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Application of Intergroup Contact Theory to the Integrated Workplace:

Setting the Stage for Inclusion

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### Abstract

Social inclusion in community work settings remains an elusive outcome for many employees with intellectual disabilities. This study explored how the structure of work relationships with colleagues facilitates or inhibits social integration. Data were collected on 22 employees with disabilities through semi-structured interviews with six employment specialists and participant observations of six employees at their community worksites. Data were interpreted using intergroup contact theory, a longstanding theory within the intergroup relations literature that addresses the role of contact in reducing prejudice toward members of negatively stereotyped groups. As predicted by intergroup contact theory, interviews and observations revealed that coworkers were generally more accepting of an employee with a disability if (a) they had the opportunity to get to know the employee as an individual rather than as a stereotype or label, (b) they worked with the employee as an equal peer to accomplish common work goals, and (c) the employer or worksite supervisor unequivocally supported the equality and workplace inclusion of the employee with a disability. Findings suggest intervention strategies to promote inclusion in the integrated workplace.

Application of Intergroup Contact Theory to the Integrated Workplace:  
Setting the Stage for Inclusion

## 1. Introduction

Our relationships with others contribute to the quality of our lives. A growing body of research evidence from the fields of positive and hedonic psychology indicates that close interpersonal relationships are an important determinant of subjective well-being and happiness in the general population [41,50]. Similarly, interpersonal relationships are linked to quality of life outcomes for people with intellectual disabilities [51]. Given the importance of social relationships to personal well-being, the fact that many individuals with intellectual disabilities are reported to experience social isolation, even in integrated settings [3,20,42], is cause for concern.

In his 1972 formulation of normalization, Wolfensberger [55] asserted that physical integration is a precondition for the attainment of social integration; however, “ultimately, integration is only meaningful if it is social integration; i.e., if it involves social interaction and acceptance, and not merely physical presence” (p. 48). Cummins and Lau [20] further contend, “It is social, not physical, integration that has a reliable positive influence on well-being” (p. 145). The realization that people with disabilities may live, work, and attend schools in their local communities yet have few friends and limited social networks has led advocates and researchers to investigate strategies designed to foster the development of interpersonal relationships. The focus of these efforts is to assist individuals who are merely *in* their communities to become *part of* their communities.

One particular focus of research attention has been the development of interpersonal relationships between employees with disabilities and their colleagues in integrated employment

settings [10]. Community employment bestows social status and can afford opportunities for forming new relationships with coworkers. Much of the theoretical and empirical work in this area has been framed in terms of *social integration*, *inclusion*, *social support*, or *social networks*. The Developmental Disabilities Assistance and Bill of Rights Act of 2000 [21] emphasizes a strong social component in its definition of *inclusion* with respect to employees with developmental disabilities. *Inclusion*, according to the Act, is the acceptance and encouragement of the presence and participation of individuals with disabilities in the workplace, by individuals without disabilities, that enables individuals with disabilities to (a) form relationships and friendships, (b) enjoy full access to and active participation in typical employment settings, and (c) have regular contact with individuals without disabilities. According to this definition, many employees with disabilities unfortunately fail to achieve true inclusion in community work settings. All too often they are isolated in the workplace—working alone, performing job duties that require little communication with others at the worksite, and working according to work schedules that do not coincide with the schedules of other employees.

It has long been recognized that some individuals with disabilities obtain employment in integrated community workplaces and yet remain socially segregated from coworkers [35,40,54]. A recent review of the research on the social and emotional outcomes of supported employment for individuals with intellectual disabilities summarized the empirical evidence regarding indicators of social integration and other potentially positive outcomes of community employment [34]. Based on their review of 15 longitudinal and case-controlled studies, Jahoda et al. concluded that supported employees enjoy greater psychological well-being, quality of life, autonomy, and self-determination than those who are unemployed or in sheltered employment programs. However, these authors also report that the research evidence regarding the social

outcomes of integrated employment is mixed. According to the authors, the available evidence suggests that while individuals entering supported employment do expand their social networks and increase their interactions with coworkers without disabilities, supported employees often do not feel socially accepted at work. Apparently, developing larger social networks and increasing interactions with coworkers alone do not necessarily translate into a sense of belonging for employees with disabilities.

Intervention strategies designed to promote the social integration of employees with disabilities have ranged from attempting to improve the employees' social skills to actively encouraging coworkers to interact with them [10,11,52]. An underlying assumption of these strategies appears to be that *direct* facilitation of social exchanges will foster the development of interpersonal relationships with coworkers. However, the research evidence regarding the effectiveness of these strategies has been mixed [10,11], and true social inclusion remains an elusive outcome for many workers with disabilities.

Other strategies for facilitating social integration take a more indirect approach. Rather than focusing on directly changing the social behavior of employees with disabilities or their coworkers, indirect intervention strategies focus on job selection and design as a means of increasing the likelihood that social relationships will develop between coworkers. Much of the work in this area has explored the influence of workplace culture (i.e., the social norms of a workplace) on opportunities for social interaction and integration [9,25,29,31]. For example, Butterworth et al. [9] used participant observation and semi-structured interviews to investigate the workplace experiences of eight young adults with developmental disabilities. These researchers found that the young adults were more likely to be supported and included at work when the workplace culture included certain key elements, such as clearly identified places and

times for employees to socialize, relationships among employees that extend beyond the workplace, and an employer who fosters team building.

In addition to the culture of a workplace, the design of an employee's job can also influence opportunities for social interaction and integration. Several features of job design – more specifically, work relationship structures – have been linked to social integration. These relationship structures include working in physical proximity to other employees, cooperating with coworkers to complete tasks, and having a job description and work schedule similar to those of coworkers [15,32,36,44]. The purpose of the present study was to examine the work relationships and social relationships of employees with disabilities in integrated work settings. Specifically, we hoped to gain a better understanding of (a) various characteristics of work relationships between employees with disabilities and their coworkers and (b) how these characteristics of work relationships facilitate or inhibit the social integration of employees with disabilities. If alterable features of work relationships are found to be associated with positive social integration outcomes, intervention strategies based on these findings could be implemented to “set the stage” for inclusion in the integrated workplace.

### ***1.1. Theoretical Framework***

What factors account for the social integration of some employees with disabilities and the social isolation of others? Can the way in which jobs are designed influence the likelihood that employees with disabilities will fit in and make friends at work? Interest in these questions has led to a search for a broader theoretical framework that might illuminate the dynamics of social integration in employment settings. While the research literature suggests a list of variables associated with inclusion in the integrated workplace, most studies have been largely atheoretical [14,15, 44]. Recognizing this gap in the literature, the first author surveyed the social

psychology literature on stereotyping, prejudice, and attitude change in search of theoretical frameworks that have been successfully applied to the social integration of negatively stereotyped groups within society (e.g., religious and racial minority groups). This search led to intergroup contact theory, a longstanding theory within the intergroup relations literature that addresses the role of contact in reducing prejudice toward members of a negatively stereotyped group.

