



# Recycle Mobility Programme Impact Report & Evaluation Study 2024

Dr Jolanta Burke, CPsychol (RCSI University of Medicine and Health Sciences)

Stephen Campbell (RCSI University of Medicine and Health Sciences)

Dr Robert Egan (Trinity College Dublin)

Variety – the Children's Charity of Ireland (Variety Ireland) CHY5739



Supported by



An Roinn Leanaí, Comhionannais,  
Míchumais, Lánpháirtíochta agus Óige  
Department of Children, Equality,  
Disability, Integration and Youth

Supported by



An Roinn Iompair  
Department of Transport

# Summary

**Variety - the Children's Charity of Ireland, also known as Variety Ireland, helps children in Ireland from across the disability spectrum, up to the age of 18 years.**

Variety Ireland's "Recycle Mobility Programme" provides special mobility trikes to children with disabilities in Ireland, so that they can be included in outdoor activities with their family and friends.

Once the child has outgrown their trike it is then upcycled and passed to another child or special school in Ireland so children can be included in cycling activities with their family and friends.

The aim of the programme is to ensure children with mobility issues are included in cycling activities with their family and friends while contributing to the overall health and wellbeing of the child and the family members while ensuring the programme benefits the environment.

This study was commissioned to measure the impact that the trikes would have on the child and family unit. It was conducted by Dr Jolanta Burke of The Royal College of Surgeons to explore the impact of that Variety Ireland's "Recycle Mobility Programme" has on the wellbeing of children with disabilities who have been given special mobility tricycles. This report also includes update research findings conducted by Stephen Campbell, MSc and Dr Robert Egan from Trinity College Dublin showing the impact that The Recycle Mobility Programme is having on children with disabilities and their families.

Findings show that this programme is having a very positive effect on children's mental and physical health, along with the entire family's wellbeing.

Some of the main contributions of the programme included helping young people with a disability gain an increased feeling of inclusion within their family and community. In addition to this, an enhanced sense of accomplishment and joy was experienced, both of which are integral components of psychological wellbeing (Burke, 2021).

Given that wellbeing is now one of the Department of Education's national priorities (DOE, 2021), providing children with a disability with tricycles can significantly contribute to the wellbeing of both students and their parents, who are part of the school community.

Future research will be carried out with a larger sample of participants which Variety Ireland will continue to carry out as part of their Recycle Mobility Programme as it expands. However, this research provides evidence to suggest that the tricycle scheme is already improving family's wellbeing and must be considered as partial fulfilment of the government strategy for enhancing physical and mental wellbeing of both the child with disabilities and other family members.

# Contributors

## Jolanta Burke, CPsychol



**Dr Burke is a contributor and researcher on both Variety Ireland's Recycle Mobility Programme Impact Report 2022 and Variety Ireland's Recycle Mobility Programme Evaluation Report 2024.**

Jolanta Burke, PhD, is a Chartered Psychologist and a Senior Lecturer (US: Associate Professor) at the Centre for Positive Health Sciences, RCSI University of Medicine and Health Sciences. Dr Burke specialises in the application of positive psychology. Specifically, she researches mechanisms for enhancing psychological flourishing and new wellbeing interventions, such as pro-environmental, nature-based and lifestyle-medicine-based tools for enhancing psychological flourishing.



Her latest research projects include an exploration of the nature-related mechanisms impacting physiological (Heart Rate Variability) and psychological wellbeing (funded by the Science Foundation Ireland) and the psychological wellbeing impact of bees on beekeepers, their families and the community (funded by the Irish Research Council and Community Foundation Ireland). She has authored over ten books, published over 60 peer-reviewed publications and written for such newspapers as the Guardian, Irish Independent, and Irish Times. Her research and publications have been featured in such media as The Economic Times, Channel News Asia, CNN and Fox News.

She is a regular contributor to Psychology Today and The Conversation, where over 2 million people have read her articles in the last two years, and she was acknowledged by the Irish Times as one of 30 people who make Ireland a better place.

For more information go to [www.JolantaBurke.com](http://www.JolantaBurke.com).

## Stephen Campbell, MSc



**Stephen Campbell is a contributor and researcher on Variety Ireland’s Recycle Mobility Programme Evaluation Report 2024.**

Stephen Campbell, MSc, is a research assistant at the Centre for Positive Health Sciences, RCSI. He graduated from University College Dublin with an Honors degree in Psychology and further completed a Master's degree in clinical neuroscience. In his dissertation, he performed enzyme-linked immunosorbent assays (ELISAs) to investigate the association of damage-associated molecular patterns (DAMPs) in the pathophysiology of schizophrenia.



Stephen brings his knowledge and deep interest of psychology and neuroscience to the Centre for Positive Health Sciences where he works on several multi-disciplinary projects in fields such as positive psychology, lifestyle medicine, and environmental education.

## Robert Egan, PhD



**Robert Egan is a contributor and researcher on Variety Ireland’s Recycle Mobility Programme Evaluation Report 2024.**

Robert Egan, PhD, is a Research Fellow in the Centre for Transport Research, Trinity College Dublin. He specialises in the study of everyday cycling and active transport planning in Ireland and has published widely in this field. Robert is currently exploring how e-cargo cycling is incorporated into everyday mobility within Ireland among private e-cargo bike owners.



The University of Dublin

## Acknowledgment

We would like to acknowledge and thank Dr Jolanta Burke (RCSI University of Medicine and Health Sciences) Stephen Campbell (RCSI University of Medicine and Health Sciences) and Dr Robert Egan (Trinity College Dublin) for researching and compiling this report and for their compassion shown towards children and families living with disabilities. These results illustrate the vital importance an initiative such as Variety Ireland’s Recycle Mobility Programme can have on children and the family unit.

# Table of Contents

Summary.....	2
Contributors.....	3
Acknowledgment.....	4
About the Recycle Mobility Programme.....	6
About Variety – the Children’s Charity of Ireland.....	6
Environmental Impact.....	7
Trikes & Trees Programme.....	7
Background - 2022 Recycle Mobility Programme Impact Report.....	8
Background - 2024 Recycle Mobility Programme Evaluation Study.....	8
2022 Recycle Mobility Programme Impact Report.....	10
Profile of Respondents.....	11
The Impact of Tricycles.....	11
On Children.....	11
Impact numbers.....	11
Impact in parents words.....	12
On Family .....	14
Impact in numbers.....	14
Impact in parents words.....	14
Final Word.....	16
Conclusion 2022.....	17
2024 Recycle Mobility Programme Evaluation Study.....	18
Profile of Respondents.....	19
Research Background.....	19
High Hopes.....	21
Usage Of Tricycles Among Children.....	22
Impact Of Tricycles on Children.....	23
Limitations.....	33
Promoting Social Inclusion and Independence.....	33
Enhancing Family Quality of Life.....	33
Mental and Physical Health Benefits.....	34
Reducing Healthcare Costs.....	34
Promoting Inclusivity in Public Spaces.....	34
National or Local Tricycle Distribution Programmes.....	35
Collaborative Partnerships.....	35
Conclusion.....	36
Supporting Testimonials.....	38



## About the Recycle Mobility Programme

In the Summer of 2021, Variety – the Children’s Charity of Ireland, with the support of Minister Anne Rabbitte and the Department of Children, Equality Disability, Integration and Youth and Minister Eamon Ryan and The Department of Transport launched their Recycle Mobility Programme. The Programme is designed to provide financial assistance to parents or guardians of children with disabilities who are looking to purchase a special mobility trike for their child. Up to the 1st of August 2024, The Recycle Mobility Programme has successfully delivered over 350 special mobility trikes to children with disabilities. Variety – the Children’s Charity have been able to achieve this through government and corporative funding as well as the generosity of public donations.

