An Occupational Therapy Needs Assessment of Instrumental Activities of Daily Living in Pediatric Community-Based Environments

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OT-543-A: Community/Population Needs and Health

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Introduction

This needs assessment project was developed in collaboration with Sacred Heart University's Occupational Therapy program under the supervision of Dr Stefanie Seanor. Its purpose was to explore the occupational needs and participation patterns of children in summer and community-based programs in Bridgeport, Connecticut. Specifically, it aimed to identify the types of instrumental activities of daily living (IADLs) and leisure activities children engage in, and whether there were gaps in occupational performance skills that could be addressed by occupational therapy (OT). The project also examined how program staff and pediatric OTs assess these skills and what tools or strategies are in place to support participation. Findings will inform future program development and OT interventions to promote occupational engagement, skill development, and wellness in pediatric populations outside traditional school settings.

Community/Population Description

The community focused on for this assessment is Bridgeport, Connecticut, a suburban town with a diverse socioeconomic and cultural population. According to the U.S. Census Bureau (2020), about 45% of Bridgeport's residents are under 18, making pediatric services an important focus. This needs assessment focused on children in summer programs at St. Andrew Catholic Academy and Alliance for Community Empowerment. These programs serve youth from varied racial, ethnic, and economic backgrounds, providing activities that promote social, recreational, and life skills development (Catholic Academy of Bridgeport, 2025). Factors such as family income, transportation, and program affordability impact participation (Alliance for Community Empowerment, 2025). These summer program settings offer supervised, meaningful occupations outside of school, making them ideal for identifying occupational needs and participation gaps, and exploring how OT services could support engagement in IADLs.

Environment Description

This needs assessment focused on the community-based environments specifically at St. Andrew Catholic Academy and Alliance for Community Empowerment. These sites offer structured and unstructured opportunities for children to engage in meaningful occupations, including leisure and IADLs. Since OT emphasizes participation across diverse contexts, understanding the resources and limitations of these environments is essential. Environmental factors such as program offerings, staff support, safety, and accessibility directly impact participation (Catholic Academy of Bridgeport, 2025) (Alliance for Community Empowerment, 2025). This assessment explored how these environments support or limit occupational engagement for children and where OT services might enhance skills, routines, and overall occupational wellness in non-traditional learning settings.

Literature Review

Just-Norregaard et al. (2021) explored how part-time work and leisure activities during adolescence influence educational and employment outcomes in adulthood. They found that both were positively associated with higher rates of connection to education and employment at ages 25–29, with gender and socioeconomic status affecting these associations. The results highlight the value of structured engagement during childhood and adolescence and support integrating leisure and life skills training in summer programs to improve occupational outcomes.

Kari et al. (2023) examined the impact of community participation on well-being in children, emphasizing that involvement in meaningful activities supports physical, emotional, and social development. Findings reinforce the need for inclusive, supportive community settings to promote occupational engagement and enhance pediatric well-being.

Murnahan et al. (2023) investigated the relationship between leisure participation and mental health in children. Regular involvement in leisure activities was linked to lower anxiety and depression symptoms, with social support and accessibility influencing participation. The study shows the importance of providing opportunities for leisure engagement to support emotional well-being during developmental years.

Shin et al. (2022) surveyed pediatric OT practitioners on how they address and prioritize IADLs across pediatric age groups. While IADLs were viewed as important, they were inconsistently addressed, especially in younger children and community settings. As children aged, IADLs were addressed more frequently, though barriers like limited resources affected how and when they were integrated. The findings highlight a significant gap in standardized assessment tools and structured programming for IADLs in non-traditional environments, highlighting this needs assessment's relevance in identifying participation gaps.

Collectively, these articles demonstrate the critical role that structured leisure, IADL engagement, and community-based activities play in supporting positive developmental outcomes for children. Shin et al. (2022) further highlighted a significant gap in pediatric OT practice, noting that while IADLs are important for fostering independence, they are often under assessed, especially in younger children and non-traditional learning environments. Their findings emphasize the need for earlier integration of IADLs in pediatric OT services and show attention to the lack of standardized assessments in this area. Together, these studies supported the importance of creating inclusive, accessible summer programs where OT can help identify and address participation gaps and promote occupational wellness in pediatric populations.