Spurred by Allport's formulation of intergroup contact theory in his 1954 book *The Nature of Prejudice* [1], a half-century of research has shown that personal contact with members of a negatively stereotyped group generally improves attitudes toward group members. Recognizing that not all contact between groups has a positive outcome, Allport [1] and others [2,18,46,49] have emphasized the importance of establishing certain optimal conditions within the contact situation. Contact theory predicts that the positive effects of intergroup contact on prejudice will be enhanced when the following conditions are satisfied:

1. Sufficient opportunities exist for interaction on a personal, intimate level [17].
2. The interaction encourages behaviors that disconfirm stereotypes that groups hold about one another [49].
3. The situation promotes equal-status interactions between members of the groups [1,2].
4. Members of the groups are involved in cooperative, outcome dependent relationships [7].
5. Those in positions of authority are perceived as favoring integration and intergroup acceptance (i.e., authority support) [46].

Intergroup contact theory has been applied across a wide range of social groups, settings, and societies. Early research focused on the racial desegregation efforts of the 1950's [2]. The most notable were studies of the effects of cooperative learning programs in racially desegregated classrooms [7]. The effects of intergroup contact on prejudice have since been studied with groups that differ by race, ethnicity, age, religion, physical and intellectual ability, sexual orientation, and political preference. A 2006 meta-analysis of the research literature [47] found greater reductions of prejudice in samples that optimized Allport's conditions of contact.

### ***1.2. Intergroup contact in the integrated workplace***

By viewing the integrated workplace as an intergroup contact situation, we can predict that coworkers will be more accepting of an employee with a disability if (a) coworkers have the opportunity to get to know the employee as an individual (opportunity to interact) rather than as a stereotype or label (stereotype disconfirmation), (b) coworkers work with the employee as an equal peer (equal status) to accomplish common work goals (outcome dependency), and (c) the employer or worksite supervisor unequivocally supports the equality and workplace inclusion of the employee with a disability (authority support). The application of intergroup contact theory to the integrated work setting appears warranted for two reasons. First, like members of other minority groups, people with intellectual disabilities are marginalized within society [4]. If citizens with intellectual disabilities are to become fully participating, valued members of their communities, the stigma of the mental retardation label [22,27] must be overcome. Secondly, intergroup contact theory is particularly well suited to the examination of attitudes toward employees with disabilities in integrated employment settings because the conditions of optimal contact are present at some worksites but not at others. For example, some employees with disabilities share tasks with their coworkers whereas others work independently. Furthermore,

some employees with disabilities have work schedules and job responsibilities that are similar to those of coworkers, while other employees are in job situations that are quite atypical for a particular worksite. This study used intergroup contact theory as a lens through which to examine the relationships between employees with disabilities and their colleagues without disabilities.

## **2. Method**

### ***2.1. Data collection***

Data on the work relationships and social relationships of 22 employees with disabilities were collected through (a) semi-structured interviews with six employment specialists and (b) participant observations of six focal employees at their community worksites. Informed consent was requested and secured from study participants in accordance with federal and university policies for the protection of human subjects in research.

#### ***2.1.1. Employment specialist interviews***

Employment services supervisors from two supported employment agencies (one in Ohio and one in Indiana) were asked to nominate employment specialists (i.e., direct service staff who provide employment supports to individuals with disabilities and community worksite personnel) who were particularly reflective practitioners and who had worked with a wide range of employees with disabilities in a wide variety of worksites. Six employment specialists were purposefully sampled based on supervisor nomination, length of time in current position, and interest in the research topic. The median job tenure of the selected employment specialists was 3.5 years, with a range of one to seven years of relevant work experience. All were female.

Each employment specialist was interviewed on two occasions separated by approximately one week. All interviews lasted from 1 to 1.5 hours. Interviews were guided by a

series of questions about natural supports, workplace culture, and social integration drawn from a review of the relevant supported employment literature [13,15,30,31,33,45]. The interview schedule is presented in the Appendix. The first interview began with employment specialists being asked to describe examples of supported employees who were particularly well integrated at work. After describing the positive social integration examples, employment specialists were asked to describe examples of supported employees who were extremely isolated at work. The purposive sampling of extreme cases was intended to represent the diverse characteristics of the target group of supported employment placements [6].

At the close of the first interview, employment specialists were asked to pay particular attention during the upcoming week to the various work and social relationships they observed at community worksites. The second interview typically began with questions about examples of socially isolated supported employees. The employment specialists were then asked to compare and contrast individual, workplace, and job design characteristics for supported employees who were at opposite ends of the social integration continuum. Additional questions suggested by themes emerging from ongoing analysis of the data were also asked [26]. Finally, questions were asked to explore examples that *did not* fit the emerging conceptual framework (e.g., supported employees who work very closely with coworkers but are not accepted or liked by them). All interviews were tape-recorded, and a detailed interview log was used to transcribe the interviews [38].

### **2.1.2. *Worksite observations***

Following the employment specialist interviews, we conducted worksite observations and informal interviews with six additional supported employees and their employment specialists [53]. The observations were guided by the same set of questions that guided the employment

specialist interviews and were undertaken to further explicate the role of workplace and job design characteristics in facilitating or hindering social integration. While the interview accounts of the employment specialists were rich with descriptions of workplace interactions, firsthand observation enabled us to notice things that may have become routine to the employment specialists [38]. These observations also allowed us to determine whether the characteristics of the relationships suggested by employment specialists were apparent to an observer. Again, we purposively sampled worksites of employees who had either very good or very poor relationships with coworkers.

Each focal employee was observed for six hours during the course of two or three work shifts. Field notes were systematically collected during observations when this could be accomplished unobtrusively and immediately following observations when it could not. As before, we documented evidence both consistent and inconsistent with the emerging conceptual framework.

## **2.2. Data analysis**

A constant comparative method of analysis was employed, and data were coded according to emerging themes. Initial themes that emerged during preliminary analysis of the interview data centered on the construct of *congruence of work relationship structures*. Dissatisfied with this initial conceptualization, the first author surveyed the social psychology literature for applicable theories. At approximately the midpoint of the employment specialist interviews, intergroup contact theory was discovered as a potentially relevant theory. As interview logs were read and reread, the value of intergroup contact theory to this particular study became apparent, leading to a change in the original direction of the study. The intergroup

contact framework was applied during the subsequent interpretation of results and, on completing the analysis, provided a powerful interpretive framework for the data.

Several steps were taken to bolster the trustworthiness and credibility of study findings. First, as suggested by Guba and Lincoln [28], we conducted member checks throughout the study by periodically summarizing for participants how we understood what we were seeing and hearing and asking them to confirm or disconfirm the accuracy of our interpretations. Secondly, we used negative case analysis [19,39] to expand and revise our emerging hypothesis to accommodate discrepant cases and negative evidence not readily accounted for by our theoretical framework (i.e., intergroup contact theory). For example, we sought and analyzed cases of isolated employees whose work situations met the optimal conditions specified in intergroup contact theory and socially integrated employees whose work situations did not meet these conditions. Third, two special education faculty members unassociated with data collection – one with expertise in supported employment research and one with expertise in attitude research – completed a peer review of interview logs and provided feedback on preliminary interpretations of the findings. Finally, two members of the research team independently reviewed the interview logs and field notes and rated the extent to which each optimal condition of contact was satisfied for each focal employee (i.e., *met*, *partially met*, or *not met*). Interrater reliability was considered acceptable with a 91% level of agreement between the two researchers [39].

