

Participatory Action Research Report

A Project initiated by









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CHILDREN HAVE THE POWER TO MAKE BETTER FOOD CHOICES!

The Better Eat Better project leverages self-determination theory and community development principles, fostering autonomy and competence in children regarding food choices. Permaculture practices are also integrated to create a sustainable food system. This initiative, based at the Tak Takut Kids Club (TTKC), aims to raise awareness, encourage adoption, and empower children and families to advocate for healthy eating.

TTKC, a community space for children aged 7-14, fosters intergenerational bonds through shared activities like growing food, shopping, cooking, and eating together. This collaborative effort has empowered 150 children and 70 volunteers, generating knowledge and experiences that have benefited over 1000 individuals. TTKC stands as a testament to the power of community engagement in promoting healthy lifestyles and fostering lasting memories.



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Abstract

The Better Eat Better (BEB) programme aims to empower children to make healthier food choices. Inspired by the vision of the MOH Office for Healthcare Transformation, BEB focuses on generating positive behavioural change through community engagement and action.

As an organisation that cares deeply about community support for children from disadvantaged backgrounds, 3Pumpkins felt that it could play a part in improving health literacy for the children and their families. Teaming up with Cultivate Central, an urban permaculture design consultancy, BEB was launched in November 2022 at Tak Takut Kids Club (TTKC), a community social space for children aged 7-14 to gather, mingle and learn as a community.

Grounded in the Participatory Action Research (PAR) approach, the BEB programme prioritises collaborative community involvement at every stage. By engaging in a non-linear process of planning, action, observation, and reflection, the BEB team co-creates its strategy with the community.

This report sheds light on the first year of BEB implementation, highlighting facilitated dialogues, community activities, and interviews. It delves into the gathered data, revealing the lived experiences of the community. With these insights, BEB continues to craft a multi-tiered strategy to empower children with the knowledge and skills to lead healthier lives.

Participatory Action Research

PAR serves as a framework for research and knowledge generation, rooted in the belief that the community most impacted by interventions should actively participate in the research and development process. The PAR process is organic and iterative, with programme implementation constantly tested and tweaked based on community feedback and environmental changes.

Although presented in a cyclical manner, PAR is often non-linear and 'messy' in practice. Every interaction, observation, and reflection shapes the process in unexpected ways, leading to new outcomes. For example, an impromptu video created for fun revealed TTKC community's hidden filmmaking talents. This discovery resulted in the creation of a 10-minute edutainment video that was screened to a wider public.



Children were involved in the making of a video to explain the reset of the TTKC community kitchen, Jan 2023

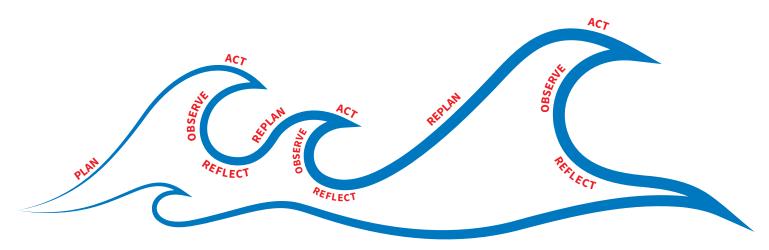


Snapshot from the "Better Eat Better Show", a video campaign co-created with the community, $\mbox{Oct}\,2023$



Children and befrienders join forces to create a video that encourages donors to give healthy food, Mar 2023

The BEB Participatory Action Research Waves



The BEB team adapted participatory action research in waves. Taking into consideration time, resources, project objectives while responding to the rhythm and pulse of community living.

1. PLANNING FOR CHANGE

Consultation with the children, community workers, and volunteers of TTKC to understand current trends and devise potential action plans.

2. ACT

Regular and ongoing community engagement to enable opportunities to grow, shop, cook, and eat together as social learning routine.

3. OBSERVE

Rigorous documentation, compilation and sharing of the activities, interactions, and behaviours that emerge from community engagement.

4. REFLECT & REPLAN

Monthly review sessions to form responsive refinement and evolution of programme design.

Referred to as "action spiral research", PAR is best understood as a longitudinal journey where multiple phases coexist concurrently. Thus, astute observational and reflective skills are crucial for programme designers to guide the community towards shared objectives. ¹

The BEB team embraced this methodology by engaging in iterative cycles of planning, action, observation, reflection, and re-planning. This dynamic and overlapping approach is exemplified in the spiral graphics as show in the graphic above.

