

Beyond Adaptations and Accommodations: Management Practice that Matters as the Key to Retention of Employees with Autism (Part 1)

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Abstract

United Nations declares that employment is a basic human right. Numerous public policies reference the devastating impact of unemployment on health and social inclusion and seek to promote the economic participation of people-with-disabilities. Some researchers reckon high levels of economic marginalisation are experienced by people with a disability in Australia, in comparison with other OECD countries. In the literature, 80% unemployment rates are reported among working-age people-with-autism spectrum disorder (ASD). This is a critical area of concern that is currently under-researched and poorly addressed. "ASD-ness" (ASD behavioural characteristics) can be regarded as personal differences rather than disorders. Acknowledged experts such as Drucker and Clifton & Harter argue that individuals gain more when they build on their talents rather than focusing on improving weaknesses. The authors, therefore, take an ASD-ness-strengths-based-approach philosophy which, in a nutshell, regards ASD-ness as a source of employment-strengths and autistic behavioural challenges as personal differences not deficits.

Keywords: *positive-autism, productivity, management, Drucker, strengths-focused-employment, evocative-analytic-autoethnography.*

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1. Introduction

“Expecting people with autism to ‘fit in’ is cruel and unproductive; value us for our strengths (Wong, P, 2018).”

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Despite decades of deficit-based autism behavioural interventions and treatment, 80 per cent of adults-with-autism remain unemployed and the situation is not improving. This study addresses the ongoing and under-researched problem of the employment retention of people with autism in today's knowledge-based economy. The business world is moving towards a knowledge-based economy where managing knowledge workers and their productivity (KWP) is the prime role of management (Drucker, 1999). This study looks at the practicality of applying Drucker's KWP theory (Wong, Neck & Yu, 2013) to employees with autism as supported by the extant literature review which follows. An innovative auto-ethnographic approach is adopted to provide new insights into this important topic. First-person accounts have been used in those parts of the research reflecting the personal experiences of the prime author, a person with autism. Most importantly, autism is not viewed as a defining disorder in this research but linked to a range of possible attributes including highly desirable employment attributes. Therefore the language 'person with autism' has been used in the research as opposed to the use of 'autistic person': Additionally, the term neuro-typical is used to describe people without autism; neuro-diverse to refer to people with autism and neurodiversity to refer to people with and without autism. This language is consistent with the view that aspects of autism may be characterised by behavioural attributes linked to less common variations in the function of the central nervous system (neuro-diverse). For example, greater sensitivity to visual &/or auditory cues and challenges in processing non-verbal communication signals. It may also include characteristics such as the ability to maintain concentration and to focus attention for extended periods. Consistent with the assumptions of this research, this terminology does not assume that people with autism are disordered. The findings of this research make an original contribution to knowledge with implications for theory, policy and practice.

1.1 Rationale

“Autism is a condition that defies simple generalisations. Except one: the potential of far too many autistic people is being squandered. Although around half of those with autism are of average intelligence or above, they do far worse than they should at school and at work... Globally, the United Nations reckons that 80% of those [people] with autism are not in the workforce... These numbers represent a tragic toll, as millions of people live idle and isolated [life] outside the world of work (The Economist, 2016, April 16, p. 9).”

The term autism can be described as a distinct category of developmental disabilities that share many of the same characteristics. The behavioural characteristics of Autism Spectrum Disorder [ASD] are described in the fifth revision of the Diagnostic and Statistical Manual of Mental Disorders [DSM-5], 2013. Although people with autism are all different, they all display “persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history” (DSM-5, 2013, p. 50) in –

- Social-emotional reciprocity; and

- Nonverbal communication used in social interaction; and
- Developing, maintaining and understanding relationships.

Additionally, they may display “restricted, repetitive patterns of behaviour, interests, or activities, as manifested by at least two of the following, currently or by history” (DSM-5, 2013, p 50) in –

- Stereotyped or repetitive motor movements, use of objects, or speech; or
- Insistence on sameness, inflexible adherence to routines, or ritualized patterns or verbal and nonverbal behaviour; or
- Highly restricted, fixated interests that are abnormal in intensity or focus; or
- Hyper- or hypo- reactivity to sensory input or unusual interests in sensory aspects of the environment.

In the DSM-5, autism is defined as a spectrum of disorders, which include Kanner’s autism (Kanner, 1943); Asperger Syndrome (Asperger, 1944) and pervasive developmental disorder-not otherwise specified [PDD-NOS]. Kanner’s autism is often regarded as the most severe form of autism. Autism is commonly understood as a set of “permanent developmental disorders that will continue into adulthood, creating lifelong challenges for the individual” (Hendricks, 2009, p. 125).

Autistic behavioural ‘disorders’ often continue throughout adulthood [9] and contribute to challenges in employment for people with autism. Unemployment rates among people with autism are alarmingly high at 80 per cent (Ban, 2015; Dudley, Nicholas & Zwicker, 2015). A growing population of adolescents diagnosed with autism are graduating from high school with limited employment opportunities (Roux et al, 2013).

“The vast majority of autistic people [people with autism] cannot get a job – and when they do, bullying in the workplace seems to be on the rise. These are just two of the shocking findings in a new survey released today by the National Autistic Society, which is launching a petition for change (The Guardian, 2016, Oct 27).”

“Just 16% of autistic adults [adults with autism] are in full-time paid employment. And, in almost a decade, this appalling situation hasn’t improved. We are determined to change this ... Once autistic people [people with autism] are work ready, many still face unnecessary difficulties when applying for a job and, if they get one, [they face] further barriers in the workplace (The National Autism Society, 2016).”

