need to prepare yourself a bit.

This fragment exemplifies the insight that many participants shared about the difference between sheltered workshops and competitive employment, and the different qualifications that competitive employment requires. Several participants mentioned the temporary nature of sheltered workshops, and how they saw it as a springboard towards competitive employment. Thus, they experienced the sheltered workplace as a way of gaining access to the ordinary labor market, which most of them seemed to consider as the ultimate goal in employment. This could be interpreted in such a way that competitive employment gives employees a stronger feeling of competence, as Emily also expresses: 'I really enjoy being able to work in ordinary employment. Since ... it does something with one's sense of achievement, one feels more confident when one is capable of being in an ordinary job, not just this sheltered workshop.'

However, in this study, most participants seemed to appreciate the possibility of gaining proficiency in working life skills through activities in sheltered workshops, and they expressed the need to refine certain skills before being able to take the leap towards competitive employment. This suggests on the one hand that employees with ID show insight in their own strengths and needs, but on the other hand they seem to believe that learning the necessary working life skills needs to happen before and not during competitive employment. Indeed, sheltered workshops may be better equipped to teach new skills with appropriate support and in a pace that is more adjusted to the individual's capacities, thus providing a safer learning situation. Yet, from a pedagogical stance, working life skills may be best learned there where they are needed, that is, in competitive employment. Indeed, findings from a study by Stephens et al. (2005) suggest that competitive employment may be a significant means of enhancing adaptive skills, much more so than employment in sheltered workshops. It can then be questioned whether this line of thinking may be an unconscious reflection of discriminatory practices that exist in society towards persons with ID. Persons with ID may have adopted the belief that they are unqualified for competitive employment because of their disability, and hence, they feel that they need to be in a segregated work setting first before they can move on towards inclusive employment. Thus, it can be questioned whether sheltered workshops present a challenge to society's overarching goal of inclusive employment, as they may encourage a segregated way of thinking about employment possibilities for persons with ID.

Autonomy

Self-determination in the workplace

The ability to influence one's own work situation can be central for work motivation. In the current study, few participants expressed that they could influence the contents of their work, and few of them had the possibility to shape their workday based on personal preferences or interests. At the same time, most participants claimed that they were satisfied with this low level of self-determination. The following example illustrates this:

Interviewer: Is there something that you can decide or choose to do all by yourself at work?
Andrea: There is no choice at work, I just need to do my tasks.

Interviewer: Tasks that your boss tells you to do?
Andrea: Yes, or if I'm not told what to do, then I just go to the storage area and unpack items; everyone needs to do that.

Interviewer: Yes.
Andrea: It's not like you can just hang around and do nothing.

Interviewer: But, does it happen that you want to decide something by yourself? Like, today, I want to do something else in the store?

Andrea: No, I've just got to do what I've got to do.

Interviewer: Yes.

Andrea: Just need to do what is most important for the store.

According to Lam and Gurland (2008), autonomy in the workplace functions as a predictor of intrinsic work motivation. This suggests that employees who encounter possibilities to influence the content of their work and who can participate
in decision making may experience greater job satisfaction. However, the fragment above suggests that, despite little opportunity for autonomy on the work floor, Andrea perceives ownership and commitment to the workplace, and it can be interpreted as a feeling of loyalty when she states that she just needs to do ‘what is most important for the store’. On the one hand, this could suggest that she appreciates the feeling of contributing to a greater good, namely the well-functioning of the store, and that her personal need for autonomy is less important to her. On the other hand, this may also be a consequence of natural adaptation to situations with little autonomy. As Wehmeyer and Shogren (2017) claim, persons with ID frequently find themselves in situations where they experience few opportunities for autonomy and self-determined behavior. It could then be argued that prolonged exposure to situations with restricted options may result in an adaptive preference for exactly this kind of situation, and that opportunities for autonomy may appear overwhelming and therefore less attractive.

Yet, small accommodations on the work floor may provide employees with valuable opportunities for autonomy and self-determination, as illustrated by the following example in which Isabella talks about her lunch break:

**Isabella:** It is very pleasant to sit and eat together.

**Interviewer:** Yes. Can you tell a bit more about that? Because you sit and talk together?

**Isabella:** Yes, we talk about what we will have on the menu for the coming week and what we will cook and stuff.

**Interviewer:** Okay, so you discuss work stuff during lunch. That sounds exciting. Can you help decide what will be on the menu then?