Current Programming in Place

St. Andrew's Catholic Academy offers summer program enrollment up to August 1st, offering extracurricular and social activities through the lens of the Catholic faith. While the website offers limited information on the scope and activities provided during summer sessions, the St. Andrew's parent manual states that students are to participate in summer activities with an emphasis on "freedom, equality and respect for individual rights" (St. Andrew Academy, 2025).

Alliance for Community Empowerment is a non-profit agency that offers many day programs for underprivileged children from ages 2-6. These day programs offer services on a sliding scale of payment, which allows families who would not be able to afford a day program to be able to have their child socialize and participate in the activities provided. These programs last from 9am-5pm, with program activities ranging from book readings, outdoor recreation, early learning and education, and frequent field trips.

Key Questions

The key questions for this needs assessment were:

- What were the everyday activities (ex: IADLs, social participation, play) that children were expected or encouraged to engage in within this program?
- What challenges did staff observe in children's ability to participate in these activities independently or successfully?
- What strengths or supports were present that helped children engage in meaningful activities?
- What additional resources, tools, or strategies did staff feel would improve children's participation in daily routines or non-academic tasks?
- How were children demonstrating or developing volition, autonomy, and self-care skills in this setting?

Data Collection Methods

For this needs assessment, data collection was conducted using a combination of observations of program participants and semi structured interviews with site employees. The primary data collection tools included an Observation Checklist (see Appendix A) and semi-structured interviews of site employees (see Appendix B).

Three student researchers observed and recorded these behaviors of children's participation in various IADL-related and leisure activities using the checklist. The research team noted whether children engaged in tasks such as snack preparation, managing belongings, structured or unstructured play, craft activities, and social interactions. Observed occupational performance skills such as following directions, initiating actions, and transitioning between tasks were also recorded. Each observation session lasted approximately one hour during regular program activities.

Semi structured, one-on-one conversations were conducted with summer program staff, focusing on their perceptions of what IADL-type activities children engage in, noticeable skill gaps, program strengths and limitations, and additional supports they wished were available to promote occupational engagement. Staff were approached in person during observation visits, with discussions lasting between 5–10 minutes depending on availability.

The checklist was designed by the student research team, based on occupational therapy frameworks and literature related to pediatric IADLs, taking from elements of the COSA and PVQ assessment tools for observational structure (Kielhofner et al., 2008) (Kielhofner et al., 2014). The employee interview questions were developed to gather qualitative insights into existing programming, observed skill gaps, and perceived needs. The same observation checklist

and interview questions were used at both locations to ensure consistent data collection procedures across both environments.

Data Analysis

The data collected were analyzed using a combination of quantitative and qualitative methods. For the observational data, the completed Observation Checklists were reviewed to track the frequency of IADL-related and leisure activities. The research team also documented how often specific occupational performance skills, such as following directions, initiating tasks, and transitioning between activities, were demonstrated.

For the qualitative data, notes from one-on-one staff conversations were reviewed and coded into recurring themes. These included categories such as “limited opportunities for IADL participation,” “staff-identified skill gaps,” “program strengths,” and “suggestions for support.” Recurring responses were grouped together to identify the most frequently mentioned needs and areas of concern.

Results and Analysis

At St. Andrew’s school summer program, children aged 5–10 were observed participating in both structured and unstructured activities. Children demonstrated independence with several IADLs. For example, they put away their own lunches and used lockers to manage their belongings, although the lockers were often left open and messy. During free play, students independently selected their activities, including options such as basketball, chalk drawing, cheerleading practice, and water play. Children also changed themselves into bathing suits for water activities and were able to clean up after craft projects. One of the most important observations was that children initiated and organized a talent show. They created their own

sign-up sheet and planned performances. These examples showed strong volition, creativity, and autonomy. However, transitions between activities were a challenge. Children often had difficulty stopping one task and moving to the next, which resulted in moments of disorganization and required significant staff redirection. Time management and emotional regulation during transitions appeared to be areas of struggle.

