SEAMLESS JOURNEYS TO WORK

FOR YOUNG ADULTS WITH PHYSICAL/NEUROLOGICAL DISABILITIES

Foreword

In Australia, young people with disabilities have lower workforce participation than their peers. This project addressed this important issue by examining emergent workers' (young people with physical disabilities aged 15- 24) lived experiences.

Supported with an Australian Council Research (ARC) Linkage grant (LP 150100168), this project investigated emergent workers' (young people with physical disabilities aged 15-24) transitions to work. Our aim was to help make the transition to work more seamless for young people with physical disabilities (aged 15-24 years) by broadening our understanding of their lived experiences of transitioning to work, by identifying interventions to improve online service delivery enables choice and self-determination in their journeys to work. Our findings indicate that:

■ our policy landscape is still inefficient, more needs to be done to provide a holistic, transparent program to get young people with a disability into the workplace

■ young people with disabilities often create their own creative resistance to get the system to work for them – this is not always enough to play within the boundaries given by society and employers

- the role of support from friends, family and employers as well as individual drive or motivation are key to successfully journeying to work

- the provision of online technology can create opportunities for young people with disabilities – both to help them in their journey to work and also in the workplace

- the amount of effort it takes for young people with disabilities to take a journey that is not routine presents a critical need – planning journeys to work require connecting a variety of services to better support new journeys

- seamless journeys to work can be enabled at policy level and at service provision – this requires a transformative approach to service design

Promoting self-determination and people's choice to enhance workforce participation is key in Australia's policy reforms around disability services. We aspire that the results of this research will provide key data to support organisations, service providers, educators, designers of interventions, and policy stakeholders, as well as a model to support an enhanced delivery of services supporting access to employment.

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Why one size fits all approach to transition in Disability Employment Services hinders employability of young people with physical and neurological disabilities in Australia

Why one size fits all hinders employability of young people with disabilities in Australia

Unemployment and underemployment issues among young people are not solely dependent on supply side employability factors, including their knowledge, skills, and circumstance. Labour demand factors involving deep structural and cultural aspects, such as market trends, labour vacancy ratios, embedded stereotypes and prejudice, and inaccessible environments, also significantly impact their employment opportunities and barriers. Moreover, the education-to-employment pathways of young people in advanced industrial societies have become more diverse, lengthy, and complex, making their transition to work even more difficult.

Successfully transitioning to employment is especially important to young people with disabilities as this enables them to achieve full social and economic participation. However, this cohort is most at risk with higher possibilities of experiencing poor work outcomes and higher rates of unemployment, due to socio-cultural, political-economic, physical, and psycho-social barriers. Focusing on young people with disabilities, this paper identifies assumptions driving contemporary Disability Employment Services (DES) policy regarding education-to-employment pathways and how this can better support secondary and tertiary students with disabilities in their transition to employment.

Method and sample

A critical review was conducted to understand the positions and assumptions driving contemporary DES policy regarding education-to-employment pathways. To further frame the analysis, the study draws on interpretive policy analysis to understand how the policy is interpreted in action. This involved 22 semi-structured, in-depth interviews that lasted between 45 minutes and 1 hour to explore interpretations of the policy. Participants, recruited using snowball sampling, included staff from policy implementing organisations (DES service providers) and affected citizens' representations (advocacy organisations), six of whom also had a form of impairment. Analysis of the interviews involved a four-stage-iterative process reflecting interpretive policy analysis protocol, and data were coded using NVivo 11.

Key findings

Analysis of the DES Eligible School Leavers (ESL) program, a specific provision to support young people with disabilities i nto employment, provides insights into how it positions young people, transition pathways, and level of impairment.

1. The policy intent and eligibility requirements view young people only as full-time secondary school students who are under 22 years of age, while excluding students aged 22 or above who are undertaking secondary education through TAFE or similar institutions.

2. DES only considers one transition pathway for young people, from secondary school to open employment, while other pathway components, such as tertiary or vocational employment training program, before open employment are not viewed as requiring any specific transition support.

3. ESL eligibility is also limited to young people with only severe disability, or a significant level of impairment, which is understood to be the major barriers to open employment. However, this is contradicted in the next page of the guideline, which shifts focus away from disability as the major barrier to employment. This policy positioning thus neglects the impacts of multiple structural and social barriers and the intersection of these barriers with a person's impairment on their transition to work.

These insights indicate a narrow conception of young people with a disability's transition to employment in DES policy, which results in a one size fits all approach to providing employment support. Further insights from in-depth accounts of DES service providers and advocacy organisations supporting young people with disabilities can help explore the implication of such view. Two main issues impacting young people's employability and transition were identified: (1) changes over time with ESL and the effects on access, service delivery, and creative resistance practice, and (2) prohibiting DES support to tertiary students in their education-employment pathway.

The 2012 changes in the ESL programs limited the eligibility criteria to only severe impairment and year 12 students, instead of students from year 10 and above. These lessened the personal psychological benefits such as stronger confidence and self-belief seen in students. The restrictions were also considered to be more about saving costs and avoiding dual servicing, which reflects marketization and paternalism thinking of the policy. Another restriction was the inability for DES providers to assist young people with after-school job support, which limits the opportunities and experience created by early intervention. Despite the 2016 DES reform, the widened eligibility had little impact on addressing existing the structural and temporal barriers. These DES restrictions also contradict with the practices and approaches discussed international literature to assist young people with disabilities in their pathways to obtain employment, including early intervention to build expectation, belief, and career thinking; specialised transition planning, career advice, and development; and support with work experience, training, and part-time job while at school.

> Another restriction was the inability for DES providers to assist young people with after-school job support, which limits the opportunities and experience created by early intervention.

Certain creative resistance practices to these restrictions include developing work attitudes and expectations; developing localised partnerships for school-based traineeships; or conducting work immersion programs at school. However, these workarounds are only currently realised by individual initiatives and require further recognition and incorporation into the wider DES service delivery model to make them accessible to all young people with disabilities.

Another issue identified was exclusion to DES support in the tertiary-to-employment pathway. There is increasing demand for tertiary education to enhance the modern workforce's employability and allow young people to seek secure and meaningful employment. However, not until a student completes/exits a tertiary course can they receive DES support, which limits their opportunities to develop and maximise employability. Furthermore, tertiary education still encounters attitudinal barriers and vocational and modification knowledge deficit, which impact student placements.

Recommendations

These findings imply philosophical and operational changes required in DES. Specifically, DES policy should broaden its understanding of education-to-employment pathways for young people and recognise the more complex and lengthy transition in the contemporary Australian economy. As such, transition to employment supports for young people should be widened in DES policy.

First, the Eligible School Leavers program rules and supports currently adopts a strong notion of "deservingness", as only those with significant disabilities can receive support in building employability and finding employment. However, this deems secondary students with "less" severe disability as not needing help, which is unsupported by research. Hence, there is a need to recognise that difficulties in transition to work are encountered by young people with various levels of impairment.

Second, DES programs should raise expectations early with schools, individuals, and families, as seen in creative resistance practices. This is because it takes time to challenge traditional expectations regarding the culture of work or seeing the possibility of open employment, especially for young people with a disability. Engaging with young people and their families will help build intrinsic motivation, trust, and relationships, which breaks down barriers and negative attitudes that allow for a smooth transition.

Finally, generating a post-secondary transition program can create a smoother pathway. This requires removing restrictions in supporting young adults in the tertiary education-employment pathway and increasing access to specialised disability employment knowledge, including awareness of employment assistance processes and timeframes. This would assist students with practice placements and enhance graduate job readiness. Further policy may also identify transition needs of young adults with disabilities in the tertiary education pathway and to explore co-design of tertiary-to-employment service provision.

Reference:

Stafford, L., Marston, G., Chamorro-Koc, M., Beatson, A., & Drennan, J. (2017). Why one size fits all approach to transition in Disability Employment Services hinders employability of young people with physical and neurological disabilities in Australia. Journal of Industrial Relations, 59(5), 631-651.

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Interpretative accounts of work capacity assessment policy for young adults with disabilities

Interpretative accounts of work capacity assessment policy for young adults with disabilities

The transition from education to work has become more complex and difficult for young adults, especially those with disabilities who have poorer work outcomes and higher unemployment rates. These can be attributed to various political-economic barriers, such as marketised policy and service systems, as well as socio-cultural barriers, such as attitudes and discriminatory practices within these systems.

Many OECD countries have made access to disability income support more difficult, through tightened eligibility, compulsory work activities, sanctions for non-compliance, and more frequent work capacity assessments for those already receiving benefits. With this strategy, organisations can justify reduced spending, but at the same time create coercive policies that fail to support those needing help. These also shift the focus from structural barriers that perpetuate inequalities for young people with disabilities, and instead to individuals' behaviour and internal effects.

> **The transition from education to work has become more complex and difficult for young adults**

One area that requires revision is work capacity assessment, which aims to categorise, code, and sort people with disabilities according to their work capacity and hours. This practice undermines complex disability experiences with expert-led judgement that neglects

a person's own knowledge of their needs and rights to exercise choice and control. When conducting work capacity assessments, service organisations also face tensions from the duality of roles as they monitor policy compliance and breach while also building relationships and delivering support services.

Therefore, it is important to uncover the interpretation of Disability Employment Services (DES) policy by personnel from related organisations. This helps identify the mismatch between policy intent and policy in action, and the impacts of policy on young people with disabilities. Focusing on work capacity assessment, this article illustrates how the assessments in practice are problematic as they perpetuate rather than remove structural barriers impacting the transition to work for young adults with disabilities.

Method and sample

The study uses interpretive policy analysis to identify how policy is understood and practised in action by different actors involved in its implementation, not just its construction. It does so by conducting in-depth, semi-structured interviews with 22 participants from DES service providers and advocacy organisations in Australia. Participants held different positions in these organisations and had different years of experience with disability employment. Six of the participants also self-identified as having a disability.

The interviews explored three areas: barriers to transition, solution/ strategies, and needs moving forward at the policy and programme levels. Data analysis followed the interpretive policy analysis protocol, which involved four stages:

1. Identify artefacts such as programme rules;

2. Identify relevant communities of meaning;

3. Identify and describe meanings from the artefacts;

4. Identify and discuss implications of the meanings on different communities and the differences between how communities interpret the policy.