Variety – the Children’s Charity of Ireland have also been able to upcycle 120 disability trikes which were handed back to the charity by families receiving their new trikes. We have been able to pass these on to special schools and organizations looking after children with mobility issues, so these children can enjoy the same experience and delight of being able to cycle a bike in safety and comfort. The Recycle Mobility Programme ensures that old trikes do not reach harmful landfill sites which is not only good for the environment, but also offers major financial savings to all stakeholders given we do not have to constantly have to pay for new trikes once a child has outgrown their old trike.



## About Variety – the Children’s Charity of Ireland

Variety – the Children’s Charity of Ireland, also known as Variety Ireland, is an Irish not-for profit registered charity, founded in Ireland back in 1951. Its main core values are addressing and helping children with disabilities and children from disadvantaged background. Each programme the charity operates is designed to address the mental and physical wellbeing of children from across the disability spectrum living on the island of Ireland. Variety Ireland also has “Triple Lock” status which is only awarded to charities by The Charities Institute of Ireland that uphold the highest standards in transparent reporting, ethical fundraising and strong governance structures. This recognition is the gold standard for Irish charities to offer assurances to donors, members and the public.

As a charity with a non-paid CEO or board members who dedicate their time to the charity of free and without expense, this ensures that they maximise all funding provided via government, corporative and public donations which goes directly to helping children we serve. Our environmental sustainability policy ensures we design and operate programmes that benefit children and families as well as the environment.

# Environmental Impact

The Variety – Children’s Charity of Ireland “Recycle Mobility Campaign” is designed to have many sustainable and environmental benefits.

The most important being that all special bicycles (trikes) we give to children with mental or physical disabilities are handed onto another child, once it has been outgrown by the user.

This not only offers substantial financial savings to the charity from having to continually pay for a new bicycle each time, but also extends the lifetime of each item so other children can experience the same enjoyment of cycling as its previous owner.

This stops pre-loved trikes from reaching harmful landfill sites across the land which are an environmental risk (see chart below of Co2 emission savings).

Mode of Transit	CO2 released (per km driven per person)	CO2 released during production of vehicle
Car	271 g	313 g
Bus	101 g	---
Bicycle	16 g (This is from the fuel of the rider - food)	16 g

# Trikes & Tree Programme

Variety Ireland are aiming to be one of the very few children’s charities in the world to be “Carbon Positive” by the year 2028. Our Trikes & Trees Programme will help us achieve this by creating special Variety Ireland Nature Gardens in Special Schools and Respite Homes around Ireland which will off-set (plus) all carbon emissions used in the manufacturing of our special mobility trikes. Each garden will create a safe environments that let children experience and enjoy natural habitats close up to help nourish and enhance their mental wellbeing.

This together with the benefits our Special Mobility Trikes can provide, which can enhance a both child’s physical and mental wellbeing, means that children regardless of their ability have equal access to enjoy our great outdoors.

# 2022 Recycle Mobility Programme Impact Report

In 2022, Variety – the Children’s Charity of Ireland published our Recycle Mobility Programme report which was co-designed by Dr Jolanta Burke and the Variety Ireland charity in conjunction with The Department of Children, Equality, Disabilities, Integration and Youth and the Department of Transport in Ireland with the main aim being to identify the impact of providing young people with Tricycles on their own quality of life and their family’s wellbeing.

All parents whose children received a tricycle since the launch of the programme in 2021, were invited to participate in this once-off online survey. They responded to a range of demographic questions relating to their gender, age, relationship to the child and the length of time their child had a tricycle.

The main questionnaire comprised close and open-ended questions. There were five close-ended questions on a five-point Likert scale ranging from strongly disagree to strongly agree. The aim was to identify the impact of the wellbeing improvements associated with the receipt of a tricycle.

**See page 10 for full report.**

# 2024 Recycle Mobility Programme Evaluation Study

Since the launch of Variety – the Children’s Charity of Ireland’s Recycle Mobility Programme in 2021, the charity with the support of The Department of Children, Equality Disability, Integration and Youth, The Department of Transport, corporate partners and donors have, delivered 350 special mobility trikes to children with disabilities across Ireland.

Ongoing research studies with families who have already received their special mobility trikes between 2022 and August 2024 have allowed us to evaluate the success of this programme in great depth. This part of the evaluation study shows the impact that special mobility trikes are having on both the child and family members which supports inclusion and equal access to cycling for children and teens with mobility issues.

**See page 18 for full report.**





**variety**<sup>®</sup>  
the children's charity



# Recycle Mobility Programme Impact Report 2022

Supported by



An Roinn Leanaí, Comhionannais,  
Míchumais, Lánpháirtíochta agus Óige  
Department of Children, Equality,  
Disability, Integration and Youth



Supported by



An Roinn Iompair  
Department of Transport

## Profile of the Respondents

A total of eight respondents participated in this pilot survey. The response rate was 61%, which is adequate. All the respondents were children's parents, 87.5% (n=7) were female and the remainder were male (n=1, 12.5%). Most participants were aged 40-49 (n=5, 62.5%) followed by 50-59 (n=2, 25%) and one parent was aged 30-39. Therefore, most parents were middle-aged.

## The Impact of Tricycles

Most of the respondents reported that their children used their tricycles donated by Variety Ireland for at least 3 months (n=5, 62.5%), with three participants (37.5%) receiving their tricycles one or two months ago. This means that all the participants had ample time to use their tricycles and observe the impact it had on their quality of life.

## On Children

### Impact in numbers

All the participants agreed that their children's wellbeing has improved considerably since they have received a tricycle, with 50% of participants reporting considerable improvement.

Furthermore, 62.5% (n=5) of participants saw a considerable improvement in their physical health, 25% (n=2) of participants saw an improvement in their physical health whereas one participant reported was unsure if the saw physical wellbeing improvement.

Similarly, in relation to mental health, the vast majority of participants (n=7, 87.5%) saw an improvement in their children's mental health since receiving a tricycle with four participants (50%) reporting considerable improvement; whereas one participant was uncertain whether or not their child experienced mental health improvement since receiving a bike. Figure 1 provides a summary of numerical findings.

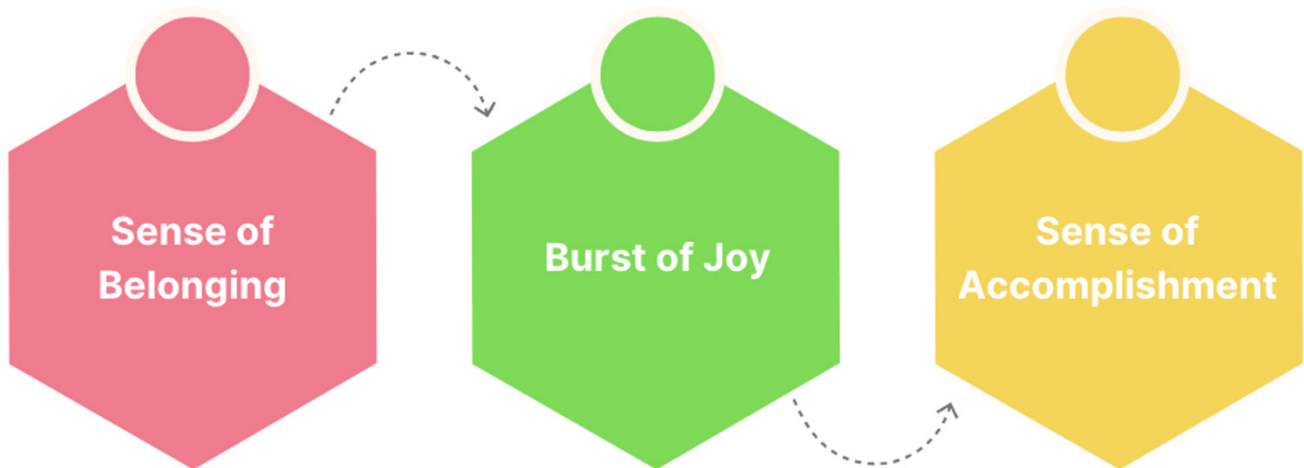
Figure 1 Summary of numerical findings relating to the impact of tricycles on children.



