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CHAPTER 7

GENERAL DISCUSSION

INTRODUCTION

Paying attention to job satisfaction is important in the light of both individual and organizational functioning and well-being. Insight into the factors related to job satisfaction of people with intellectual disabilities is particularly important, considering their need for employment support, and the current and ongoing discussions and developments within the employment domain. The overall aim of this thesis was to reach a comprehensive understanding of the factors that are associated with the job satisfaction of people with intellectual disabilities. In this chapter, we will summarize and discuss Chapters 2 to 6, outline strengths and limitations of the study, and discuss implications of this study for future research and practice.

MAIN RESULTS

In order to provide an overview of available literature on job satisfaction of people with intellectual disabilities, and to enhance insight into the factors that may be associated with their job satisfaction this study started with an exploration of existing research regarding job satisfaction of people with intellectual disabilities in integrated and sheltered employment settings, and its associated factors (Chapter 2). A systematic and comprehensive literature search revealed 13 relevant studies that were examined. It was concluded that, despite the vast amount of research on job satisfaction in general industrial/organizational psychology, and the increased recognition of the significance of employment to people with intellectual disabilities, research on job satisfaction of people with intellectual disabilities is still fairly limited. Preliminary evidence was found for associations between job satisfaction and employee characteristics (including IQ-level, work skills, self-esteem, self-determination, and motivation), between job satisfaction and characteristics of the employment setting (including job characteristics, and aspects of the physical work environment), and between job satisfaction and the extent to which the work environment meets the vocational and social needs (e.g. a feeling of belonging) of employees with intellectual disabilities. Nevertheless, the number of studies on each of these aspects is small, results are fragmented and largely on singular associations. Also, besides the factors identified in this literature study, other factors may be relevant as well. This may include characteristics that are particularly important to workers with intellectual disabilities, or variables that have proven to be important determinants of job satisfaction of non-disabled workers, such as personality traits (e.g. Ilies & Judge, 2002; 2003; Judge & Klinger, 2008).

A comprehensive, integrative view on job satisfaction of people with intellectual disabilities is missing. Furthermore, although results pointed out that job satisfaction levels were generally higher in integrated employment in comparison to sheltered employment, it remains unclear which personal and/or environmental characteristics underlie these

differences. This review suggested that, to gain a better, more comprehensive understanding of job satisfaction of people with intellectual disabilities, it is necessary to understand how various types of variables (e.g. situational and personal characteristics) interact and what may be the nature of the relations among them. In order to do so, research on job satisfaction of people with intellectual disabilities could benefit more from the large amount of knowledge and many developments in general industrial/organizational psychology, while at the same time acknowledging the specific characteristics and experiences of workers with intellectual disabilities.

The studies in this thesis are based on a research model, which relies on two different, contemporary perspectives. The first perspective, described in Chapters 3 and 4, focuses on the association between job satisfaction and job characteristics, and is based on the Job Demands-Resources model (JD-R; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Bakker & Demerouti, 2007). The JD-R model assumes that, although every occupation may have its own specific job characteristics, these characteristics can be classified in two general categories: job demands and job resources. Within the JD-R model, the choice of specific job demands and job resources to be included in a study is dependent upon the study context (Bakker & Demerouti, 2007). Generally, the choice for job characteristics to be included in the study is made by the researcher, based on previous research results in mainstream research. However, to ensure that the job characteristics that are included in this study reflect what is relevant to the job satisfaction of people with intellectual disabilities, it is essential to incorporate their own perspective on this. Therefore, Chapter 3 explored what people with intellectual disabilities themselves considered relevant to their job satisfaction. Using photovoice as a method of a qualitative approach with nine persons with intellectual disabilities, nine themes relating to their job satisfaction were found: the nature of the work itself, working conditions, experienced job demands, social relations at work, received support, perceived autonomy, opportunities for using competencies, opportunities for growth and development and meaningfulness. The themes mainly represented various job characteristics, indicating that, from their own point of view, job characteristics were indeed important to people with intellectual disabilities, and could be either positively or negatively associated with their job satisfaction. The themes that were found confirmed and complemented previous research on job characteristics associated with job satisfaction of people with intellectual disabilities and non-disabled employees, and found certain job characteristics that may be particularly and distinctively important to people with intellectual disabilities in comparison to non-disabled employees (e.g. receiving employment support, having opportunities for using competencies).