From interviews with the counselors at St. Andrews, the children were described as independent, able to manage their personal items and inform camp leaders of any toileting or health needs throughout the day. However, children were not responsible for taking their own medication or alerting camp leaders when they needed to take their medication, as it was provided to them at the necessary time. It was noted that due to the wide age range of the campers, the older campers often led the younger ones in both indoor and outdoor group activities, guiding the younger participants by providing directions and offering physical help when needed. Summer program staff stated that technology played a more active role in the 5-10 age group, with camp participants frequently playing computer games during free play or doing educational work as a structured activity.

At Alliance's summer enrichment program, the observed ages ranged from 4–6, and many were referred through the Department of Children and Families. Children served themselves lunch from a communal bowl using a spoon and participated in pretend cooking during free play. They also cleaned up crayons and pushed in their chairs after activities, showing early signs of IADL engagement. Children were observed dancing to music, coloring pictures of themselves, and helping each other during tasks like coloring. However, transitions between activities were challenging. Children became easily distracted and struggled to stay engaged or follow through with tasks. Handwashing routines were observed to be rushed and

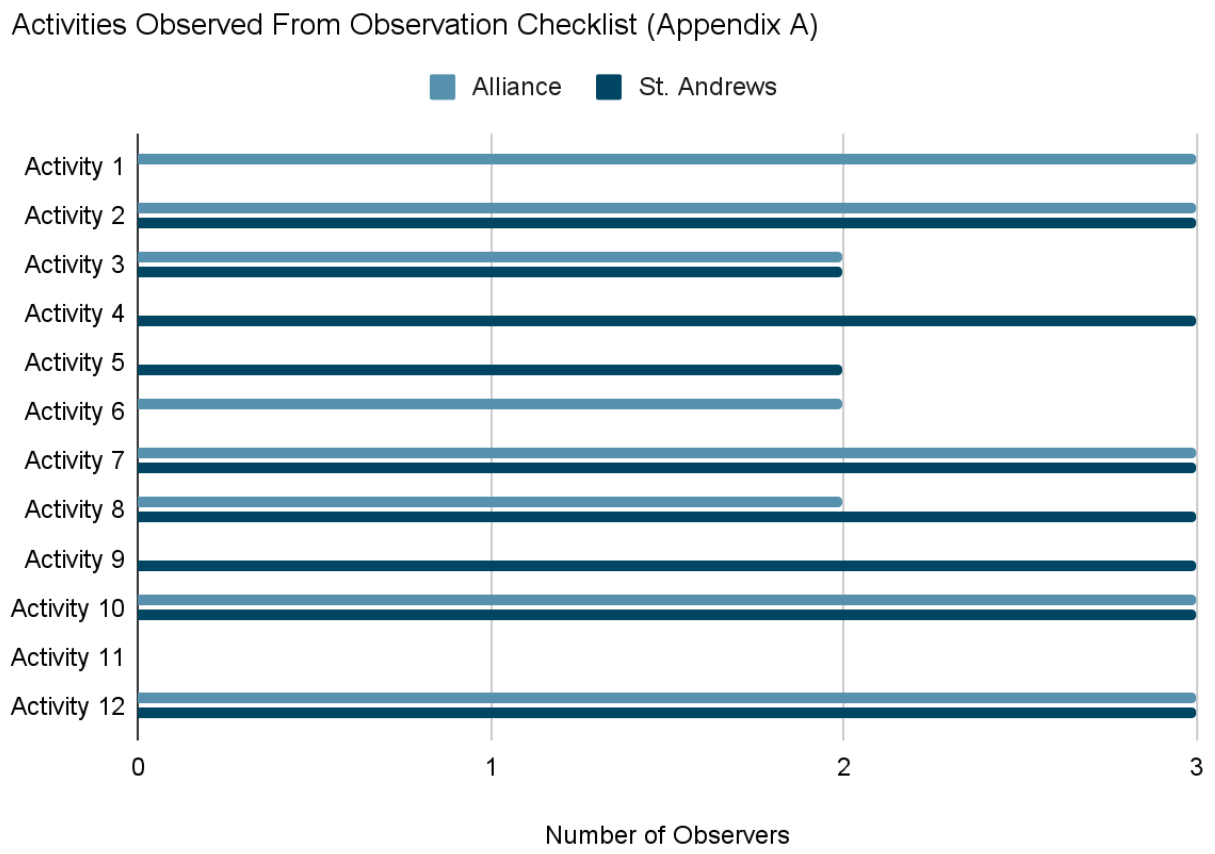
minimally independent. Some caregiving tasks, like putting away jackets and managing hair styling, were completed by staff.