## Impact in parents' words

Three themes emerged from parents' description of the impact of tricycles on their children. Firstly, they acknowledged how their children's sense of belonging has increased as a result of riding a tricycle. Secondly, they mentioned the joy their children experienced from their tricycles. Finally, they talked about the sense of accomplishment that riding a bike gave their children (Figure 2).

Figure 2. Themes emerging from the impact of tricycles on children.



## Sense of Belonging

**Most parents highlighted how tricycles helped** their children feel they belonged with their family and friends. Children no longer watch their siblings and friends enjoy **themselves** while they stay outside and watch. Instead, the tricycle allows them to join in and enjoy all that other, fully-abled children enjoy.

Here are some quotes that illustrate this:

“It has allowed my child to have a tricycle like all **other children** her age (...) It allows her to be inclusive with her peers.” Participant A

“He is no longer watching my other children enjoying **themselves** / this has given him the opportunity to partake in an outdoor activity and experience the speed, **air in his face**, the simple pleasures we all get from cycling.” Participant C

“It has enabled her to cycle alongside her friend. Hearing them laugh and race each other is the best feeling in the world.” Participant D

“To get her outside and not be stuck in a buggy while she watches her friends cycle their bikes” Participant B

## Burst of Joy

Some parents mentioned that children were frustrated as their freedoms were limited. Receiving a tricycle allowed them to let go of negative feelings and feel the joy of cycling.

*Here are some of the quotes that illustrate this:*

“(It has) allow her to experience the joy the tricycle brings to her everyday life.” **Participant A**

“My child would have been in a buggy getting frustrated as his siblings were able to cycle. You could tell he would have loved it. He got frustrated by it.” **Participant F**

“The joy this brings him to untold. Plus he is more inclined to talk when he is on the bike. My son loves the tricycle it is a change from wheelchair... he is always happy in tricycle” **Participant G**

“It has given him a new outlook and something to enjoy with the rest of the family” **Participant C**

## Sense of Accomplishment

Some participants mentioned the impact that tricycles had on their children’s sense of accomplishment. What they thought they could not do, they have now accomplished with a tricycle.

*Here are some of the quotes that illustrate this:*

“It is difficult to put in words the impact of having a tricycle has on my daughter’s life. She cannot walk independently but has cycled up to 40km in one day. The tricycle gives her independence she would not otherwise have.” **Participant D**

“It gets her leg’s moving” **Participant C**

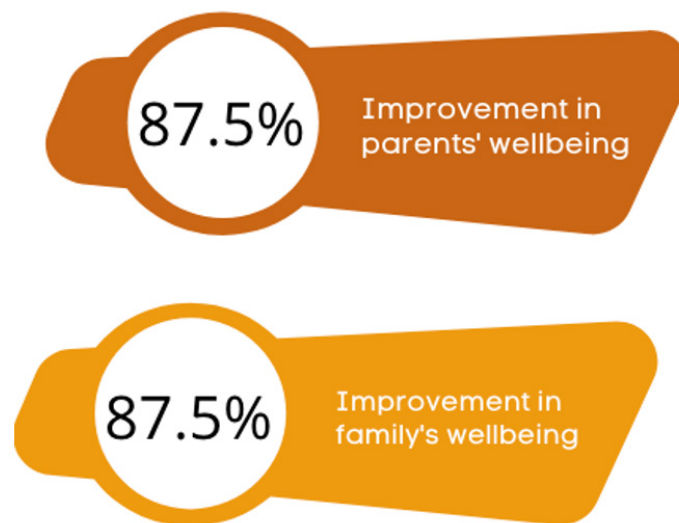
“Our daughter can’t cycle a bicycle. Tricycles to suit a teenager with her requirements are so expensive. Having a tricycle means the world to her, to do what she never could, she has watched other children in the past always wishing she could do the same. Now she can.” **Participant H**

# On Family

## Impact in numbers

A total of 87.5% (n=7) of parents acknowledged that the tricycle their child has received improved not only their wellbeing but also the parents' wellbeing. Of them, 62.5% (n=5) of them reported that the improvement was considerable. Only one participant was unsure of the impact of a tricycle on their wellbeing. Moreover, seven participants (87.5%) found that a tricycle improved their family's quality of life, and half of them considered the improvement considerable. Only one person was unsure of the impact it had on their family. Overall, data indicated that tricycles have impacted both children's and their family's wellbeing. Figure 3 provides a summary of these findings.

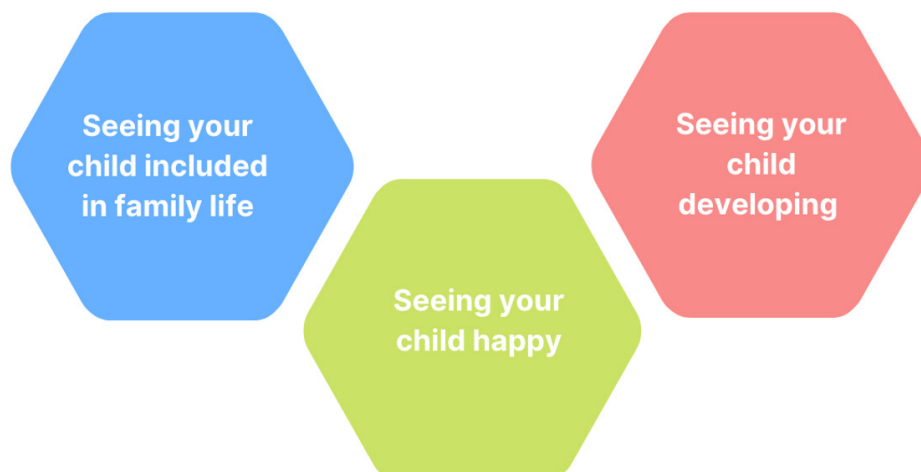
*Figure 3. Summary of the numerical findings relating to the impact of tricycles on family's wellbeing*



## Impact in parents' words

Three themes have emerged relating to the impact of tricycles on family's wellbeing. Firstly, for many what made them happy was seeing their child being more included in the family life; secondly, seeing their child happy; and thirdly, seeing their child developing skills and growing independent. Figure 4 illustrates these themes.

*Figure 4. Themes illustrating the impact of tricycles on family's wellbeing*



## Seeing your Child Included in Family Life

Their child felt more integrated into the family, as they were able to join their parents and siblings in physical activity, all of which made them happy.