Based on the results of Chapter 2 and 3 in Chapter 4 three job demands (psychological demands, physical demands, emotional demands), and five job resources (decision authority,

opportunities for skill utilization, meaningfulness, social support from co-workers, social support from mentor) were studied in relation to job satisfaction. Furthermore, we added personality traits (neuroticism, extraversion, conscientiousness) to the research model. Previous research on job characteristics and job satisfaction of people with intellectual disabilities did not include personality traits (Chapter 2). Yet as an individual's traits may be associated with his job satisfaction, as well as his perception of job characteristics, lack of inclusion could lead to misunderstandings about the appropriate ways of enhancing job satisfaction. Data for this study, as well as the studies described in Chapters 5 and 6, were gathered in a quantitative study, among 117 persons with intellectual disabilities, recruited from a Dutch care organization. Structured questionnaires, based on well-established instruments, were used to interview participants on their perceptions of job characteristics and job satisfaction. Data on personality was obtained from support staff. In line with expectations, results of this study, as described in this chapter, indicated that job resources were significantly and positively associated with job satisfaction, whereas job demands were negatively, yet not significantly, associated with job satisfaction. Contrary to expectations no direct associations were found between personality traits and job satisfaction of people with intellectual disabilities, we did however find that conscientiousness moderated the relationship between job demands and job satisfaction. For people with intellectual disabilities who had a tendency to act dutifully, and aim for achievement (i.e. high conscientiousness) enhanced job demands were associated with reduced job satisfaction, which was not the case for people with intellectual disabilities who have low levels of conscientiousness. Neuroticism and extraversion also showed associations with one of the subscales for job demands (i.e. psychological demands). The findings suggest that it would seem useful to pay attention to job design, and in particular to enhancing positive, resourceful job characteristics. For adequately matching a person with a job, taking account of personal characteristics (i.e. personality traits, age) is advised as these may affect how a person actually perceives job characteristics or what he can cope with, and hence what support is required.

The second perspective of the research model relies on self-determination theory (SDT; Deci & Ryan, 2000). Previous research among people with intellectual disabilities indicates that meeting a person's needs may be important in relation to job satisfaction, yet little research has been devoted to this (Chapter 2). In Chapter 5 the basic psychological needs for autonomy, relatedness, and competence were introduced. This Chapter studied the associations between job characteristics, basic psychological needs, and job satisfaction. Combining the JD-R model and SDT, it was investigated whether basic psychological needs mediated the relationship between job characteristics (i.e. job resources and job demands) and job satisfaction. This was investigated in the group of 117 participants. Our study was the first to show that fulfilment of the basic psychological needs for autonomy, relatedness

and competence were positively associated with job satisfaction of people with intellectual disabilities. Furthermore, according to expectations, it was found that job resources were positively associated with fulfilment of basic psychological needs and job satisfaction. Job demands were negatively associated with basic psychological needs, yet were not significantly associated with job satisfaction. Analyses indicated that fulfilment of the needs for autonomy, relatedness and competence partially mediated the relationship between job resources and job satisfaction. These findings suggest that the provision of a resourceful work environment may positively affect job satisfaction of people with intellectual disabilities, and this may partially be explained by the finding that a positive, resourceful work environment might establish the conditions that are necessary for people with intellectual disabilities to grow. A demanding work environment may not directly affect job satisfaction, yet it requires energy, and deters the fulfilment of a person's needs, which might in turn negatively affect their job satisfaction. In other words, people with intellectual disabilities who experience more job resources may be more likely to feel that they can make their own decisions at work and act with a sense of volition (i.e. need for autonomy), feel connected to others at work (i.e. need for relatedness), and feel effective and able to manage challenges (i.e. need for competence), which might explain why they feel more satisfied with their jobs. People with intellectual disabilities who experience their work environment as demanding may be more likely to feel that their needs are thwarted, and therefore feel less satisfied with their jobs. For jobs to be satisfying to people with intellectual disabilities it would therefore seem useful that they are designed in such a way that people can experience a sense of autonomy, belongingness and competence.

To enhance understanding of the factors associated with job satisfaction of people with intellectual disabilities, and considering their specific situation and characteristics, several variables that may be expected to impact job satisfaction were added as control variables to the model: gender, age, level of intellectual disability, and the distinction between integrated and sheltered employment. Results of Chapter 4 and 5 showed that only age was significantly positive associated with job satisfaction, and age was therefore controlled for in the analyses.