Key findings

Overview of work capacity assessment

Assessments of work capacity are to determine whether people have mutual obligation to receive their income support payments. These apply for young adults with disabilities aged below 35 years, except for those transitioning from school to work through the DES – Eligible School Leavers program. This assessment gives a person a work capacity score such as 8 hours, 16 hours, or 21 hours per week. For anyone with a deemed capacity of 8 hours or more, it is required that they are either studying full-time or seeking employment. They will also have mutual obligation requirements to meet regularly with the Department of Human Services and participate in compulsory activities set out in the Job Plan. Failure to comply with these compulsory activities can result in suspended income support.

Interpretive meanings

One common interpretation of the policy in action is that it is a flawed process. This is not only about determining eligibility and work capacity but also the underlying logic to decide the categories, cut-off points, and benchmarks for the assessment. These assessments often disregard demand side factors impacting employment opportunities, such as labour market trends and vacancy ratios, embedded stereotypes and prejudices, and inaccessible physical environments.

Moreover, the determinations are usually just arbitrary 'judgement calls' that lack validity. As a result, the policy further stigmatises young adults with disabilities and reinforces disablement, rather than helping and supporting people by removing barriers.

Deficit focus

Participants also raised concerns about the deficit focus of assessments. A deficit-oriented approach views disability as a burden, a tragedy, or something that needs to be fixed. This is problematic because it overlooks structural issues impacting people in their pathway to work, individuals' interests, strengths, and capabilities, and thus unable to identify the support required.

'One size fits all' approach to assessment

The flawed process also lacked flexibility and consideration for different life stages, specifically people's age and experience. Assessing young people transitioning from school to work should be different from assessing a middle-aged person who may have an acquired disability and a different level of experience. Moreover, the policy has a significant gap in the support and assessment process for recent school-leavers in transition. Participants noted there are more resources for young people while they are at school, but once they leave school it would be harder for them to get the required support.

Misfit in benchmark hours and referral

When the policy is carried out by front-line service personnel, they referred people to inappropriate employment support streams. This caused problems for the young person and providers in achieving the work capacity benchmarks as well as meeting all compulsory activities requirements in their mutual obligation. Inappropriate benchmarks, for instance, the 30-hour benchmark was also unfit considering young people's age and circumstances. This new benchmark was also abruptly applied without consultation or justification, thus making people feel unfeasible and inappropriate.

Variability in administering the assessment

There were also concerns over how the assessments were conducted and by whom. In regional areas, assessments were likely to be carried out on the telephone, rather than face-to-face. This made people further question the validity of this process in understanding the complex intersection between person, environment, and work context, to identify the barriers, opportunities, and supports needed by young people with a disability.

Recommendations

From the issues identified, this paper suggests a shift from a deficit-oriented assessment process to a capability orientation, as the current approach devalues young people with disabilities, upholds stigma, and creates inequalities for them. In recognising individual strengths and capabilities, a holistic and co-determination approach can enable young people with disabilities to determine whether paid work is an option, and if so, the type of paid work and supporting strategies required so they can achieve their work goals.

Additionally, the policy should revise the concept of work itself, as noted in previous research. In a capitalist society, the idea that one must work in order to have value can perpetuate stigmatisation towards those with disabilities. Moreover, there is less high-quality paid work in post-industrial economies. These raise a need for policy to, not just contract young adults to seek paid work, but also address the very things that exclude young people with disabilities from the workforce. Ultimately, this enables self-determination among young adults with disabilities in their transition to work.

Reference:

Stafford, L., Marston, G., Beatson, A., Chamorro-Koc, M., & Drennan, J. (2019). Interpretative accounts of work capacity assessment policy for young adults with disabilities. Disability & Society, 34(6), 885-903.

Using Interpretive Policy Analysis To Uncover Meanings About Disability Employment and Income Policy Regarding Young Adults and Education–Employment Pathways

Project overview and context

The research focus is on improving the economic and social participation of young adults with disabilities. Of particular interest is understanding the complex education to work pathways and the intersecting barriers that impact these young adults in their attempt to secure paid work. The overall study aims to identify policy and practice interventions that can assist this interest which was prompted by the more complex, fragmented, and unpredictable pathway to work in post-industrial economies. This is a concern as many young adults with disabilities experience difficulties in their transition to paid work and already experience higher rates of unemployment and underemployment.

However, there is little progress made in improving the workforce participation for young adults with disabilities despite large public investment. This raises concerns about the underlying assmptions of the Disability Employment Programs (DES) policy, specifically the gap between policy intent and actual needs of young adults. To address this question, the interpretive policy analysis (IPA) was selected. IPA helps explore how the DES policy is understood and experienced by various policy actors in the community, which is important to identify policy effectiveness, resistance, and the tangible impact on the problem the policy seeks to address.

Research design and methodology

Design

The IPA approach formed Stage 1 of the study and sought to identify how implementers of policy (personnel from service providers) experience, understand, contest, and practise the policy and program logic. Stage 2 and Stage 3 explore the journey to work of affected citizens – young adults with disabilities.

What is IPA?

IPA is concerned with the meanings held by different actors about policy in action and acknowledges that policy operates in a social world where actors can vary its meaning and interpretation based on their experiences, context, prior knowledge, and values. IPA moves beyond the descriptive language of a policy to uncover not just the various meanings held about a policy by different groups, but importantly how the policy is interpreted and given meaning through processes and lived experiences. Hence, it reveals that the "truth" of policy intent is in what implementers do rather than what the policy says in its language.

IPA also acknowledges that any policy will involve different communities such as policy makers, policy implementing agency personnel, and affected citizens. They will offer unique perspectives to reach a deeper level of understanding of policy issues and how they are understood, practised, and experienced. Such analysis

produces "communities of meanings", from which policy implications and debates can be highlighted, and future policy changes can be informed. Identifying the different communities of meaning is essential in planning IPA research as it informs the data selection and collection, but is often overlooked, nevertheless.

The study's communities of focus include policy makers, policy implementers from service delivery organisations, and personnel from advocacy organisations representing affected citizens. The protocol involves a four-stage non-linear process as follows:

1. Identify the data artefacts that convey policy meaning (e.g., program rules);

2. Identify relevant communities of meaning;

3. Identify and describe meanings being communicated in the artefacts;

4. Identify and discuss implications of policy meaning on different communities and the different understanding and interpretations held by different communities.

Data methods

Two data methods are used in the research: documents and in-depth interviews with implementers of policy.

Three different categories of documents were identified. First, DES Income and Disability Support Pension policy and program rules documents available on the website were a key artefact to identify how policy makers understood young adults and transition. Next, 16 organisation's submissions to the National Disability Employment Framework were artefacts of implementers' experiences with the DES system. Finally, 41 academic papers from 2005 onwards were also reviewed and analysed to inform Stage 1 literature review. To help manage this large volume of documents, a recording system was used to log the documents as data and a research software program, NVivo, to store, code and categorise the data.

For in-depth interviews, ethical considerations involve managing personal risks (financial and emotional) and social risks (field reputation) associated with accounts of the Disability Employment program. To ensure this, any identifiable information were removed from transcripts to protect anonymity. Participants could also check and remove items they did not want to be included. Moreover, job categories used in published reports were also generalized to ensure confidentiality.

Participants were recruited from DES service providers across Australia and systemic advocacy organisations using snowball sampling, where participants were suggested by initially recruited participants. A total of 22 people participated with various years of experience and organisational positions held, 6 of whom also identified as having a disability. Two peak industry research partners acted as key gatekeepers in developing the interview schedule and recruiting.

Research practicalities

The important thing to note when applying IPA is that it is an iterative process which can be overwhelming, especially with the category analysis across different data types in big volume. Hence, using a research software like in this study (NVivo) will enable efficient categorising, coding, and analysis of data.

> **A total of 22 people participated with various years of experience and organisational positions held, 6 of whom also identified as having a disability.**

It is also helpful to spend time reading the documents and transcripts to be familiar with the data, which can sensitise the researcher to language that helps reveal embedded meanings held by policy communities about particular policy issues as well as the consideration of any historical or contemporary shifts.

To aid with coding the categories, a double coder approach is recommended to check on interpretation and arrive at an extensive table of themes, along with sub-themes and descriptions produced from the iterative process of review and refinement.

The IPA of the disability employment policy worked well as it helped identify and understand different meanings held about education–employment pathways and young adults by different communities involved in the policy in action. The reported experiences and accounts held by the implementers of the policy showed how two communities interviewed shared a mutual understanding that young people with disabilities' transition to work was much more complex than what DES policies and programs assumed.

Results

Young adults with disabilities, despite being a very diverse group in terms of impairments and transition–employment needs, were only understood in policies to be those at secondary school, hence only support relevant to this group and the lack of acknowledgement for young people's needs outside of secondary school such as recent school leavers or tertiary students. Therefore, the one-size-fits-all approach applied to young people under DES policies was concluded to be inadequate, helping inform policy change needed to improve support for young adults in their more complex and diverse education to employment pathways.

Practical Lessons Learned

While comparisons between the three types of documents analysed would have revealed disparity, the interviews provided in-depth illustrations of how and why the policy was not working in action, showing the benefits of using different data types in IPA. However, the whole process was time-consuming with the most difficult part being the lengthy participants recruitment to generate in-depth interview data.

Firstly, knowing the policy context, including its history, is one of the important starting points in policy analysis. This provides information regarding the communities involved, the historical time context of the policy, and any intersections with other policy and systems. In this case, disability employment cannot be understood without understanding contemporary industrial relations reform and income support systems (the "welfare-to-work" policy settings) adopted by many OECD countries including Australia. This helps with identifying communities of meanings, a key dimension of IPA.

Secondly, allowing sufficient time in the research planning for interpretive analysis is also critically important for success. Researchers should allow sufficient time in the data collection process for in-depth interviews, including ethics, recruitment, and conducting the interviews. Also, time must be appropriately allowed for the intense analysis process of all different data types. While the time will vary depending on the number of participants and data volume, it is key to realistically consider the time it takes to do the whole process.