 $^{^1} Kemmis, Mc Taggart, Nixon, The Action Research Planner, Springer Science + Business \ Media \ Singapore \ 2014$

PAR Approach:

Facilitated Dialogues



Facilitator Michelle Ow engaging children in a discussion about their eating habits, Dec 2022

Planning For Change

The first survey session occurred during the TTKC Open House (Nov-Dec '22), where children and members of the public toured TTKC spaces. The activity in the kitchen centred on conversations about food routines. Using a dot voting survey, we polled 32 children (ages 7-14) with eight questions about their meal times. This exercise was followed by focused group discussions.

The facilitators noted that the children quickly grasped the dot voting activity and questions, answering independently without being influenced or influencing others. They particularly enjoyed discussing snacks, which led to friendly banter. Some even suggested snack alternatives not listed on the board, such as bread. There was also debate over whether Cup Noodle constituted a snack or a meal. During the focused group discussions, making rice balls while chatting proved effective in sparking conversations. The children



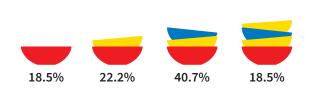
Making rice balls while having conversations about food, Dec 2022

expressed enjoyment, with comments like "I like the conversations, being heard and all" and "I love it! That we get to do it as a team work. I am so happy." This genuine sharing allowed us to gather valuable data for our observations and reflections.

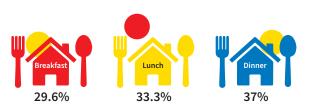
Observe & Reflect

The table below illustrates the eight questions and the responses from the children. They were permitted to select more than one answer for certain questions.

How many meals a day?



When do you eat at home?



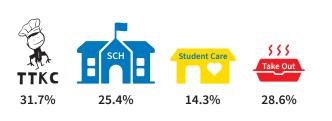
Do you like your home cooked meal?



When do you eat a meal outside?

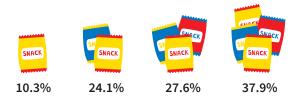


Where do you eat out?



How many snacks do you eat in a day?

Do you drink soft drinks everyday?



What snacks do you eat everyday?



One significant finding was that while a majority of the children enjoy home-cooked meals, they also frequently eat out, with TTKC serving as a source of food. During that period, TTKC was cooking and serving dinners to the community. We reflected on how this practice might discourage children from eating at home. Although the absence of home-cooked meals may be a concern for several households, this issue requires specialised interventions beyond the scope of BEB.

Secondly, snacks featured significantly in the children's diet, with many opting for items high in sugar and sodium. A striking 78.8% consume soft drinks daily. While these snacks and beverages are readily available in schools and neighbourhood shops, we considered whether TTKC also contributed to the availability of these unhealthy options. During that period, TTKC did not discriminate against the types of food items received from donors.

21.2%

Re-plan and Act

After reflection and evaluation, TTKC decided to close the community kitchen for a month to undergo transformations. The following adjustments were made:

- Changing the operational timings of the community kitchen to 4-6pm, focusing on snack time.
- 2. Replacing processed food items with healthier options.
- Developing and distributing a donation guide, and implementing a strict policy to reject donations of highly processed or nutritionally poor food.



A sample of the daily activities in TTKC where snack making and eating is routinsed between 4-6pm, Feb 2023 $\,$



The kitchen snack cart that was initally filled with sugary snacks and drinks, Dec 2022



Transformation of the snack cart where nutritionally dense snacks like nuts and dates were made available to the kids and less healthy snacks were reserved for community celebrations, Feb 2023

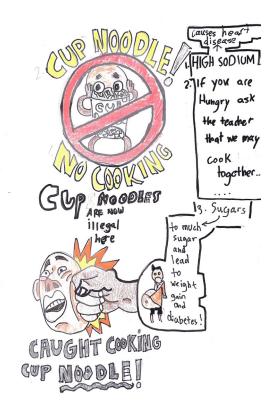


A donor who 1st donated unhealthy snacks to TTKC was transformed by our donation guide that encourages healthy snacks, Feb 2023

Outcomes

The kitchen's closure immediately sparked conversations about TTKC's new 'Better Eat Better' approach. Although the community initially expressed disappointment and frustrations with the stricter guidelines, they quickly adapted to consuming fruits and nuts as snacks. Aside from children with known case work, there were no reports of hunger. Children assisted community workers in the process, and co-created a video to show the community effort in revamping the kitchen.