The final study, described in Chapter 6, takes a first step in a further extension of the research model. This study addressed another facet of SDT, namely the reasons behind people's behaviour, referred to as quality of motivation. Having a high quality of motivation (i.e. autonomous motivation) instead of a low quality of motivation (i.e. controlled motivation) has been associated with positive work-related outcomes for employees without disabilities, including job satisfaction (Van den Broeck, Vansteenkiste, & De Witte, 2008). Previous studies (e.g. De Cooman, Stynen, Van den Broeck, Sels, De Witte, 2013; Millette & Gagné, 2005) introduced autonomous motivation as another mediating variable in the relationship

between job characteristics and job outcomes. The explorative, qualitative study, described in this chapter, examined the motivation of people with intellectual disabilities to work, exploring the quality of their work motivation, and the associations between the quality of work motivation and job satisfaction. From the 117 persons that were interviewed, using open-ended questions on motivation and a job satisfaction questionnaire, a matched sample of 25 participants in integrated employment and 25 in sheltered employment was selected for this study. It was found that people with intellectual disabilities displayed great variety in reasons for working. Reasons displaying low quality motivation (i.e. controlled motivation), such as financial reasons, feeling urged by someone else, avoiding the negative consequences of staying at home, were expressed more frequently than reasons displaying high quality motivation (i.e. autonomous), such as working for the enjoyment of working, or because they identified with the value of the job (e.g. helping or meeting others). Results indicated that job satisfaction was higher for participants with autonomous motivation compared to controlled motivation. Participants in integrated and sheltered employment displayed no differences in motivational quality. These findings provide preliminary evidence that quality of work motivation of people with intellectual disabilities varies between individuals and for the assumption, and an initial indication of the relevance of the quality of motivation for job satisfaction of people with intellectual disabilities. Findings suggest that paying attention to work motivation of people with intellectual disabilities throughout continuation of the job may be important, in order to optimally connect with individuals and contribute to their well-being.

STRENGTHS AND LIMITATIONS

This thesis has strengths and limitations. In this part of the general discussion we will outline several strengths and limitations.

A strength of the current study is the use of a combination of methods to determine the factors associated with job satisfaction, including literature research and empirical studies, using qualitative and quantitative techniques. Also, in this study it was a priority that persons with intellectual disabilities themselves would be able to share their perspective regarding their work situation. They are the experts on this, and thus should be enabled to share their knowledge and views (Roeleveld, Embregts, Hendriks, & Van den Bogaard, 2011; Schuurman, Speet, & Kersten, 2004; Verdugo, Schalock, Keith, & Stancliffe, 2005; Van Hove, 2014). Research has shown that persons with intellectual disabilities are able to report on their work situation and job satisfaction, provided that an effort is made to correspond to their capabilities (Chapter 2). We have been able to examine their perspectives, feelings and opinions in each part of the empirical study. A combination of methods was used for

this, including photovoice (Chapter 3), open interview questions (Chapter 6), and interviews using structured questionnaires (Chapters 4, and 5). The mixed method methodology of this research, and the main focus on the perspective of persons with intellectual disabilities, allowed for a more integrative and qualitatively better explanation of the factors associated with job satisfaction of persons with intellectual disabilities and increased credibility and validity of results.

The study described in Chapter 3 reports on the use of photovoice as a research method for people with intellectual disabilities. The merits of the use of photographs in intellectual disabilities research have been pointed out previously, however, thus far only few studies have reported on the use of photovoice as a research method (Jurkowski, 2008; Schuurman, Speet & Kersten, 2004; Slump, Moonen, Hoekman & Jongmans, 2010). Photovoice proved to be a valuable method for gaining in-depth insight into the experiences, needs and feelings of workers with intellectual disabilities. Because their photographs and knowledge were the main source of expertise, the method provided an in-depth understanding of their work situation and allowed us to learn about experiences that might otherwise have been ignored, or hard to gain insight into as an outsider. Furthermore, the use of photos was useful to help people with less cognitive abilities (e.g. those with moderate ID) to express their opinions, and share their feelings. Less verbal abilities were required as the visual image provided information, yet at the same time this also appeared to be a trigger for memories and emotions and a tool that was beneficial in putting their experiences into words. Taking photographs also allowed people to think about their work situation while they were there, instead of retrospectively reflecting on it, which facilitated participants to focus in the interviews. A limitation of the method is the fact that it may underrepresent some relevant aspects, such as more abstract concepts and subjects that are not present at the time of study, which are harder to think of and require creativity to express in a photograph. A further limitation involves ethical aspects and informed consent, requiring persons to ask permission for taking photographs and explaining the goal, which may be difficult and may create a barrier for taking certain photographs.