Finally, being organised and having good systems is critical when working with documents. A practical consideration is being highly organised and having good document recording systems due to the large data volume. Keeping a document log as well as using software programs such as NVivo to store, code, and analyse all documents can help manage data effectively.

Reference:

Stafford, L., & Marston, G. (2019). Using interpretive policy analysis to uncover meanings about disability employment and income policy regarding young adults and education–employment pathways. SAGE Research Methods Cases Part 2.

View online: **https://eprints.qut.edu.au/124097/**

Stage 1 Report – Disability employment policy and program influences on education-to-employment transition for young people adults

Transitioning from education to employment

Transitioning from education to employment is critical to the economic futures of young adults with disabilities, as this allows them to achieve full social and economic participation. However, the right to work, choice, and employment for this cohort is not well-actualised in many countries, including Australia. To enhance employability and the improve the transition success of young people with disabilities, there needs to be a seamless journey from education to work with individualised services across the systems.

This research aims to make this transition more seamless by exploring mobility experiences of young people with disabilities and identify blended interventions (policy, physical, social, and technological) that improve person-centred service delivery, facilitate choice and self-determination, and encourage experience sharing. Corresponding with Stage 1 of the larger project: Seamless Journeys to Work for Young People with Physical / Neurological Disabilities, this paper takes a deeper look at Disability Employment Services (DES) and intersecting service systems to examine policy and program influences on the transition to work for young adults with physical and neurological disabilities.

Existing transition research has largely focused on secondary schools but lacked insights into employment services such as DES, its supporting role for young people's diverse education-to-employment pathways, and DES interface with education systems.

Therefore, this research focuses on employment services and explores what the policy and program rules say about transition and young people with disabilities, as well as how implementing organisations such as service providers understand and apply the policy. Issues in employment support for young adults with disabilities and its potential implications were identified and discussed.

Method and sample

Semi-structured, in-depth interviews were conducted with 22 participants from DES service providers and advocacy organisations. Participants held different positions in these organisations, had various years of experience with disability employment, and six of these participants also have a disability. The interviews explored transition to work for young people with disabilities across three areas: barriers to transition, solutions/strategies, and needs moving forward at the policy and program level. Additionally, 41 academic papers were reviewed and analysed, combined with secondary data from 16 organisation's submissions to the National Disability Employment Framework to inform analysis and theme identification. The interpretive policy analysis protocol was applied to data analysis and the coding process used NVivo11.

Key findings

A wide range of barriers impact the education-to-employment pathways and employability of young people with disabilities. These include:

1. Policy and programmatic derived barriers pertaining to transition itself and more broadly disability employment;

2. Social-cultural barriers, such as negative attitude/prejudices, low expectation, poverty; and

3. Spatial barriers, such as regional areas, housing, and other forms of built environment and transport.

These barriers are a result of prejudicial conceptions of disability and subsequent forms of social, economic, and spatial marginalisation of people with disabilities. Overall, the current DES system is inflexible and thus unaccommodating to all employability needs of young people with disabilities.

In response to these barriers, service personnel from organisations have developed creative resistance practices, for instance, building work attitude and expectation with schools, individuals, and families; providing quality work experiences and paid after-school jobs while at school; or developing localised partnerships to facilitate school-based traineeships and work immersion programs. However, DES should recognise and incorporate these practices into a suite of transition support services to make them more accessible to all young people with disabilities.

Recommendations

Moving forward, DES requires a combination of philosophical and operational changes to make the education-to-employment more seamless for young adults with disabilities. Specifically, DES needs to:

1. Recognise that transition takes time and the transition pathways are becoming more diverse, length, and complex, and thus widen transition support beyond the Eligible School Leavers (ESL) program.

2. Recognise that young people are at different points in the journey and allow permeable pathways between education, pre-employment, and employment.

3. Remove exclusions of who can access support through DES, including eligibility in ESL if a person with a disability wants help finding employment.

4. Consider the various complex needs when conducting the Department of Human Services assessments to ensure appropriate level and type of support as well as being age appropriate.

5. Allow DES ESL providers to

    a. Engage early on with schools, individuals, and families and show them possibilities of open employment to raise expectations and intrinsic motivation.

    b.   Support quality and various work experiences and paid after-school job while at school to build a career focus.

6. Acknowledge the specific needs of Recent School Leavers (RSLs) in DES who did not go through or who were not eligible for ESL but have transitional support requirements, for example, development of employability skills and experiences.

7. Enable support for young adults in the tertiary education-employment pathway like in ESL, for example by providing access to employment support and specialist knowledge with practice placements, graduate job readiness, unpaid internships (length to be self or co-determined).

8. Provide career development and career transition support for people post-placement.

9. Encourage individualised tailored plans and customised roles that focus on individuals' strengths to empower people and shift the view from "any job will do" to an individualised career outlook.

10. Foster peer group support and sharing of success stories to help young people learn from each other's experience and provide encouragement.

11. Provide specialist knowledge of workplace modifications and assistive technology to increase understanding of what is possible beyond people's impairments.

Overall, these changes shift DES policy towards a more client-driven holistic approach. The expanded perception of young people and transition can better cater to the complex and diverse pathways. In Australia, the transition from school to work cuts across areas of Education, Employment, Income Support, Health, Inclusive Environments and Infrastructure, and Disability Support Services, which are key policy areas in the National Disability Strategy 2010-2020. By acknowledging the intersection of these services and developing an integrated response, DES service providers can create a seamless journey to work for young people with disabilities.

Reference:
Marston, G., Stafford, L., Chamorro-Koc, M., Beatson, A., & Drennan, J. (2017). Seamless journeys to work for young adults with physical/Neurological disabilities: Stage 1 Report-Disability employment policy and program influences on education-to-employment transition for young adults.

View online: **https://eprints.qut.edu.au/110731/**

Participants as the experts: A design perspective on transformative research enquire

Current works in transformative service research (TSR) aims to improve services to enhance the quality of life of individuals and communities.

Current works in transformaive service research (TSR) aims to improve services to enhance the quality of life of individuals and communities. For people with physical disabilities, digital technologies empower their everyday mobility, specifically their daily commute to work, and enables them to gain and maintain employment. However, a lack of information and understanding of technologies may hinder their self-determination during journeys.

As part of TSR, this research investigates service experiences that affect people's self-determination and hence their well-being. Specifically, it examines the mobility experience of service users and how digital technologies enhance or hinder their self-determination during journeys. This poster presents the data collection methods and preliminary results from the first study, highlighting potential areas for design intervention based on users' needs.

Method and sample

Phase 1 of the study utilised the inductive Critical Incident Technique (CIT), which supports research participants to recall stories of memorable experiences that can be positive or negative. Eight semi-structured interviews with people located in Brisbane who had various mobility abilities in Brisbane and were familiar with using digital technology in their daily journeys. Interviews were transcribed and thematically analysed to identify critical incidents of limiting situations and supporting strategies that hindered or improved participants' self-determination in the use of digital platforms to prepare for or during journeys. In results, 54 critical incidents were identified and grouped into five categories and 24 sub-categories.

In phase 2, a collaborative design workshop presented different scenarios of mobility experience and digital technology usage of consumers to disability support service providers. This aimed to generate discussions how digital platforms can support both service users and providers and understand the service delivery barriers from the providers' perspective.

These methods adopt the human-centred design perspective and the service design approach that captures both users' and service providers' voices. An inductive and collaborative methodology also supports the transformative purpose to empower participants to raise suggestions, concerns, and propose ideas

Results and recommendations

Preliminary results from the first phase, which applied CIT, revealed five different areas where design can improve user interactions with digital technologies and in turn facilitate their self-determination in everyday journeys.

1. Planning: When planning the journey, users feel the need to contact service providers to double check information because what is said online is not always accurate.

2. Transport options: Physical accessibility of public transport is an issue and online services do not provide all the relevant information users need.

3. Technology: Social media provides the opportunity and space for users to have a voice, connect and build peer support networks.

4. Accessibility standards: In some cases, the information about accessibility provided online does not correspond to the specific needs of users, resulting in a place not being accessible to them.

5. Communication: Information provided online about accessibility and transport are not always up to date and do not correspond with reality.

Reference:

Amaral, C., Chamorro-Koc, M., Beatson, A. T., & Tuzovic, S. (2019). Participants as the experts: A design perspective on transformative research enquire. In 17th Qualitative Methods Conference.

View online: **https://eprints.qut.edu.au/128970/**

Seamless Journeys to Work for young people with Disabilities

Connecting the dots for seamless journeys to work: From lived experiences to seamless scenarios of mobility

As new and enhanced digital technologies and services are altering many aspects of our daily lives, social participation is no longer based on one's ability to move from one place to another, but their accessibility to services and social engagement. This is especially important for the case of people with mobility-related disabilities, where online interactions could enable seamless mobility and, in turn, minimise social exclusion and support their access to paid work and services.

This paper is part of our investigation into the lived experiences of young people with disabilities in relation to their mobility to work, covering two projects: a Pilot study that developed a mobility scenario framework and our three-year funded research titled Seamless Journeys to Work for young people with Disabilities, which investigated the enabling and disabling factors (policy, services, and experiences) impacting young people's everyday mobility experiences.

Specifically, this paper focuses on how digital technologies may enable seamless mobilities of young people with disabilities. As a result, it provides a design strategy to visualize a seamless scenario of mobility, which can help connect the 'dots' of limiting and supporting situations that impact the cohort's journeys to work.

The Pilot study: Lived mobility experiences of young people with disabilities

Young adults with a physical condition represent 62% of young people with a disability.

The Pilot study employed a qualitative approach which included interviews, cultural probes, and self-reported diaries, which revealed the high level of planning required for people with a mobility disability to get to work on time. Additionally, the study provided insights into the supports required for seamless mobility, the importance of online and mobile resources, and the frustration experienced when the actual journeys did not go as planned.