*Here are some of the quotes that illustrate this:*

“It has been fantastic as younger son can cycle the wheelchair bike and it’s just himself and his brother together - gives my son a little break from mum and dad too - we can walk behind and watch as our younger son cycles with him.” **Participant C**

“We could never go cycling together as she would have been left out, on holidays etc, we’re so grateful. The tricycle has had a positive impact on all of us, her brother is delighted he has someone to cycle with.” **Participant H**

“The tricycle enables us go on outings and holidays together, for example, the Waterford and Blessington Greenways.” **Participant E**

## Seeing your Child Happy

Respondents highlighted how happy they are to see their children happy.

*Here are some of the quotes that illustrate this:*

“It’s all for the child” **Participant D**

“For us to see him engaging with people as he is out and about is amazing and to feel he is no different to his siblings. He is actually the envy of them now.” **Participant F**

## Seeing your Child Develop

Parents mentioned how seeing their children being independent and developing skills made them happy.

*Here are some of the quotes that illustrate this:*

“To bring her outdoors not in a buggy and her independence to grow.” **Participant A**

“Hugely beneficial for all of our mental health to have the extra tool to be able to help our child learn how to cycle and be outdoors more” **Participant B**

“The ease of use on country roads is massive.. knowing how hard he is strengthening legs makes me proud. So so grateful for our tricycle.” **Participant G**

## Final Word

“When you have a child with both a physical and intellectual disability activities are very limited as everything requires support. This tricycle has had a huge impact on our son as he sits in the chair at the front of the bike while either myself, my husband or one of our children cycle with him - he is safe and can enjoy the experience while also giving him a sense of belonging and confidence. It’s life changing for all of us!” **Participant C**

“An issue for us was figuring out how to transport the tricycle as it is too big to fit in the boot of the car. We managed to find a carrier after a lot of searching. Other families might need some support with this issue. Please pass on our thanks to Variety for their support in purchasing the tricycle.” **Participant E**

“We are so grateful to all involved in making this happen. Our daughter is truly so happy when on her tricycle and this would never been feasible without the support from everyone in loved.” **Participant A**





# Conclusion

The current pilot study was carried out to explore the impact of Variety Ireland's "Recycle Mobility Programme" on the wellbeing of children who have been given tricycles and their families.

Findings have shown that to date; the programme had a very positive effect on children's mental and physical health and the entire family's wellbeing.

Some of the main contributions of the programme included helping young people with disability belong to their family and community, as well as enhancing their sense of accomplishment and joy, both of which are integral components of psychological wellbeing (Burke, 2021).

Given that wellbeing is now one of the Department of Education's national priorities (DOE, 2021), providing children with disability with tricycles can significantly contribute to the wellbeing of both students and their parents, who are part of the school community.

More research needs to be carried out with a larger sample of participants which Variety Ireland will continue to carry out as their Recycle Mobility Programme expands to help more children.

However, this research provides preliminary evidence to suggest that the tricycle scheme can improve family's wellbeing and should be considered as partial fulfilment of the government strategy for enhancing wellbeing.



# Recycle Mobility Programme Evaluation Study 2024

Supported by



An Roinn Leanaí, Comhionannais,  
Míchumais, Lánpháirtíochta agus Óige  
Department of Children, Equality,  
Disability, Integration and Youth



Supported by



An Roinn Iompair  
Department of Transport

# Evaluation Study 2024

Since the launch of our Recycle Mobility Programme in 2022, it has delivered over 350 special mobility trikes to children with disabilities across Ireland. On going research studies with families who have received special mobility trikes between 2022 and August 2024 have allowed us to evaluate their success of this programme in great depth.

## Profile of the Respondents

Children aged 3-18 years with disabilities from across the disability spectrum. The most common disabilities being Down Syndrome, Cerebral Palsy, Spina Bifida, and Autism.

## Research Background

Written by Dr Jolanta Burke, CPsychol (RCSI University of Medicine and Health Sciences), Stephen Campbell (RCSI University of Medicine and Health Sciences), Dr Robert Egan (Trinity College Dublin).

A total of 27 families participated in this evaluation. Initially, they completed a survey shortly before receiving tricycles between August and October 2023. They were then followed up nearly a year later, between July and August 2024, to assess their experiences with the tricycles. At the follow-up, 20 families (74%) completed the survey. This high follow-up rate reflects the families' strong commitment to this initiative.

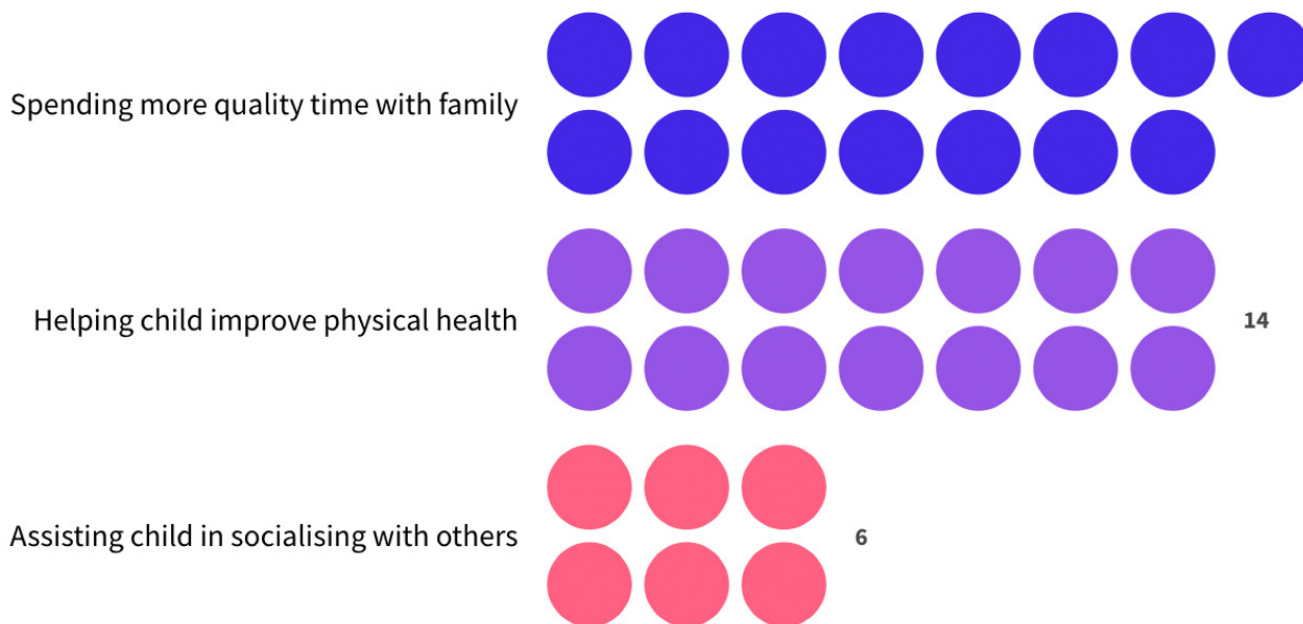
To evaluate the impact of tricycles on families and individuals, we employed three validated scales and an additional open-ended questionnaire to allow guardians to share their insights freely. The validated measures used were the Family Quality of Life Scale (Hu et al., 2011), the Satisfaction with Life Scale (Diener et al., 1985), and the Affect Balance Scale (Bradburn, 1969) to measure emotional balance. All scales have demonstrated excellent validity and reliability in previous studies. SPSS (version 27) was used to analyse the quantitative data, and a paired-samples t-test was applied to identify differences in participant scores before and after they received tricycles. Given the nature of the Variety report, statistical data is not published herein; however, it is available directly from the researchers upon request.