**Isabella:** Yes, I can.

**Interviewer:** Yes, okay. And what do you suggest then?

**Isabella:** Sometimes I choose fish and vegetables, sometimes chicken with rice, sometimes chicken with pasta.

This example shows how a workplace can provide employees with ID with opportunities to participate in an autonomy-supportive manner, and Isabella expresses pride over being a valued colleague who can contribute in an equal way. While participants may not necessarily react negatively to a low degree of autonomy and self-determination in the workplace, introducing more opportunities for participation may nonetheless instill positive feelings in employees with ID, and it may increase their job satisfaction and motivation. Participants in this study seem to be satisfied with their employment situation, despite the fact that they experience little autonomy in the work place.

**Salary**

Optimally, employees show an intrinsic motivation for work, where they experience their work tasks as worthwhile and in line with personal interests. However, receiving payment for one’s job may provide an extrinsic motivation that can sometimes compensate for low intrinsic motivation. In Norway, adults with ID generally receive a disability pension, but in addition, they obtain a small hourly fee for the work that they do. In our study, Ryan was not always motivated to go to work and he was sometimes tempted to stay at home. However, he recognized that this also meant less money, and he experienced salary as an extra motivation to come to work. Emily identified a similar extrinsic motivation for her job in kindergarten:

**Interviewer:** Does it have anything to say for your work motivation, that you get a fee on top of your disability pension?

**Emily:** Yes, well, I need all the money that I can get. Of course, there is a motivation in actually making some money.

While the job satisfaction of other participants in the study did not seem to depend on the external reward that salary offers, payment for work was nonetheless identified as important, as it opened doors for acting out plans in other life areas. For example, Ahmed explained that he had saved up money from his salary to go on a trip with a friend from work, while Isabella was saving part of her salary to buy a car. Thus, for some participants, salary is an important motivator for work, while for others it functions as a facilitator for participation in other areas.

**Relatedness**

**Social relationships with colleagues**

Employment may increase the social network of employees with ID, but these relationships do not necessarily extend beyond the workplace. Findings in this study suggest individual differences, and these may originate both from differences in personality and from different degrees of support for social interaction at the workplace. Two of our participants, Robert and Ahmed, describe themselves as sociable and extroverted, and they report meeting colleagues outside of work for leisure activities. Robert reports that his employer often encourages his employees to have lunch together:

**Robert:** We usually buy lunch together, because we _when Jack [employer] says ‘go out and buy lunch’, then we go and buy lunch in the supermarket, and then we share everything._
Interviewer: Oh yes.
Robert: Have lunch together.
Interviewer: So, you have lunch together. Do you do that every day?
Robert: Yes.

This simple encouragement from the employer seems sufficient support for the employees in the sheltered workshop to socialize during lunch. However, not all participants seemed equally interested in building social relationships on the work floor. Mia, for example, did not know the names of all of her colleagues, and even though she said that she appreciated her colleagues, she hardly ever engaged in social interaction with them outside of the workplace, stating that she found social arrangements ‘boring’, and that she liked best to work. While this could be interpreted in such a way that Mia has a less sociable personality and therefore is less interested in social contact with her colleagues, it could also indicate that she is in need of more support in social interactions.

For participants in competitive employment, the work situation does not always stimulate social interaction with colleagues. For example, at Andrea’s workplace, there was no opportunity for lunch with colleagues, as there always needed to be enough employees in the store. Emily, also in competitive employment, correspondingly stated that she usually did not have lunch together with her colleagues. In contrast, participants who worked in a sheltered workshop explained that their workplaces had activity groups that organized regular leisure time activities. It is possible that sheltered workshops may be more aware of the social support needs of their employees with ID, and they may be better equipped to help their employees with the development of social networks.

Despite differences in support for social interaction, almost all participants highlighted the importance of employment for social contact. Most of them expressed that, without work, life would be boring, and they appreciated the opportunities for socializing that work provides, such as in the following example:

Interviewer: Can you tell us something about what this job means to you?
Emily: Well ... the alternative would be to stay home all day, so obviously it is important to have somewhere to go to, and to be able to meet people during the day, that is very important to me. I live alone, have no husband, no children, so to have a job to go to and to have people to talk with, that is very important to me.