From this Pilot study, a mobility scenario framework was developed (Figure 1), which represents the sequence of actions comprising the structure of everyday mobility. A person's mobility practice is shaped by three elements: routines, rhythms, and space and time, which are the 'dots' that need to be connected for a seamless mobility experience. These 'dots' are connected or disconnected in three contextual dimensions. Mobility practice is how people assemble routines to produce their mobility. Mobility social describes how people manage the rhythms of daily activities to interact with others. Mobility experience is how people apply their understanding of space and time from previous experience to ensure predictability and safety in their mobility.

routines	practice The way person assembles routines to produce his mobility	tasks (what) Context of mobility actions, routines and person's daily practices that help person participation in everyday life
rhythms	social The way person prioritises and organises his mobility in order to interact with others	self (how) Context of mobility priorities and organisation that help person belong to society and social life
space and time public 9am 11am private 3pm 8pm	experience The way person applies previous experience to ensure predictability and safety in his mobility	environment (where – when) Context of mobility infrastructure of space and time that is understood by person's experience and knowledge

Figure 1. Scenario framework of a person's mobility

Altogether, these elements form a scenario framework that portrays one's mobility practice shaped around three instances: task (what), self (how), and environment (when-where). When all the 'dots' are connected, a person with disabilities would be able to experience a seamless mobility experience. Conversely, when these elements are disconnected, they may experience limited mobility experience and, in turn, limited participation in society (Figure 2).

a scenario of a person's mobility

routines	practice catch the 7:30am accessible bus at bus stop #3A	tasks (what) self-drive to park&ride spot close to bus stop, take bus and arrive after 15min, with 10min to wheel to office building.
rhythms	social arriving by 8am to share morning coffee with office supervisor	self (how) morning coffee with supervisor allows some mentoring time for personal career progression

missed the bus for the 3rd time on the week! being seen as unreliable worker

Figure 2. Scenario framework of a person's mobility disconnection

The three-year research: Young people with disabilities' seamless transition to work

The three-year research then investigated the policy, service delivery, and the design of online services that support young people with disabilities transition to work. This project consisted of three stages.

Stage 1

Stage 1 was an audit of the service and policy landscape, which conducted 60-minute in-depth interviews with 22 participants from different employment service delivery and advocacy organisations. Results highlighted the need of young people with disabilities for support in self-determining work goals, which vary according to individuals' life experiences, personal characteristics, environment, and resources. Support service personnel were also found to develop certain creative resistance practices to adapt current policy to people's needs.

> **Young adults with a physical condition represent 62% of young people with a disability.**

Stage 2

In Stage 2, an online survey adopting the Model of Goal Directed Behaviour was administered to 200 young adults with a physical and/or neurological disability from all stat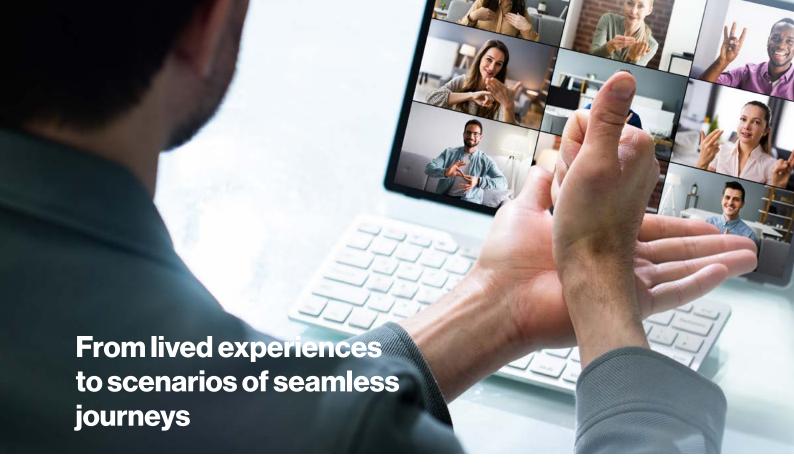es in Australia. The survey examined motivations, perceptions, and expectations of young people with disabilities about their journey to work. Results revealed 11 influencing factors impacting motivation, including attitude, subjective norms, positive emotions, negative emotions, risk aversion, past behaviour, perceived behavioural control, employer support, social support, desires, and intentions. Figure 3 presents a scenario narrative developed from the survey results.

Mia is a 25-year-old female who lives with her family in QLD. She works full time and has a Bachelor degree. In the morning Mia wakes up and gets ready for work with the occasional support from her mum. She drives herself to the train station where she parks and transfers to her wheelchair to catch the train. Her workplace is quite supportive, and her boss occasionally checks in on her to see how she is going and offers help if required. Mia is somewhat satisfied with her job and feels people are generally treated fairly at work. After work, Mia is frequently invited to join her colleagues for after work drinks. Because Mia is extremely cautious about new situations, she often avoids attending those events. When Mia needs to go to new places on her own, she researches where they are going to ensure the place is suitable for her and that she can travel there safely. She finds easy to use transport apps to assist with this.

Figure 3. Scenario narrative of a person's Goal Directed Behaviour about her journey to work

Stage 3

Finally, Stage 3 explored factors enabling people's self-determination in their actual journeys to work and the impact of digital technologies. The Critical Incident Technique (CIT), which involved self-reported field observations and interviews, identified 65 critical incidents, including positive and negative experiences (supporting strategies and limiting situations) of participants' journeys. The biggest limiting situation was the lack of digital platforms during journeys for planning and decision making (29.1%). Moreover, this research expanded the concept of journeys to work to encompass all activities performed before and during a commute, including planning, familiarisation with the route, transport booking, or getting from one place to another.

From lived experiences to scenarios of seamless journeys

This section integrates the findings from the two research. From Stage 3, a non-routine journey map was developed, including the identified enablers and limiting factors encountered during one's journey to work (Figure 4).
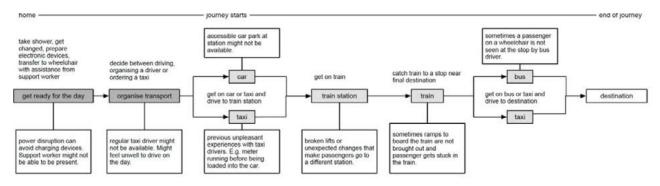

Figure 4. A person's non-routine journey map

These limiting factors are further elaborated in Table 1, which applies the scenario framework illustrated in Figure 1 to show the problems that a person with mobility disabilities might encounter.

Routines	Mobility Practice	Tasks flowchart (what)	
Rhythms	Mobility Social	Self-determination (how)	• Pre-trip, planning: getting ready and organising transport tasks are of same importance as it is a daily repetitive task • On the train: unannounced changes are out of her control – the implication of changes lessens her personal sense of control over the journey
Space and time	Mobility Experience	Environment (where-when)	Specific CIT causes disconnections in the participants' journey: • Accessibility: broken lifts, or unexpected changes at the train station requires that passenger goes to another station Other CITs on previous tasks add to the negative experience of this disconnection: • Preferred (trusted) driver is not available • No accessible parking spots • Taxi running meter is 'on' while loading wheelchair

Table 1. Scenario framework and limiting CITs of a person's non-routine mobility

In comparison, Figure 5 shows a journey map with supporting factors that facilitate a seamless journey to work, with the use of digital tools.
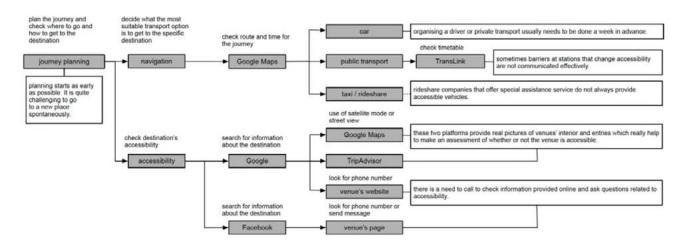

Figure 5. A non-routine journey map showing assistance of digital tools

A segment of this journey is placed into the scenario framework to further understand supporting role of the technologies identified in Figure 5.

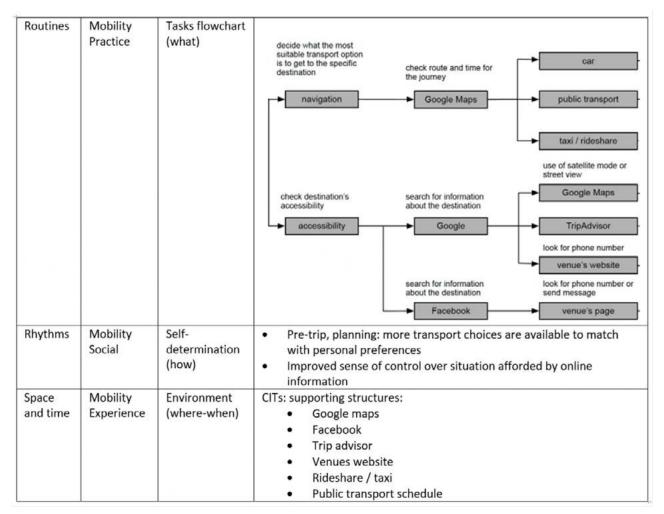|			
Routines	Mobility Practice	Tasks flowchart (what)	decide what the most suitable transport option is to get to the specific destination → navigation → check route and time for the journey → Google Maps → car / public transport / taxi / rideshare. check destination's accessibility → accessibility → search for information about the destination → Google → use of satellite mode or street view → Google Maps / TripAdvisor / look for phone number → venue's website. search for information about the destination → Facebook → look for phone number or send message → venue's page
Rhythms	Mobility Social	Self-determination (how)	• Pre-trip, planning: more transport choices are available to match with personal preferences • Improved sense of control over situation afforded by online information
Space and time	Mobility Experience	Environment (where-when)	CITs: supporting structures: • Google maps • Facebook • Trip advisor • Venues website • Rideshare / taxi • Public transport schedule

Table 2. Scenario framework and enabling CITs of a person's non-routine mobility with digital tools

These findings can influence managerial decisions. For transport planners and service providers, consideration of routine, rhythms, space-time elements of a journey, combined with context-led mobility scenarios (practice, social, experience) can inform decisions on how to cater for different people's mobility needs. Moreover, this scenario approach can be used as a design tool to visualize the impact of new technologies on people's mobility practice and how these tools enhance virtual-physical connections.

Reference:

Chamorro-Koc, M., Beatson, A., Amaral, C., Stafford, Lisa., Marston, G., Adkins, B. (2020). "Connecting the dots for Seamless Journeys to work: from lived experiences to seamless scenarios of mobility." In Christer, K., C. Craig and P. Chamberlain, eds. 2020. Vol. 1 of Proceedings of the 6th International Conference on Design4Health, Amsterdam, 2020. Sheffield: Sheffield Hallam University.