The findings from the photovoice study were combined with knowledge from previous research and were further investigated in a quantitative study. Using structured questionnaires 117 persons with moderate or mild intellectual disabilities or borderline intellectual functioning were interviewed on their perception of job characteristics, basic psychological need fulfilment, work motivation, and job satisfaction. The interviews were largely based on well-established questionnaires developed for people without intellectual disabilities, the content of which corresponded with the results of the photovoice study. A few additional items were developed to better suit the situation and perspective of people with intellectual disabilities. Adaptions, to improve comprehension by people with intellectual

disabilities, consisted of simplification of items when necessary, visualization, and the choice for interviews instead of self-report, with the possibility to elaborate on answers. It was found that participants were well able to report on their work experiences and job satisfaction using these questionnaire-based interviews. The specific way visualization was applied in this study, as described in Chapters 4 and 5, contributed to this. This provided a visual aid, stimulated active participation, and helped to retain focus in the interview. Observations during the interviews suggest that this was useful for many participants, and particularly people with moderate intellectual disabilities profited from this.

An instruction manual and an interview protocol were used to enhance reliability. All interviewers received a training on the use of these, as well as on interview conduct and the specifics of interviewing people with intellectual disabilities. During the interview period interviewers were supervised, by written record of their interview experiences, by telephone and e-mail contact, and by two organized peer intervision moments. These measures aided the interviewers in conducting the interviews in an adequate and uniform way. Also, the interview protocol allowed for probing and explaining in a pre-determined way, which further enlarged the quality and quantity of information obtained from the participants. The modifications to the questionnaire allowed us to include people with more severe intellectual disabilities as well, allowing for a larger and more representative sample representing the group of people with intellectual disabilities who are involved in work.

Even though various measures were taken to enhance understandability, limitations with respect to comprehension still cannot be ruled out entirely. Questions about perception of the work situation and feelings regarding the job, require participants to think about what typically occurs, and about how they feel generally. This calls for the ability to generalize, to look beyond specific or current events and emotions, which has been found to be difficult for people with intellectual disabilities (Finlay & Lyons, 2001). Although in this study participants generally would be able to think of frequent occurrences of an event or emotion, particularly when probed, it is nevertheless hard to establish to whether the level of generalization of their answers was always in accordance with the requirements of the question.

This study relied on staff reports to assess personality. This was considered necessary in order to keep the number of questions for people with intellectual disabilities limited, and because questions about personality appeared to be too difficult. Although staff was considered to know the clients well, it has been shown previously that proxy ratings tend to differ from self-report measures, and this may have reduced reliability of these measures. As we were particularly interested in the views of people with intellectual disabilities themselves subjective measures were used for all main variables. This also implies that common method variance may have inflated the strength of the associations. Measures were taken to reduce potential problems of common method variance. Participants were

assured that there were no right or wrong answers, they were encouraged to answer as honestly as possible, and anonymity was guaranteed (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003). Moreover, results are strengthened by the fact that both qualitative and quantitative measures point to associations between job characteristics and job satisfaction and motivational processes and job satisfaction.

The sample of Chapters 4 and 5 was relatively large compared to several other studies on job satisfaction of people with intellectual disabilities. This allowed us to investigate a multifactorial model, use control variables, and conduct moderator and mediator analyses. This is essential in understanding how and why relationships exist between variables, yet is not common in intellectual disabilities research (Farmer, 2012). Most studies on job satisfaction of people with intellectual disabilities have focused on one factor at a time, and/or tested single associations. The analyses in the current study provided more insight into the dynamic interaction between person and environment, and showed that personality and age of people with intellectual disabilities might affect their perceptions of and feelings towards the work environment. It also pointed to the mediating role of basic psychological needs in the association between job resources and job satisfaction, indicating that motivational processes are key in understanding job satisfaction.

