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Employee Engagement and Commitment to Two Australian Autism Employment Programs: Associations with Workload and Perceived Supervisor Support

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ABSTRACT

Purpose – Although there is growing academic and business interest in autism employment programs, few studies have examined employee (manager and co-worker) attitudes toward these programs. This study examined the impact of workload changes (a job demand) and perceived supervisor support (a job resource) on commitment to the program and employee engagement more broadly.

Design/methodology/approach – A total of 229 employees from two Australian public sector organizations completed a survey about the autism employment program in their organization.

Findings – Perceived workload increases were associated with lower affective commitment and higher continuance commitment to the program. Perceived supervisor support was associated with higher affective commitment to the program and employee engagement, but lower continuance commitment to the program. Perceived supervisor support moderated the effect of workload increase on employee engagement, but not in the expected direction.

Originality/value – This research helps to fill a gap in the autism employment literature by focusing on commitment toward autism employment programs among existing employees. The research helps to provide a more complete and nuanced view of these programs within their broader organizational context.

Keywords: autism employment, job demands and resources, affective commitment, employee

engagement, supported employment, neurodiversity

Employee Engagement and Commitment to Two Australian Autism Employment Programs: Associations with Workload and Perceived Supervisor Support

Autism spectrum disorder (American Psychiatric Association, 2013)[1] is a lifelong neurodevelopmental condition present in 1 to 2 percent of the population (Baio *et al.*, 2018). Despite reporting a strong desire to work (Chen *et al.*, 2015), autistic adults face significant challenges finding and maintaining employment (van Heijst and Geurts, 2015) and high underemployment and unemployment rates (e.g., Baldwin *et al.*, 2014). Recognizing the potential social and economic benefits of employing more autistic people (Austin and Pisano, 2017; Donovan, 2008), there are a growing number of supported employment programs that directly employ and/or improve employability of autistic individuals (Annabi *et al.*, 2019; Austin and Pisano, 2017). Although research has demonstrated that these programs have benefits for autistic individuals (Flower *et al.*, 2019; Hedley *et al.*, 2018; Remington and Pellicano, 2019), few studies have examined these programs within their broader organizational context (Vogus and Taylor, 2018), including the impact on other employees (i.e., co-workers and managers). This is an important gap as sustainable autism employment depends on inputs from a large ecosystem (Nicholas *et al.*, 2018), including other employees. The current research helps to fill this gap by examining employees' attitudes toward their organization's autism employment program. We used Job Demands-Resources theory (Bakker and Demerouti, 2017) to conceptualize the impact of program on their commitment to the program and employee engagement more broadly. Before reviewing our theoretical rationale and hypothesis development, we briefly discuss supported employment within the context of autism.

Autism and Supported Employment

Although some autistic people are successful in open employment, research suggests that many autistic individuals would like and/or would benefit from additional workplace support (Hedley

[1]There is significant variability in preferences for describing autism (Bury *et al.*, 2020; Kenny *et al.*, 2016). Consistent with the Publication Manual of the American Psychological Association 7th edition, we use both person-first (e.g., person on the autism spectrum) and identity-first (e.g., autistic person) language.

et al., 2018; Nicholas *et al.*, 2019). Supported employment programs provide individuals on the autism spectrum, and other disabilities, with competitive wages and ongoing support in an integrated work environment (Gerhardt *et al.*, 2014). Prior research indicates that supported employment programs use both individual-level and organization-level strategies to support autistic employees (Rashid *et al.*, 2017), and these programs tend to improve employment and social outcomes for autistic adults (Hedley *et al.*, 2017). For example, qualitative research with autistic employees in DXC Technology's Dandelion Program (Hedley *et al.,* 2018) found that the autistic employees perceived the program supports positively and benefitted both economically and psychologically from the program. Similarly, autistic interns in a supported internship program at Deutsche Bank (Remington and Pellicano, 2019) mentioned increased confidence and appreciation for the personalized supports in the program.

Although research has demonstrated that autistic people perceive these programs positively, there is a paucity of research examining how these programs are perceived within the broader organization, including attitudes and experiences of existing employees. This is an important gap because supportive attitudes and behaviors can improve the sustainability of autism employment programs. For example, employees who are highly committed to a program are more likely to devote extra time to it and champion it externally (Herscovitch and Meyer, 2002), and Spoor and Hedley (2020) found that employees who were highly supportive of their organization's autism employment program provided extra support to their autistic colleagues and spoke favorably about the program outside of work. Thus, supportive employees can augment formal support services for autistic staff (Gerhardt *et al.*, 2014) and facilitate greater inclusion and social integration of their disabled colleagues (Colella and Bruyère, 2011; Schur *et al.*, 2009). Thus, it is important to encourage positive employee attitudes toward autism employment programs and develop a better understanding of the challenges and facilitators of these attitudes.