As individuals with ID tend to be less involved in their local community and participate to a lesser extent in social leisure activities (Badia et al. 2013), employment may provide them with the opportunity to engage with other people. The segregation that they continue to experience in everyday life may also explain why they seem to value the social interaction with co-workers higher than non-disabled employees (Kocman & Weber 2018). Thus, employment can play an important role in the fulfillment of the need for relatedness at the individual level, as it may provide employees with ID with possibilities for social interaction and a sense of belonging.

Meaningful employment
Employment may offer individuals with ID the feeling that they too can contribute to society through the work that they do. This is illustrated by the following example:

Interviewer: Tell us something about what you like best about your job.
Isabella: The best thing I know, is to serve the children food.
Interviewer: When all the food is prepared, and then the children come?
Isabella: Yes.
Interviewer: Yes, and what do you like about that?
Isabella: Uhm, they are kind and nice and ...
Interviewer: And they are happy when they get food?
Isabella: Yes!

This example suggests that the work is appreciated by others, which may prompt the feeling of contributing to society in a meaningful way. Thus, employment may cover the basic psychological need for relatedness at a macro level, as employees experience being part of and contributing to a larger community (Ryan & Deci 2002). The instant positive feedback that Isabella receives from the children may also reinforce the experience of meaningfulness, possibly more so than employees in sheltered workshops encounter. In the sheltered workshops that the researchers visited in the current study, employees did not receive immediate feedback on their work performance from others aside from their supervisors. Here, competitive employment may be better suited to give employees with ID authentic feedback about the value of their work.

Conclusion
Findings from this study suggest that the fulfillment of the need for competence, autonomy, and relatedness form essential motivational factors for employment participation for adults with ID.
Participants in the study emphasized the importance of feeling competent at work, and for that, they need meaningful tasks that allow them to experience a sense of self-efficacy. An important finding of this study is that employees with ID experienced self-efficacy through repetitive and predictable work tasks rather than through challenging new tasks. Indeed, several participants reported feelings of stress and anxiety when they found themselves in situations where they did not feel competent, and this emphasizes the importance of a just-right match between personal capacities and environmental demands. Individualized supports and a suitable workload then become necessary conditions for the experience of competence. Participants in the study also considered sheltered workshops as a stepping stone to competitive employment. Participation in competitive employment may require a higher level of competence and flexibility to solve different work tasks, and as such, sheltered workshops may provide a safe training arena to learn the required skills prior to engaging in ordinary employment. However, if participants experience themselves as not competent enough to participate in competitive employment, this leaves us to question whether the labor market manages to fulfill the ideal of inclusive employment.

Several participants in this study reported that they experienced little autonomy at work, but they did not seem to perceive this as something negative. This may be a consequence of the restrictive environments in which individuals with ID frequently find themselves, as they may be used to a milieu that allows little room for autonomy and self-determination. Indeed, findings in the present study may indicate an acceptance of a situation that individuals with ID encounter as typical, and hence, they may not feel inclined nor empowered to call for change. Also, since very few adults with ID find their way into the Norwegian labor market, simply having a job to go to may be more essential to them than being able to influence the contents of their work.

One of the most important benefits of employment for individuals with ID seemed that it provides them with a sense of relatedness, both at an individual level and at a macro level. Employment gives the individual opportunities to participate in and contribute to society, resulting in a sense of belonging. At the same time, employment is an important facilitator for social contact with others, and our participants emphasized this positive impact of employment on their lives.

While only a very small minority of adults with ID in Norway is employed, participants in the study indicated that having a job is of significant importance to them, and they identified different motivational factors for their participation in the labor market. However, access to the labor market for adults with ID is not solely a matter of individual motivation, and previous research has identified different environmental barriers to participation in employment. Amongst others, a lack of effective work skills training during the school years, negative attitudes in potential employers, and a shortage of jobs in sheltered employment are real obstacles to employment participation for adults with ID.

Findings from this study illustrate why it is important to explore further how adults with ID can be included in the labor market, and hence, the study provides a rationale for future research and practice. Investment in employment opportunities for adults with ID, where employees experience competence, autonomy, and relatedness, will require facilitation, increased resources, and support for those involved. There is a need for more research to identify, analyze, and remediate the structural barriers that prevent this from happening. The present study has highlighted the pivotal role that employment plays for adults with ID. More research is required to examine how different support systems can be organized to facilitate employment for the large group of adults with ID who are currently outside the labor market, so that they too can experience competence, autonomy, and relatedness.

**Competing Interests**
The authors have no competing interests to declare.

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