Promoting employment participation for people with autism is an important research issue that is currently not being adequately addressed (Ratto & Mesibov, 2015, Billstedt, Gillsberg & Gillsberg, 2007; Seltzer et al. 2011; Shattuck et al. 2007). Despite the importance of research “improving the quality of life and functioning of adults with autism, with the overall goal of enabling adults to lead fulfilling and productive lives in the community” (Orsmon, Shattuck, Cooper, Sterzing & Anderson, 2013, p. 271), in Australia, 99% of all current autism research focuses on the early years and school years (Autism Cooperative Research Centre [CRC], 2015). In the United Kingdom, some researchers have called for autism research to focus

“in those areas that make a difference to people’s day-to-day lives” (Pellicano, Dinsmore & Charman, 2014, p. 756). In the United States, the Interagency Autism Coordinating Committee [IACC] indicated in its 2017 strategic plan (IACC, 2017, p. 83) that –

“Research focused on adult issues has lagged far behind other types of ASD-related research, comprising only 2% of all autism research spending in 2015.”

1.2 Research critical issues

The research problems, the research questions, the research objectives and the research proposition underpinning this inquiry are listed in Table 1.1.

Table 1. Research problems, questions, objectives and proposition

| |
|---|
| <p>Research problem one: Employment retention for people with autism appears to be a critical area that is currently under-researched and poorly addressed.</p> <p>Research problem two: There appears to be a lack of sustainable strategies and management models addressing issues of employment retention for people with autism.</p> <p>Research question one: What are the workplace factors critical to employment retention for people with autism?</p> <p>Research question two: How can employment retention for people with autism be improved?</p> <p>Research objective one: To identify and examine the factors affecting employment retention for people with autism in competitive employment.</p> <p>Research objective two: To build a management framework to improve support for the employment retention for people with autism.</p> <p>Research proposition: There is a significant role for Drucker’s knowledge-worker productivity practice in investigating and developing support for the employment retention for people with autism.</p> |
|---|

Source: Developed for this research.

To address this cascade of problems, questions and objectives, the research was structured in a series of steps commencing with a review of the literature on autism, employment retention and management theories to identify factors which may be contributing to the employment retention of people with autism, including factors related to the conceptualisation of autism and characteristics of autism as well as management and workplace factors. An innovative pattern-matching approach was used to analyse auto-ethnographic accounts of the author’s employment history and the transcripts of interviews with neuro-typical, age and cultural peers about their employment history. Clusters of descriptors related to the employment strengths and behavioural characteristics of people with autism, workplace and entrepreneurial characteristics were identified in the first person accounts of employment experiences of the author and those of neuro-typical age and cultural

peers. The framework of the Harvard/Stanford Strengths Weaknesses Opportunities and Threats [SWOT] analytic model was linked with each of these clusters of descriptors, resulting in the identification of the key employment retention themes. An explanatory model of workplace retention was proposed encapsulating each of these themes and linked with the insights of Drucker's Knowledge Worker Management model. The series of steps employed to investigate employment retention are summarised in Figure 1.1 Investigation flowchart that now follows:

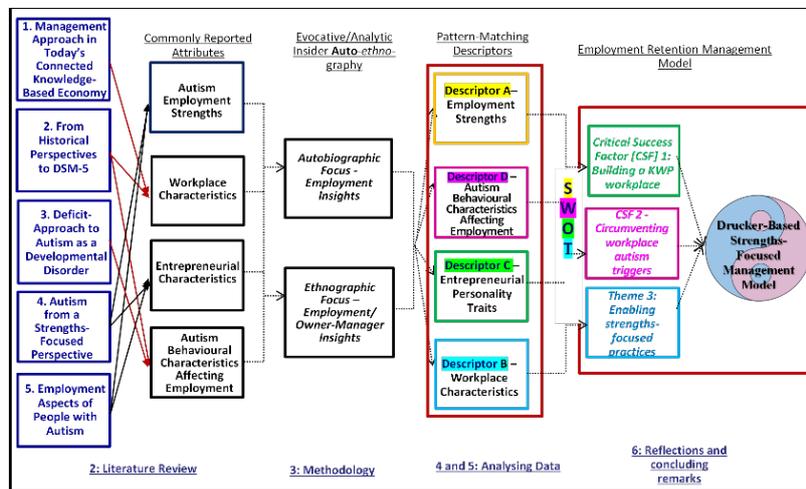


Figure 1. Investigation flowchart
Source: Developed for this research

2. Literature review

A series of literature reviews was undertaken commencing with the workplace and employment management practices. This was followed by three reviews on the social construction of 'autism', then rounded up in a final review of issues regarding employment, the workplace and autism.

- Review 1: Management approach in today's connected knowledge-based economy;
- Review 2: Historical perspectives to DSM-5;
- Review 3: Deficit-approach to autism as a developmental disorder;
- Review 4: Autism from a strengths-focused perspective; and
- Review 5: Employment aspects of people with autism.

Autism reviews 2 and 3 provided the basis for an argument against the effectiveness of deficits-based autism behavioural interventions and treatments as evidenced in the low employment rates of people with autism. Autism reviews 4 and 5 and the workplace and employment management review (Review 1) evaluated a strengths-focused perspective and management practice, and resulted in identifying a gap in the literature of a strengths-focused management approach to employment retention solutions for people with autism in competitive employment.

Four commonly reported attributes of autism employment strengths, autism behavioural characteristics, workplace characteristics and entrepreneurial characteristics were synthesised from the literature review as –

- Workplace characteristics (Hammill, 2005; Gibson, Greenwood & Murphy, Jr., 2009; Gallup Management Journal, 1999; Chamberlain & Hodson, 2010; Tolbize, 2008; Cennamo & Gardner, 2008; Twenge, Campbell, Hoffman & Lance, 2010; Pyöriä, Ojala, Saari & Järvinen, 2017; Giang, 2013; Kapoor & Solomon, 2011; Glass, 2007; Boss, 2014; and Hansen & Leuty, 2012);
- Autism behavioural characteristics (DSM-5, 2013);
- Autism employment strengths (Autism Spectrum Australia, 2016, the Asperger/Autism Network, 2017 and Autism Diagnostic Criterion B, DSM-5, 2013);
- Entrepreneurial aspects (Meredith, Nelson & Neck, 1982).