Theoretical Rationale

To understand the potential impact of autism employment programs on employee attitudes,

we draw on Job Demands-Resources (JD-R) theory (Bakker and Demerouti, 2017; Schaufeli and Taris, 2014). The theory outlines a range of negative factors (i.e., job demands) that may undermine performance and well-being at work, but it also highlights positive factors (i.e., resources) that can encourage employees to flourish. Job demands are any aspect of the job (physical, psychological, social, or organizational) that requires sustained effort and impacts physiological or psychological outcomes (Bakker and Demerouti, 2017). Example job demands include workload, time pressure, and emotional demands (Schaufeli and Taris, 2014). Job demands, particularly in the absence of sufficient resources, are normally linked to negative job outcomes, including reduced engagement and lower organizational commitment (Jong and Ford, 2016; Schaufeli and Bakker, 2004).

Prior qualitative research examining autism employment programs suggests that a common demand for existing employees is an increase, or shift, in workload (Flower *et al.*, 2019; Hedley *et al.*, 2018). For example, comments from existing employees (coworkers and managers) in one program reflected that the accommodations sometimes increased their own workload or time to complete tasks (Spoor and Hedley, 2020). Although these employees generally discussed the program favorably and did not complain about the additional workload, they reported observing negativity among other employees, noting that these employees perceived that their autistic co-workers received special treatment. This observation is consistent with research demonstrating that accommodations for employees with disability can be perceived by others as unfair (Colella *et al.*, 2004). Coworkers and managers in the Deutsche Bank internship program (Remington and Pellicano, 2019) also made comments suggesting that working with the autistic interns took more time, ranging from repeating instructions to supporting their well-being. Finally, Richards *et al.* (2019) found that supervisors of autistic staff experienced demands on their time, resources, and interaction styles that sometimes led to high levels of exhaustion.

Job resources refer to any aspect of the job (physical, psychological, social, or organizational) that facilitate individuals' personal growth and development (Bakker and Demerouti, 2017). Example job resources include quality of relationships with supervisor and positive feedback (Schaufeli and

Taris, 2014). Resources positively influence job performance through increased motivation, which is reflected in improved job attitudes (e.g., commitment) and engagement (i.e., energy, enthusiasm). In the current research we focused on the job resource of perceived supervisor support (Eisenberger *et al.*, 2002). Perceived supervisor support reflects the extent to which employees feel that their supervisor, and by extension their organization, cares for them and values their contributions. Prior research has demonstrated that a positive supervisory relationship improved evaluations of an organizational change program (van Emmerik *et al.*, 2009). Thus, we argue that perceived supervisor support may contribute to positive attitudes toward the autism employment program. Moreover, consistent with the buffering hypothesis in JD-R theory (Bakker *et al.*, 2005), perceived supervisor support may also offset some negative effects of increased workload.

In the current research, we examined the impact of increased workload and perceived supervisor support on employee engagement more broadly, and their commitment to the autism employment program more specifically. Commitment can be broadly defined as "a force that binds an individual to a course of action of relevance to one or more targets" (Meyer and Herscovitch, 2001). Commitment reflects three distinct but overlapping mindsets (Herscovitch and Meyer, 2002; Meyer and Herscovitch, 2001): affective, normative, and continuance commitment. Affective commitment to the program reflects emotional attachment and personal support based on its perceived benefits and value to both the person and the organization (Herscovitch and Meyer, 2002). Autism employment programs are often touted as creating shared value, by increasing inclusion of autistic people whilst also increasing the organization's productivity and innovation (Annabi *et al.*, 2019). Thus, affective commitment to these programs is likely to be high due to their perceived benefits and value to the organization, but an increase in workload may diminish the personal benefits to employees. However, a supportive supervisor may help to buffer this negative effect of increased workload. We propose the following hypotheses for affective commitment:

Hypothesis 1a: Perceptions of increased workload will be negatively related to affective commitment to the program.

Hypothesis 1b: Perceived supervisor support will be positively related to affective commitment to the program.

Hypothesis 1c: The relationship between increased workload and affective commitment to the program will be moderated by perceived supervisor support, such that the relationship will be weaker when supervisor support is high.