During interviews, staff reported that campers were moderately independent with personal belongings and expression of needs, but often had difficulty explaining what they were feeling or if they were upset. Children also needed more frequent verbal cues from the staff, especially if they were transitioning into different environments. If the children were told to line up for the bathroom, they would do so, but would leave the line and go back to playing if the transition did not happen quickly after the initial cue. Campers were also less likely to plan groups with each other towards a specific goal but rather, one child would ask another if they could play with them in an activity they were doing and participate alongside them without much structure or goal.

Across both sites, several shared themes emerged. One of the most consistent challenges observed was difficulty with transitions. Whether moving from structured to unstructured activities or shifting between different tasks, children often required redirection and had trouble maintaining focus during these transitions. Another common area of need was executive functioning, including organization, time management, and the ability to follow multistep directions. Despite these challenges, children demonstrated levels of autonomy and initiative. Staff at both locations expressed a desire for more structured support and resources to help foster independence and participation in IADLs and leisure tasks. While environments were generally supportive, findings suggest that OT services could play a vital role in strengthening routines, promoting skill development, and enhancing participation through strategies and staff collaboration.

Table 1 displays the number of research team members who observed each activity on the checklist at both St. Andrew's and Alliance. Each bar represents how many of the three observers noted the presence of a given activity during site visits. Activities such as Activity 2,7,10 and 12 were consistently observed by all three observers across both locations, indicating high frequency. In contrast, activities like Activity 3, 5 and 6 were noted by only one or two observers, suggesting either less frequent engagement. Activities like 11 were not observed at all which highlighted the need for OT support. This visual summary supports the identification of both consistently present skills and potential areas for occupational therapy support.

Table 1



Activity 1	Preparing or serving snacks
Activity 2	Cleaning up personal or group items
Activity 3	Managing personal belongings (e.g., backpack, jacket, shoes)
Activity 4	Organizing game or activity materials
Activity 5	Managing time or transitioning between activities
Activity 6	Participating in structured games/sports
Activity 7	Particpating in unstructured free play
Activity 8	Completing craft, building or creative projects
Activity 9	Helping peers or staff with a task
Activity 10	Making activity choices independently
Activity 11	Engaging in problem solving situations
Activity 12	Demonstarting leisure or recreation preferences

Discussion

Sociocultural and socioeconomic factors significantly influenced children's participation in daily activities across both settings as limited financial resources, transportation barriers, and varied cultural expectations around independence impact how and when people engage in IADL tasks (Portela et al., 2020). These factors may contribute to differences in children's routines, levels of support at home, and familiarity with certain occupations. While the programs offer opportunities for skill development, not all children receive the same level of support or access to tools needed to foster independence and self-management. A major gap identified through this needs assessment is the absence of a clearly defined list of pediatric IADLs that reflects the occupations children are realistically expected to perform in community settings. Further research is needed to define these tasks and create assessment tools for pediatric OTs that can

guide occupational therapy interventions, helping to bridge the gap between current programming and children's evolving occupational needs.

While the use of a consistent observation tool and interview format across both sites was a strength, several limitations may have impacted the results. The small sample size limited the generalizability of findings to other summer program settings. Differences in daily programming may have influenced which activities were observed, potentially limiting the opportunity to see the full range of children's typical routines and participation patterns. Additionally, children's behavior may have been altered by the presence of observers, which could have impacted the accuracy of recorded engagement. Despite these limitations, the data clearly point to gaps between current programming and children's occupational needs. These findings support the integration of OT services in community-based settings to enhance IADL skill development, promote inclusion, and provide staff with tools to better support children's growth and independence.

Recommendations and Conclusion

While the children at both Alliance and St. Andrews summer programs demonstrated behaviors associated with IADLs (care for personal items, self-motivation, and expression of needs), the specific IADLs performed by them are undefined, as they differ from those listed in the Occupational Therapy Practice Framework, which focuses more on IADLs for adults and older adults. A concrete list of IADLs specifically for children could benefit occupational therapists in identifying any deficits in independence and self-management, but further research is necessary to determine occupations applicable to multiple age ranges and demographics. Furthermore, an assessment to evaluate a child's competence in these occupations could serve to improve their participation in school, home, and extracurricular activities.