View online: **https://research.shu.ac.uk/design4health/wp-content/uploads/2020/09/D4H2020-Proceedings-Vol-1.pdf**

When mobility becomes a challenge: A human-centred approach to understand the needs of people with disabilities

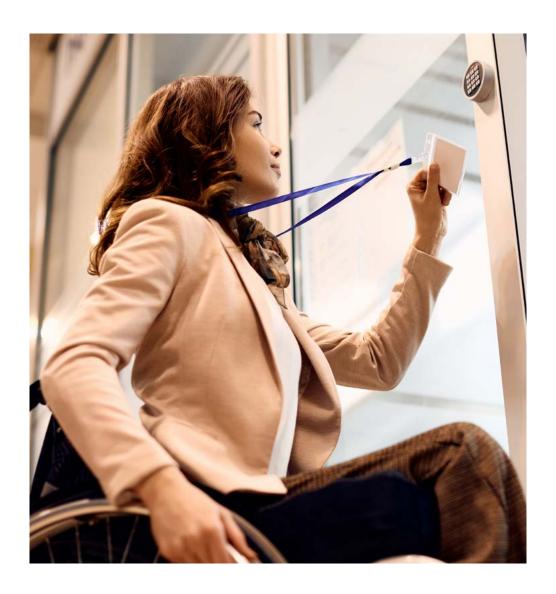# Understanding the needs of people with disabilities

As part of service research, transformative service research (TSR) aims to improve the well-being of consumers and service providers. In recent studies, TSR outcomes mainly focus on service design due to its human-centred, multidisciplinary, and transformative nature. However, little is known about how adopting a human-centred mindset can inform the design of transformative services.

This paper presents preliminary findings of a qualitative study to understand the mobility experience of people with disabilities. Specifically, it explored the barriers and enablers to their mobility and how digitally-enabled services supported them. The justification for this is that mobility is vital for self-determination, directly impacting the feeling of well-being. By positioning consumers central to the investigation, this study allows participants to raise concerns about the issues impacting their well-being and propose an agenda to transform their lives.

> **Mobility is vital for self-determination, directly impacting the feeling of well-being.**

Method and sample

The critical incident technique (CIT) method was used to invite participants to recall both positive and negative experiences that comprise their lived experiences. These were then analysed as enabling and disabling factors of service experiences. Interviews were conducted with 8 people with various levels of mobility abilities and familiarity with using digital technology to assist travel. Participants were recruited via on online screening questionnaire. The interviews lasted on average 40 minutes and were conducted after obtaining informed consent from the respondents. The interviews were audio recorded and later transcribed for analysis. The analysis employed an inductive approach to thematically categorise relevant incidents.

Recommendations

A total of 54 critical incidents were identified, organised into 5 categories and 24 sub-categories. The five major categories are (1) planning and decision making, (2) transport options, (3) technology, (4) policy and standards, and (5) communication. Some examples of participants' reports describe that when planning to go to an unfamiliar venue, they need to contact service providers to double-check the accessibility because the information provided online is not always accurate. The physical accessibility of public transport is an issue and relevant information about it is not provided in a timely and appropriate manner. Social media platforms offer opportunities to access peer networks that provide helpful support. Service providers have different understandings of accessibility, and there are no standards about how to give this information, resulting in consumers making misinformed decisions about whether to go to a place. These represent key areas for improving services to support people's mobility.
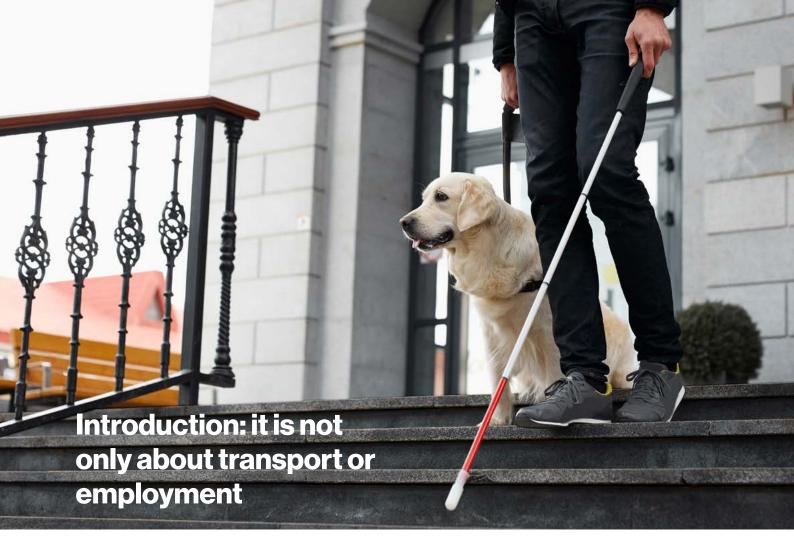
These findings have implication for several service design solutions. For instance, peer-to-peer digital platforms can be enhanced with the sharing of successful problem-solving practices from people's lived experience of disability and mobility. Real-time transport information could also be incorporated to provide timely updates about accessibility problems and solutions. Besides, communication channels between consumers can give them an opportunity to discuss their accessibility needs to relevant stakeholders. Overall, this study shows that a human-centred approach is beneficial to explore mobility needs of consumers with disabilities and identify concerns about the things that impact their well-being.

Reference:

Amaral, C., Chamorro-Koc, M., Beatson, A., & Tuzovic, S. (2020). When mobility becomes a challenge: A human-centred approach to understand the needs of people with disabilities. In 11th SERVSIG 2020 Conference-High Tech and High Touch: The Future of Human Service.

View online: **https://researchspace.auckland.ac.nz/handle/2292/52779**

SEAMLESS JOURNEYS TO WORK: A multi-faceted approach to exploring daily journey to work experiences of young people with disabilities

Introduction: it is not only about transport or employment

Previous studies suggest that young people with a disability experience poor transitions to employment and face multiple complex barriers hindering the process. In addition, their education to employment pathways are tightly prescribed. Regarding this issue, little evidence is found about the challenges young people with disabilities face in their physical commute to work and introduction to the workforce. For example, the level of planning required of wheelchair users to get to work on time is formidable with several steps. Even when all these are planned for, experiences of being stranded are common. There are sequences of supports that need to be in place simultaneously to make the work journey possible where online and mobile resources are also central in the process. Hence, this research seeks to explore the transition to work of young people with a disability as well as the role technologies can play in improving their self-determination and employment.

Young people with disability: mobilities and self-determination in their journeys to work

This research defines mobility as people's ability to access social life and services supporting a productive life. In this notion, people's mobility experiences shaped by the social and built environment critically determine their ability to connect the elements that enable daily routine. Hence, many obstacles that people with a disability encounter in their mobility, such as the fragmented support services to employment assistance, personal care, transport, aid, and equipment, reduce their ability to participate in employment seamlessly. In such cases, their self-determination and sense of wellbeing are negatively affected, positioning them in a situation of inequality. Particularly, Australia's current services and infrastructures have not effectively enabled smooth journeys to work for people with mobility-related impairments.

All the explained supports the notion that young people with disabilities experience poor transitions to employment and with low employment rates despite existing support. Nevertheless, little is known about what is required and what works for young people with physical disabilities to effectively join the workforce. The research hence aims to address this problematic knowledge gap from a systems perspective, situated in the intersection between policy, service landscape (including stakeholders and employers) and the application of a design lens.

Exploring journey experiences: a mixed method approach

Australia's current services and infrastructures have not effectively enabled smooth journeys to work for people with mobility-related impairments.

Three stages are conducted to address the above research problem's complexity and reach a better understanding of the person-environment interactions in the journey

Policy exploration and Creative Resistance

Stage 1 investigates how policy and programs influence the transition to work for young adults with disabilities and how they are interpreted and practised by implementing organisations (e.g., service providers). Twenty-two 60-minute in-depth interviews were conducted with results highlighting the need of young people with disabilities for support in self-determining work goals, varying according to individuals' life experiences, personal characteristics, environment, and resources. Support service personnel were also found to develop certain creative resistance practices to overcome prescribed service restrictions to help young people with disabilities build their employability.

Exploring motivations and attitudes: indicators of scenarios

Stage 2 focused on identifying motivations, perceptions, and expectations of young people with disabilities about journeys to work. An online survey adopting the Model of Goal Directed Behaviour was administered to two hundred young adults with a physical and/or neurological disability from all states in Australia. Results revealed eleven influencing factors impacting motivation, including attitude, subjective norms, positive emotions, negative emotions, risk aversion, past behaviour, perceived behavioural control, employer support, social support, desires, and intentions. The relationships and influence of these factors were more clearly identified in the results from a cluster analysis applied to the responses to the online survey and were interpreted in four types of Personas.

A design narratives approach was then applied to construct scenarios making people's experiences of work journeys more realistic and relatable. The below example is a scenario narrative based on one of the Personas.

Mia is a 25-year-old female who lives with her family in QLD. She works full time and has a Bachelor degree. In the morning Mia wakes up and gets ready for work with the occasional support from her mum. She drives herself to the train station where she parks and transfers to her wheelchair to catch the train. Her workplace is quite supportive, and her boss occasionally checks in on her to see how she is going and offers help if required. Mia is somewhat satisfied with her job and feels people are generally treated fairly at work. After work, Mia is frequently invited to join her colleagues for after work drinks. Because Mia is extremely cautious about new situations, she often avoids attending those events. When Mia needs to go to new places on her own, she researches where they are going to ensure the place is suitable for her and that she can travel there safely. She finds easy to use transport apps to assist with this.

Figure 1. Scenario narrative of persona Mia's journey to work

This scenario narrative provides an explicit account of a Persona (Mia), her characteristics, personal views, routines, and challenges that facilitate the understanding of how the eleven factors influence her attitudes and motivations towards her daily journeys to work. The journey is much more than just using transport to get to work as it also involves a support system of family and friends, infrastructure, and technology.