These synthesized lists (available on request) were proposed for further investigation in Section 3: Methodology for their feasibility as a data-analysis tool relevant to the study of a strengths-focused management approach to employment retention for people with autism.

Subsequently, this study takes the view that –

“Individuals gain more when they build on their talents, than when they make comparable efforts to improve their areas of weakness” (Clifton & Harter, 2003, p 111).

Many psychotherapists find that –

“Concentrating on failures and inadequacies ... can make patients feel worse rather than better, at least in the short run. If the focus on shortcomings and mistakes continues, the patient's self-esteem may decline and the situation may deteriorate” (Harvard Mental Health Letter, 1997).

Instead of identifying the broad characteristics of people with autism (DSM-5, 2013) as deficits in social communication/interaction, and restricted/repetitive behaviours, interests and activities, some researchers (Pickavance, 2014; Lorenz & Heinitz, 2014; Harrop & Kasari, 2015) believe autistic restrictive, repetitive patterns of behaviour, interests, or activities can be seen as strengths because people with autism think and focus differently –

“SAP [SystemAnalyse und Programmentwicklung] said that by 2020, 1 per cent of its global workforce of 65,000 employees would be people with autism. The company said it believes that ‘innovation comes from the edges’, and only by employing people who think differently and spark innovation will SAP be prepared to handle the challenges of the 21st century” (Pickavance, 2014 p 139).

Whether it is SAP campaigning for workplace neurodiversity, or big businesses in science, technology, engineering and mathematics (STEM) seeking to harness the unique talents of people with autism, they are suddenly in demand for their obsessive *“concentration during long-lasting routine work, identification of*

logical rules and patterns, processing visual information, and the ability to remember facts, [that] surpass neural-typical individuals” (Lorenz & Heinitz, 2014, p. 1).

Difficulties in social communication/interaction skills in areas such as empathy, social skills, emotional control or flexibility (Kapp, Gillespie-Lynch, Sherman & Hutman, 2012) may need to be accommodated to harness the identified employment strengths. While therapies to improve social communication/interaction skills have rapidly advanced, the mechanisms, and the management of autistic restrictive, repetitive patterns of behaviour, interests, or activities remains contested (Harrop & Kasari, 2015). Making uninformed attempts to intervene may not be beneficial or welcomed by the autistic community particularly as the same characteristics can turn out to be valued strengths not deficits.

Kral (1989, p. 32) believes that –

“If we ask people to look for deficits, they will usually find them, and their view of the situation will be coloured by this. If we ask people to look for successes, they will usually find them, and their view of the situation will be coloured by this.”

Arguably, when deficits are viewed as individual differences, focusing on autism behavioural characteristics as employment strengths for people with autism is more likely to open doors to establishing and retaining competitive employment for people with autism. As such, the focus of this research is a strengths-based approach to employment success addressing the factors affecting the ‘employment retention of people with autism in competitive employment’. Autistic behavioural challenges in this inquiry are considered personal differences not deficits. Research by the Gallup organisation showed that people who use their strengths every day are eight per cent more productive and 15 per cent less likely to quit their jobs, six times more likely to be engaged at work, and are three times more likely to report an excellent quality of life. Performance reviews that emphasise personal strengths improve organisational performance (Flade, Asplund & Elliot, 2015).

In order to move beyond studying autism as a deficit and to look more deeply at the potential abilities and strengths of people with autism, this inquiry focused on the perspectives of a person with autism and their employment experiences over their 40-year career trajectory, using an auto-ethnographic approach

3. Methodology

The methodological approach adopted was auto-ethnography. First person accounts or stories were used to construct an understanding of the content and context drawing upon cultural discourses (Riessman & Speedy, 2007). While people are essentially storytellers and the world is a series of stories, individuals decide what makes a story legitimate based on its coherence and fidelity (Fisher, 1985). Story is also a principal means by which messages are conveyed about what is valued and what is meaningful to a cultural group (Fisher, 1985). Thus, stories are central to individual reasoning and human relationship (Bochner, Ellis & Tillmann-Healy,

1997). They provide a unique and valuable source of knowledge about social life in social sciences.

In past decades, narrative rationality in autoethnography has been widely adopted by health researchers (Harter, Japp & Beck, 2005), particularly in the context of illness narratives providing deeper insight into patients' experiences of illness and health care (Klienmann, 1988). To some extent, all research endeavors are autobiographic⁵ (LeCompte, 1987) in the sense that research topic selection, methodology, and process reflect researchers' personal interest, bias, and circumstance (Chang, 2008).

One definition of auto-ethnography suggested by Bochner and Ellis (2006, p. 111) is

“a research method that uses personal experience (“auto”) to describe and interpret (“graphy”) cultural texts, experiences, beliefs, and practices (“ethno”). Autoethnographers believe that personal experience is infused with political/cultural norms and expectations, and they engage in rigorous self-reflection—typically referred to as ‘reflexivity’—in order to identify and interrogate the intersections between the self and social life. Fundamentally, autoethnographers aim to show ‘people in the process of figuring out what to do, how to live, and the meaning of their struggles.’”

However, these descriptions of autoethnography are not without controversy. Controversies surrounding the term autoethnography include the definition of *self* within a social context. Also, the thematic induction technique and whether the approach to analysis is evocative or analytic. The philosophical frame of the autoethnography in epistemology and methodology needs to be made clear and finally the actual methods employed specified.

