



# SPEVI

South Pacific Educators  
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**BRISBANE 8TH - 12TH JANUARY**



# Physical health as illuminated by youth with vision impairment: implications for physical education and health programs

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# Setting the scene...

- Youth with vision impairment show higher obesity and lower physical fitness and activity levels than sighted youth (Augestad & Jiang, 2015; Haegele & Porretta, 2015)
- Identified barriers to their physical activity: (Augestad & Jiang, 2015; Haegele & Porretta, 2015)
  - Limited knowledge in parents, teachers and etc.
  - Lack of accessible and suitable opportunities.
- Limited research has found some programs are associated with increased physical activity in these youth (Furtado et al., 2015; Haegele & Porretta, 2015)
  - Various interventions, small samples, lack of theoretical foundations, and non-validated measures



# The value of their voices

- Continued research is needed to fill the knowledge gaps of parents, teachers and etc., and thus enable accessible physical activity programs for youth with vision impairment
- Personal motivation to be physically active on the part of the youth is a key facilitator of their physical activity (Augestad & Jiang, 2015; Furtado et al., 2015)
- Capturing the voices of youth themselves about their own conceptualization and enactment of physical health is important to understand their motivations



# My Research



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# Study design

- Adapted from Youth ReACT method for participatory research  
(Foster-Fishman et al., 2010)
- Study had two phases:
  - An initial data collection phase
  - A member-checking phase following researcher-driven analysis





# Recruitment and participants

- Recruited through 7 vision-impairment-related organizations
  - email, postal mail, social media, in-person distribution

## Sample:

- 21 youths participated
- Current age:  $M = 18.62$  years  $SD = 3.12$
- Age at vision impairment onset:  $M = 4.59$  years  $SD = 5.15$
- 19 (90.5%) were legally blind
- 11 (52.4%) cases of retinal dystrophy – other causes incl. albinism and neurological trauma
- 9 (42.9%) had comorbid conditions
- 16 (76.2%) used non-sport recreation programs
- 13 (61.9%) took part in sports for people with vision impairment



# Procedure and analysis

- 3 interviews/focus groups per participant and a participant-driven audio-recording task over approximately a fortnight

## Research questions

- **Week 1:** What is going on in your life when you are doing well?
- **Week 2:** Does your vision impairment affect how well you are doing?
  - If **'Yes'**: In what ways? What helps deal with this?
  - If **'No'**: What helps stop it from affecting it?
- Six-staged thematic analysis: 1) Data familiarization, 2) Coding, 3) Deriving themes, 4) Reviewing and structuring themes, 5) Defining and naming themes, and 6) Reporting (Braun & Clarke, 2006)



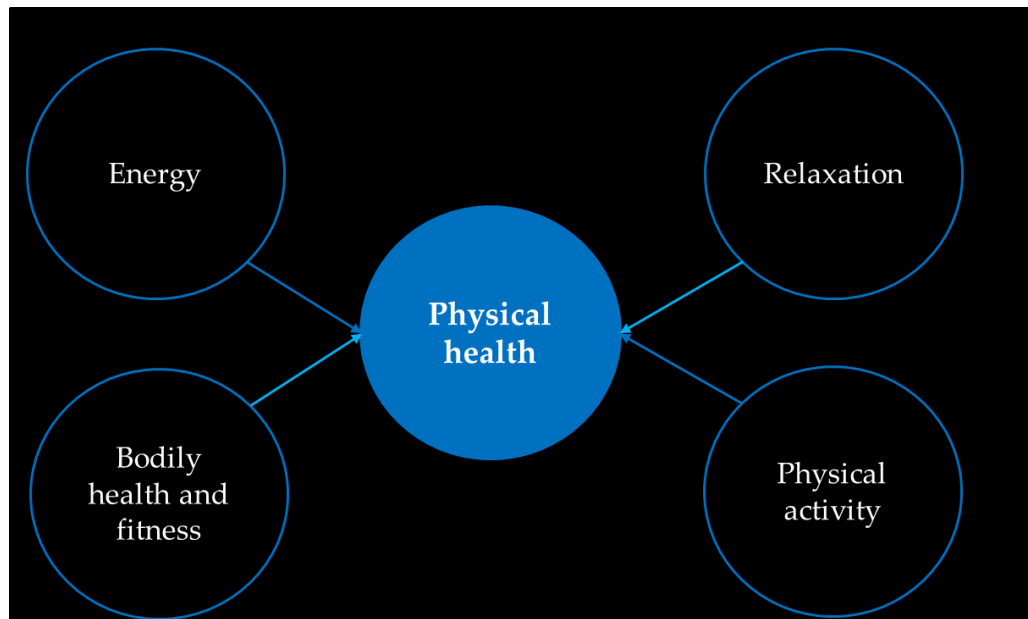


# Member-checking

- Engaged in member-checking process:
  - 1 session per participant
  - An audio-recorded group session
  - Participants presented with major themes and structure
  - Discussed accuracy of the reflection of their views
- 11 participants returned
- Increase rigour and trustworthiness of findings