### **3. Findings**

Study findings are presented and discussed within the framework of intergroup contact theory. This section opens with a description of the demographic and employment characteristics of the focal employees, followed by case sketches of two employees introduced to illustrate several essential elements of intergroup contact theory. Next, the optimal conditions of contact

are elaborated upon, and supportive examples from the interviews and observations are provided. Finally, data are presented to highlight unique characteristics of the supported employment situation not fully explained by the conditions of intergroup contact theory.

### ***3.1. Focal employees***

We explored the job situations of a total of 22 supported employees. Information on 16 employees (8 males, 8 females) was obtained through interviews with their employment specialists, while observations at community worksites provided data on 6 additional employees (3 males, 3 females). Nearly all focal employees had intellectual and/or developmental disabilities. The median age of the employees was 40.5 years, and the age range was 22 to 60 years. Age range was similar for employees in the socially integrated and socially isolated groups, while the median age was slightly older for employees in the isolated group than in the integrated group, 41 and 40 years of age, respectively. The most commonly held occupations were in janitorial services (8), factory work (5), food service (3), and office work (3). Six employees were working in group placements alongside other employees with disabilities, while all others were working in individual community jobs. There was a wide range in the job tenure of the focal employees. At the time of the study, five employees had been on the job less than one year, while three had been employed for eight years or more. The median length of time on the job for employees in the socially isolated group was 24 months, slightly lower than the median tenure for employees in the socially integrated group (29 months). The number of hours focal employees worked per week also varied widely from 3 to 40 hours per week. The median number of hours worked by employees in the socially isolated group was 10 hours per week, while the median number of hours worked by employees in the integrated group was 12.5 hours

per week. Table 1 contains a summary of the employees' demographic and job characteristics.

All names used in this report are pseudonyms.

### ***3.2. Case narratives***

The case narratives of Jodie and Jack are composites of statements made by their respective employment specialists. Statements were corrected for grammatical errors, and, at times, syntax was changed to improve readability. The first case narrative describes how Jodie moved from one work area within her place of employment to another area and the concomitant changes in her social relationships with coworkers. Jodie's story is highlighted because her work experiences represent both ends of the social integration spectrum: extreme social isolation and extreme inclusion. Jodie is a 28-year-old woman with Down syndrome. She is short in stature, about 4 feet 10 inches, and has a bubbly personality. Jodie has worked in the purchasing department of a large university for two and a half years. Her main job duties consist of sorting and filing purchase orders.

#### *Case Narrative #1: Jodie's Job Change*

Before this job, Jodie's family and case manager argued that she was not capable of holding a community job. Because of her past history of inappropriate behaviors, stealing, and lying, they didn't know if she could handle it. When she eventually did get a job, we [Jodie's employment specialist, family, and case manager] wanted her in a place where she would be easy to supervise and where there weren't many people around. So we put her in Purchasing, which was located upstairs in a back room, away from the hustle and bustle. That meant she wasn't with the people who hired her. She was with other employees who hadn't agreed to be her supervisors. When she started, she was absolutely *not* valued as an employee. It was terrible.

They didn't appreciate what she had to offer. They said, "She is not our responsibility" and complained about having to "take care of" her.

About a year and a half ago, we decided to move her downstairs with the person who hired her, even though we initially didn't want her there because it was very crowded; there was a lot of opportunity for her to take change off of somebody's desk or steal food when no one was looking. But the situation couldn't have gotten any worse than it was upstairs.

She's come a long way since then. She's just so great! Everyone there really appreciates her. She knows what her duties are, and if she runs out of things to do, she knows what her backup duties are. And she's really valued. I'm certain that if she wasn't there, the purchase orders would just pile up.

She works in a small area with four other women. When one person talks, everyone hears it, and so it turns into a group conversation. They gossip and they talk about things. It's like a hen's nest over there. Jodie is treated like everyone else. She certainly has a different life than others, but she's very much included. Jodie's finally found a place where she's comfortable and where she's not different.

The second case narrative illustrates Jack's path to workplace inclusion. Jack is a friendly yet reserved gentleman in his mid-40s. He has a label of severe intellectual disability. He knows basic sign language, but he rarely uses signs to communicate. His gait is slow, and he shuffles his feet as he walks. Jack was hired two and a half years ago to assemble small parts in an automobile braking-systems factory. This was Jack's first job in the community. His story is of particular interest because he has developed positive social relationships with his coworkers despite his limited use of conventional modes of communication.

*Case Narrative #2: Winning Friends Without Saying a Word*

Jack works in a stereotypical factory setting with a lot of people who are going to notice if you look a little different, and they're going to shy away. And Jack acts a little different. He doesn't speak, and he sometimes hits himself. And he's got this thing about coffee; he has been known to go up and grab a coworker's coffee and down it.

For the most part, everyone at the brake factory works hard and feels that others should work hard also. When Jack first started, he was not very productive. I had to prompt him constantly. All the parts he puts together get passed on to other departments, so if he runs behind on parts, his coworkers down the line are going to run behind. There was resentment and talk among his coworkers about whether he was earning his money. Coworkers made complaints like "he's lookin' at me funny." However, from the very beginning, his direct supervisor gave him a lot of positive feedback and support.

Over time, Jack's productivity increased dramatically. Now he works independently. He pumps out parts like you wouldn't believe. He can assemble parts quickly and to quality specifications. On one particular job, he can outwork the average nondisabled worker any day. Before he even puts the finished part in the box, he's reaching for the next one. I noticed a big improvement in attitudes toward Jack when he started really putting out the work. They know they can count on Jack because he's proven himself.

Jack's coworkers like him and respect his work. They see Jack for who he really is and appreciate the things about Jack that make Jack who he is. I believe they still recognize a difference, but I don't think they see that difference as a negative. One coworker who was standoffish in the beginning now drives up in his cart at the end of Jack's shift to offer him a ride

to the front door. Other coworkers also make a point of coming over to kid around with Jack when they pass his work area; there are a lot of pats on the back and handshakes.

Jack can't tell me that he likes going to work, but I've seen amazing changes in him since he started working there. He walks around smiling much of the time whereas before [back in the workshop] he could usually be found sitting in a chair asleep with his head down. Jack's personality is really beginning to come through at work. He doesn't verbally initiate conversation, but he often initiates communication by looking at his supervisor or favorite coworkers and smiling at them. One time, he was heading to the restroom, and one of the guys who always says "hi" to him was talking to someone else. Jack went right up to him and smiled. The guy turned around and said, "Hey, I know you're trying to bum a pop." That's the running joke between them, and they get a kick out of it. It was really cool because that was something that Jack initiated, and he never used to do that.

Every once in a while, Jack will sit back in his chair, look around at everyone working, and just smile. He acts like he's really at home there. Jack's work experience has been the epitome of integration in a really hard-to-integrate setting.

What factors might account for Jodie's newfound status as a valued and included member of the work team? How did Jack gain the respect and support of his coworkers? Intergroup contact theory offers one potential explanation.