Hence, a unified approach to nomenclature is proposed to identify different dimensions of autoethnography by using prefixes, qualifiers, hyphenations and word formatting to signal the researcher's autoethnographic design and implementation orientation. For example, an ‘evocative/analytic insider **auto-ethno-graphic** study’ signals a combined evocative and analytic approach. Also that an insider perspective was adopted with a primary emphasis on the autobiographic materials, a secondary emphasis on interview materials and a tertiary emphasis on the product. In applying this approach, the primary investigative instrument came from the researcher's autobiographic materials on his employment experience spanning a career of over 40 years and himself having been diagnosed with autism. Other data came from interviews with neuro-typical age and cultural peers about their employment experiences, in order to connect and sensitise the auto-enthnographic account to wider cultural, political and social understandings. Both evocative and analytic theme induction were employed clarifying each of the dimensions. In this study this was best summarised as ‘evocative/analytic insider **auto-ethno-graphy**’. Consistent

⁵ Arguably, as “*in a larger sense, all writing is autobiography: everything that you write, including criticism and fiction, writes you as you write it*” (Coetzee, 1992, p. 17).

with this methodology, a pattern-matching evocative/analytic data-analysis technique was proposed to preserve the pre-eminence of the story told without having to turn it into the language of analysis. Operationally, a five-step theme induction process was completed (Table 2).

Table 2. Five-step theme induction process

| Pattern-matching steps | Description of the process |
|--------------------------------------|---|
| 1. Data familiarisation: | Transcribe and/or translate data as a means to familiarise data set through reading and re-reading. Note down interesting ideas in a summary table format. |
| 2. Identifying interesting themes: | Coding interesting features of the data based on the initial pattern-matching descriptors in a systematic fashion across the entire data set, collating data relevant to each code. |
| 3. Refining specifics of each theme: | Collate patterns into potential themes, gathering all data relevant to each potential theme based on the initial pattern-matching descriptors. These descriptors are continuously revised during the repeated evocative/analytic theme induction process and additional literature review (if necessary) to form the final and complete version to check, review, define and name each key theme. |
| 4. Key theme representation: | Collate patterns into potential themes, gathering all data relevant to each potential theme based on the revised pattern-matching descriptors. Depending on personal preference, the overall thematic picture can be represented in the form of a Venn diagram, a thematic map or other form of illustration (discussed in Section 5: Data Analysis Two (Ethnographic Data). |
| 5. Report generation: | The final analytic opportunity for presentation arises from the selection of vivid, compelling extracts of vignettes and examples while relating the analysis back to the research question and literature for a scholarly report of the thematic analysis and at the same time aiming to create intrinsic and instrumental interests among the readers for the experience of the writer. |

Source: Adapted from Braun and Clarke (2006).

3.1 Data familiarization - pattern-matching descriptors

Data analysis followed the proposed five-step theme induction process (see Table 3.1 above), using the proposed evocative/analytic pattern-matching technique of autobiographic materials focusing on workplace issues affecting employment and employment retention of a person with autism (the primary researcher) with a career trajectory spanning over forty years. The technique was repeated in ethnographic analysis of interview transcripts of two interview participants who started their own business after their retirement from work, focusing on workplace issues of employment, employment retention, and owner-manager styles. Throughout the data analysis, the initial pattern-matching descriptors, developed from the literature, were used in theme induction. These initial sets of descriptors were trialed, renamed, revised and updated. To cut down unnecessary repetition, the revised descriptor sets are illustrated here.

Presented here first are the revised pattern-matching descriptors (Tables 3 – 6) based on commonly reported employment attributes synthesised from the literature review and updated and revised during subsequent data analysis. Due to the length of these tables, they are presented with water-marks to indicate them as

partial lists below (full lists are available on requests). The revised sets of descriptors are also illustrated below in both career summary tables and vignette examples that follow after the sample descriptor lists which were colour-coded, revised and updated in this research as (again, full lists of Descriptors A, B, C and D are available on request)

- Descriptor **A** – autism employment strengths;
- Descriptor **B** - workplace characteristics;
- Descriptor **C** – entrepreneurial personality traits; and
- Descriptor **D** – autism behavioural characteristics affecting employment retention.

Table 3. Desc A²– employment strengths/autism employment strengths (partial list)

| | |
|---|--|
| A₁: Fixation— | |
| <p><u>Intense Focus:</u></p> <ul style="list-style-type: none"> a. preference for spending time alone; b. interest in arcane or off-beat fields of knowledge; c. concentration for long periods of time on reading, experimenting, writing etc; d. avoidance wasting time in some activities that appeal to neurotypical people; e. some special interests to be channelled into productive hobbies or even careers, where the person may be creative or make new discoveries. | <p><u>Fixation on Details:</u></p> <ul style="list-style-type: none"> a. systematic information processing; b. attention to detail; c. precise technical abilities; d. ability to notice small details of an idea, theory, number pattern, book, film, object or visual image; e. ability to perform repetitive tasks where accuracy, rules and routine are important; f. commitment to quality; and g. accuracy of work. |
| A₂: Cognitive and Visual Thinking— | |
| <ul style="list-style-type: none"> a. very high intelligence; b. good verbal skills; rich vocabulary; c. ability to absorb and retain large amounts of information, especially about topics of special interest; d. ability to think in visual images; e. self-motivated, independent learners; f. tendency to think outside the box and generate novel solutions to problems; g. may show a strong aptitude for a particular field of study or topic; h. diversification in occupations; and i. education qualifications exceeding the requirements of the Australian and New Zealand Standard Classification of Occupations. | |
| <p>²Coloured theme with sub-coded letters indicates different descriptors.</p> | |

Source: *Developed for this research*

Table 4. Desc B – workplace characteristics (partial list)

| | |
|---|---|
| B1: Entrepreneurship— | |
| a. capitalises on momentum; | b. willingness to try and explore “newness”. |
| B2: Leader Style— | |
| a. empathetic; | b. <i>integrative</i> (A person of integrity). |
| B3: Workplace motivation— | |
| a. recognition; | c. long-term future. |
| b. praise of accomplishment; | |
| B4: Followership— | |
| a. consensual; | d. strong character; |
| b. collegial; | e. loyalty; |
| c. outspoken; | f. contract-worker mindset. |
| B5: Communication Style— | |
| a. meetings; | c. continuous learn and teach. |
| b. interaction in person; | |
| B6: Environment— | |
| a. materials and equipment necessary and matching workplace practicality; | d. good workplace conditions; |
| b. materials and equipment necessary and matching government regulations; | e. basic healthy workplace condition catered for/not catered for; |
| c. good and above award wage; | f. materials and equipment necessary above workplace and government requirements. |