Despite the relatively large size of the sample in Chapters 4 and 5, the sample only represented people with intellectual disabilities served by a single care organization for persons with intellectual disabilities in the Netherlands. Moreover, only people with intellectual disabilities who had been declared unfit for gainful employment, and received government benefits instead of pay from work were included. People with less severe disabilities, people not receiving support and/or who are being paid for their work, were not included due to the sampling method. They might however have other experiences, expectations and aspirations regarding work, which may affect their perception of the work environment, fulfilment of their needs and job satisfaction. The fact that these people were not included in this thesis limits the generalizability of the findings. Also, this study included people with varying levels of intellectual disability. In the quantitative study ($n = 117$) 22% of the participants had a moderate intellectual disability (IQ range 35-50), 64% had a mild intellectual disability (IQ range 50-70), and 13% were diagnosed with borderline intellectual functioning (IQ range 70-85), combined with significant impairments in adaptive functioning. As such, the findings particularly apply to people with mild intellectual disabilities. The samples for people with moderate intellectual disabilities and borderline intellectual disabilities were relatively small, and might not be fully representative. Moreover, in contrast to other countries, in the Netherlands people with borderline intellectual functioning can be referred to a care organization for people with intellectual disabilities, when their adaptive functioning is severely limited, and they are in need of long-term or structural support.

As such they might be not considered as part of the population of people with intellectual disabilities based on their IQ-scores, yet based on their overall ability and support needs they are highly comparable. However, as this is a diverse group, with varying, often complex problems, further research is advised to strengthen the findings for this particular group. Furthermore, employment situations of people with intellectual disabilities show great variability among countries. This implies that particularly results pertaining to the differences between integrated and sheltered employment have to be interpreted with caution, and may not be fully generalizable across countries.

Another limitation is the fact that the number of respondents in integrated employment was small, compared to the number of respondents in sheltered employment. Although this reflects the actual situation, this did limit in a certain extent the possibilities to examine differences for these groups.

The current findings contribute to the development of models on the ways in which job characteristics and basic psychological needs impact job satisfaction of people with intellectual disabilities. Nevertheless, as our study relies on cross-sectional data, caution is needed with respect to conclusions on the directions of the relationships. Although the model is based on accepted theoretical frameworks, reversed relationships might also be plausible, and causal interpretations of the current findings can only be made in a highly tentative fashion.

FUTURE RESEARCH

This study focused on the perspective of people with intellectual disabilities. As such, an effort was made to enable them to share their knowledge and views in various ways. People with intellectual disabilities also exerted influence on the content of the research, as the themes that they brought forward provided the input for the quantitative study. They were involved in the pilot phase of the study to make suggestions for further improvements of the instruments used. Their involvement allowed us to closely follow what was important to them, and to gain in-depth insight into their experiences, feelings and perceptions. This was definitely an added value to this research. It is recommended that future research also involves people with intellectual disabilities, as respondents, or as co-researchers.

Furthermore, in line with the strengths and limitations of this study, it is suggested that future research further investigates antecedents of job satisfaction, using a combination of methods. Self-ratings seem a feasible way to assess the perceptions of and satisfaction with the workplace. However, this study shows that other methods, such as photovoice, also contribute to this. Future research might consider to combine methods, for instance combining self-reports with proxy ratings, and/or objective measures for job characteristics. This might

extend insight and further strengthen the results of the findings pertaining to associations between job characteristics, motivational processes and job satisfaction. In addition, the use of other designs, such as longitudinal or experimental designs, is recommended to further examine the causal relationships between characteristics of the work environment, motivation and satisfaction with the job. Other methods, such as observations, or the use of diaries, may give insight in temporal fluctuations in perceptions and feelings towards their work, and may provide further insight in their level ability to generalize.

It is also recommended that future research on job satisfaction of people with intellectual disabilities uses multifactorial models, including personal and environmental characteristics. Further research is needed within the work context, as well as in other contexts to investigate the merits of the JD-R model and SDT for intellectual disabilities research. More specifically, additional research is needed on the interaction between job demands and job resources, explaining the buffering role of job resources in the relationship between job demands and job satisfaction. Also, insight into the associations between different types of job demands (i.e. challenges and hindrances) and job satisfaction is needed. In addition, based on the results of the explorative studies (Chapters 3 and 6) more research, using larger samples, is advised on individual differences with respect to the relevance of job characteristics in relation to job satisfaction and on quality of motivation of people with intellectual disabilities.