### ***3.3. Conditions of intergroup contact***

Based on the interview and observation data, an employee's job situation was judged to *meet*, *partially meet*, or *not meet* each of the five conditions of contact. Figure 1 graphically depicts the extent to which each employee's job situation satisfied the conditions outlined in intergroup contact theory. A visual examination of the figure reveals that the key conditions of

intergroup contact were far more likely to be met for socially included employees than for socially isolated employees. Evidence related to each condition will be considered in turn.

### ***3.3.1. Opportunity to interact***

Cook [18] suggested that situations that promote intimate contact with members of an outgroup (e.g., people with disabilities) will enhance the development of meaningful relationships with outgroup members. Stated more explicitly, contact must be of sufficient frequency, duration, and propinquity to facilitate the development of intergroup friendships [7]. Examples of work relationship structures that represent high “acquaintance potential” include similar work schedules, proximal work areas, and similar break times and locations.

Figure 1 shows that all but 2 of the 22 focal employees had job designs that allowed for the possibility of interaction with coworkers. While most focal employees had at least intermittent opportunities for interaction, socially integrated employees as a group had more opportunities than socially isolated employees. Sixty-four percent of the job placements for socially integrated employees fully met this condition, while only 18% of job placements for socially isolated employees fully met this condition.

Being in the same place at the same time as other employees was a consistent theme of the stories of integrated employees. Jodie’s employment specialist described the relationship between Jodie and her second set of coworkers as follows: “They’re very close. It is a bunch of women. It’s like a hen’s nest over there.” The proximity of Jodie to her new coworkers differed markedly from her initial placement where she was both physically and socially isolated from others. Another employment specialist related a story of Lynn, an employee who worked as a dishwasher at two separate worksites. At the first site, Lynn was valued and included; at the second site, she was socially isolated. One difference between the sites was that employees at the

first site operated as a team unit whereas employees at the second site did not. When asked how she accounted for the difference in social integration at the two sites, given that Lynn held the same position at both sites, the employment specialist stated,

[At the first site,] the work area is pretty close. Everything is right there, so they can't really avoid each other. [At the second site,] they're off by themselves and don't have much interaction.... It's just the closeness of the first site may be more conducive to interaction.

This comment indicates an awareness that working in physical proximity to coworkers can enhance opportunities for social interaction. Social interaction, in turn, may provide the venue through which friendships can develop. However, as evidenced by the socially isolated employees, merely having the opportunity to interact with coworkers is not a sufficient condition for inclusion. Several other relevant factors are discussed in the paragraphs that follow.

### ***3.3.2. Stereotype disconfirmation***

Rothbart and John [49] maintained that in order for contact to have a positive effect on intergroup attitudes, the interaction must convey information that disconfirms prevailing stereotypes about the outgroup. Study findings suggested a particularly strong relationship between stereotype disconfirmation and social integration in the employment setting. Coworkers of socially included employees with disabilities demonstrated positive regard for their individuality and abilities. By contrast, coworkers of socially isolated employees acted in ways that suggest they held stereotypical impressions of the employees. Employment specialists reported that coworkers sometimes viewed employees with disabilities as childlike, incompetent, dangerous, or sexually perverse. Jodie's employment specialist reported that a coworker in Jodie's initial work area once said, "She's a child. She'll do anything for attention. She might

even jump out of the [third story] window sometime for attention.” This statement clearly demonstrates stereotypical misconceptions on the part of Jodie’s coworker.

The most often cited stereotype about employees with disabilities in this study was that they would be unable to satisfactorily complete their job tasks. This is a commonly held stereotype of individuals with intellectual disabilities. Brown, et al. [8] pointedly call attention to the consequences of this stereotype:

For too many years it has been hypothesized that extremely few adults with severe handicaps could perform meaningful work.... As a result, they have been devalued, undertaught, their life spaces have been tragically constricted, and many negative generalizations have become embedded in the minds and hearts of millions of experientially deprived nondisabled persons. (p. 266)

Brown et al.’s remarks suggest that by demonstrating productivity in the workplace, people with disabilities can disconfirm negative stereotypes and secure valued roles in the workplace and, ultimately, in society. The case of Jack illustrates this point. Jack was labeled as having a severe intellectual disability. His employment specialist reported that when Jack began working at the factory, “his coworkers were keying in on that [Jack’s disability label] at first.” However, as Jack’s productivity increased, his coworkers began to look past the stereotypes implied by the mental retardation label and got to know him as a person. Edgerton [22] refers to this process as “delabelling.” He contends that while a disability or label may be prominent in the eyes of others during the initial stages of the relationship, that aspect of the person with a disability becomes less salient over time.

### 3.3.3. *Status equality*

Allport [1] stressed that situations that promote equal-status contact between members of two social groups tend to improve intergroup attitudes. Therefore, the way coworkers perceive their status relative to the status of a colleague who has a disability can be expected to influence the outcome of interactions with this colleague. Status comparisons in the employment setting may relate to perceived differences in job titles and responsibilities, work schedules, compensation and benefit packages, seniority, chain of command, and opportunities for career advancement.

The equal-status condition was rarely met for the cases investigated in the present study. Unlike many of their coworkers, only two focal employees held full-time, 40-hour-per-week jobs. Nearly three-quarters worked fewer than 20 hours per week. Only half of the focal employees' job descriptions were similar to the job descriptions of their coworkers. Several focal employees' job descriptions had been carved from the job descriptions of other employees. For example, Doris and Jodie worked in office settings where they had been hired to perform filing functions previously assigned to other employees within the office. Furthermore, status inequality was common among employees both in the socially integrated and socially isolated groups. Less than half of all focal employees even partially met the equal-status condition. Forty-five percent of the socially integrated employees met or partially met the condition, while only 27% of the socially isolated employees met or partially met the condition. Only two employees from each group fully met the equal-status condition.

Numerous situations that set employees with disabilities apart from their coworkers were noted in the interviews and observations. For instance, the mere presence of an employment specialist at the worksite often signaled the unequal status of the employee with a disability.

While company employees typically arrived at work in private vehicles, most focal employees were dropped off by a city bus or “special” van owned and operated by the supported employment agency. Some focal employees were prohibited from working weekend and evening shifts due to limited transportation options or to the restricted work schedules of their employment specialists. Status inequalities also resulted from focal employees working with other employees with disabilities in group placements. Describing one such group placement, an employment specialist explained that a representative of the supported employment agency “directly oversees the group and acts as their liaison” to worksite personnel, and, at least initially, coworkers focused on the fact that “this is a small group of people who are ‘mentally handicapped.’” Needless to say, employees in the group placement did not follow the typical chain of command within the organization, and coworkers viewed them as a single stereotyped unit rather than as individuals. Although employees with disabilities often have little control over how they are transported to and from the worksite, whether they are assigned to a group placement or an individual job, and restrictions to their work hours due to the availability of support staff, these factors have the potential to negatively impact the employees’ perceived status within the workplace.