Source: Developed for this research

Table 5. Desc C – Entrepreneurial personality traits (partial list)

| | |
|--|---|
| C: Entrepreneurial Characteristics— | |
| 1. Self-confidence: | 4. Leadership: |
| a. confidence; | a. leadership behaviour; |
| b. independence; | b. get along well with others; |
| c. individuality; and | c. individuality; and |
| d. optimism. | d. responsive to suggestions, criticisms. |
| 2. Task-result oriented: | 5. Originality: |
| a. need for achievement; | a. innovative/creative; |
| b. profit-oriented; | b. flexibility (openness of mind); |
| c. persistence/perseverance/determination; | c. resourceful; and |
| d. hard work/drive/energy; and | d. versatile; and |
| e. initiative. | e. knowledgeable. |
| 3. Risk-taker: | 6. Future-oriented: |
| a. risk-taking ability; and | a. foresight; and |
| b. likes challenges. | b. perceptive. |
| C: Individualistic Personalities— | |
| a. aloof; | e. warm; and |
| b. arrogant; | f. friendly. |
| c. withdrawn; | |
| d. shy; | |

Source: Adapted from Meredith, Nelson and Neck (1982)

Table 6 Desc D – Autism characteristics affecting employment retention (partial list)

| D: SOCIAL COMMUNICATION AND INTERACTION— | |
|---|--|
| <p>1. Deficits in social-emotional reciprocity:</p> <ul style="list-style-type: none"> a. abnormal social approach; b. failure of normal back-and-forth conversation; c. reduced sharing of interests, emotions, or affect; d. failure to initiate or respond to social interactions; and e. scripted social interaction; f. tendency to be easily bored on a subject that holds no personal interest; g. tendency to feel uncomfortable to with praise because of the uncertainty of how-to response; h. no tolerance of dishonesty or incapability; i. except in familiar/structured social interaction; <p>2. Deficits in nonverbal communicative behaviours used for social interaction:</p> <ul style="list-style-type: none"> a. poorly integrated verbal and nonverbal communication; b. abnormalities in eye contact and body language; c. deficits in understanding and use of gestures or hints; d. a total lack of facial expressions and nonverbal communication; and e. tendency to take things literally. | <p>3. Deficits in developing, maintaining, and understanding relationships:</p> <ul style="list-style-type: none"> a. difficulties adjusting behaviour to suit various social contexts; b. difficulties in sharing imaginative play or in making friends; c. absence of interest in peers; and d. difficulty judging how others are feeling about you or reacting to your words/actions; e. except for familiar social interaction; and f. trouble figuring out hidden meaning if someone hinting but not saying what they want; g. aware of or being told that you are aloof, withdrawn or day-dreaming (immersed in one's own world); h. tendency to find it hard to admit/apologise that you are wrong after taking a strong viewpoint in a discussion. i. aware or being told that you are being selfish because of failure to be considerate in certain circumstances |

Source: Adapted from DSM-5, 2013; Carpenter, 2013; Kim, 2013

3.2 Identifying interesting themes - pattern-matching technique conceptualisation

The idea of using a pattern-matching approach and building blocks to describe complicated phenomenon is based on Holland's suggestion (1992, p. 170) that "...if I have a process that can discover building blocks, the combinatorics start working for me instead of against me. I can describe a great many complicated things with relatively few building blocks." Holland used an example based on the work of police facial composite artists in a system known as Identikit to explain his theory –

"The idea was to divide the face into, say, 10 building blocks: hairline, forehead, eyes, nose, and so on down to the chin. Then the artist would have strips of paper with a variety of options for each: say, 10 different noses, 10 different hairlines, and so forth. That would make a total of 100 pieces of paper... the artist could talk to the witness, assemble the appropriate pieces, and produce a sketch of the suspect very quickly... by shuffling those 100 pieces of paper, the artist could make a total of 10 billion different faces, enough to sample the space of possibilities quite widely."

The same concept of using building blocks and pattern-matching is adapted in this study to identify employment retention themes.

4. Analysing autobiographic data

The five-step theme induction process (see Table 2) and the evocative/analytic pattern-matching technique focussing on workplace issues affecting employment and employment retention of a person with autism (the primary researcher) was used to analyse auto-ethnographic data.

4.1 Career summary tables (autobiographic data)

Two summary tables (excerpts) representing my career pattern - Hong Kong (Table 7) and Australia/Overseas (Table 8) were prepared as the first step to theme induction. Full lists are available on request. These are provided here to illustrate how pattern-matching lists were used to identify themes in the two summary tables.

Table 7. Career history, Hong Kong (excerpt)

| Job/Duration/Age | Achievements | Workplace Issues | Reasons for Leaving |
|---|--|---|---|
| 1. News Reporter, Major International Press /six months/19 | Promotion to war reporter within three months | Family's disapproval of job-transfer to become a war-reporter located in the then war-torn Vietnam. | My mother went to tell my employer I was resigning without letting me know when she found out that I was to be trained as a war reporter posted in the then war-torn Vietnam. |
| 2. Law Enforcement Officer/18 months/20. | Highly regarded by immediate Supervisor for clean police image. | Psychological bullying, discrimination and corrupt work practices | Could not get along with the replaced Supervisor and was bullied and discriminated against by this newly transferred second Supervisor. |
| 3. Dyehouse Technologist/18 months/23. | Groomed to join the sales team of the Dyehouse. | Hazardous factory work environment of noise, heat, smell and chemical pollution | Unable to get along with other managers and peers during the rotating job secondment training program. |
| 4. Hong Kong T-Teachers' College | Student Teacher scholarship | None. | No teaching jobs available after completion. |
| 5. Quality Control Manager at T-Testing/18 months/25. | Established a corruption free culture despite the then highly corrupt business practice. | Not able to cope with paper work. | Weak organising and planning skills |
| 6. Factory Quality Control Manager, F-Pants/12 months/26. | Established factory-wide quality standards. | Unpleasant factory work environment of noise, heat, smell and chemical pollution. | Unable to get along with my peers. |
| 7. Factory Quality Control Manager at B-Jeans/12 months/27. | Established a highly reputable quality control team. | Unpleasant work environment of noise, heat, smell and chemical pollution. | Personal desire to gain experience beyond quality control. |