Donors who brought in food donations outside the guidelines were gently educated on inappropriate items. Our feedback was generally well-received, leading to healthier food donations over time, such as nuts and dried fruits. The donation guideline was also shared with corporations, benefitting thousands of beneficiaries who receive goodie bags during excursions and community events organised by them.



PSA poster on "No Cup Noodles" drawn by an 11-year-old child, Feb 2023



Introduced the consumption of fruits and nuts as snacks for the community, Jan 2023



The first BEB donation guide was launched on Feb 23. Above is a sample of the newly updated guide launched on Apr 2024

PAR Approach:

Insights from the Ground

Plan & Act

Since the kitchen reopened, the BEB team has collaborated with TTKC community workers, volunteers and children as co-creators of the engagement activities. A daily BEB programming plan was created to ensure high impact & routine engagement (see table below). While there are guidelines on acceptable ingredients, facilitators have autonomy to collaborate with the children in deciding what and how to cook. Observations and insights from these activities are then gathered, detailing the processes, interactions, quotes, and questions on the ground.

Interaction Type	Frequency of Interaction
Community engagement activity	4 times a week
Check-in with community facilitators	Weekly
BEB Team Meeting	Weekly

The non-conventional power dynamic, where control is shared between the BEB team, facilitators and children, sometimes leads to confusion and disagreement over alignment in approaches and outcomes. The PAR approach recognises this "messiness" as opportunities to gather authentic information, generate new knowledge and cultivate community ownership. Hence, regular engagement, check-ins and conversations are critical to ensuring the success of the work.

Observe & Reflect

Menu planning was guided by a mixture of the facilitators' expertise and requests from the children. This resulted in an explosion of culinary experimentation where a diverse range of food was explored, from making bubble tea pearls to cooking kaya from scratch. While these experiments generated a myriad of new ideas and recipes, the daily variation of ingredients, tools, and techniques led to exhaustion of the facilitators and the BEB team. It was also unclear if the children were retaining knowledge and skills.

Facilitators expressed concerns that repeating menus might bore the children. However, through weekly reflections and reviews, facilitators realised repetition provided opportunities for children to enhance skills such as using kitchen tools effectively, measuring ingredients, reading labels, making healthy snacks affordably, cooking eggs and running pantry audits before shopping. Repetition thus became a tool for skills efficacy, confidence-building, and communicating key food and health concepts.













A myriad of new ideas and recipes were tried out by the facilitators, Jan - Jun 2023

The children displayed a strong sense of satisfaction while preparing food for themselves and friends, many of whom were not allowed to cook at home due to safety concerns. TTKC kitchen became their first experience with tasks like knife handling and stovetop cooking. Through casual conversations, the idea of a TTKC cafe serving the wider community emerged. This notion of cooking as a community service became particularly evident when the children initiated sandwichmaking for holiday excursions, where they had to form an assembly line to make food for forty people.



Using herbs from the community garden, children prepare Krapow, a dish they serve for community dinners on Fridays, Apr 2024



Sandwitches Club. prepares forty chicken sandwiches for an excursion, Nov 2023

Re-plan & Act

Through on-going observation and reflection processes, the BEB team tested several strategies, including:

- 1. Developing an engagement guidebook
- 2. Conducting capacity-building activities for the facilitators
- 3. Cultivating the Sandwitches Club



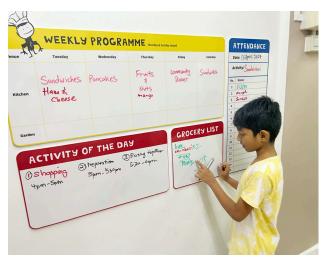
In order to support the facilitators and volunteers in their engagement with the children, the BEB team created a kitchen guidebook and conducted capacity-building sessions to clarify engagement flow and food safety in the kitchen. However, the responses to these new components were lukewarm. It was likely that handbook was too lengthy and the adults were generally time poor. In Year 2 of the BEB project, the team introduced a quarterly menu structure and visual communication elements in the kitchen, which yielded much better outcomes.