#### ***3.3.4. Outcome dependency***

According to Allport [1], “It is the cooperative striving for the goal that engenders solidarity” (p. 276). This statement suggests that, to the extent that members of different groups rely on one other to complete a task or reach a jointly desired goal, they will be inclined to develop friendlier relations with one another [7]. Based on this assertion, employees with disabilities who have interdependent working relationships with coworkers should have an increased likelihood of being socially integrated. This prediction was borne out in the results of

the present study. Socially integrated employees were more likely than socially isolated employees to have interdependent working relationships with their coworkers (see Figure 1). All socially integrated employees had some level of interdependence in their work relationships with coworkers, while only 36% of the socially isolated employees met or partially met this condition. As an example of outcome dependence, it was important for Jodie to keep up with the filing of the purchase orders so that her colleagues could locate a purchase order quickly if they received a question about it. Likewise, Colleen's colleagues in the grocery store relied upon her to bag groceries efficiently so that customer lines would continue to move quickly.

There is, however, one caveat to the assumption that interdependence leads to liking: The outcome of the cooperative endeavor must be successful [5]. Cooperation can adversely affect the social acceptance of a person with a disability if this person is unable to contribute sufficiently to the team effort or if others blame this person for the poor performance of the group [15]. The case of Lynette illustrates this point. Lynette was one of six women who worked in a close, noisy, and busy kitchen of a nursing home. Lynette often fell behind in washing the dishes, and coworkers would be asked to go over to assist her. Lynette preferred to work at her own pace and would frequently voice her frustration to the coworker who came over to help her. Lynette's employment specialist shared these exasperated comments of the kitchen manager:

She's really not keeping up with the job and I don't think she can do any better, and I don't think training is going to help; we've already tried that.... And I'm tired of having to hire other people because of it [Lynette's yelling]. They don't have to take being yelled at, so they just quit.

Lynette's situation demonstrates a case where, because the cooperative effort was not successful, task interdependence led her manager and coworkers to develop increasingly negative attitudes toward Lynette.

The story of Jack provides an example of the opposite outcome resulting from successful interdependent relationships with coworkers. Jack's fellow factory workers depended upon him to keep up with the flow of parts moving down the assembly line. Initially, they were concerned that Jack was working too slowly and not earning his wage. However, when Jack started "pumping out the parts," his coworkers expressed increased respect for his work and accepted him as a peer. The stories of Lynette and Jack highlight the importance of successful interdependent relationships with coworkers as they pertain to social integration.

### ***3.3.5. Authority support***

The final condition of intergroup contact theory is authority support. According to Brewer and Brown [7], contact is more likely to lead to social integration if those in positions of authority unequivocally endorse the goal of integration. In the integrated workplace, this support might be demonstrated by a supervisor who includes the employee with a disability in departmental meetings and company-sponsored social events.

From the interviews and observation data, it is apparent that the support of an employer or direct supervisor was vital to the job success and social inclusion of the focal employees. In general, the employers and supervisors of the socially isolated employees in this study did little to facilitate their social inclusion in the workplace. In fact, only 36% of the socially isolated employees worked in environments that even partially met the condition of authority support, and only one isolated focal employee's work situation fully met the condition. By contrast,

supervisors were described as very supportive at all but two worksites where the focal employees were included. Jack's employment specialist described Jack's direct line supervisor this way:

His supervisor is an all-around awesome guy. He's been supportive since Day One.... At the same time, he's not a goody-goody. He's not just doing Jack a favor. He gave him a fair chance to prove himself. He's accountable for what his department puts out, but when he saw that Jack was doing what he needed to be doing, he was willing to go to bat for him because he's his supervisor. He's really taken ownership and responsibility for Jack.

The story of Jodie's initial placement upstairs in the purchasing department suggests that a lack of supervisory support can lead to the opposite outcome. Jodie's employment specialist described the situation this way: "They put her upstairs. That meant she wasn't with the people who hired her.... Her coworker saw her as a liability, and she *didn't* want that liability." Such a comment underscores the vital role of authority support in facilitating social integration.

Some employers appeared more willing than others to take responsibility for their employees with disabilities. In one extreme example, the employer consistently referred to the employee with a disability as "your man" when speaking with the employment specialist. It is highly unlikely that this particular employee will be accepted as an equal peer by his coworkers when his employer doesn't even accept him as a bona-fide company employee. An employment specialist offered this advice for encouraging employers to take "ownership" of their employees with disabilities: "It's more ideal for employers to pay supported employees directly because, in the minds of the employers, they then become *their* employees." This recommendation reflects the belief that authority support should be fostered in the integrated workplace.

### ***3.4. Uniqueness of the supported employment situation***

Overall, intergroup contact theory provides a valuable framework for understanding the interplay between work relationship structures and the social integration of employees with disabilities. However, two strong study findings emerged that deserve further examination: (a) the observed relationship between productivity and social integration and (b) the uniformly high prevalence of unequal status relationships. Evidence supporting the two themes appeared consistently throughout the interviews and observations. The theoretical framework must be expanded if it is to encompass these findings. It may be that these findings are unique to the supported employment situation or that their importance is magnified in the supported employment setting.

First, demonstrating productivity appears essential to becoming valued. Throughout the interviews, employment specialists repeatedly alluded to the relationship between productivity and acceptance. This relationship may be particularly strong for employees with intellectual disabilities because they are often perceived to be incompetent. Edgerton [23] asserted, “One might speculate that no other stigma is as basic as mental retardation in the sense that a person so labeled is thought to be completely lacking basic competence” (p. 207). One particularly reflective employment specialist commented on the relationship between productivity, expectations, and social integration:

You can't value someone if you don't expect them to do anything, and people with disabilities have to earn that. Many times, more often than we would want to admit, people are hired just because they have a disability.... It is going to take time, energy, and effort to show their employers and coworkers that they can make a difference for the company. And it is at that time I believe people become valued.

For several focal employees, the demonstration of competence was the key that opened the door to interaction, acceptance, and inclusion.

Secondly, status equality appears to be a difficult, if not an impossible, condition for many supported employees to meet. It may be argued that supported employees have inherently unequal status positions within the competitive workplace. The mere presence of an employment specialist at the worksite signals that the employee with a disability is somehow different from other employees and consequently may limit opportunities for interaction [12,24,37]. Therefore, fulfilling the equal-status condition of contact may be even more challenging for employees with intellectual disabilities than for members of other negatively stereotyped groups to which contact theory has been applied.

#### **4. Discussion**

Intergroup contact theory provides useful insights into the relationships between employees with disabilities and their colleagues without disabilities. Study findings reveal that, in general, employees whose job situations more closely approximated the optimal conditions of contact were more likely to be socially integrated at work. However, the evidence separating the integrated and isolated groups was not entirely clear-cut. Considerable overlap existed between the two groups in the extent to which their job situations met the individual conditions of contact. Certainly, other factors, such as the social skills of the employee with a disability and the culture of the workplace, contribute to the acceptance of a particular employee by coworkers at a particular worksite. Nonetheless, an examination of the overall pattern of differences in the extent to which conditions of contact were met for the two groups suggests that the intergroup contact framework is indeed useful for investigating the social integration of employees with disabilities.