Source: Developed for this research

Table 8. Career history, Australia/Overseas (excerpt)

| Job/Duration/Age | Achievements | Workplace Issues | Reason for Leaving |
|--|--|--|--|
| 12. Factory Quality Control Manager, D-Garment/6 months, Inner Suburb, Sydney/30 | Established QC standard; Set up procurement procedures. | Unpleasant work environment with noise, heat, smell and chemical pollution. | Unethical work practices; Unable to get along with my bosses and peers. |
| 13. Experimental Scientist, Division of Textile Physics, CSIRO/three years, Inner Suburb, Sydney/31. | Established a dark fibre detection equipment with a patent application and seven journal and seminar papers | Lack of non-financial motivation; psychologically bullied; lack of job security on a three-year contract and other reasons listed in the next column; I rejected a further two-year extension. | The longest stay of any jobs because of ideal work workplace free of sensory overloading distractions, bullying, discrimination and unethical practices but my inability to get along with my immediate supervisor is the main reason I did not take up the appointment extension offer. When working as an Experimental Scientist for the CSIRO, I was given full autonomy to conduct my research in a workplace free of sensory overloading distractions, bullying, discrimination and unethical practices but my inability to get along with my immediate supervisor was the main reason I left after staying there for three years. This aspect of the work environment linked to the lack of support for autism related behavioural challenges continued to compromise my employment retention. |
| 14. Factory Manager, S-Dyehouse/12 months, Rural Victoria/34. | Established a unified team of workers including Vietnamese refugees, town's people of low socio-economic background and ex-convicts returning to the workforce. | Hazardous factory work environment: heat, smell, noise, chemical pollution. | Unable to get along with the factory owners; unable to adapt to a small-town country life. Unable to cope with the 24x7 dynamic nature of factory operational demands. |
| 15. Sales Manager, B-Chemicals/six months, Melbourne/35 | Secured a number of major accounts in a very small and competitive textile industry. | Unethical work practices at the B-factory polymerisation plant | Unable to get along with my immediate supervisor. |
| 16. Quality Control Manager, M-Carpet/12 months, Outskirt Melbourne/35. | Built the first carpet testing lab in Victoria; established the Australian Carpet Classification Scheme. | Hazardous factory work environment of noise, heat, smell and chemical pollution. | Unable to get along with my bosses and peers; unethical business practices. Unable to cope with the 24x7 dynamic nature of factory operational demands. |
| 17. Laboratory Technician, Australian Wool Testing Authority (AWTA)/three months, Melbourne/36. | Completed a six-months Control Data course in half the time; managed to study during the day and worked each night with only two hours sleep for a period of three months. | Night-shift worker. | Starting a new career life in computing and moving back to Sydney where my parents were based. |

Source: Developed for this research

4.2 Redefining specifics of each theme - vignette example (autobiographic data)

The proposed evocative-analytic technique is demonstrated here in the form of a vignette excerpt. This technique kept the pre-eminence of the first-person account and avoided personal accounts being changed to the language of the analysis used in the theme induction. Details of the pattern-matching descriptors that emerged are provided in the right-hand column (Figure 4.1).

| EVOCATIVE/ANALYTIC VERBATIM AUTOBIOGRAPHIC VIGNETTE 1: WORKPLACE ENVIRONMENT INSIGHTS (JOB 1) | EMERGING THEMES |
|--|--|
| <p>I remember my first job as a news reporter for Major International Press in the summer of 1968 when I finished my Hong Kong School Certificate. I was so blessed that my first job was, in fact, my dream job. As a news reporter, I had to work shifts. In my night shift, I listened to recorded news from China and had to translate them into English for my American bosses to re-write stories with news value before they sold them to other newspapers, television and radio stations...</p> <p>... During my day shift, apart from translating news from local Hong Kong newspapers, I had to board trains between Lo Woo (the Hong Kong and China border) and Kowloon to interview Chinese returning to Hong Kong. Life was full of excitement on the train. There were always hostile members from the Chinese Labour Union on the lookout for news reporters and stopped us from conducting interviews on trains. I was always on alert to avoid them from spotting me. I just could not imagine the consequence if they caught me and the physical damage, they could do to me. They were, in my opinion, proxy Mao Red Guards.</p> <p>There were a few dramas and, on one trip three union members spotted me. They were standing at both ends of the carriage waiting for the train to stop at Shatin Station (then a remote rural station outside of Tsim Sha Tsui, Kowloon Central Business District [CBD]) where they quite possibly might drag me out and beat me up. Obviously, I was not going to give them a chance. As soon as the train came to a halt, I jumped out of the window and I ran to the bush. Believe me, I could run like Forrest Gump and I managed to lose those proxy Red Guards.</p> |  <p>Figure 3.2.1 Reporter ID, 1968</p> <p>AUTISM EMPLOYMENT STRENGTHS PERSONALITY—Strong will to succeed; desire to work; personal fulfillment. ENTREPRENEURIAL PERSONALITY TRAITS ATTITUDE—Career sustainability attitude: determination; thriving on experience. Right mental attitude towards work; enjoy work; total dedication to one's doings; positive mental attitude turns one's jobs into exciting, interesting, rewarding work. ENTREPRENEURIAL PERSONALITY TRAITS CHARACTERISTICS—Risk-taker: risk-taking ability. ENTREPRENEURIAL PERSONALITY TRAITS CHARACTERISTICS—Risk-taker: risk-taking ability; like challenges ATTITUDE—Habits: positive attitude. ENTREPRENEURIAL PERSONALITY TRAITS CHARACTERISTICS—Risk-taker: risk-taking ability; like challenges ATTITUDE—Habits: positive attitude and a healthy self-image.</p> |

Figure 2. Vignette 1: News Reporter, United Press International (UPI)/6 months, at 19 (excerpt only)
Source: Developed for this research

The next section focusses on the ethnographic interview materials.