The models as included in this thesis explained moderate amounts of variance in outcome variables. The (significant) R^2 values ranged from 25% (in Chapter 4) to 43% (in Chapter 5), meaning that 57 to 75% of the variance in the outcome variable was not explained. It is recommend that future research includes additional factors, such as pay, and other personal characteristics, such as goals, and aspirations. We recommend that future research also elaborates on the role of support in relation to job satisfaction, and pays attention to the role of support characteristics and support style. For instance, the use of an autonomy supportive style was found to be important for intrinsic motivation and fulfilment of needs among people without disabilities (Deci, 2004). Commonly used support methods such as solution focused support (Roeden & Bannink, 2007; 2014), may also be effective in terms of need fulfilment at work and job satisfaction. Furthermore, personal characteristics and competencies of support staff, which have found to effect vocational success of people with severe mental illness (Corbière, Brouwers, Lanctôt, & Van Weeghel, 2014), may be important for supporting workers with intellectual disabilities as well. This has yet to be investigated. In line with previous research (e.g. Petrovski & Gleeson, 1997; Szivos-Bach, 1993; Seltzer, 1984) it is advised to pay attention to previous work experiences and to expectations (mindset) that people with intellectual disabilities hold towards themselves and their work situation. In addition, the expectations of significant others (e.g. parents) may also be relevant for their job

satisfaction. Research also points to the role of attitudes and stigma in the work environment in relation to well-being of people with intellectual disabilities (e.g. Petrovski & Gleeson, 1997). Considering the significance of the need to belong (relatedness), and the concerns about social isolation (e.g. Hall, 2004; Jahoda Kemp, Riddell, & Banks, 2008), these are issues that call for further exploration. Additionally, other theories that have been found valuable in explaining job satisfaction in mainstream industrial and organizational psychology (e.g. The Theory of Work Adjustment; Dawis & Lofquist, 1984; social cognitive model of job satisfaction; Lent & Brown, 2008) may also be applicable to people with intellectual disabilities and further enhance insight into their job satisfaction.

Although personality traits were not directly associated with job satisfaction in this study, we did find support for a moderating role of conscientiousness on the relationship between job demands and job satisfaction. Also, results suggests that personality traits may play a role on the perception of certain job characteristics (both neuroticism and extraversion were significantly associated with the perception of psychological demands), indicating personality traits may have some relevance in relation to work experiences and job satisfaction. Research among non-disabled employees points to the relevance of other traits as well (e.g. negative affectivity, self-esteem, self-efficacy) (Judge & Klinger, 2008). It is advised that the role of personality in the experience of work situations and job satisfaction is further investigated, as other traits may independently, or in combination with neuroticism (known as core self evaluations) be more adequate in explaining job satisfaction of people with intellectual disabilities.

Although not a central research question in this study, it should be noted that in this study no differences were found in job satisfaction levels of people with intellectual disabilities in integrated and sheltered employment settings. This is in contrast to findings of previous studies (e.g. Jiranek & Kirby, 1990; Griffin, Rosenberg, Cheyney, & Greenberg, 1996). This could be due to better circumstances in the sheltered employment settings, but also to worse circumstances in the integrated employment settings in this study, compared to previous studies. It is also conceivable that a third variable may have caused the lack of association in this study. It would be interesting to find out whether studies that do find differences in job satisfaction levels, do also find differences in perceived job characteristics and basic psychological needs.

IMPLICATIONS

Scientific implications

By combining two theoretical frameworks, and complementing these with personal and environmental characteristics of workers with intellectual disabilities, this study provides a more comprehensive, integrative view on their job satisfaction, that offers a more in-depth insight into the processes underlying job satisfaction of people with intellectual disabilities. This study has hereby yielded new findings that contribute to the research literature in various ways.

First, this study is among the first applying two general, well-researched theories, the JD-R model and SDT, in intellectual disabilities research. It provides further evidence for the applicability of both frameworks for people with intellectual disabilities, and initial evidence for the applicability of SDT to the work context of people with intellectual disabilities.

Second, by combining the JD-R model and SDT, this study clarifies the processes through which job characteristics relate to job satisfaction. The findings of this study are in line with recent findings among people without intellectual disabilities (De Cooman et al., 2013; Millette & Gagné, 2008; Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008) and provide further evidence for the core assumptions underlying the JD-R model and SDT. This study extends previous studies linking JD-R and SDT by focusing on job satisfaction as an outcome, and by applying it to people with intellectual disabilities.

Third, based on results of previous studies (Chapter 2) and our photovoice study (Chapter 3) the general frameworks of the JD-R model and SDT were complemented with personal and environmental characteristics that are particularly relevant to workers with intellectual disabilities (e.g. support). By including job characteristics that people with intellectual disabilities themselves considered relevant, a model has been developed that specifically pertains to their work situation.