#### ***4.1. Implications for employment supports***

Several researchers have asserted that the period of job development and initial job entry is critical for establishing workplace roles and social integration [29,36,48]. The results of the present study suggest practical implications for the way in which jobs are developed for individuals with disabilities. Attention to the nature and structure of contact between employees with disabilities and their coworkers during the job design and negotiation phase may influence subsequent opportunities for interaction. For example, employment support professionals often view job positions in isolation and, like Jodie's employment specialist, may intentionally negotiate isolated job descriptions that offer little opportunity for employees with disabilities to perform tasks cooperatively with their coworkers [32]. Isolated job descriptions may be developed in an attempt to minimize potential distractions and confusion on the part of an employee or because teaching an employee a series of job tasks is often considered easier if the tasks do not require communication with others. While these are legitimate considerations when searching for or negotiating a job position, they should be balanced by consideration of the potential benefits of task interdependence and frequent opportunities for interaction with coworkers.

Although the initial period of job development and job entry is the best time for addressing characteristics of job design, employment specialists can continually seek to create optimal conditions of contact within the work setting. It may be possible to move an employee's workstation to a higher traffic area within the work setting, or the employee may be able to begin helping a coworker complete a particular work task. As mentioned earlier, many employees with intellectual disabilities have part-time jobs. Part-time jobs can contribute to unequal status relationships with coworkers, and part-time jobs also tend to limit opportunities for interaction,

especially opportunities available during social times, such as breaks and shift changes. If it is not feasible to negotiate a full-time position, it may be possible to arrange for the employee to begin his or her work shift at the same time as other employees or to schedule break times that fall directly before or after a shortened shift.

Study findings suggest that the biggest challenge for employment specialists may be the facilitation of equal-status relationships with coworkers. Few focal employees had job situations similar to those of coworkers. Cohen [16] warns that unequal status relationships, particularly with outgroup members in a subordinate role, are likely to reinforce stereotypical expectations. Such a situation may occur, for example, if an employee with a disability has job duties considered to be of relatively lesser value to the organization than the job duties of other employees. Research by Mank, Cioffi, and Yovanoff [36] provides additional evidence of the link between status equality and social integration. Mank, et al. examined the “typicalness” of the employment experiences of supported employees compared to those of colleagues. Typicalness was operationalized as similarity in the way jobs are acquired, orientation and training processes, work roles, and compensation packages. Mank, et al. found that more typical employment features were associated with higher levels of social interaction for supported employees. Taken together, these findings highlight the need for additional efforts to be directed toward establishing equal-status relationships with work peers.

In sum, intergroup contact theory suggests concrete strategies for structuring jobs in ways that enhance opportunities for social inclusion. Structuring work relationships between employees with disabilities and their coworkers to foster social integration may provide a more subtle approach to enhancing integration than commonly used interventions such as social skills training and direct intervention with coworkers. Of course, designing jobs in ways that “set the

stage” for the development of coworker relationships, as part of an intervention package that incorporates multiple intervention approaches, seems to offer the greatest potential for successful integration.

#### ***4.2. Limitations and future research***

Several limitations of this study should be noted. First, the data collected for the study came exclusively from interviews with six employment specialists and observations of six employees with disabilities at their community worksites. It is possible that the experiences and perceptions of the interviewed employment specialists differ from the experiences and perceptions of other employment specialists or from those of the employees with disabilities, coworkers, and supervisors discussed in the interviews. It is also possible that the work and social relationships observed at the worksites are not representative of other supported employment placements. Future research should include extended worksite observations and semi-structured interviews with employees with disabilities, their coworkers, and their supervisors to more fully explore the unique perspectives of individuals from each group.

Second, intergroup contact theory primarily addresses the role of dyadic relationships between employees with disabilities and their colleagues. Important issues related to the broader workplace culture, such as common informal gathering places and social customs that encourage social interaction, may go largely undetected in this type of analysis. Subsequent to data collection for the present study, a quantitative study was undertaken to test the applicability of intergroup contact theory to the integrated workplace [43]. This follow-up study took into account the broader workplace culture in predicting social integration outcomes. Findings revealed that both conditions of contact and workplace culture play a role in predicting

employees' level of social participation and coworker acceptance of an employee with a disability.

Third, it is not clear from study results which conditions of intergroup contact theory are essential to integration, which conditions merely facilitate the observed relationship between contact and integration, and which conditions mediate this relationship. For example, rather than being a condition of contact, stereotype disconfirmation may actually be the process by which opportunity to interact and outcome dependence lead to social acceptance. It is also unclear whether an employee's job situation must fully meet all conditions of contact in order for him or her to become socially integrated at work. The results of this study suggest that this is not the case. Few focal employees held positions equal in status to those of their coworkers, yet many were considered by their employment specialists to be socially included. In support of this interpretation, a recent meta-analytic review of the literature on the effects of intergroup contact on prejudice [47] suggests that contact alone is sufficient to reduce prejudice but also that the positive effects of contact are enhanced when optimal conditions are present in the contact situation. Future research in this area is also needed.

In conclusion, study findings support the application of intergroup contact theory to our understanding of the social integration of employees with intellectual disabilities in community work settings. Although social integration is a complex phenomenon dependent upon a range of personal, relational, and setting characteristics, the structure of work relationships with coworkers appears to play a significant role in the acceptance of employees with disabilities. Structuring work relationships to meet the conditions of intergroup contact theory can set the stage for social inclusion, thus enabling employees with disabilities, such as Jodie and Jack, to become valued as colleagues and valued as individuals.

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## References

- [1] G.W. Allport, *The Nature of Prejudice*, Cambridge, MA: Addison-Wesley, 1954.
- [2] Y. Amir, The role of intergroup contact in change of prejudice and ethnic relations, in: *Towards the Elimination of Racism*, P.A. Katz, ed, New York: Pergamon, 1976, pp. 245–308.
- [3] C. Bigby, Known well by no-one: Trends in the informal social networks of middle-aged and older people with intellectual disability five years after moving to the community, *Journal of Intellectual & Developmental Disability* **33** (2008), 148–157.
- [4] D. Biklen, The myth of clinical judgment, *Journal of Social Issues* **44** (1988), 127–140.
- [5] F.A. Blanchard, R.H. Weigel and S.W. Cook, The effect of relative competence of group members upon interpersonal attraction in cooperating interracial groups, *Journal of Personality and Social Psychology* **32** (1975), 519–530.
- [6] R.C. Bogdan and S.K. Biklen, *Qualitative Research for Education: An Introduction to Theory and Methods*, 5<sup>th</sup> ed., Boston: Allyn & Bacon, 2007.
- [7] M.B. Brewer and R.J. Brown, Intergroup relations, in: D.T. Gilbert, S.T. Fiske and G. Lindzey, eds, *The Handbook of Social Psychology*, 4<sup>th</sup> ed., Vol. 2, New York: McGraw-Hill, 1998, pp. 554–594.
- [8] L. Brown, B. Shiraga, J. York, K. Kessler, B. Strohm, P. Rogan, M. Sweet, K. Zanella, P. Van Deventer, and R. Loomis, Integrated work opportunities for adults with severe handicaps: The extended training option, *Journal of The Association for Persons with Severe Handicaps* **9** (1984), 262–269.
- [9] J. Butterworth, D. Hagner, D. Helm and T. Whelley, Workplace culture, social interactions, and supports for transition-age young adults, *Mental Retardation* **38** (2000), 342–353.