Capacity building on basic garden care for staff and volunteers, Jul 2023



Choosing the better option during shopping by reading labels, Jan 2024



Children and facilitators using visual tools designed for the kitchen to facilitate the food preparation process, May 2024

The Sandwitches Club became recognised as an interest group in TTKC, where frequent meetings led by a community worker to plan for upcoming events and as well as to design a club logo. The club is consistent in showing up two hours prior every excursion to prepare sandwiches for 40 pax.



Sandwitches Club members meet to finalise their club logo, May 2024



Eating sandwiches made by the Sandwitches Club during excursion, Jun 2023





As the club members evolve, Sandwitches Club requested for a logo revamp. The above shows the previous logo (top) created on May 23 and updated logo (bottom), May 2024

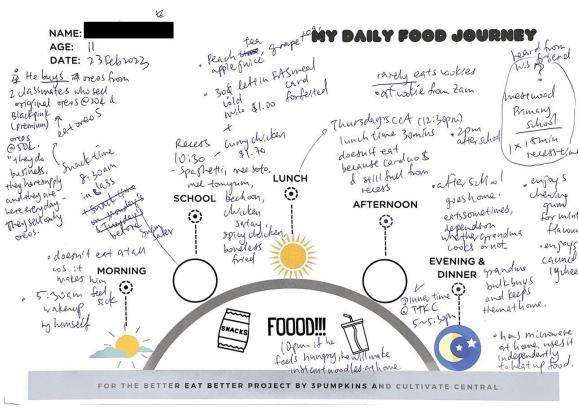
PAR Approach:

One-on-One Interview

Plan & Act

The fine-tuning of the BEB programme design and the development of a compelling public campaign involved conducting individual interviews with the children involved. "The Daily Food Journey" interview was thus designed to help us identify common, unifying and unique food eating patterns and habits within the community.

Six facilitators conducted one-on-one interviews with a total of 60 children, using provided illustrations to anchor the child's ideas, responses, and conversation on their food choices and daily routine. Each interview lasted approximately 20 minutes.



Sample record of "My Daily Food Journey" written by a facilitator while interviewing a child, Feb 2023

The facilitators noted that children tended to be easily distracted, often veering off topic to share other personal experiences and stories. Engaging them required dialogic skills to keep them focused on the topic. Additionally, understanding the children's language and expression was crucial for capturing

nuanced data in their sharing. Facilitators needed guidelines, questions and notes as handrails to guide the children through the conversations.

It is important to note that while we interviewed 60 children, the total number of responses per category won't necessarily equal 60. This is because the research was qualitative, focusing on in-depth interviews where children shared experiences, anecdotes, and daily choices that often spanned multiple categories.

Observe & Reflect

Interviews for the Daily Food Journey program revealed clear patterns in children's food choices and habits. These insights are crucial for refining action plans and strategies within the BEB program. These patterns are important to refine actionables and strategies

addressed through the BEB programme. Presented below are the patterns of food choices and habits across five scenarios that will continue to shape the course of the BEB programme.

INSIGHTS FROM DAILY FOOD JOURNEYS: FOOD CHOICES ACROSS 5 SCENARIOS

BREAKFAST



22 children mentioned eating breakfast prepared at home, often "grab and go" options including bread, cereal, and biscuits.

18 children said they do not eat breakfast before school. Reasons for this include: 'It was too early.', 'I'm in a hurry in the morning.', 'I have breakfast at school.'

14 children opted for Milo as their breakfast drink, while 11 preferred milk. A smaller number chose Nestum, tea, coffee, or protein shakes.

7 children made breakfast choices independently on their own to school, options including slushies, chips, bottled green tea, Mamee snacks, and Oreo biscuits.

AT SCHOOL



All children have a meal during recess, with schools offering a diverse range of meals catering to various cultural preferences, which children look forward to.

33 children purchase and consume bottled or canned sugary drinks daily.

A small number of children purchase and consume chips and candies in school.

5 children packed meals from home.

INSIGHTS FROM DAILY FOOD JOURNEYS: FOOD CHOICES ACROSS 5 SCENARIOS

AFTER SCHOOL



39 children have lunch at home or student care as part of their daily routine.

30 children buy packet snacks and sugary drinks after school either on the way home or before CCA.

8 children mentioned they skipped lunch altogether.

TEA TIME



31 children enjoy routine healthy snacks during tea time, They receive healthy snacks from either TTKC, student care or at home. At TTKC they choose: nuts, fruits and the various snacks made at TTKC.