Fourth, by combining two theoretical frameworks, and testing combinations of personal and environmental characteristics, this study offers a more complete insight into job satisfaction of people with intellectual disabilities and the important factors related to it than was obtained in previous studies on job satisfaction of people with intellectual disabilities (e.g. Flores, Jenaro, Orgaz, & Martín, 2011; Lam & Chan, 1988; Melchiori & Church, 1997).

Fifth, by focusing on issues other than the simple distinction between integrated and sheltered employment, more in-depth knowledge has been obtained on important factors related to feeling satisfied with the job that underlie the discussion on inclusion in the domain of work.

Practical implications

Based on the findings of the current thesis some recommendations can be made for practice. The findings show various ways in which the work situations and employment support of people with intellectual disabilities might be improved. The results of this study suggest that taking a motivational perspective towards employment support of people with intellectual disabilities, and paying attention to the fulfilment of their basic psychological needs for autonomy, relatedness and competence, might be important. The results point out that designing positive, resourceful work environments, that allow people to grow and flourish might be a useful way to create better chances for a high job satisfaction.

This implies firstly that it may be suggested to provide a work environment in which people with intellectual disabilities experience their behaviour at work as freely chosen and volitional. This does not mean that they have to be able to accomplish their work entirely independently. Yet, bearing in mind what a person can cope with, it is important to pay attention to the opportunities the work environment offers a person to (learn to) take initiative, make decisions and choices, and for being involved in the goals that are set and the organizational decisions that are made. Whenever it is not desirable or possible for a person to make his own decisions, due to personal limitations or organizational constraints, it may still be possible to fulfil his need for autonomy. It is conceivable to follow the requests of a supervisor or employment support worker, while engaging in a task with a sense of volition and psychological freedom, as long as attention is being paid to choice and acknowledgement of the feelings of workers with intellectual disabilities, and to the extent to which a person experiences the tasks as fun, interesting or meaningful. This is reflected in an autonomy supportive support style, which involves the use of non-pressuring language, positive feedback, taking the workers' perspective, supporting exploration and self-initiation, and encouraging workers to develop and implement solutions to their own problems. In contrast, the use of pressuring language (you should, you have to), rewards, punishments, pressure, and imposed goals, are unsupportive of basic psychological needs and undermine intrinsic motivation (Deci, 2004).

Secondly, it may be advised that people with intellectual disabilities are enabled to interact with and care for others, and feel valued and cared for by significant others at work. Just like workers without disabilities, people with intellectual disabilities have to be able to feel that they belong, that they are part of the team, and can be themselves, instead of feeling lonely, unaccepted or unsupported. Having something in common with co-workers or sharing common experiences with them can be beneficial for this. More importantly, developing a feeling of relatedness may require that people with intellectual disabilities have the opportunity to have frequent, affectively pleasant social interactions with their colleagues, and that these take place in a long-term stable work relation, characterized

by caring and concern for each others welfare. Employment support workers may hence stimulate feelings of relatedness, by selecting work environments that do indeed provide these opportunities, and actively stimulate it by emphasizing similarities between people, by stimulating joint (work) activities, by stimulating opportunities for social interactions, and learning both people with intellectual disabilities and their co-workers who may or may not have an intellectual disability, how mutual caring and concern can be expressed.

Thirdly, it is suggested that people with intellectual disabilities should feel capable to master the environment and bring about desired outcomes. Knowing what is expected of them in their work, and finding tasks and work environments that match a persons' competencies, and/or making accommodations (e.g. by job carving) to find a fit between the person's competencies and the requirements of the job is needed for this. This study suggests that reducing excessive job demands might be important for people with intellectual disabilities in order to flourish at work, and this is something that is often central in employment support. However, for realizing a persons need for competence it might also be useful to offer optimal challenge, so that people with intellectual disabilities can become more effective in their work environment. Given what a person is capable of, and what he can cope with, job characteristics may be provided that allow for growth and further development of competencies, appealing to a variety of skills and for trying new things. Employment support workers, supervisors and co-workers can further support a persons need for competence by providing positive feedback, aimed at a person's competencies, and by providing them with rationale for acting and information on how to improve in a task without using pressure.

Job design might play an important role with respect to need fulfilment and job satisfaction. As such employers and employment workers can actively work on developing or adapting jobs in such a way that they contribute to well-being. This may require paying attention to the task, as well as the broader work context, from the perspective of the worker. Adequate job design may also require paying attention to a person's personality, which is not only associated with how a person perceives the job characteristics in the workplace, but also how job characteristics might be related to his job satisfaction.