- [10] J. Chadsey, Adult social relationships, in: S.L. Odom, R.H. Horner, M.E. Snell and J. Blacher, eds, *Handbook of Developmental Disabilities*, New York: Guilford Press, 2007, pp. 449–466.
- [11] J.G. Chadsey and S. Beyer, Social relationships in the workplace, *Mental Retardation and Developmental Disabilities Research Reviews* 7 (2001), 128–133.
- [12] J.G. Chadsey, D. Linneman, F.R. Rusch and R.E. Cimera, The impact of social integration interventions and job coaches in work settings, *Education and Training in Mental Retardation and Developmental Disabilities* 32 (1997), 281–292.
- [13] J.G. Chadsey, D.L. Shelden, R.E. Cimera and J.R. Horn, Personal and environment characteristics that predict successful social integration for employees with disabilities, in: J.G. Chadsey and D.L. Shelden, eds, *Promoting Social Relationships and Integration for Supported Employees in Work Settings*, Urbana, IL: University of Illinois at Urbana-Champaign, Transition Research Institute, 1998, pp. 74–99.
- [14] J. Chadsey-Rusch and L.W. Heal, Building consensus from transition experts on social integration outcomes and interventions, *Exceptional Children* 62 (1995), 165–187.
- [15] C. Chambless, *The relationship between natural supports and social integration in supported employment*, PhD. Dissertation, University of Utah, 1996.
- [16] E.G. Cohen, The desegregated school: Problems in status power and interethnic climate, in: N. Miller and M. Brewer, eds, *Groups in Contact: The Psychology of Desegregation*, New York: Academic Press, 1984, pp. 77–96.
- [17] S.W. Cook, Interpersonal and attitudinal outcomes in cooperating interracial groups, *Journal of Research and Development in Education* 12 (1978), 97–113.

- [18] S.W. Cook, Experimenting on social issues: The case of school desegregation, *American Psychologist* **40** (1985), 452–460.
- [19] J.W. Creswell, *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*, Thousand Oaks, CA: Sage, 1998.
- [20] R.A. Cummins and A.L.D. Lau, Community integration or community exposure? A review and discussion in relation to people with intellectual disability, *Journal of Applied Research in Intellectual Disabilities* **16** (2003), 145–157.
- [21] Developmental Disabilities Assistance and Bill of Rights Act of 2000, 42 U.S.C. 15001 *et seq.*
- [22] R.B. Edgerton, *The Cloak of Competence*, Berkeley, CA: University of California Press, 1967.
- [23] R.B. Edgerton, A case of delabelling: Some practical and theoretical implications, in: L.L. Langness and H.G. Levine, eds, *Culture and Retardation*, Dordrecht: Reidel, 1986, pp. 101–126.
- [24] B. Ferguson, J. McDonnell, J. and C. Drew, Type and frequency of social interaction among workers with and without mental retardation, *American Journal on Mental Retardation* **97** (1993), 530–540.
- [25] R. Fillyar and R. Pernice, Workplace culture analysis where people with intellectual disabilities work: A case study approach, *Journal of Intellectual and Developmental Disability* **30** (2005), 176–180.
- [26] C. Glesne, *Becoming Qualitative Researchers: An Introduction*, 2<sup>nd</sup> ed., New York: Addison Wesley Longman, 1998.
- [27] E. Goffman, *Stigma*. Englewood Cliffs, NJ: Prentice-Hall, 1963.
- [28] E.G. Guba and Y.S. Lincoln. *Effective Evaluation*. San Francisco: Jossey-Bass, 1981.

- [29] D. Hagner, *The Social Integration of Supported Employees: A Qualitative Study*. Syracuse, NY: Center on Human Policy, 1989.
- [30] D. Hagner, *Workplace Culture Survey*, Durham, NH: New Hampshire, Institute on Disability, 1994.
- [31] D. Hagner, *Coffee Breaks and Birthday Cakes: Evaluating Workplace Cultures to Develop Natural Supports for Employees with Disabilities*, St. Augustine, FL: Training Resource Network, 2000.
- [32] D. Hagner and D. DiLeo, *Working Together: Workplace Culture, Supported Employment and Persons with Disabilities*, Cambridge, MA: Brookline Books, 1993.
- [33] D. Hagner, P. Rogan and S. Murphy, Facilitating natural supports in the workplace: Strategies for support consultants, *Journal of Rehabilitation* **58** (1992), 29–34.
- [34] A. Jahoda, J. Kemp S. Riddell and P. Banks, Feelings about work: A review of the socio-emotional impact of supported employment on people with intellectual disabilities, *Journal of Applied Research in Intellectual Disabilities*, **21** (2008), 1–18.
- [35] D. Mank, The underachievement of supported employment: A call for reinvestment, *Journal of Disability Policy Studies* **5** (1994), 1–24.
- [36] D. Mank, A. Cioffi and P. Yovanoff, Analysis of the typicalness of supported employment jobs, natural supports, and wage and integration outcomes, *Mental Retardation* **35** (1997), 185–197.
- [37] D. Mank, A. Cioffi and P. Yovanoff, Direct support in supported employment and its relation to job typicalness, coworker involvement, and employment outcomes, *Mental Retardation* **38** (2000), 506–516.

- [38] S.B. Merriam, *Case Study Research in Education: A Qualitative Approach*. San Francisco: Jossey-Bass, 1988.
- [39] M.B. Miles and A.M. Huberman, *Qualitative Data Analysis: An Expanded Sourcebook*, 2<sup>nd</sup> ed, Thousand Oaks, CA: Sage, 1994.
- [40] S. Murphy and P. Rogan, *Developing Natural Supports in the Workplace: A Practitioner's Guide*, St. Augustine, FL: Training Resource Network, 1994.
- [41] D.G. Myers, Close relationships and quality of life, in: D. Kahneman, E. Diener and N. Schwarz, eds, *Well-Being: The Foundations of Hedonic Psychology*, New York: Russell Sage Foundation, 1999, pp. 374–391.
- [42] F. Myers, A. Ager, P. Kerr and S. Myles, Outside looking in? Studies of the community integration of people with learning disabilities, *Disability & Society* **13** (1998), 389–413.
- [43] J. Novak and P. Rogan, Social integration in employment settings: Application of intergroup contact theory, *Intellectual and Developmental Disabilities* **48** (2010), 31–51.
- [44] W. Parent, J. Kregel and P. Wehman, *Vocational Integration Index: Measuring Social Integration of Workers with Disabilities*, Richmond, VA: Virginia Commonwealth University, Rehabilitation Research and Training Center on Workplace Supports and Job Retention, 2007.
- [45] W. Parent, J. Kregel and P. Wehman, *Vocational Integration Index*, Boston: Andover, 1992.
- [46] T.F. Pettigrew, Intergroup contact theory, *Annual Review of Psychology* **49** (1998), 65–85.
- [47] T.F. Pettigrew and L.R. Tropp, A meta-analytic test of intergroup contact theory, *Journal of Personality and Social Psychology* **90** (2006), 751–783.
- [48] P. Rogan, D. Hagner and S. Murphy, Natural supports: Reconceptualizing job coach roles, *Journal of the Association for Persons with Severe Handicaps* **18** (1993), 275–281.