In addition to the scales, we asked guardians three open-ended questions. Prior to receiving the tricycles, we asked about (1) their expectations for how the tricycle would benefit their child and family. After nearly a year of use, we requested their views on how the tricycle had benefitted (2) their child and (3) the guardian completing the survey and their immediate family. Data was analysed using MaxQDA software (2022 version). We also recorded information on tricycle usage frequency, the duration of each session, the locations of use, and the storage arrangements. To ensure the protection of children's identities due to the small sample size, we did not collect any demographic data about the children or their guardians.



# High Hopes

Before the young people received their tricycles, we asked their guardians to share their views on how they believed the tricycles would benefit their child and the entire family. A total of 27 people responded to this question and the top three hopes were:



## Spending More Quality Time with Family

The most commonly reported potential benefit of the tricycle was associated with being able to spend more quality time as a family.

### Sample Quotes

*“We can do more together as a family”*

*“We can do an activity together as a family”*

*“We will be able to go on more family outings together”*

*“As a family can travel to an area to bike together and experience a family activity with her and her cousins brother.”*

## Helping Child Improve Physical Health

The second most commonly reported hope concerning the tricycle was about how it would help the child get more exercise, develop physically and improve their health.

## Sample Quotes

*“The children can get more exercise”*

*“It will also provide good physio therapy for my daughter.”*

*“It will also benefit my son’s gross motor skills”*

*“Allow my daughter the opportunity to experience physical exercise outside”*

*“I am hoping when the tricycle eventually comes (...) that my special needs son can get out more and exercise”*

## Assisting Child in Socialising with Others

Guardians hoped that a trike would assist their child to socialise with other children.

### Sample Quotes

*“Make new friends in the neighbours.”*

*“My son will be able to spend time with his peers driving around the area.”*

*“It will be a great social out let for her”*

## Usage of Tricycles Among Children

Children typically use their tricycles for about half an hour per session. However, some extend their riding time to 1-1.5 hours per session. Usage patterns show that some children ride their tricycles over the weekend, while others prefer weekdays. Nearly half of the children (45%) ride their tricycles several times a week, and 20% use them at least once a week. Remarkably, one child enjoys their tricycle so much that they use it every day for a total of 7 hours each week. Additionally, 25% of the children ride their tricycles several times a month or at least once a month, while only one child uses a tricycle less than once a month.

The majority of children ride their tricycles around their homes and within their residential estates. About one-third of the children venture further, using their tricycles in parks, on cycle tracks, greenways, or other more distant locations. Additionally, there is a notable instance of one child using their tricycle at school, presumably on car-free school grounds.

These findings suggest that greenway infrastructure and low-car residential areas provide sufficiently safe spaces for children participating in this scheme to use their trikes. These locations for cycling indicate primary recreational and social cycling, particularly with family or neighbourhood friends. Non-residential public roads only

appear to be indicated in one response as a main space used for tricycling. In this response, cycling to the shop is also listed as a destination.

Overall, non-residential public roads may be considered excessively risky as spaces for trike use, which may in turn limit the use of the trikes for a wider range of journeys, including transport journeys to school or other locations. Improving the safety of local cycle networks and ensuring tricycle-accessible parks and greenways may enhance the spaces and purposes available for tricycling for future scheme participants and their families.

In terms of storage, most families keep their tricycles in the garage (35%), at home (30%), or in a shed (25%). Additionally, some families store the tricycles in their garden or at school (10%). In only one instance, it was reported that the tricycle was generally parked outside (with a cover). This may indicate the importance of having indoor storage space for prospective scheme participants. Expanding locally available cycle parking/storage options may help more families avail of the scheme, particularly those who live without sufficient space or accessibility to store a trike indoors or in a private shed space. Such cycle parking may include within schools, as listed by one participant, or secure compound or on-street cycle parking that facilitates adapted tricycles for residents of apartments or terraced houses.

## Impact of Tricycles on Children

We asked guardians to share their perspectives on the impact of tricycles on their children. A total of 20 people responded to this question.

**Tricycle significantly improved child's wellbeing**

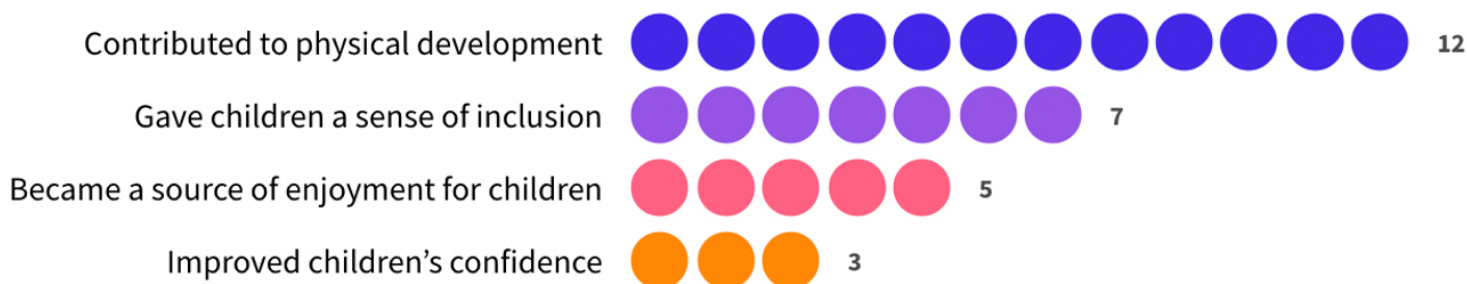


80%

20%

**Tricycle improved child's wellbeing**

Qualitative data analysis showed 4 main benefits of tricycles for children with disabilities.



## Contributing to Physical Development

The most frequently reported benefit of the tricycle for children was associated with their physical development. Tricycles have provided children with an opportunity to develop their gross motor skills, and supported them with physiotherapy. Thus, they became an integral part of their children's positive health development.

### Sample Quotes

*"My son's gross motor skills are improving from using the tricycle and it is benefiting her weight loss also."*

*"Good physio"*

*"It has strengthened his legs and helped him with kicking while swimming"*

*"It has helped to build his strength"*

*"It helps with mobility of joints and physical strength"*

## Gives Children a Sense of Inclusion

The tricycle has enabled children to feel more included in various activities. Over the years, they were often excluded from physical activities that their peers were involved in. Having a tricycle allows them to feel part of the family and community.

### Sample Quotes

*"Not feel so isolated as we did before he got the tricycle."*

*"Being part of the gang."*

*"It has got us out as a family and my son has opportunities to cycle with his cousin and friends regardless of disability"*

*"Inclusion in family days"*

*"She is enjoying doing something alongside her brother."*



## It's Become a Source of Enjoyment for Children

One of the main benefits of the tricycle is that it brought more joy into children's lives. They laughed more, had more energy, and enjoyed the thrill of riding a bike. For some, the break from their wheelchair was an especially happy experience.

### Sample Quotes

*"My child is so happy on his tricycle. He enjoys the thrill of the speed and the wind in his face. He loves cycling around with his siblings and being part of the gang."*

*"Enjoys the motion"*

*"She has great fun on it."*

*"The tricycle gives my daughter a wonderful sense of fun enjoyment."*

## Improved Children's Confidence

The tricycle has significantly boosted the children's confidence. Being able to ride independently gave them a sense of achievement and control, which translated into greater self-assurance. This newfound confidence extended beyond just riding the tricycle; it positively impacted other areas of their lives as they felt more capable and empowered.