5. Analysing ethnographic data

In a similar fashion, the same evocative/analytic pattern-matching technique was also adopted in the analysis of the interview transcripts of two neuro-typical interview participants who were neuro-typical, age and cultural peers of the researcher. The analysis of their first-person account of their employment history identified workplace issues related to employment, employment retention from the perspective of their experience as an employee and owner-manager. The descriptor lists were also adapted based on emergent themes in the transcripts.

5.1 Career summary table and vignette example (ethnographic data)

Participants were recruited via snowball sampling. In contrast to the primary researcher, they displayed near perfect employment retention patterns. In addition, Participants A and B started their owner-operated small to medium businesses after retirement from employment providing unique insights into management practices from the perspectives of employee and then employer. Table 9 and Figure 3 are

examples of the analysis (Ethnographic Data). Again, details of the pattern-matching descriptors that emerged are provided in the right-hand column (Figure 3).

Table 9. Work summary (Interview Participants – A and B)

| Time-Lines | Career History |
|-----------------|--|
| 1959 - 1999 | Participant "A" joined "The Bank" in rural NSW Australia as a "Teller" and worked in various positions through the bank network in middle management, senior management roles and as MD for a subsidiary of "The Bank" and retiring as a "State" Manager. One employer for 40 years. |
| 1999 to present | Participant "A" now owns and runs a successful Franchise business in the Far North Coast of NSW, commenced after his retirement. |
| 1968 - 1983 | Participant "B" started as a factory trainee for "The Factory" in Hong Kong and worked in various positions through "The Factory" to the position of the Chief Operating Officer for a subsidiary of "The Factory" in Singapore. "B" worked there for 15 years till the closure of the subsidiary. |
| 1983 - present | Participant "B" owns and runs a successful sweater manufacturing set-up in Hong Kong and China, commenced 1983 and continuing (at the time of writing). |

Source: Developed for this research

| EVOCATIVE/ANALYTIC VERBATIM VIGNETTE A1: WORKPLACE ENVIRONMENT INSIGHTS - FROM BANK TELLER TO BANK SUBSIDIARY MANAGING DIRECTOR | EMERGING THEMES |
|---|---|
| <p>... Yes...Well, I started working in 1959. I joined a bank from a country town in NSW. And I've worked for that organisation for 40 years^{B3-e}. Ah, I've all sort of roles from Junior Teller right through the bank network ... into senior management, had overseas experience in the US and the New Guinea. and when I came back I actually ran a subsidiary company for the bank. So, I went through a range of work experiences^{A2-a} ...</p> <p>... before I retired from the bank, I only ever had one job^{B3-e}. And when I retired, I bought my own business and I only had that job since I retired ...</p> <p>... Ah, I think it's a little bit to do with the way the work force was in those days. I think it'll be far more difficult to do today. I think you've to probably move from jobs and company to company to get progression today^{E1-3-a,b}. It is not the same of career progression as we had in the 50s, 60s, 70s where you started at the bottom and you worked your way through^{E4-1*} ...</p> <p>... as far as a branch manager, ... your day was full of interviews with customers ... I needed to fix whether it was transactional to send money overseas or a range of home loan, a range of business loan ... You might say 10 – 15 customers a day in your office and go through their needs, filling the documentation, do all the stuff. And also go out with your business customers ... get to know what made their business work to meet their business needs better ... sort of 8 o'clock in the morning, 8.30 at the latest and very rarely out before six. Yeah, a fairly long day^{E1-2*} ...</p> | <p>^{B3-e} WORKPLACE CHARACTERISTICS FOLLOWSHIP — STYLE — <i>follower-loyalty</i></p> <p>^{A2-a/A3-5-b} EMPLOYMENT STRENGTHS COGNITIVE AND VISUAL THINKING — <i>very high intelligence.</i> Strong will to succeed: <i>company loyalty.</i></p> <p>^{E1-3-a,b} ENTREPRENEURIAL PERSONALITY TRAITS CHARACTERISTICS — Risk-taker: <i>risk-taking ability; like challenges</i></p> <p>^{E4-1*} ENTREPRENEURIAL PERSONALITY TRAITS ATTITUDE — Career Sustainability: <i>thriving on experience.</i></p> <p>^{E1-2*} ENTREPRENEURIAL PERSONALITY TRAITS CHARACTERISTICS — Task/result oriented: <i>hard-working/drive/energy.</i></p> |

Figure 3. Vignette 2 Banking Industry, Participant A, Australia (except)

Source: Developed for this research

5.2 Emerged descriptor-based sub-themes

The descriptors and their occurrences that emerged in the evocative/analytic pattern-matching investigation of autobiographical materials and interview transcripts were summarised under their respective descriptors below with details of the occurrences of each descriptor. Please note that details of occurrences are presented for ease of visual reference only and do not infer that any numerical or statistical analysis is relevant to this inquiry. Items referenced are presented in a two-column table format below (Table 5.2). The first column provides details of the occurrences of the items referenced. The three numbers in brackets represent the number of times the item appeared in the vignettes of autobiographic materials and then in the vignettes of Participant A and Participant B, respectively, for example, the descriptor '*Strong will to succeed: desire to work* (4x/0x:3x)' refers to the particular descriptor item that appeared four times in the analysed autobiographic vignette (4x/), zero time (0x:) in the Participant A's vignette and three times (3x) in the vignette derived from Participant B's interview transcripts. In a similar fashion, the second column provides grouped themes individually represented by three numbers in brackets. Table 10 summarises the number of occurrences of all descriptors in the vignettes of Participants A and B and the first researcher. Please note that autistic behaviours affecting employment retention were only listed in the autobiographic accounts. The interview participants did not talk about their weaknesses in their accounts. Table 10 also shows the interesting range and pattern of descriptors influencing employment retention that emerged.