Exploring people's perspectives: critical incidents and journeys to work experiences

Stage 3 identified factors enabling people's self-determination in their journeys to work experiences using the Critical Incident Technique method that employs self-reported field observations and interviews. Eight participants were asked to describe memorable examples of limiting situations or support strategies that impacted their self-determination during journeys, from which sixty-five critical incidents were generated. The largest limiting situation was the lack of digital platforms during journeys for planning and decision making (29.1%). The second one was transport options (26.6%), followed by technology (19%), policy and standards (15.2%), and communication (10.1%). Overall, stage 3 extends our understanding of factors enabling or disabling self-determination of young people with mobility-related disabilities in journey experiences. This is illustrated in the form of journey to work experience maps, which we present in the following sections.

A design narratives approach was then applied to construct scenarios making people's experiences of work journeys more realistic and relatable.

Actual and desired scenarios of journey experiences

The design approach helped bring together and interpret findings from the three stages of the research into a holistic understanding of young people with disabilities journeys to work experiences. The CIT study provided insights into participants' process of planning and undertaking routine and non-routine journeys, from which journey maps illustrating the activities were generated. A journey map represents how a person interacts with a service by synthesising information into a step-by-step representation of service touchpoints. For this research, the journey maps also include sample quotes from participants of critical incidents associated with specific steps of the journey.
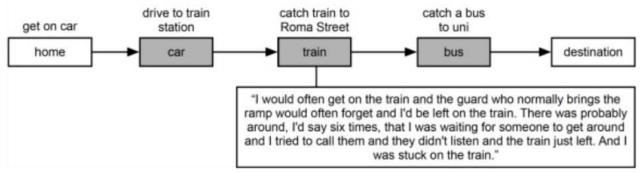
Figure 2. A person's routine journey to work

Figure 3 illustrates the journey map of a non-routine journey showing different enablers as well as limiting factors encountered at different touchpoints. It tells that when engaging in a journey to a new destination, the person's routine planning does not necessarily prevent delays or unexpected challenges. It also shows how the person engages with mobile technology to overcome the challenges.

Figure 3. A participant's non-routine journey

Such representations of journeys are helpful to illustrate the different problems that a person with mobility disabilities might encounter. It provides a design narrative for designers to work with stakeholders (end users and transport service providers), to work across design teams, and more importantly, to identify moments of the journey experience where a design intervention is clearly needed.

This approach was tested at a workshop with stakeholders to gather their views about the service delivery needs and the support of their creative resistance, as well as proposing ways to collaborate with service users. The workshop participants were purposefully recruited to present the five categories found from CIT: mobility planning, transport option, technology, policy and standards and communication. Their comments revealed possibilities and desires of what a better or desired scenario of a seamless journeys would be, one of which is the idea of a person-to-person interactive and collaborative web platform to inform both end users and service providers of people's everyday journeys. This emerged as a required solution to make those journeys easier to navigate and more seamless

Reference:

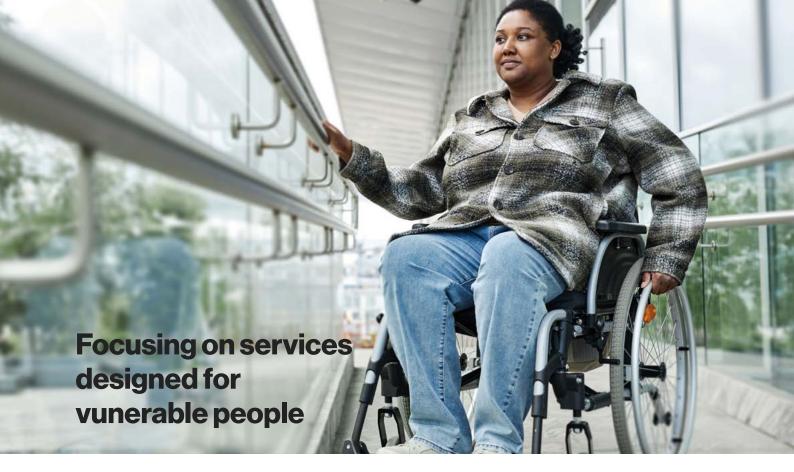Chamorro-Koc, M., Beatson, A., Amaral, C., Tuzovic, S., Stafford, L., & Marston, G. (2020). Seamless journeys to work: A multifaceted approach to exploring daily journeys to work experiences of young people with disabilities. Proceedings of DRS2020 Synergy. Vol. 3 Co-Creation., 1201-1215.

View online: **https://eprints.qut.edu.au/203847/**

Increasing the independence of vulnerable consumers

Focusing on services designed for vunerable people

With many consumers being at a disadvantage, transformative service research (TSR) has emerged in the services marketing research area, focusing on services designed for vulnerable people. Vulnerable consumers, such as the elderly, overweight and obese consumers, cancer patients, and people with disabilities, are considered powerless in consumption experiences. This population has gained attention in the literature as scholars increasingly examine different ways to provide support to these individuals.

Previous research has provided insights into the challenges these consumers face, such as risks of scams, higher levels of debt, lower financial literacy, and higher unemployment rates. However, there are knowledge gaps about support for people with disabilities in their transition to the workforce, and research on consumers with disabilities in general is under-represented in the marketing literature. Moreover, only two previous studies have examined the positive impacts of social support on the independence, health and well-being, and employability of vulnerable consumers.

Young Adults with Disabilities: YAWDS

Addressing these gaps, this current research contributes to TSR on vulnerable consumers and the overall research goal of service inclusion for all consumers. It does so by examining the influence of social support on the transition into the workforce of young adults with disabilities (YAWDs), one segment of the vulnerable consumer population. Specifically, it investigates the path to independent mobility that enables YAWDs to not only travel to work but also continue and maintain their position by travelling independently to their workplace. The study proposes a conceptual model through which risk aversion, anticipated positive emotions, and perceived behavioural control drive vulnerable consumers' independence behaviour.

> **These findings have several managerial implications to help increase the independence and thus well-being of vulnerable consumers.**
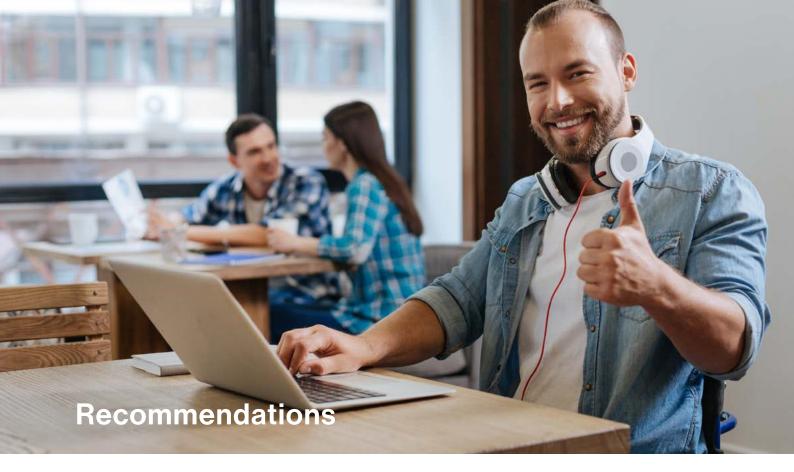
Method and sample

A survey was administered to 200 young Australian adults aged 18-35 years with a physical and/or neurological disability, such as Cushing's syndrome, amputation, spina bifida, and cerebral palsy, and were either employed or seeking employment. Participants were recruited through an online panel, Survey Sampling International. They completed questions about their demographic details, risk aversion, anticipated positive emotions, anticipated negative emotions, perceived behavioral control, attitudes, social support, and behaviour. Previously validated scales and reliable scales were employed in the survey.

Key findings

1. The influence of risk aversion on anticipated negative emotions then on attitudes and behaviour was stronger for those with low social support, which suggests that a lack of social support has a significant effect on one's behaviour.

2. The anticipated positive and negative emotions both impacted attitudes, which drove the behaviour. However, the emotions themselves did not drive the behaviour alone, indicating importance of attitudes in influencing behaviour.

3. Perceived behavioural control was more likely to drive attitudes toward independent mobility for those with high social support. As YAWDs feel they have more control over a situation with the support they recei ve, their attitudes and behaviours are in turn influenced.

4. Conversely, those with low social support perceive lower behavioural control. Thus, their behaviours were more likely driven by anticipated negative emotions rather than the control.
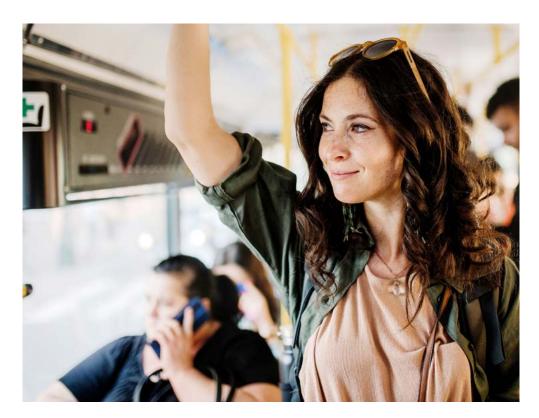
They completed questions about their demographic details, risk aversion, anticipated positive emotions, anticipated negative emotions, perceived behavioral control, attitudes, social support, and behaviour.

Recommendations

Overall, the findings suggest different drivers of independent mobility behaviour for YAWDs with high and low social support. These findings have several managerial implications to help increase the independence and thus well-being of vulnerable consumers.

For vulnerable consumers with high social support, marketers should develop approaches to increase their control over a given situation. For example, marketing campaigns could showcase successful journeys or focus on ways to solve problems arising along the journey, such as by including links to real time traffic information or encouraging engagement with other travellers.

Campaigns could also show services in action to demonstrate how the service could be used, or highlight the functionality incorporated into public transport designs to show how YAWDs could benefit from the services offered. The anticipated positive emotions resulting from travelling independently, reflected in their satisfaction and gratification, should also be highlighted, as these can also drive positive attitudes to independent behaviour.

When integrated with a social media campaign, the campaign should provide links to different tools available to help vulnerable consumers with journey planning and problem solving. It could also include a live chat functionality with service providers or consumers with lived experiences so YAWDs can interact with others who face similar challenges yet are able to successfully navigate different mobility situations.