- [49] M. Rothbart and O.P. John, Social categorization and behavioural episodes: A cognitive analysis of the effects of intergroup contact, *Journal of Social Issues* **41** (1985), 81–104.
- [50] R.M. Ryan and E.L. Deci, On happiness and human potentials: A review of research on hedonic and eudaimonic well-being, *Annual Review of Psychology* **52** (2001), 141–166.
- [51] R.L. Schalock, The concept of quality of life: What we know and do not know, *Journal of Intellectual Disability Research* **48** (2004), 203–216.
- [52] K. Storey and L. Lengyel, Strategies for increasing interactions in supported employment settings: A review, *Journal of Vocational Rehabilitation* **17** (1992), 231–237.
- [53] S.J. Taylor and R. Bogdan, *Introduction to Qualitative Research Methods: A Guidebook and Resource*, 3<sup>rd</sup> ed., New York: John Wiley & Sons, 1998.
- [54] P. Wehman and J. Kregel, At the crossroads: Supported employment a decade later, *Journal of The Association for Persons with Severe Handicaps* **20** (1995), 286–299.
- [55] W. Wolfensberger, *The Principal of Normalization in Human Services*, Toronto: National Institute on Mental Retardation, 1972.

## Appendix

### Interview Schedule

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#### SELECTION OF EXTREME CASES

1. Think of a supported employee with whom you are working who has very good/poor relationships with his or her coworkers, someone you would describe as “socially well-integrated”/“socially isolated.” Why would you describe these relationships as good/poor?
2. Why do you think this person is socially well integrated/isolated?
  - a. Are there relevant characteristics of the supported employee? (e.g., very outgoing personality)
  - b. Are there relevant characteristics of the supervisor and/or coworkers? (e.g., supervisor is very supportive of the supported employee)
  - c. Are there relevant characteristics of the worksite culture? (e.g., coworkers are all young and joke around with one another)
  - d. Are there relevant characteristics of the job position? (e.g., supported employee delivers mail to everyone in the building)
3. Which of these do you think is the main reason(s) for good/poor workplace inclusion and why?

#### WORK RELATIONSHIP STRUCTURES

1. How many other employees work in the supported employee’s immediate work area?
  2. What is the supported employee’s work schedule and how is it similar to, or different from, the schedules of coworkers?
  3. What job tasks does the supported employee perform and how are they similar to, or different from, those of coworkers?
  4. To what extent do coworkers depend upon the supported employee to get their own work done?
  5. Does the supported employee job require him/her to communicate with coworkers throughout the
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workday?

6. To what extent does the supervisor include the supported employee in the typical requirements and activities of the workplace?

#### SOCIAL RELATIONSHIPS

1. Do the supported employee and coworkers talk about work-related and/or nonwork-related topics?
2. Where and with whom does the supported employee take breaks and/or lunch?
3. Is the supported employee involved in social activities of the workplace?
4. Do the supported employee and coworker(s) get together outside of work?
5. Is the supported employee involved in running jokes or rituals at the work site?
6. Do the coworkers or supervisor treat the supported employee in any way that is different from the way other employees are treated?
7. What indications of satisfaction or dissatisfaction has the supported employee expressed toward his/her social relationships with coworkers?

#### OTHER

1. Has the supported employee held other jobs? If so, how did they compare to this one in terms of work relationships and social relationships?
  2. How typical are the relationships between this supported employee and his/her coworkers compared to the relationships of other supported employees with whom you have worked?
  3. How do workplace and job design characteristics of the socially integrated supported employees differ from those of the socially isolated supported employees?
  4. Discuss examples of any supported employees whose job situations *don't* seem to fit the pattern(s) discussed in your response to the previous question?
  5. Hypothetically, what kind of job would you develop if you wanted to ensure that an employee had little chance of making friends? In other words, how would you sabotage a job?
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Table 1

*Focal Employees with Disabilities*

Employee	Age	Disability	Position	Job tenure (months)	Hrs/wk
<u>Socially-integrated</u>					
Benjamin	25	autism; nonverbal	small parts assembler in a factory <sup>a</sup>	36	12.5
Chris	60	mild ID	recyclables sorter at a waste management plant	72	27.5
Colleen	33	mild ID; vision impairment	bagger and carryout at a grocery store	31	30
Dan	28	traumatic brain injury	small parts assembler in a factory <sup>a</sup>	6	12.5
Edward	49	cerebral palsy; hearing impairment	janitor at an animal laboratory	2	17.5
Jack	40	severe ID; nonverbal	small parts assembler in a factory <sup>a</sup>	29	12.5
Jodie	28	Down syndrome	filing clerk at a university	29	17.5
Lynn	46	moderate ID; arthritis; speech impairment	dishwasher at a restaurant	96	20
Nancy	48	mild ID	janitor at a mall	24	6
Renee	22	borderline ID; spina bifida	office assistant	24	6
Ronnie	44	Down syndrome	janitor at newspaper company <sup>a</sup>	48	10

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Socially-isolated

Beth	46	mild ID; seizure disorder	parts packager at a factory	120	40
Doris	41	mild ID; mental illness	office clerk for a small business	24	3
George	32	mild ID	janitor at a video store	4	10
Lynette	46	mild ID	dietary aide at a nursing home	288	25
Matt	45	mild ID; nonverbal	janitor at a motor pool	18	15
Nancy	58	mild ID	food prep assistant at a preschool	7	16
Patricia	41	mild ID; mental illness	instrument cleaner in a laboratory	24	8
Rick	27	mild ID; hearing impairment	wire and rod cutter in a concrete factory	9	40
Samantha	22	mild ID; cerebral palsy	janitor at a mall	24	6
Todd	25	mild ID	janitor at a pharmacy <sup>a</sup>	12	3
Tyrone	29	autism	janitor at a newspaper company <sup>a</sup>	48	10

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*Note.* ID = intellectual disability

<sup>a</sup>Group placements.

## Figure Caption

*Figure 1.* Extent to which each employee's job situation satisfies the conditions outlined in intergroup contact theory.

	Opportunity to Interact	Stereotype Disconfirmation	Status Equality	Outcome Dependency	Authority Support
<b>Socially Integrated</b>					
Benjamin	●	●	○	●	●
Chris	●	●	●	●	●
Colleen	●	●	●	●	●
Dan	●	●	○	●	●
Edward	●	●	●	●	●
Jack	●	●	○	●	●
Jodie	●	●	●	●	●
Lynn	●	●	●	●	●
Nancy	●	●	○	●	○
Renee	●	●	○	●	○
Ronnie	●	●	○	●	●
<b>Socially Isolated</b>					
Becky	●	○	●	●	●
Doris	○	○	○	○	○
George	●	○	○	○	○
Lynette	●	○	●	●	○
Matt	●	○	○	○	●
Nancy	●	○	○	●	○
Patricia	●	○	○	○	○
Rick	●	○	●	●	●
Samantha	●	○	○	○	○
Todd	●	○	○	●	○
Tyrone	○	○	○	●	●

- Meets the condition
- Partially meets the condition
- Does not meet the condition