### Sample Quotes

*"Gave her confidence"*

*"It has boosted her confidence."*

*"Confidence and joy"*

## Family Quality of Life

This assessment aimed to understand how the quality of life for the entire family has changed since receiving a tricycle. Family Quality of Life encompasses various factors, including guardian satisfaction with family interactions, parenting styles, emotional wellbeing, and physical and material wellbeing.

### Sample Questions Included

*"My family enjoys spending time together."*

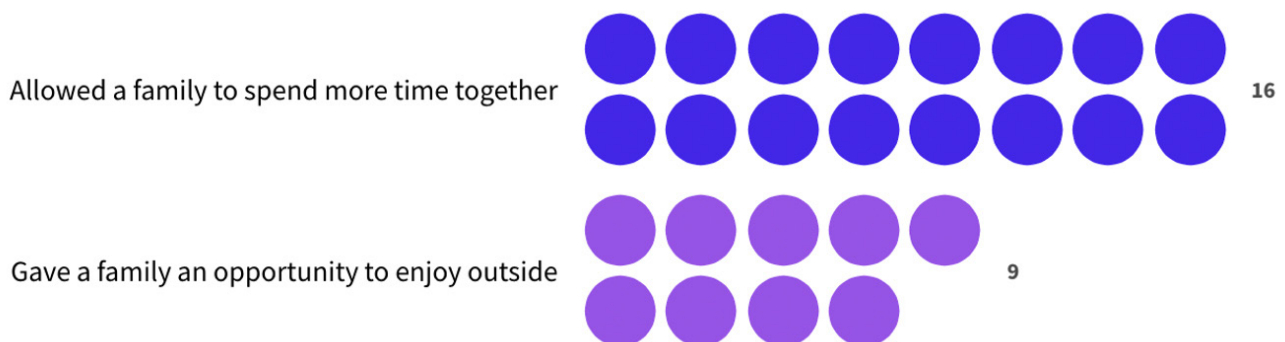
*"My family members help the children learn to be independent."*

*"My family has the support we need to relieve stress."*

Statistical analysis revealed improvement in family quality of life from before children received a tricycle to one year after. This suggests that the introduction of the tricycle and its related changes may have contributed to greater harmony among family members.

# The quality of life has improved for 65% of families a year after receiving a trike

We asked guardians to delve deeper and share with us how receiving a tricycle impacted their family dynamics. The two main themes that emerged were:



## Allows a Family to Spend More Time Together

The tricycle has enabled families to spend more quality time together. The vast majority of the respondents reported that having a tricycle allowed them to engage in more shared activities, fostering stronger family bonds. Whether it's going on rides together, enjoying outdoor adventures, or simply spending time in each other's company, the tricycle has brought families closer, creating cherished memories and enhancing their overall sense of connection.

### Sample Quotes

*"We like having an activity everyone in the family can enjoy."*

*"His siblings are spending more time with her now that they can accompany her on her tricycle."*

*“Our tandem bike has been of huge benefit to us as a family. It has meant that we have been able to get out cycling as a family which is so important to us especially as we have a greenway so close to us”*

*“It has enabled my son keep up with his siblings”*

*“It's been lovely to see my daughter cycle with her brother, and it allows us to all go out together, whereas previously only one parent could go cycling with our older son, and one would have to stay with my daughter.”*

*“Inevitably previously, our daughter would have to wait while the other children went on cycles. She is the same as other members of the family during a cycle now.”*

## **Gives a Family an Opportunity to Enjoy Life Outdoors**

The tricycle provided the entire family with the opportunity to enjoy the outdoors, which is immensely beneficial for both their mental and physical health. Being outside together not only allowed families to get fresh air and exercise but also contributed to reducing stress and improving their overall wellbeing.

### **Sample Quotes**

*“Get out in the fresh air and enjoy it in a playful fun manner”*

*“It gave us more options to do activities outside”*

*“It has got us out as a family”*

*“The trike allows us as a family to go on cycles together.”*

## **Improves Family Communication**

One aspect of Family Quality of Life involves the guardian's satisfaction with family communication. This dimension assesses the relationships among family members and the impact they have on one another. Increased discord or feelings of insecurity can lower family communication scores, while supportive behaviours—such as helping each other achieve personal goals and demonstrating love and care—tend to result in higher scores.

### **Sample Questions Included**

*“Does my family member with a disability receive support to achieve goals at home?”*

*“Do family members show love and care for one another?”*

*“Is there outside help available to address the special needs of all family members?”*

## Gives a Family an Opportunity to Enjoy Life Outdoors

The tricycle provided the entire family with the opportunity to enjoy the outdoors, which is immensely beneficial for both their mental and physical health. Being outside together not only allowed families to get fresh air and exercise but also contributed to reducing stress and improving their overall wellbeing.

### Sample Quotes

*“Get out in the fresh air and enjoy it in a playful fun manner”*

*“It gave us more options to do activities outside”*

*“It has got us out as a family”*

*“The trike allows us as a family to go on cycles together.”*

## Improves Family Communication

One aspect of Family Quality of Life involves the guardian’s satisfaction with family communication. This dimension assesses the relationships among family members and the impact they have on one another. Increased discord or feelings of insecurity can lower family communication scores, while supportive behaviours—such as helping each other achieve personal goals and demonstrating love and care—tend to result in higher scores.

### Sample Questions Included

*“Does my family member with a disability receive support to achieve goals at home?”*

*“Do family members show love and care for one another?”*

*“Is there outside help available to address the special needs of all family members?”*

**Family communication  
has improved for 60% of  
families a year after  
receiving a trike**

The results demonstrated an improvement in family communication from before the children received their tricycles to a year later. This suggests that the tricycles may have enhanced family dynamics. The inclusiveness of the tricycles allowed children to participate in family outings and cycle alongside their siblings, potentially fostering closer family connections. Additionally, the physical activity associated with cycling may have reduced stress in children, which could have positively affected other family members. Furthermore, decreased parental concerns about a child's exclusion may have led to increased satisfaction with family interactions. This finding highlights the significant impact of tricycles on not only the child but also their siblings and other family members.

## Positive Parenting

Another aspect of Family Quality of Life is parenting. Positive parenting involves a guardian's approach to fostering a child's independence, supporting their interests and activities, engaging in their friendships, and showing interest in their life beyond the home.

### Sample Questions Included

*"My family members help the children with schoolwork and activities,"*

*"Adults in my family know other people in the children's lives (friends, teachers, etc.),"*

*"My family member with a disability receives support to achieve goals at school or work."*

**Positive parenting  
has improved in 45%  
of families a year  
after receiving a trike**

The results showed that guardians' satisfaction with positive parenting increased after the children received their tricycles. This improvement may be attributed to the increased excitement and communication generated by the tricycles. The enjoyment children experienced with the tricycles could have led to more discussions with people outside the immediate family and contributed to the perception of greater inclusion, fun, and movement. These are some possible reasons for the observed increase in perceived positive parenting.

## Improved Family Emotional Wellbeing


Family Emotional Wellbeing refers to a family's ability to handle stress, stay united during challenges, and support each other in resolving issues and making positive decisions.