For vulnerable consumers with low social support, marketers should mitigate their risk aversion, as this impacts their negative emotions, attitude, and behaviour. Since addressing all elements in this pathway is too much for one marketing campaign, it is recommended to focus on individual elements in the pathway to continually strengthen it. For example, campaigns could show mobility in action with methods for problem solving to reduce perceived risk, or show successful journeys to elicit a sense of satisfaction and minimise negative emotions.

For both groups with high and low social support, information about how to access transport and the types of options available could be provided, in the form of active training and mentoring or scenario style experiences using virtual reality or 3D designs. Moreover, internal marketing campaigns within organisations, such as government, transport and disability support providers could utilise gamification or anthromorphic designs incorporated into online technologies to help employees understand the lived experiences of those with disabilities. As a result, they can better support their peers and customers and develop more collective networks.

Factors influencing young adults with disabilities' journey to work

Factors influencing young adults with disabilities' journey to work

The journey to work, entailing both the physical commute and workforce transition, is challenging for young people with physical and/or neurological conditions. These people also experience higher rates of unemployment compared to ones without disabilities. Previous research has examined how specific conditions influence one's ability to move into the workforce, and four key factors have been identified: socio-cultural factors, psychological factors, environmental factors, and transition programmatic/policy factors.

However, it is unclear whether these factors do in fact influence the journey to work for young people with a physical and/or neurological condition. Therefore, this study will examine whether socio-cultural factors (subjective norms), psychological factors (attitudes and emotions), and environmental factors (one's past ability to access transport) impact the above journey. The transition programmatic/policy factors were not examined as they are beyond the individual's control.

Methods and sample

One assisting theory for the study will be the model of goal directed behaviour (MGDB), an ext ension of the theory of planned behaviour (TPB), to provide an understanding of decision-making behaviour prior to forming intentions to travel independently to work and transit into the workforce. The MGDB posits that affective and motivational

factors are instrumental in explaining the pursuit of the journey to the workplace by physically/neurologically disabled young adults. By adding risk aversion and social and employer support to MGDB, this study thoroughly examines the factors which influence a young person with a disability's journey into the workforce.

A survey was administered to a sample of 200 young adults with a physical and/or neurological disability aged 18-35 years, recruited through an online panel sample through survey sampling international (SSI). All participants were employed or seeking employment. Ethics approval was gained through the researcher's home university and the research was conducted in line with standard ethical guidelines and the National Statement on Ethical Conduct in Human Research. The MGDB constructs were measured using previously validated scales, and data analysis used the partial least squares (PLS-SEM) technique.

Key findings

Overall, the findings suggest that psychosocial, socio-cultural, and environmental factors all play a significant role in a young person's desire and intention to independently commute to work and establish themselves in the workforce. Among the psychological factors, attitudes, anticipated negative emotions, and risk aversion had a strong positive impact on desires where desires significantly influenced intentions. Here, attitudes refer to individual's attitudes to commuting to work independently and negative emotions refer to the sadness, anger and guilt felt as a result of not commuting to work independently. Surprisingly, anticipated positive emotions did not significantly drive desires to commute to work independently, varying from previous MGDB research.

In terms of the socio-cultural factors, subjective norms, employer support, and social support all had significant influence intentions to commute to work independently and establish oneself in the workforce. That is, individuals who perceived this as a societal norm were more likely to desire to and intend to travel to work independently. Also, with the support from their employers, friends, and family, individuals were more likely to identify that they had the PBC to transition into the workforce independently, which then drove their intention to do so.

For environmental factors, it was found that the intentions to commute to work independently would increase if individuals felt they had the PBC to access transport independently. Furthermore, past behaviour involving previous independent work travel significantly impacted intentions to utilise independent travel in the future. Interestingly, PBC and past behaviour did not significantly impact desires to independently travel to work.

Recommendations

The challenge is how to translate these salient factors into a tangible procedure to support young people with physical and/or neurological disabilities' commute to work and establishing themselves in the workforce. Despite government and interested parties' interventions, public policy still has a way to go to fully embrace the journey to work for young people with disabilities and to understand the influencing factors their interactions as shown in this study. The best solution may be to focus on procedures specific to each factor to develop best practices, which can then be integrated across individual factors to provide a holistic approach. This can fully support all factors and reduce disconnection between them.

One way to overcome potential disconnect is by developing early interventions within the school and tertiary education system. The focus should be on helping students overcome fear in transition, build self-determination, and importantly, being mentally prepared in the journey. Ways to develop this may include inventions in a digital setting, such as virtual reality (VR) headsets, to provide different scenarios to young people and teach them how to overcome potential obstacles and plan alternatives. VR can also allow them to plan accessible travel routes, simulate different work situations, or educate them about safety factors in and around the workplace. Headsets can also be used for instructors, counsellors, and human resourcing staff to understand some of the challenges young people with disabilities are likely to encounter and some of the broad requirements within the workforce such as workstation, toilets, and access. By experiencing the types of challenges faced by young people transitioning into the workforce with a disability, those involved in the support programs would have a better understanding of the workplace and the type of job plan that is required.

Reference:

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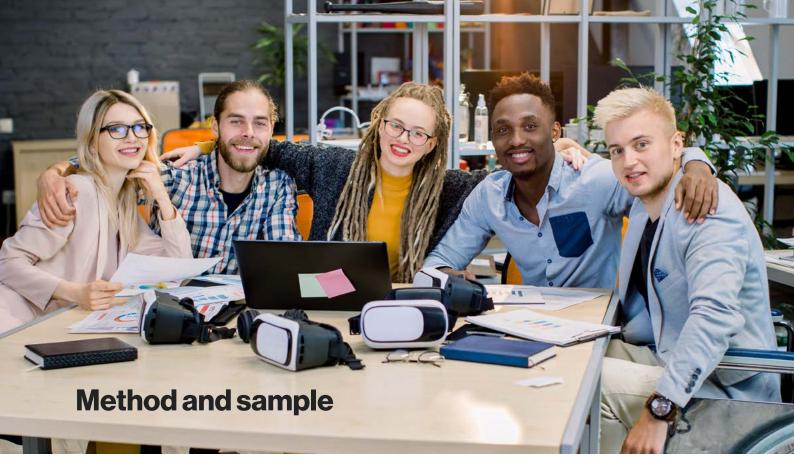
View online: **https://www.tandfonline.com/doi/epub/10.1080/09638288.2019.1655804?needAccess=true**

Segmenting with YAWDs with Theory of Planned Behaviour (TPB)

Encouraging young adults with a disability to be independent in their journey to work

Young adults with a physical condition represent 62% of young people with a disability. Thanks to developments in medical interventions, the lifespans of these young adults have increased significantly. However, there is a lack of understanding of how to support this population in their later years of life, specifically in gaining and maintaining employment. This is important as young adults with physical conditions are more likely subject to workplace discrimination, part-time and temporary employment, and higher rates of unemployment than others with disabilities.

Due to each person's differences in actual disabilities and factors influencing their decisions and motivations, the young adults with disabilities (YAWDs) population is heterogenous. Three segments were identified based on psychosocial and sociocultural factors. From there, this study applies the Theory of Planned Behaviour (TBP) to develop strategies to encourage YAWDs to be independent in their physical journey to work.

Method and sample

An online survey administered through an online panel was completed by a sample of 200 young adults who had a physical disability and were seeking employment or recently employed. Ethical clearance was obtained, and information about the survey content, its risks and benefits, and relevant contact details were provided to participants. Following that, participants completed questions about their demographic, their disability diagnosis, social support and desire measures, and the TBP measures, using previously validated scale items.

Key findings

Three segments of YAWDs were identified: highly, moderately, and lowly motivated and supported. The highly motivated and supported segment had the highest levels of desire and social support for independence in their travel to work. Thus, they had higher positive attitudes, subjective norms, perceived behavioural control, and intentions to being independent. They also reported the highest levels of actual past independent behaviour, with over half of the segment driving their own car to work. As a result, strategies should focus on commending these individuals on their independent behaviour and encouraging them to maintain it.

The moderately motivated and supported segment had medium levels of social support and desire to travel to work independently. This means their attitudes, subjective norms, perceived behavioural control, intentions, and demonstrated behaviour were also moderate. As these individuals may not complete the behaviour despite their initial intentions to do it, the challenge here is to ensure they do follow through with their intentions to translate those into actual actions.

The lowly motivated and supported segment had the lowest desire and social support for independent travel, which led to significantly lower attitudes, subjective norms, perceived behavioural control, intentions, and demonstrated behaviour than the other groups. Therefore, this segment can easily lose their employment aspiration due to negative attitudes, and the employment success of these individuals depends on how much support they receive from friends and family.

To address the lowly and moderately motivated and supported segments, strategies should focus on each component of the TBP (attitudes, social norms, and perceived behavioural control). This contributes to increasing their intentions and actual behaviour to travel independently to work.

Recommendations

First, campaigns are effective to enhance YAWDs' attitudes about travelling independently to work and portray such behaviour as a norm. Specifically, a multi-channel campaign utilising both traditional and digital methods can highlight the support available on public transport for YAWDs so they can feel more comfortable travelling independently.

To target social norm, another focus for the campaign is to make YAWDs feel socially accepted when travelling independently and highlight that their friends are travelling independently as well. Campaigns should target not only those with a disability but also the broader population to encourage assistance for those who may be encountering issues on public transport or in transit in their journey. It is also important that transport staff and the public are diversity- and disability-aware and inclusive in their approach.

Moreover, having peer-to-peer support networks, such as crowdsourced map systems like Waze or Google Maps, can provide real-time community advice and information that can help YAWDs plan and alter their journeys if issues arise. Transport operators and organisations should also provide information in a mobile app or website about any physical disruptions, including road works, building works, or terrain, together with alternative routes to aid planning.

Finally, perceived behavioural control can be enhanced by reviewing and increasing the available infrastructure to support YAWDs in their independent travel. One way to increase behavioural control is to educate them about transport options, route planning, and alternative seeking, which are useful knowledge for travelling independently. For instance, transport operators or city councils could provide virtual reality headsets with likely scenarios encountered on their journeys to enable learning in a safe and controlled environment. On top of that, this technology allows transport operators, architects, and city planners to experience and understand the potential challenges faced by individuals with physical disabilities, which, in turn, creates empathy and facilitates inclusive development and design of buildings, public spaces and transport options.