To make effective improvements in the work environment and employment support, it may also be suggested to focus on a person's work motivation. Although many persons work for the pleasure of working, the results of this study suggest that there may also be many persons that work from a more external motivation, who experience a lack of choice or even feel forced into a certain employment setting. People might often be unaware of the options that are available in reaching their goals, or be ill-informed about the (dis-)advantages associated with various employment options. Working on autonomous motivation starts with understanding and enhancing a person's insight into employment related matters.

It is advised to determine the meaning of autonomy, relatedness and competence, as well as the avenues for fulfilment of the needs for each individual. Understanding to what degree an individual's needs are met in a particular work context requires in-depth understanding of a person's own experiences, in his specific work context. Individuals are likely to have different means of expressing and fulfilling their needs, depending on their own values and competencies, as well as the obstacles and affordances in their work context (Deci & Ryan, 2000; Sheldon, Turban, Brown, Barrick & Judge, 2003). As such, the relative salience and modes of expression of needs may vary across the lifespan, and people's motivation may change, due to personal development and dynamics in the work context. Awareness for job design, need fulfilment and autonomous motivation is therefore an ongoing effort, and not a one-time exercise.

People close to the individual, such as parents, colleagues and caregivers, can provide valuable information. Yet, to fully understand how a person experiences his work and how he expresses his autonomy, relatedness and competence in his work, it is essential to incorporate his own perspective. Interviews are a useful means for this, particularly when combined with visual aids. Considering the characteristics of people with intellectual disabilities, and based on our experiences, a method like photovoice provides a powerful tool to improve understanding of the work experiences of people with intellectual disabilities, particularly those with more severe disabilities. Moreover, photovoice enables them to bring about changes in their work, that contribute to their own well-being and match their aspirations. Therefore, it is strongly advised that it should be used more often in practice, to allow people with intellectual disabilities to share their perspective on work and to empower them in bringing about changes in their work situation. We advocate for greater involvement of people with intellectual disabilities in career related matters, in order to give them a higher chance to enhance their self-determination and motivation and increase satisfaction.

Developments within the domain of work for people with intellectual disabilities are ongoing, and are increasingly directed at offering integrated employment opportunities for persons with intellectual disabilities. This is reflected in both research and practice. In the Netherlands, the recent Participation Act (Participatiewet, 2015) and ratification in January 2016 of the United Nation's 'Convention of human rights for people with disabilities' (2006) may lead to an increase in the number of people with intellectual disabilities working in integrated employment settings. It is essential that attention is being paid to their job satisfaction. This reflects a concern for their well-being, and is also valuable from a utilitarian point of view as well. Job satisfaction is known to be associated with individual functioning and behaviour, and may be relevant for job performance and job tenure of people with intellectual disabilities. By paying attention to the elements associated with job satisfaction, both before and during placement, better workplaces can be selected for individuals with intellectual disabilities

and adequate support can be provided. This might increase the chance that (integrated) work is indeed a positive experience. As such job satisfaction may be relevant for successful employment participation from both a subjective and objective point of view.

Moreover, paying attention to job satisfaction of people with intellectual disabilities underscores their role as workers, with work-related needs, and emphasizes that they are more than recipients of care. This study showed that people with intellectual disabilities reported high levels job satisfaction in integrated as well as sheltered employment, and both settings would seem to provide elements contributing to job satisfaction. Combining knowledge and experiences from both work settings may be beneficial for further improvement of employment situations of people with intellectual disabilities in the near future. Care organizations have obtained a large amount of experience in providing good work conditions and support to people with intellectual disabilities in sheltered settings, and this may be very useful for those providing support in integrated employment settings. At the same time, care organizations can learn from the experiences in integrated employment, to reflect on possibilities to create access to integrated employment opportunities for more people with intellectual disabilities.

Considering the rights of people with intellectual disabilities to equal employment opportunities and to just and favourable conditions of work, it is essential to be aware of the degree of resourcefulness of a workplace and the extent to which it has the potential to fulfil an individual's needs. The importance of job satisfaction cannot be stressed enough. It is striking that this topic, that has received great attention in general employment literature and practice, has received so little attention in the field of intellectual disabilities. Increased awareness of the job satisfaction of people with intellectual disabilities, and the factors that are related to it, should be warranted.

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