### Sample Questions Included

*"Our family solves problems together,"*

*"My family has the support we need to relieve stress,"*

*"My family members have friends or others who provide support."*



**Family resilience  
has improved for  
45% of families  
a year after  
receiving a trike**

The results showed that family resilience improved before the children received their tricycles compared to after. This aspect of wellbeing relates to how resilient a family is in facing life's challenges. Resilience can be viewed as the ability to use and negotiate available resources, such as accessing a tricycle and working with Variety to navigate its nuances. The tricycle may have become a symbol of perceived resilience, positively impacting the family's overall emotional wellbeing.

## Satisfaction With Life

Parenting a child with a disability presents significant challenges for many caregivers. Research indicates that the daily demands and additional supports required can negatively affect guardians' overall life satisfaction.

### Sample Questions Included

*"In most ways, my life is close to my ideal,"*  
*"So far, I have achieved the important things I want in life,"* and *"If I could live my life over, I would change almost nothing."*

In this study, guardians' satisfaction with life improved after their child received a tricycle. This improvement may be attributed to the sense of inclusion the bike provided, allowing the child to participate in activities that children without disability might take for granted. This could have increased the child's happiness. Consequently, a happier child could lead to greater satisfaction with life for the parent.

**Life satisfaction  
of guardians has  
improved in 50%  
of families a year  
after their child  
received a trike**

## Positive Emotional Balance

Experiencing a balance of positive and negative emotions is essential for a fulfilling life. While negative emotions are natural and can signal that something may be missing or that we are being treated unfairly, positive emotions are equally crucial. They help us build psychological, intellectual, physical, and emotional resources necessary for thriving. Moreover, a balance of positive and negative emotions supports wise decision-making, vitality, and resilience. To safeguard against depression and anxiety and to enhance our overall wellbeing, it is important to experience more positive emotions than negative ones.

In our evaluation, we examined experiences of positive emotions, such as feeling pleased, excited, or interested, compared to negative emotions like feeling restless, lonely, or unhappy. The evaluation revealed that after children received tricycles, their parents' emotional balance improved significantly. This improvement likely stemmed from the increased bursts of positive emotions associated with the joy and excitement of cycling. Observing their children enjoying these activities may have contributed to a greater overall sense of emotional balance among the parents.

This enhanced emotional balance can positively affect various aspects of family life, including increased engagement with family members, a more positive atmosphere at home, better coping with challenges, and overall improved wellbeing. Therefore, the benefits of achieving a more balanced emotional state extend beyond immediate effects, influencing many areas of family life.

**Managing emotions  
improved in 35% of  
families a year after their  
child received a trike**



## Limitations

Like all studies, this evaluation has three main limitations. First, only 20 families participated, so increasing the sample size in future research would improve the generalisability of the data. Second, due to the nature of funding and distribution of tricycles, a waitlist control group was not feasible, which limited the ability to account for other influencing factors such as seasonality, educational, or political changes. Future studies will incorporate a control group to address this issue. Third, the evaluation did not directly involve the children; the impact of the tricycles was assessed through their guardians. Future research should include children directly to better understand the impact on them.

## Policy Implementations

The findings from this study have several important policy implementations that could guide the future development of Variety – the Children’s Charity of Ireland’s Recycle Mobility Programme, which is aimed at supporting children with disabilities and their families cycling needs. Here are the key policy indicators.

## Promoting Social Inclusion and Independence

The study highlighted that Variety – the Children’s Charity of Ireland’s Recycle Mobility Programme tricycles programme significantly enhance social inclusion and reduce isolation for children with disabilities, which is crucial for their mental and emotional development. Therefore, policymakers should consider incorporating The Recycle Mobility Programme as part of broader strategies to promote social inclusion and independence for children with disabilities. This should involve significantly increased funding for tricycles as part of The Recycle Mobility Programme, making them more accessible to families in need.

## Enhancing Family Quality of Life

The study showed that tricycles not only benefit children but also improve overall family dynamics, leading to better parenting practices and stronger family relationships. Therefore, The Recycle Mobility Programme that supports the distribution of tricycles to children with disabilities should be linked with broader family support initiatives. This could include integrating tricycle programmes with family counselling, parenting support, and community-based activities that promote family bonding.

## Mental and Physical Health Benefits

The study indicates that tricycles contribute to physical activity, which complements physiotherapy and strengthens children physically. Additionally, the mental health benefits for both children and guardians are substantial, potentially reducing the risk of mental health disorders. Therefore, public health policies should recognise the provision of tricycles as a preventive measure to improve mental and physical health among children with disabilities and their families. Health and education departments should create on-going partnerships with Variety – the Children’s Charity of Ireland, so their Recycle Mobility Programme can be extended to primary and secondary schools around the county to facilitate access to tricycles for children and young adults with disabilities.

## Reducing Healthcare Costs

By improving mental health and reducing the incidence of mental health disorders like depression and anxiety, Variety’s Ireland’s Recycle Mobility Programme can lower healthcare costs over time. Therefore, the government could explore the potential long-term cost savings associated with the reduced need for mental health services due to the psychological flourishing observed in families that receive tricycles. Investing in such preventive measures could be cost-effective in the long run.

## Promoting Inclusivity in Public Spaces

The study emphasised the importance of children with disabilities being able to participate in outdoor activities alongside their peers and siblings, which strengthens social bonds and inclusivity. In other words, the children with disabilities were empowered to occupy public space with their siblings and peers to a greater extent than before having access to the tricycle. Notably, residential streets were used by many participants as their primary cycling space. This suggests that low-traffic residential streets enable participants to avail of the tricycle scheme. Efforts to create more child- and cycle-friendly residential streets may therefore support uptake of the scheme and greater use of adapted tricycles for current users.

Since public non-residential roads seem to be suggested in only one instance as the primary space for tricycling, improving the safety and segregation of (tricycle-friendly) local cycle networks may help enable a broader range of tricycle journeys among participants and their families. This may in turn enable greater independent mobility among participants for non-recreational purposes. Lastly, improving the tricycle-accessibility of local parks and greenways may support greater uptake and enjoyment of the scheme, especially for quality time with friends and family.

The provision of tricycle accessible gates and curbs for greenways and parks may be particularly significant in this respect.

## National or Local Tricycle Distribution Programmes

The positive outcomes of this study suggest that a wider distribution of tricycles would broaden societal benefits, including healthier, more inclusive communities. Governments and local authorities should extend The Recycle Mobility Programme on both a national and regional level with Variety Ireland, which is specifically dedicated to providing tricycles to children with disabilities across the county.

## Collaborative Partnerships

Government policymakers should encourage partnerships between government agencies and Variety – the Children’s Charity of Ireland who are already best positioned to oversee funding, distribute, and promote the use of tricycles for children with disabilities through their already established Recycle Mobility Programme. This will ensure that more families benefit from this initiative.

In summary, the study highlighted the need for policies that support the distribution of tricycles to children with disabilities, recognising the wide-ranging benefits for both the children and their families. These policies should be integrated into broader efforts to promote health, inclusivity, and family wellbeing across communities.



# Conclusion

This longitudinal study assessed the impact of tricycles on children who received them and their families. Of the 27 families surveyed before receiving a tricycle, 20 completed a follow-up survey nearly a year later, reflecting strong commitment to the initiative. Our findings revealed overwhelmingly positive effects the Variety's Recycle Mobility Programme is having on both children with disabilities and their families, spanning various aspects of wellbeing.

For children, having a bike provided numerous benefits, such as enhancing social inclusion and reducing feelings of isolation. It emphasized the importance of independence, particularly for children with disabilities. Tricycles, in particular, boosted their self-confidence. Most importantly, bikes allowed children to get outside, enjoy fresh air, and engage in physical activity, which not only strengthened them but also complemented their physiotherapy.