To explore the need for appropriate IADL assessments in pediatric populations, our research team is planning to develop and distribute a survey targeting current pediatric occupational therapists across various settings. The survey will examine their current practices related to IADL evaluation, including which tools they use, how frequently they assess these skills, and any limitations they experience with existing methods. Given the identified need, this study will continue by engaging pediatric occupational therapists to gather further insights that will guide the creation of focused, age-appropriate IADL assessments and resources.

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Appendices

Appendix A: Observation Checklist

Observation Checklist

Site:
Date:
Observer:
Child/Group Description (Age Range, Approx. # of Children):

Activities Observed:

- ○ Preparing or serving snacks
- ○ Cleaning up personal or group items
- ○ Managing personal belongings (e.g., backpack, jacket, shoes)
- ○ Organizing game or activity materials
- ○ Managing time or transitioning between activities
- ○ Participating in structured games/sports
- ○ Participating in unstructured free play
- ○ Completing craft, building, or creative projects
- ○ Helping peers or staff with a task
- ○ Making activity choices independently
- ○ Engaging in problem-solving situations
- ○ Demonstrating leisure or recreation preferences

Observed Occupational Performance Skills

(Mark Y = Yes, N = No, N/O = Not Observed)

Skill/Behavior	Y	N	N/O
Demonstrates curiosity (tries new things, explores)			
Stays engaged in chosen activity			
Follows activity directions/rules			
Initiates actions independently			
Seeks help when needed			
Demonstrates mastery (pride, success)			
Transitions smoothly between tasks/activities			
Practices a skill (repeats actions to improve)			
Participates in clean-up or organization			

Skill/Behavior	Y	N	N/O
Uses hands and body purposefully for task demands			
Shows social interaction (peers/staff)			
Expresses preferences (likes/dislikes activities)			

Noted Strengths/Interests

Noted Challenges/Barriers

Environmental Notes

- Physical space (adequate? safe? appropriate for age?)
  - ○
- Availability of materials/resources
  - ○
- Staff-child interaction style
  - ○

Other Notes:

Appendix B: Questions for Employees

Questions for Employees:

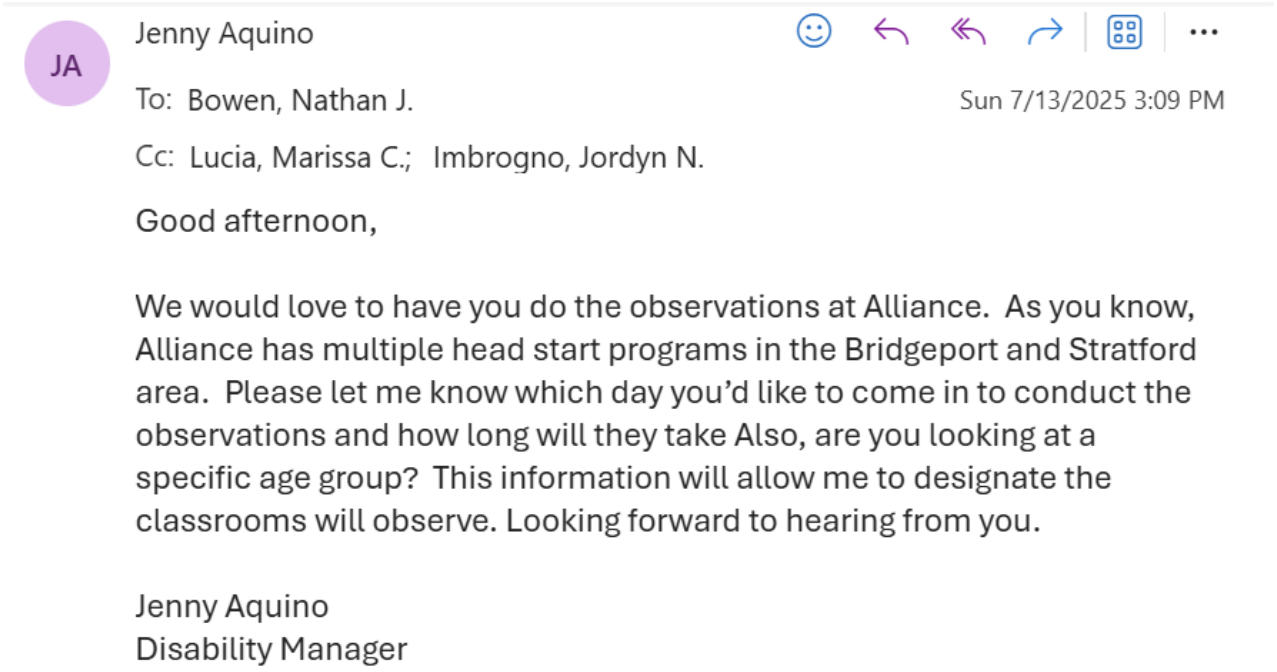
1. What IADL-type activities do you typically see children engaging in during your programs?