Although we expect that increased workload due to the autism employment program will undermine employees' emotional attachment to it, the increased workload could have the ironic effect of increasing more calculative and rational forms of commitment. Continuance commitment to the program reflects calculative support for it (Herscovitch and Meyer, 2002; Meyer *et al.*, 2002; Meyer and Herscovitch, 2001), including awareness of the potential costs of discontinuing support (Powell and Meyer, 2004). Continuance commitment is strongly linked to Becker's (1960) definition of commitment as the result of individuals making side bets that link their extraneous interests to a consistent line of activity (p. 32). Thus, commitment increases as side bets or other forms of investment in the program increase (Powell and Meyer, 2004; Rusbult and Farrell, 1983). For example, Becker (1960) suggested that as a person adjusts to a role or position, they may inadvertently become less fit for other positions. In the context of autism employment, employees may need to increase their effort and workload to accommodate the working styles of their autistic co-workers and the specific program design, but over time they may become accustomed to this new way of work and may even find that it benefits them. For example, Spoor and Hedley (2020) found that due to the high level of supports and process improvements that resulted from the autism employment program, some non-autistic co-workers perceived that their work became easier over time. More generally, the increased workload and effort becomes an investment that would be lost if the program fails (Rusbult and Farrell, 1983), thus increasing continuance

commitment to it.[2] Perceived supervisor support may also increase employees' sense that they can openly express both positivity and negativity toward the program, thus decreasing continuance commitment to the program:

Hypothesis 2a: Perceptions of increased workload will be positively related to continuance commitment to the program.

Hypothesis 2b: Perceived supervisor support will be negatively related to continuance commitment to the program.

Hypothesis 2c: The relationship between increased workload and continuance commitment to the program will be moderated by perceived supervisor support, such that the relationship will be weaker when supervisor support is high.

Normative commitment to the program reflects support for it due to a sense of moral obligation (Herscovitch and Meyer, 2002; Meyer and Herscovitch, 2001), based on adherence to social norms rather than internalized moral judgment (Gonzalez and Guillen, 2008). Normative commitment is also linked to the accumulation of side bets (Becker, 1960; Powell and Meyer, 2004), particularly those related to general social expectations and self-presentation concerns. Within public sector organizations (where the current research was conducted), there tend to be strong norms to support diversity and inclusion, and autism employment program may be one specific example (Spoor and Hedley, 2020). Thus, there may be a social expectation to support the autism employment program, and those employees who feel they have worked harder due to the program may also continue to support it to maintain a consistent self-image. Normative commitment tends to be positively correlated with affective commitment and tends to show a similar pattern of relationships, albeit often weaker, to the antecedents and consequences of affective commitment

[2]Although continuance commitment to a role or organization tends to have a non-significant correlation with affective commitment (Gellatly *et al.*, 2006; Meyer *et al.*, 2002), a recent meta-analysis of research using Herscovitch and Meyer's (2002) commitment to change measure found that continuance commitment to change was moderately and negatively correlated with affective commitment to change (Bouckenooghe *et al.*, 2015).

(Meyer *et al.*, 2002; Meyer and Parfyonova, 2010). However, some researchers (Gonzalez and Guillen, 2008) have suggested that compared to affective commitment, normative commitment reflects a more rational and logical attachment, and it has been linked to lower citizenship and discretionary behaviours compared to affective commitment (Gellatly *et al.*, 2006; Meyer and Parfyonova, 2010). Thus, like continuance commitment to the program, normative commitment to the program may reflect a perceived obligation to support it rather than genuine affection:

Hypothesis 3a: Perceptions of increased workload will be positively related to normative commitment to the program.

Hypothesis 3b: Perceived supervisor support will be negatively related to normative commitment to the program.

Hypothesis 3c: The relationship between increased workload and normative commitment to the program will be moderated by perceived supervisor support, such that the relationship will be weaker when supervisor support is high.

Although employee engagement is not directly 'about' the autism employment program, Austin and Pisano (2017) have argued that increasing neurodiversity, such as through autism employment programs, would lead to greater broader employee engagement within the organization. However, as employee engagement has been shown to be related to the balance of job demands and resources (Jong and Ford, 2016; Schaufeli *et al.*, 2009; Schaufeli and Bakker, 2004), any changes in this balance due to increased demands (i.e., workload) could temper the benefits on employee engagement. Thus, we included employee engagement in the present research to explore how increases in workload due to the autism employment program relate to attitudes toward the organization more broadly. Employee engagement reflects the extent to which employees are absorbed and attentive to their roles and is based in the underlying exchange relationship between employees and the organization (Saks, 2006). To the extent that the organization provides employees with relevant resources and support, employees provide high levels of engagement in return. We expect the pattern of relationships for engagement to be similar to the pattern for

affective commitment to the program:

Hypothesis 4a: Perceptions of increased workload will be negatively related to employee engagement.