For many children who spend most of their day in a wheelchair, a bike offered a welcome break. The chance to ride alongside their siblings in the park was priceless, strengthening their bonds and giving them a shared activity they both loved.

For families, having a bike for their child meant the child could actively participate in family activities, which fostered stronger bonds among family members. This experience significantly improved guardians' emotional wellbeing, positively impacting various other areas of their lives.

The study also noted improvements in Family Quality of Life, such as enhanced family interactions, more positive parenting practices, and overall family wellbeing. After receiving a tricycle, families reported growing closer, providing more mutual support, and better managing challenges by utilizing available resources.

Additionally, the tricycles led to greater life satisfaction among guardians, enhancing their ability to cope with daily challenges and laying the groundwork for psychological flourishing. This flourishing is linked to a reduced risk of developing mental health disorders like depression and anxiety.

Overall, this study emphasised the significant mental and physical health benefits the Recycle Mobility Programme is having in providing tricycles to children with disabilities, benefiting both the children and their families. These findings carry important implications for policymakers. Offering tricycles to families of children with disabilities via Variety – the Children's Charity of Ireland's Recycle Mobility Programme can promote inclusivity, improve mental health, and strengthen family bonds.

This initiative not only supports children with disabilities but also contributes to the development of a healthier society. According to the 2022 Census report in The Republic of Ireland, there were 131,764 children with a disability in Ireland. This accounted for 10.8% of the child population. On this basis, this report overwhelmingly recommends that government policy makers responsible for providing adequate mobility infrastructure for children and teens with disabilities, significantly increase their current level of funding to Variety – the Children’s Charity of Ireland’s Recycle Mobility Programme, to ensure annual funding for a minimum of 500 special mobility trikes. This accounts for 0.37% of children with disabilities in Ireland.

This not only helps families with children with disabilities to access subsistence funding for a special mobility trike for their child, but also provides equal access to cycling so children with disabilities can be included in cycling activities with their family and friends in parks and new greenways across Ireland. Once the child outgrows their trike, it is then passed onto another child or special school so these children can experience the same enjoyment and benefits of cycling. This makes this initiative sustainable and environmentally friendly. Most importantly, this programme enhances the overall mental and physical wellbeing of the child, their family, peers, teachers, carers and people in their local community.



# Supporting Testimonials

*Here are just some samples of testimonials received so far from families who have benefited from the Recycle Mobility Programme in Ireland.*



## Elizabeth, Co Leitrim

*I am writing on behalf of our daughter Elizabeth and all in our family to sincerely express our gratitude to yourselves, Minister Anne Rabbitte, Minister Eamon Ryan and Minister Chambers who so kindly helped provide our daughter with her new mobility bike.*

*Elizabeth's new trike means we can enjoy cycling activities together as a family which before now was an impossibility. Your Recycle Mobility Programme presents real cycling opportunities to families with children with disabilities. This is not only good for their physical health, but also all of our own wellbeing as we can now do outdoor activities together. Thank you all so much as it's given our Elizabeth and the family a new lease of life and we will be forever grateful."*

**Alex (Elizabeth's mother)**

## Sonny, Co Monaghan

*“Since receiving the adaptive mobility trike, we have been able to get out and about as a family so much more. Sonny thrives in nature and lives to be outside. Although Sonny is mobile, his hyper-mobility causes him to fatigue easily and also leaves him a high risk for falls and injury.*

*The adaptive trike has really supported his endurance. Sonny also has very low muscle tone which meant when he did take interest in regular trikes earlier this year, we couldn't give him any independence as he would tip over very easily. The additional supports of the adaptive trike are allowing Sonny to learn about pedalling in a safe and stable environment. Sonny was wary of the foot straps initially so we have been introducing them slowly. Sonny's feet naturally fall outwards which makes pedalling impossible. The straps will support this hugely and we are so excited to see Sonny enjoy and achieve his trike as he progresses through the Summer months.*

*Sonny's trike has given him independence, support, encouragement, therapeutic engagement and so much more. We would like to thank Variety Ireland for providing this amazing piece of equipment and the various government departments for securing the much needed funding for so much life changing equipment for children and their families. We are very grateful for all the wonderful work you all do!”*

**Grainne (Sonny's Mum)**





## Peppy, Co Kerry

*“Our youngest child, Peppy, who is 15, for whom we got the bicycle, has been relishing each and every occasion that we have used the tandem.*

*Cycling certainly gives Peppy great exercise but more importantly, it’s great fun. It aids Peppy tremendously with her physical well being. She smiles so much during each cycle. Her eyes smile as well. It has been and is so good for her mental health. It really gives her a lift and might I add that it gives the whole family a lift as we can all go out together now. Without your financial assistance we could not do this as a family. So, again, we would like to express our gratitude.*

*Thank you so, so much. With all good wishes!”*

**Marcus & Rachel ( Peppy’s mum and dad)**



## Eric, Co Clare

“We would like to thank all at Variety Ireland and the government departments for Eric’s new trike.

Eric loves to get outside in the fresh air, and this has provided him with a new means of transport, allowing him to travel further than walking alone can take him. As a result, he gets to explore new environments and visit new destinations. Healthwise, Eric gets physical activity and fresh air – all helping Eric stay physically and mentally well.

As a family we are delighted as we now have an inclusive activity in which the whole family can partake in. Thank you once again for Eric’s fabulous trike!”

**Mariea and Brian (Eric’s parents)”**





## Tony, Co Cork

*“Just a note to let you know Tony is absolutely loving his new wheels!*

*Tony was first introduced to cycling by the wonderful staff in St. Paul’s Special School in Cork and through your Recycle Mobility Programme, he is now able to enjoy cycling at home too! Tony is extremely energetic but is unable to master cycling a regular bicycle. His specifically adapted trike gives him the both the confidence to cycle independently and burn off some energy with his brother and sister!*

*As a family we are all delighted to see Tony so happy and are extremely grateful to Variety and the Ministers who support children like Tony, which has allowed to get him where he is today. Your Recycle Mobility Programme has changed his life and is brilliant for all parents for children with disabilities.*

*Thank you so much!”*

**Edel (Tony’s mother)**

## Méabh, Co Meath

*“Méabh has complex epilepsy, which causes frequent seizures. She loves cycling but had to stop riding her bike because of the danger of falling off. Méabh is absolutely delighted with her new trike. It is so easy to cycle and she is so happy to be able to cycle again without fear of falling off if she has a seizure. The trike will help her fitness levels and her mental well-being.*

*It will also be very useful for her brother. He has Autism and hasn't managed to learn how to cycle yet but has outgrown bikes with stabilisers. The trike will enable him to learn this very important skill and it will open up the opportunity for him to take part in an activity that other kids take for granted. As part of Variety Ireland's Recycle Mobility programme, Méabh passed on her old trike to a girl with Down Syndrome, who was delighted to receive it.*

*Thank you so much for your support in helping to ensure that children like Méabh have the opportunity to be included in cycling activities with their family and friends. Méabh is so happy to be back cycling and we are so grateful to you all!”*

**Maura (Méabh's mam)**





*Supported by*



**An Roinn Leanaí, Comhionannais,  
Míchumais, Lánpháirtíochta agus Óige**  
Department of Children, Equality,  
Disability, Integration and Youth

*Supported by*



**An Roinn Iompair**  
Department of Transport

[www.varietyireland.org](http://www.varietyireland.org)