# Overview of results



# Bodily health and fitness

- Some described the importance of meeting their “basic [needs] like water, food [and] shelter” (Caelan)
- They stressed the importance of avoiding injury and living “relatively pain free” (Harper)
  - Pain management strategies: withdrawal, medication, **relaxation**
- Physical fitness was also prized as part of bodily health
  - “It’s good to be fit” (Caelan)
  - For similar reasons to sighted youth: e.g. self-esteem, discipline (Eime et al., 2013; Haugen et al., 2013)
  - Maintained through **physical activity**



# Bodily health and fitness (cont'd)

- The participants' vision impairments influenced how much and why they valued their bodily health
- Vision impairment increased the participants' perceived and actual experiences of physical harm, and gave them a greater sensitivity to their physical safety:
  - "Walking around in an ever-changing environment... you're not going...to pick [everything] up [so you] become a little wary" (Val)
- It gave them additional reasons to prize and work towards their own physical fitness:
  - "I did hear a lot about blind people who were inactive and I was determined that that wasn't going to be me" (Alex)



# Energy

- The participants described feelings of “energy” as a central, subjectively-experienced aspect of their physical health
  - Feeling “energized” or “lively” (Val), or having “enthusiasm” (Courtney)
- This energy was not only inherently valuable, but they also needed “to re-energise [to] get ready to go out and do things” (Jules).
- Again, vision impairment demanded “a lot more effort” and thus was “physically draining” (Val), giving the participants a greater appreciation of this energy:
  - “I’d love to be able to... clearly communicate to someone the depth and complexity of my vision [but] it’s easier to try and be the same [which is] why I end up feeling tired”. (Harper)



# Relaxation

- Relaxation was primarily important to the participants for enabling their recuperation as it provided respite from the “pressure of school [or] home... in [their] own zone” (Jesse).
- “When I listen to music... it’s just floating there... I so rarely encounter rooms with sufficient and not-over-bright lighting, and not cluttered visual fields [so that experience] is very relaxing” (Morgan)
- Some described their relaxation as meditative and enabling their mindfulness
  - They described valuable spaces where they are “completely relaxed but... just enjoying all of the surroundings” (Jamie)





# Physical activity

- Physical activity offered a dynamic strategy for managing their energy:
  - “a surge of energy” (Peyton)
  - an “outlet” for their “inner animal” (Jean)
- “[This activity] gives me enjoyment. It's something that I'm good at [and] I can do [it] in [the] community. [It is] a small part of who I am” (Jules)
- “One [aide] would take me [to this activity]... and I could [do it] to a good speed without hurting myself and... got a real kick out of that” (Alex)



# Physical activity (cont'd)

- They reaffirmed several barriers to physical activity (Augestad & Jiang, 2015; Haegele & Porretta, 2015)
  - Physical skill limitations, embarrassment, lack of opportunities
- However, they were active with friends/family: “[playing] with my brothers is just something I love to do [because] we play with [a vision impaired] ball [and] a tennis ball” (Pat)
- “Having... a blind sport there just makes [it] a lot easier” (Taylor)
  - Although, they are under-resourced and “harder to find” (Val).



# Key insights

- Emphasis on subjective elements (e.g. energy) alongside bodily health and physical activity
- Shaping effect of vision impairment and other factors



# Promoting physical activity

- Developed programs should offer a space where youth with vision impairment can move confidently and freely in space
- Greater direct incorporation of friends and family in their physical activity
  - Supported by previous findings (Ayvazoglu et al., 2006; Wiskochil et al., 2007)



# The other half of physical health

- Feelings of energy must be a central target of physical health programs
  - Subjective vitality recognized as important to physical health and wellbeing more generally (Ryan & Frederick, 1997)
  - Special importance due to draining nature of vision impairment (Lieberman, 2002; Columna et al., 2015)
- Need a range of recreational programs in line with expanded core curriculum (Sapp & Hatlen, 2010)— including those promoting relaxation, not just physical activity
  - E.g. reading, arts, music, yoga (Lieberman, 2002; Telles & Srinivas, 1998)
  - Mindfulness should receive further attention (Marques-Brocksopp, 2014)



# Future research and conclusion

- Future research should specifically explore the conceptualizations and enactment of physical health in youth with vision impairment
  - Greater guidance around participant-driven data collection tasks
  - Greater participation in data analysis
- The insights offered by these youth are critical for the relevance and traction of programs and education targeting their physical health





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