Hypothesis 4b: Perceived supervisor support will be positively related to employee engagement.

Hypothesis 4c: The relationship between increased workload and employee engagement will be moderated by perceived supervisor support, such that the relationship will be weaker when supervisor support is high.

METHOD

The study was approved by La Trobe University Human Research Ethics Committee before data collection. Participation was voluntary and informed consent was obtained. Data that support the findings of this study are available from the corresponding author, upon reasonable request.

Participants

Participants were current employees (96 women, 131 men, 2 who did not indicate gender) in two public sector organizations within Australia (193 from Organization A; 36 from Organization B). Participants' ages were distributed across age categories (7.4% aged under 25, 24.91% aged 25-34, 31.4% aged 35-44, 24.9% aged 45-54, 11.4% aged 55 or over). Most participants were employed full-time (86.0%) and for more than five years (62.0%).

Research Context – Two Autism Employment Programs

The research was conducted in two Australian public sector organizations that had recently implemented separate autism employment programs (see Flower *et al.,* 2019; Hedley *et al.,* 2018, 2019 for more information about both programs). Data were collected from two organizations to increase generalizability of the findings. Both organizations administer health and social welfare programs at the federal (Organization A) and State (Organization B) level and are very large (>10,000 employees each). The employment programs were similar in that they both used modified human resource management protocols to provide the autistic employees with high-level support and

accommodations throughout the employment process. These changes were broadly consistent with recommendations for increasing inclusion of employees with disabilities (Stone and Colella, 1996). Both programs also included broad autism training and support for other organization employees, with specialized training for employees working very closely with the program. Autistic employees in Organization A worked in software testing roles on 3-year contracts; autistic employees in Organization B worked in records management roles on 2-year contracts. Both Organization A and Organization B included on-going, specialized support over the course of the respective programs, although the support model differed at the two organizations. At the time of data collection, Organization A had employed 37 autistic people at three sites in different Australian states, and Organization B had employed 8 autistic people at one site.

Procedure

All data were collected online using Qualtrics. The study was advertised as a survey about employees' experiences with and perceptions of their organization's autism employment program. Upper management at each organization sent email invitations to all staff who currently or had previously worked in the same building location to the autistic staff employed via the programs. This approach was designed to recruit participants with varying degrees of interaction with the program and thereby a range of perspectives. Participation was voluntary and anonymous, and participants were not compensated, in accordance with guidelines for government research which prohibits compensation for research participation.

The survey was accessed 360 times, and 326 individuals provided consent and commenced the survey. Ninety-five individuals discontinued the survey after providing demographic data, leaving 229 participants in the final sample. Inspection of the demographic profiles (e.g., gender, job role) of the final sample and those who only provided demographic data were virtually identical (see Supplementary Materials A).

The survey included measures assessing participants' perceptions of their workload change since the program's introduction, perceived supervisor support, commitment to the program, and

employee engagement. Participants answered standard demographic questions and rated the extent of their knowledge and interaction with the program. The survey also included additional measures for exploratory purposes that are not discussed further.

Several procedural steps were taken to reduce the effects of common-method bias (Podsakoff *et al.*, 2003). The measures were methodologically separated and presented on different pages, and several response formats were used, including some relatively objective measures (e.g., program interaction).

Measures

Program knowledge and interaction. Participants' knowledge about the autism employment program mas measured on a 7-point scale (1 = *no knowledge (e.g., never heard of it)*, 4 = *average knowledge,* 7 = *high knowledge*). Participants also indicated how frequently they interacted with members of the autism employment program during a typical week on a 5-point scale (1 = *never,* 2 = *1-2 times per week*, 3 = *3-4 times per week*, 4 = *every day*, 5 = *more than once a day*).

Workload change. Perceived workload change was measured with five items developed for this study. Participants were instructed that the questions related to how their work had been affected by the autism employment program. Participants rated the extent to which they had to take on additional responsibilities, had been more productive in their work, had been unable to focus on their work, had been less efficient in their work, and had an increase in their workload on a 7-point Likert-type scale (1 = *strongly disagree* to 7 = *strongly agree*). Responses were averaged (α = .84), with higher scores indicating increased workload.