Summarising the analysed autoethnographic data,⁷⁷ pattern-matching descriptor-based sub-themes emerged. On employment strengths - 22 were linked to the commonly reported autistic employment strengths (see Desc A), 29 were reported entrepreneurial personality traits (see Desc C) [36]; Among the employment weaknesses - 24 were linked to DSM-5 based autistic behaviours affecting employment retention (see Desc D) and two were linked to negative workplace characteristics (see Desc B).

The number of occurrences of descriptors in the auto-ethnographic accounts and vignettes were further reported under categorised as Strengths, Weaknesses (W), Opportunities (O) and Threats (T), commonly referred to as SWOT to employment retention. SWOT was used as a useful template to link the identified descriptors with an actionable implementation framework and not as a brain-storming analytic tool. In the early days of "Strategic Management", it was Michael Porter's promotion of the Harvard SWOT Analysis Technique that eventually found its way into disciplines other than management (Meredith, Nelson & Neck, 1982). The SWOT matrix is linked to a series of actionable strategies for consideration in addressing employment retention. SWOT is used in this research as a visual reference tool only and do not infer that any numerical or statistical analysis is relevant to this inquiry.

Key themes will be further presented in an SWOT matrix in Part 2 of the paper. Part 2 focus is on workplace reflections from a person with autism, management reflections on Drucker's knowledge-worker productivity practice in

³The references on both papers will be presented over two issues within a six months period.

today's connected knowledge-based economy, three critical success factors to employment-retention of a person with autism, concluding remarks and the reference list³.

Table 10. Descriptor-based sub-themes analytics (excerpt)

| Engaged Descriptors | Totals |
|---|---|
| <p>DESC A: AUTISTIC EMPLOYMENT STRENGTHS</p> <p>PERSONALITY—<i>Strong will to succeed: desire to work (4x/0x:3x); personal fulfillment (5x/0x:3x); desire for recognition/financial rewards (5x/2x:3x); persistence (1x/1x:4x); work to live (0x/0x:3x); learning as a lifelong journey (0x/0x:2x); company loyalty (3x/1x:2x); competitive workaholic (0x/0x:3x); Honesty: desire and tendency to follow rules (1x/0x:0x); strong ethics (2x/0x:3x); tendency to speak the truth—even if it's not tactful or in one's self-interest (5x/0x:2x); Fair and Just: intensely responsive when made aware of injustice (1x/0x:0x);</i></p> <p>COGNITIVE AND VISUAL THINKING—<i>good verbal skills/rich vocabulary (6x/0x:0x); very high intelligence (13x/1x:3x); tendency to think outside the box and generate novel solutions (4x/0x:0x); ability to absorb and retain large amounts of information (1x/0x:0x); ability to think in visual images (2x/0x:0x); good verbal skills/rich vocabulary (4x/0x:0x); analytic thinking (7x/0x:0x); pattern recognition (7x/0x:0x); perceived expertise authoritative status (2x/0x:0x); systematic information processing (1x/0x:0x).</i></p> <p>FIXATION—<i>Intense Focus: 'absent-minded professor' syndrome (1x); Details: precise technical skills (1x/0x:1x); systematic information processing (1x/0x:1x); attention to details (0x/0x:1x);</i></p> | <p>DESC A = 120x (77x/5x:38x)</p> <p>PERSONALITY (27x/4x:28x)</p> <p>COGNITIVE AND VISUAL THINKING (47x/1x:3x)</p> <p>FIXATION (3x/0x:3x)</p> |
| <p>DESC B: WORKPLACE CHARACTERISTICS</p> <p>RESPONSE—<i>decisive (2x/0x:5x); pragmatic (2x/0x:7x); clear (1x/0x:4x); intuitive (1x/0x:5x);</i></p> <p>CAREER COACH—<i>mutual respect (1x/0x:2x); trust (1x/1x:2x); advice (1x/1x:2x); feedback loop (0x/0x:2x);</i></p> <p>TOXIC CULTURE—<i>interactions are more formal than friendly (1x/0x:0x); insinuation/accusation (1x/0x:3x); infighting (1x/0x:2x); fear for one's job (6x/1x:0x); people have little to no leeway in doing their jobs (3x/1x:1x); infractions and demerits over recognition of extraordinary effort or triumphs (3x/0x:0x); lack of integrity (1x/2x:2x); prejudice/racism/sexism (3x/0x:0x); people do not speak up (1x/0x:0x); bullying (1x/3x:4x); insinuation/accusation (2x/0x:0x); rules and policies are more important than good judgment (2x/0x:0x); politics (2x/0x:2x); everyone is on the edge (0x/1x:0x); dishonesty (0x/2x:2x); people have little to no leeway in doing their jobs (0x/0x:1x); unitary communication in which the people in power tell others what to do (0x/0x:1x);</i></p> <p>OFFICE POLITICS—<i>stand up for oneself (1x/0x:1x); political connections influence operation (5x/3x:4x); people conflicts (2x/0x:3x); people have choice rather than just with fight/flight reaction to conflicts (0x/2x:1x); political alignment (0x/1x:1x); office politics/conflicts with management (0x/1x:1x); make it easy for your boss to champion you for recognition (0x/0x:1x); leverage personal circle of influence/opportunities (0x/0x:1x);</i></p> | <p>DESC B = 313x (52x/47x:114x)</p> <p>INTUITION (6x/0x:21x)</p> <p>CAREER COACH (3x/2x:8x)</p> <p>TOXIC CULTURE (30x/11x:20x)</p> <p>OFFICE POLITICS (8x/7x:13x)</p> <p>MANAGEMENT ORIENTATION (1x/25x:47x)</p> <p>CULTURE (1x/0x:0x)</p> <p>ENVIRONMENT</p> |

Source: Developed for this research.

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