22 children associate tea time with sodas and junk food purchased from neighbourhood shops.

DINNER



54 children have a stable dinner routine at home with family or caretakers.

8 children highlighted instant noodles as a common dinner time or late night meal.

6 children are skipping dinner or having to cook their own meals.

The sketch below, created by Nova Nelson, BEB programme director, illustrates the patterns deduced from the interviews.



Patterns concluded from PAR 1. Infographic sketched by Nova C. Nelson, Jul 2024

The first noteworthy data point is the minimal mention of eggs as a preferred breakfast option among the 60 children. Despite being affordable, nutritious, and easy to prepare, eggs seem underutilised in the children's diets. This prompted the BEB team to consider featuring egg dishes more prominently in our engagement activities. We also want to empower children to prepare simple dishes and advocate for egg consumption at home.

The second significant finding focused on the "Triple 'S' problem": Snacks, Sodium and Sugar. Children frequently purchase these items, sometimes multiple times a day, making them a major part of their food intake. Sugar intake, particularly through canned and bottled drinks, emerged as a major concern. The BEB

team reflected on engagement strategies that could more effectively demonstrate the sugar content in these beverages.

The third finding highlights children's role as active consumers. They make food choices at school, after school, and in the neighbourhood. It is crucial for us to equip children with the skills to read labels and understand their options as consumers.

The fourth finding emphasises the unhealthy food options available to children within their immediate environment. While TTKC competes with an environment that offers limited healthy choices, it remains an influential space for children to explore healthy snack habits. TTKC could play a crucial role in redefining what constitutes a snack.

Re-plan & Act

With the key findings identified in our reflection and evaluation process, the BEB team decided on two action plans:

 Creating a 10-minute edutainment video with the children. The video forms part of a campaign to share the four key findings from the 'Daily Food Journey" interviews with a broader audience.



A show-and-tell segment on children cooking eggs as a simple breakfast food.



Sugar Shocker Show aims to raise awareness of the sugar content in beverages that are commonly consumed by children.



Children are active consumers having agency in making their snack choices.



Introducing the 4 golden rules as simple ways to label literacy to help in making better food choices

Screenshots of segments from the BEB campaign video, created in response to key findings from PAR 1.0. Link to video: $\frac{https://www.3pumpkins.co/better-eat-better}{https://www.3pumpkins.co/better-eat-better}$

2. Providing an integrated food programme for children in the neighbourhood with the following community engagement pillars such as Grow, Shop, Cook, Eat Together, which empowers them to become savvy food consumers.



GROWING



SHOPPING



COOKING



EATING TOGETHER

The team developed 4 key BEB approaches for engagement.

Outcomes

With the support of Boon Lay Garden Primary School, the video was screened during morning assemblies and recess to over 1000 students. The school commended the good quality of the video, and shared that the audience were engaged throughout. Children who participated in the making of the video were also invited to share their experiences with the school.

Shopping became an integral part of the cooking process, where a community worker would bring the children to the nearby markets to purchase food. The children started to initiate reading of labels, questioning sources of ingredients, and compare prices and quality of their food choices.



Children of Boon Lay Garden Primary School watching the Better Eat Better show, Oct 2023

Conclusion

Participatory Action Research (PAR) is the cornerstone of the BEB programme, treated as an ongoing endeavour. At the start of the programme, PAR provided key information on the children's current food routines, which served as an important foundation to guide the overall strategy and design. Throughout, PAR findings served as an anchor, aligning the team with TTKC community realities and guiding initiatives within its spaces and culture.

The PAR findings revealed a diverse range of food choices across the children's day, presenting opportunities to promote healthier habits. Analysis of these patterns highlights areas for improvement, such as reducing sugary drink consumption and encouraging skill development like cooking eggs.

Food and health programmes can be exhaustive due to the vast range of topics and themes to address. PAR facilitated ways to prioritise and identify behavioural patterns in the community, enabling customised and precise awareness, advocacy and adoption initiatives for TTKC children in a consistent, engaging and scaffolded manner.



Acknowledgements

Better Eat Better

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PAR Report

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Further Readings:

Participatory Action Research https://organizingengagement.org/models/participatory-action-research-and-evaluation/

Kemmis, McTaggart, Nixon, The Action Research Planner, Springer Science+Business Media Singapore 2014