Perceived supervisor support. The extent to which participants felt valued and cared for by their supervisor was measured with Eisenberger *et al.*'s (2002) three-item measure of perceived supervisor support. A sample item is 'My supervisor takes pride in my accomplishments at work'. Responses were given on a 7-point Likert-type scale (1 = *strongly disagree* to 7 = *strongly agree*) and were averaged (α = .97), with higher scores indicating higher levels of supervisor support.

Commitment to the program. Rather than modify the standard organizational commitment measure that focuses on commitment toward an organization or role (Allen and Meyer, 1990), we adapted Herscovitch and Meyers' (2002) commitment to change measure. The items in the commitment to change measure focuses on complying with the program requirements rather than remaining with the organization, thus we believe it better reflects commitment to the autism employment program. We replaced the word 'change' with the program name. Six items measured each form of commitment, and responses were given on a 7-point Likert-type scale (1 = *strongly disagree* to 7 = *strongly agree*). An example affective commitment item is 'I believe in the value of the [employment program]'; an example normative commitment item is 'I would feel guilty about opposing the [employment program]'; and an example continuance commitment item is 'I have too much at stake to resist the [employment program]'. Cronbach's alphas ranged from .80 to .93.

Employee engagement. Employee engagement was measured with the 11-item engagement scale (Saks, 2006), which measures engagement with the specific job role and with the broader organizational role. Sample items include 'Sometimes I am so into my job that I lose track of time' and 'Being a member of this organization is very captivating'. Responses were given on 7-point Likert-type scale (1 = *strongly disagree* to 7 = *strongly agree*) and were averaged (α = .92), with higher scores indicating more employee engagement.

RESULTS

Preliminary Analyses

Preliminary analyses were conducted to screen the data and examine simple relationships among the variables. Preliminary analyses also explored the direct effect of participants' demographic characteristics on the measured variables. Results of these analyses are described below.

Data screening. Data were screened for missing variables, outliers, and the assumptions of parametric statistical analysis (Tabachnick and Fidell, 2007). Missing values for measured scales (e.g., affective commitment to the program) ranged from 0 (program knowledge) to 10% (continuance

commitment), and Little's MCAR test was not significant, $\chi^2 = 2206.89$, *df* = 2128, *p* = .11. Thus, missing values were estimated using the expectation-maximisation algorithm in SPSS 25. The distribution for continuance commitment to the program was positively skewed whereas the distribution for affective commitment to the program was negatively skewed. The distributions for affective commitment and continuance commitment to the program were transformed using a logarithmic transformation. The pattern of results was identical for the transformed and original-scaled variables. For ease of interpretation, results are presented in the original scale.

Because all items were measured using a single survey and source, common method bias may be a concern (Podsakoff *et al.,* 2003). As noted previously, we took methodological steps to reduce this bias. In the main analyses using multiple regressions, tolerance and variance inflation factors (VIF) were all within acceptable ranges (tolerance ranged from .64 to .97, VIF ranged from 1.04 to 1.57). We also conducted Harman's single-factor test, which is one indicator of the extent of common method bias (Podsakoff *et al.,* 2003). We submitted the measured items to an exploratory factor analysis with principal axis factoring to extract one factor, which explained only 28.35% of the variance. Thus, although common-method bias may have influenced responses, it is unlikely to explain the underlying relationships observed in this study.

Program interaction. Ninety-seven participants indicated that they never interacted with the employment program in a typical week. To reduce ambiguity in interpretation (i.e., we cannot determine how frequently participants interacted with the program), we excluded participants who selected 'never' in the analyses reported below. We also conducted these analyses with the full sample (see Supplementary Materials B) and obtained a similar pattern of results as reported below.

Correlations among variables. Summary statistics and bivariate correlations for all continuous variables are provided in Table I. Participants who reported working with members of the autism employment program more frequently each week also reported more knowledge about the program (*r* = .46, *p* < .001). Greater interaction and program knowledge were also positively correlated with perceived workload increase (*r*s = .38 and .30, respectively, *p*s < .001) but were

uncorrelated with perceived supervisor support.

[Table I]

Affective commitment to the program was positively correlated with perceived supervisor support (r = .38, p < .001), but negatively correlated with perceived workload increase (r = -.38, p < .001). Continuance commitment to the program was positively correlated with perceived workload increase (r = .39, p < .001) and negatively correlated with perceived supervisor support (r = -.46, p < .001). Employee engagement was positively correlated with perceived supervisor support (r = .46, p < .001).

Effects of participant demographics. We explored whether participants' demographic characteristics predicted responses to the primary measures in a series of one-way analyses of variance (ANOVA) with program interaction; program knowledge; workload changes; perceived supervisor support; affective, normative and continuance commitment to the program; and employee engagement as dependent measures. Post hoc test alphas were adjusted using Bonferonni corrections.