Reference:

Beatson, A., Riedel, A., Chamorro-Koc, M., Marston, G., & Stafford, L. (2020). Encouraging young adults with a disability to be independent in their journey to work: A segmentation and application of Theory of Planned Behaviour approach. Heliyon, 6(2), e03420.

View online: **https://www.sciencedirect.com/science/article/pii/S2405844020302656**

Enabling self-determination through transformative service design and digital technologies

Studying mobility experiences of people with disability

Data from the Australian Bureau of Statistics reveals that people with a disability or working age have a significantly lower workforce participation rate compared to those without a disability. This is due to a variety of barriers, but most crucial are mobility limitations and physical barriers that hinder them from engaging with employment-related activities. Therefore, navigating from one place to another is an essential skill to support employment and self-determination of people with disabilities. Moreover, this is important to their social, economic, and community participation, which can also affect their sense of well-being.

However, current services and infrastructure in Australia do not support effective commute to work for people with mobility-related impairments, which implies inequality and limits their self-determination. Addressing this, digital technologies can help with planning for journeys, ensure access to support, and find ways to handle disrupting issues during the trip. These provide more choice and control and thus allow people with disabilities to access services independently.

This paper explores the experience of people with mobility-related impairments in Brisbane, Australia, regarding using digital technologies to prepare for and during journeys to work. It takes a transformative service design perspective that recognises service users as experts of their experiences and allows them to propose

changes for better service experiences that improve their well-being. From these users' viewpoints, potential interventions using transformative design were proposed, which aim at enhancing self-determination in the journey to work of people with disabilities.

Method and sample

The study used the Critical Incident Technique (CIT), which places the focus on participants and gives them agency to share and propose change. Semi-structured interviews were conducted with eight people with a physical disability living in Brisbane. Participants were recruited using purposive sampling and had various levels of mobility abilities and familiar with using digital technology for journey planning and during transit. The interviews asked participants to recall both negative and positive mobility experiences that limited or enhanced their self-determination. They also discussed how digital technology impacted those incidents.

Data was analysed using an inductive approach and with the support of the ATLAS.ti software. After filtering the data, 54 usable critical incidents were identified for further thematic analysis.

These critical incidents generated 5 categories of limiting situations and supporting strategies affecting self-determination, including planning and decision making (29.1%), transport options (26.6%), technology (19%), policy and standards (15.2%), and communication (10.1%).

Key findings

Planning and decision making are strategies to help avoid unnecessary risks and overcome barriers or unexpected events during journeys. Besides participants' travel skills and confidence, planning and decision making also relies on the accessibility information available online. Moreover, part of the process entails contacting service providers to double check whether such information is accurate and up-to-date, as this gives people more confidence. However, when unable to independently solve a problem, participants must rely on others by asking for help to overcome barriers, which limits their self-determination.

Transport options involve both the positive and negative aspects of public transport, taxi and rideshare companies. For public transport, the biggest issue was the physical accessibility, for example, whether people with a disability need to rely on others to bring out a ramp or if they could independently get on and off buses and trains. Regarding taxi services, the reported incidents were mainly negative because people lacked control of where they are going or were unable to request a trusted driver multiple times. In some instances, people also got charged more than supposed to as drivers started the meter before loading the wheelchair into the car. On the other hand, rideshare services like Uber got endorsed for their reliability in having drivers that can assist wheelchair users. However,

participants also report issues such as unsuitable cars to cater for all needs and concerns over the lack of security measures.

Technology refers to digital platforms that provide accurate and relevant information as well as peer support networks that help people with disability. Social media enables these vulnerable consumers to have a voice, connect, and build supportive networks, through which they can share travel tips, updates on public transport, and support services recommendations. From there, people can feel more empowered and equal and make informed decisions to have more seamless journeys. Some suggestions to potentially provide more support include developing standard guidelines in restaurants, bars, hotels, and other venues to ensure specific, accurate and consistent accessibility information on their websites, or using an app to alert train guards on platforms to bring the ramp out for wheelchair users.

Policy and standards regarding accessibility information and support were reported as not serving people's specific needs. For instance, venues should also consider other accessibility facilities that go beyond providing access to ramps and lifts. While some participants could provide feedback to service providers to improve the physical space or information provided online and received positive responses, sometimes it is not even possible to establish contact with service providers. Besides, participants commented about the lack of action from local councils after engaging with the disability community, the vague information on the NDIS online platform, and some mobility issues in public spaces such as steep ramps, limited accessible parking, and blocked pathways for construction.

Finally, **communication** addresses the gap between what is available online and the reality. For example, information about public transport can be outdated, or hotels cannot accommodate guests with accessibility needs as photographs of their space taken with wide-angle cameras could distort some dimensions of door widths. Participants preferred realistic photos of spaces, such as on Tripadvisor, to correctly assess the accessibility of a space.

Recommendations

Insights into these five areas can inform the design of new services from the end-user perspective. Specifically, this paper suggests a transformative service design approach that entails providing:

1. A Digital Strategy Toolbox comprising existing support services and successful problem-solving practices.

2. An online collaborative platform for up-to-date users' rating of transport options.

3. A co-produced tool or communication channel that allows end-users and service providers to communicate and share accessibility problems and solutions so different needs can be catered to.

4. A Reality Map or Viewer that is based on end-users' input display consistent and relevant information about accessibility online.

Reference:

Amaral, C., Chamorro-Koc, M., Beatson, A., & Tuzovic, S. (2019). Enabling self-determination through transformative service design and digital technologies: Studying mobility experiences of people with disability.

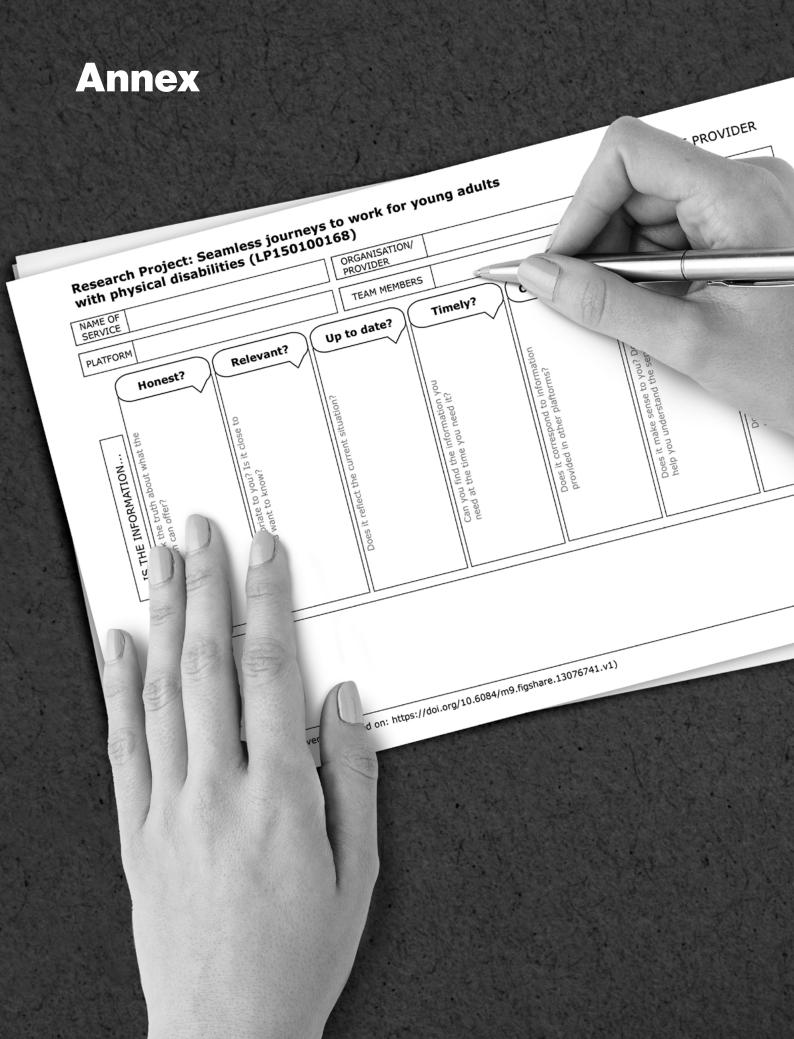View online: **https://eprints.qut.edu.au/132447/**

SEAMLESS JOURNEYS TO WORK

THANK YOU!

To all our research participants, the broader community, our research partners and the Australia Research Council Linkage Program.

VIEW PROJECT ONLINE

Annex

Research Project: Seamless journeys to work for young adults with physical disabilities (LP150100168)

ORGANISATION/ PROVIDER

PROVIDER

NAME OF SERVICE

TEAM MEMBERS

PLATFORM

IS THE INFORMATION…

Honest?

the truth about what the
can offer?

Relevant?

riate to you? Is it close to
want to know?

Up to date?

Does it reflect the current situation?

Timely?

Can you find the information you
need at the time you need it?

Does it correspond to information
provided in other platforms?

Does it make sense to you? D
help you understand the se

Research Project: Seamless journeys to work for young adults with physical disabilities (LP150100168)

COLLECTIVE

| NAME OF SERVICE | | ORGANISATION/ PROVIDER | | SERVICE CONSUMER | |

| PLATFORM | | TEAM MEMBERS | |

	Service consumer	Service Provider	Other supporting services people might be using on par
Honesty			
Relevance			
Up to date			
Timely			
Consistency			
Clarity			
Accuracy			
Opportunities			

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Research Project: Seamless journeys to work for young adults with physical disabilities (LP150100168)

NAME OF SERVICE

ORGANISATION/ PROVIDER

PLATFORM

TEAM MEMBERS

IS THE INFORMATION…

Honest?

Does it speak the truth about what the organisation can offer?

Relevant?

Is it appropriate to you? Is it close to what you want to know?

Up to date?

Does it reflect the current situation?

Timely?

Can you find the information you need at the time you need it?

Consistent?

Does it correspond to information provided in other platforms?

Clear?

Does it make sense to you? Does it help you understand the service?

Accurate?

Does it provide a correct representation of reality?

CHALLENGES

List the key challenges that you identify with the service:

P.O.E. of Online Service Delivery v1 (based on: https://doi.org/10.6084/m9.figshare.13076741.v1)

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