There were no significant effects for participant age groups, Fs < 1.61, ps > .17. The only significant effect for participant gender emerged on continuance commitment to the program, F(1, 128) = 4.55, p = .04. Women reported lower levels of continuance commitment to the program (M = 2.09, SD = 1.43) compared to men (M = 2.73, SD = 1.90). Employment tenure was not a significant predictor of any of the primary measures, although we note that the omnibus F approached significance for program knowledge (p = .08) and affective commitment to the program (p = .06).

There were significant effects of employment type on employee engagement, F(2, 128) = 3.08, p = .05. Part-time staff reported lower levels of employee engagement (M = 3.72, SD = .63) compared to full-time (M = 4.08, SD = 1.26) and other staff (M = 5.03, SD = 1.29). The omnibus F approached significance for perceived supervisor support (p = .07), and the pattern of means

mirrored the pattern for employee engagement.

Finally, there were no significant effects of organization, although the omnibus *F* approached significance for perceived supervisor support, $F(1, 130) = 2.68$, $p = .10$, continuance commitment to the program, $F(1, 130) = 2.69$, $p = .10$, and normative commitment to the program, $F(1, 130) = 3.22$, $p = .08$. Participants from Organization B tended to report higher levels of perceived supervisor support, lower levels of continuance commitment to the program, and higher levels of normative commitment to the program compared to Organization A. The main analysis include data from both organizations. The pattern of results is nearly identical when Organization B (the smaller organization) is excluded (see Supplementary Materials C).

Main Analyses

To examine our hypotheses, we submitted organizational commitment to the program and employee engagement to a series of hierarchical multiple regressions. Continuous predictors were mean-centred to reduce multicollinearity (Aiken and West, 1991). At Step 1, dummy-coded variables representing organization, participant gender, tenure, and employment type were entered as control variables. At Step 2, program interaction and program knowledge were entered, and workload and perceived supervisor support were entered at Step 3. To examine interaction effects, the workload by perceived supervisor support cross-product was entered in Step 4. Results are summarized in Table II. We also explored whether the control variables (e.g., gender, participants' program knowledge) moderated the effects of perceived supervisor support and workload changes on our dependent measures. These results are summarized in Supplementary Materials D.

[Table II]

For affective commitment to the program, the regression coefficients in Step 3 were in the predicted direction for workload ($B = -.37$, $\beta = -.40$, $t = -4.64$, $p < .001$) and perceived supervisor support ($B = .23$, $\beta = .30$, $t = 3.65$, $p < .001$). At Step 4, the workload by perceived supervisor support

interaction was not significant (t = -1.19, p = .24). Thus, Hypotheses 1a and 1b, but not 1c, were supported.

For continuance commitment to the program, the regression coefficients in Step 3 were in the predicted direction for workload (B = .38, β = .30, t = 3.19, p < .002) and perceived supervisor support (B = -.43, β = -.43, t = -4.97, p < .001). At Step 4, the workload by perceived supervisor support interaction was not significant (t < 1). Thus, Hypotheses 2a and 2b, but not 2c, were supported.

For normative commitment to the program, none of the regression coefficients were significant in Steps 3 or 4 (ts < 1), thus Hypotheses 3a to 3c were not supported.

For employee engagement in Step 3, the regression coefficient for workload was not significant (t < 1), but the regression coefficient for perceived supervisor support was significant (B = .27, β = .37, t = 4.08, p < .001). Thus, Hypothesis 4b, but not Hypothesis 4a, was supported. At Step 4, the workload by perceived supervisor support interaction was significant (B = -.14, β = -.32, t = -3.76, p < .001). To interpret this interaction, we plotted simple slopes at the lower and upper observed values for workload and perceived supervisor support (Preacher *et al.*, 2004). As seen in Figure 1, when perceived supervisor support was low, increased workload predicted greater employee engagement (B_{low} = .54). When perceived supervisor support was high, increased workload predicted lower employee engagement (B_{high} = -.36). This pattern was inconsistent with Hypothesis 4c.

[Figure I]

DISCUSSION

We examined employees' attitudes toward autism employment programs in two Australian public sector organizations. Drawing on JD-R theory (Bakker and Demerouti, 2017; Schaufeli and Taris, 2014), we proposed that perceived workload changes (a job demand) and perceived supervisor support (a job resource) would be related to commitment to the program and employee

engagement. Consistent with our hypotheses, to the extent that participants felt that their workload had increased after the employment program, they reported higher levels of continuance commitment but lower levels of affective commitment to the program. In contrast, to the extent that participants perceived higher levels of supervisor support, they reported lower levels of continuance commitment but higher levels of both employee engagement and affective commitment to the program. These results are consistent with the additive effects in JD-R theory (Bakker and Demerouti, 2017). However, there was little evidence for a buffering effect (Bakker *et al.*, 2005) as perceived supervisor support did not moderate the relationship between perceived workload changes in a way predicted by JD-R theory.

We reasoned that affective commitment to the program reflects enthusiastic and genuine support for the autism employment program, whereas continuance commitment (and possibly normative commitment) reflect more obligatory and calculative forms of support (Herscovitch and Meyer, 2002). It is interesting to note that affective commitment to the program tended to be high (M = 6.13 on a 7-point scale), whereas continuance commitment to the program tended to be low (M = 2.42 on a 7-point scale), suggesting that employees may have perceived that the autism employment program was valuable to the organization. However, results suggest that participants' affective and continuance commitment to the program were related to their perceptions that the program had affected their own workload and perceived support from their supervisor. Thus, managers should take caution to ensure that affective commitment to an autism employment program is not taken for granted. One aim of these diversity initiatives is equitable access to employment for groups who face employment barriers (such as autistic people), and these findings highlight a risk to this aim. From the perspective of JD-R theory (Bakker and Demerouti, 2017), managers working within autism employment programs could reduce the risk of perceived workload changes among existing employees by decreasing other demands (e.g., restructuring workload) or increasing resources available to these employees (e.g., supervisor support).

We also note that normative commitment to the program was around the scale midpoint

and was unrelated to perceived workload changes and perceived supervisor support. These moderate and relatively invariant levels of normative commitment to the program could reflect the broader norms for diversity and inclusion within Australian public sector organizations (Spoor and Hedley, 2020). It could be that because the program aligns with the organization's values more broadly, perceived obligation to support the program is not related to more micro-level changes in workload and perceived supervisor support.

We reasoned that employee engagement would be related to perceived changes in demands and resources (Saks, 2006) after the introduction of the autism employment program. We found that employee engagement was positively related to perceived supervisor support but was not related to perceived workload change. The interaction suggested that high perceived supervisor support may have been detrimental to employee engagement when workload was perceived to be high. Although this finding contradicted our hypothesis, we note that van Emmerik *et al.* (2009) found a similar pattern with respect to the workload and supportive leadership (measured via leader-member exchange) in relation to evaluations of an organizational change. They suggested that although a positive relationship with a leader is a form of emotional support, it may not provide the concrete resources employees need to effectively manage the change. Indeed, staff with high workloads may be frustrated by an ostensibly supportive leader who does not provide task support. Thus, we suggest that leaders introducing an autism employment program may benefit from examining social and task support to find an effective balance. This is consistent with contingency theories of leadership (Yukl, 2002) and research on fostering openness to diversity (Moss *et al.*, 2018).

Although not our central focus, we note interesting patterns with respect to program interaction and program knowledge. Program interaction was correlated with program knowledge and workload but was uncorrelated with commitment to the program and employee engagement. We note also that employees with longer employment tenure reported more knowledge of the autism employment program, particularly compared to those who had been employed less than one

year. It could be that the newer employees were preoccupied with their broader organization socialization (Moreland and Levine, 2002) and had less scope to learn about the autism employment program. Program knowledge was also positively correlated with affective commitment to the program and employee engagement but was uncorrelated with continuance and normative commitment to the program. Although the reverse causal direction cannot be ruled out, it could be that as employees became more knowledgeable about the autism employment program and its outcomes, they became more supportive of it. Although more research is needed to examine how autism employment programs affect stereotypes and discrimination directed at autistic people, taken together, these results are consistent with the importance of adequately communicating and training other employees about autistic workers and the details of relevant employment programs (Flower *et al.*, 2019; Rashid *et al.*, 2017).

Limitations and Future Directions

The current research helps to fill an important gap in our understanding of autism employment programs. Although there is emerging and mostly qualitative research on these programs from the perspective of autistic staff, and those who work most closely with them, the broader organizational context has been relatively unexplored. However, the current research was cross-sectional, thus we cannot rule out spurious or reverse causal relationships. Therefore, it is possible that employees who were highly engaged and committed to the program worked harder and thus increased their workload, perhaps to increase the success of the autism employment program and their organization. Moreover, there may have been a relatively restricted range of affective and continuance commitment to the program in the current sample, although restriction of range normally results in an attenuation of correlations (Salkind, 2010). Moreover, although we asked participants specifically about workload changes since the introduction of the employment program, we cannot rule out the potential impact of workload changes due to other organizational changes. Future research could use a longitudinal design to help to tease out these relationships.

Further, although we asked employees about the frequency of interaction with the autistic

staff, we did not enquire about the nature or quality of interaction (e.g., whether social or work related, function of interaction). Future research may benefit from examining more specific types of interaction between staff to provide a more nuanced understanding of interaction and relationships. Future researchers may also examine whether participant demographic variables, including frequency and quality of interaction with the employment program, could moderate the relationships among perceived workload changes and supervisor support (see Supplementary Materials D). However, this was beyond the scope of the present study.

We only measured one job demand and one resource in this study, and it is possible that we did not observe a buffering effect because the job resource measured was not a good match for the job demand, or overall demands outweighed available resources. Although these measures were derived from theory and prior research, future research should explore a broader range of job demands and resources. Qualitative research could also uncover job demands and resources specific to autism in the workplace. For example, Lindsay *et al.* (2019) suggested that employers' disability confidence, including creating a supportive environment for employees with a disability, is important in creating inclusive workplace environments. Leaders could provide training, support, and other opportunities for interaction and engagement so that non-autistic employees are enabled to effectively contribute to and support an inclusive environment.

Finally, the research may be limited by the specific autism employment programs within these organizations. Although the two programs did differ somewhat, they both offered a supported work environment and were based on a similar underlying philosophy about the benefits of hiring autistic people (Austin and Pisano, 2017; Donovan, 2008). Future research should examine employee attitudes toward a broader range of autism employment programs, including variations in the range of supports and organization types. Such research, especially when accompanied by insights from autistic employees, will help to improve the long-term success and sustainability of these important programs.

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Table I. Summary statistics and zero-order correlations

	Mean	SD	1	2	3	4	5	6	7
1. Program interaction	2.96	1.26	--						
2. Program knowledge	5.13	1.57	0.46***	--					
3. Workload change	2.60	1.33	0.38***	0.30***	--				
4. Perceived supervisor support	5.11	1.72	-0.11	0.05	-0.17	--			
5. Affective commitment	6.16	1.25	0.00	0.11	-0.38***	0.38***	--		
6. Normative commitment	4.89	1.51	0.01	0.00	-0.08	0.03	0.32***	--	
7. Continuance commitment	2.42	1.72	0.12	0.04	0.36***	-0.46***	-0.66***	0.02	--
8. Engagement	4.73	1.27	0.00	0.09	-0.09	0.46***	0.29***	0.05	-0.27***

Note: N = 132. *p < .05, **p < .01, ***p < .001

Data from both organizations, excluding participants who indicated that during a typical week they never interacted with autism program participants.

Table II. Summary of hierarchical regression analyses

	Affective Commitment	Normative Commitment	Continuance Commitment	Engagement
Step 1				
Organization (1=smaller)	0.11	0.16	-0.11	0.09
Gender (1=female)	0.01	-0.07	-0.24*	0.18
Tenure (1=<1 year)	0.06	0.03	-0.07	0.03
Tenure (1=1-2 years)	0.15	0.02	0.05	0.07
Tenure (1=3-4 years)	-0.17	-0.10	0.03	0.03
Employment Type (1=PT)	-0.01	0.03	0.13	-0.22*
Employment Type (1=Other)	0.01	-0.09	-0.13	0.04
R^2 change	0.07	0.04	0.10	0.08
Step 2				
Program Interaction	-0.08	0.00	0.13	-0.10
Program Knowledge	0.18	-0.02	-0.04	0.17
R^2 change	0.02	0.00	0.01	0.02
Step 3				
Workload Change	-0.40***	-0.10	0.31***	-0.06
Perceived Supervisor Support	0.30***	-0.01	-0.40***	0.37***
R^2 change	0.24***	0.01	0.25***	0.13***
Step 4				
Workload X Perceived Support	-0.10	0.07	0.07	-0.32***
R^2 change	0.01	0.00	0.00	0.09***
Overall adjusted R^2	0.28***	-0.04	0.30***	0.24***

Note: N = 128 due to missing values on demographic variables. The displayed coefficients are standardized beta weights (βs) at each step. *p < .05, **p < .01, ***p < .001.
At Step 1, participant demographics that were significantly related to at least one primary variable were included as covariates.
Data from both organizations, excluding participants who indicated that during a typical week they never interacted with autism program participants.