2. What challenges or gaps in skills do you notice?

3. What are some strengths and limitations in your program that affect children's engagement in meaningful activities?

4. What tools or supports do you wish you had to improve children's engagement in non-learning activities?

Appendix C: Alliance Observation Approval



JA

Jenny Aquino

To: Bowen, Nathan J.

Sun 7/13/2025 3:09 PM

Cc: Lucia, Marissa C.; Imbrogno, Jordyn N.

Good afternoon,

We would love to have you do the observations at Alliance. As you know, Alliance has multiple head start programs in the Bridgeport and Stratford area. Please let me know which day you'd like to come in to conduct the observations and how long will they take Also, are you looking at a specific age group? This information will allow me to designate the classrooms will observe. Looking forward to hearing from you.

Jenny Aquino
Disability Manager

Appendix D: PVQ Assessment

PVQ v2.1 Assessment Summary Form (Form A)

Name:																
Date of Birth:																
Sex: ☐ Male ☐ Female																
Examiner:																
Session I Comments (Indicate N/O if Not Observed)	**Session I** **Date:** **Setting:**						**Session II** **Date:** **Setting:**						**Session II Comments** (Indicate N/O if Not Observed)			
	P☐	H☐	I☐	S☐	Shows Curiosity		P☐	H☐	I☐	S☐						
	P☐	H☐	I☐	S☐	Initiates Actions		P☐	H☐	I☐	S☐						
	P☐	H☐	I☐	S☐	Shows Preferences		P☐	H☐	I☐	S☐						
	P☐	H☐	I☐	S☐	Tries to Produce Effects		P☐	H☐	I☐	S☐						
	P☐	H☐	I☐	S☐	Tries New Things		P☐	H☐	I☐	S☐						
	P☐	H☐	I☐	S☐	Stays Engaged		P☐	H☐	I☐	S☐						
	P☐	H☐	I☐	S☐	Task Directed		P☐	H☐	I☐	S☐						
	P☐	H☐	I☐	S☐	Expresses Mastery Pleasure		P☐	H☐	I☐	S☐						
	P☐	H☐	I☐	S☐	Practices Skill		P☐	H☐	I☐	S☐						
	P☐	H☐	I☐	S☐	Tries to Solve Problem		P☐	H☐	I☐	S☐						
	P☐	H☐	I☐	S☐	Pursues Activity to Completion		P☐	H☐	I☐	S☐						
	P☐	H☐	I☐	S☐	Seeks Challenges		P☐	H☐	I☐	S☐						
	P☐	H☐	I☐	S☐	Organizes/Modifies Environment		P☐	H☐	I☐	S☐						
	P☐	H☐	I☐	S☐	Uses Imagination		P☐	H☐	I☐	S☐						
Key:	P= Passive				H= Hesitant		I= Involved				S= Spontaneous					
Summary:																

Appendix E: COSA Assessment

Myself	I have a big problem doing this	I have a little problem doing this	I do this ok	I am really good at doing this	Not really important to me	Important to me	Really important to me	Most important of all to me
Keep my body clean	☐	☐	☐	☐	☐	☐	☐	☐
Dress myself	☐	☐	☐	☐	☐	☐	☐	☐
Eat my meals without any help	☐	☐	☐	☐	☐	☐	☐	☐
Buy something myself	☐	☐	☐	☐	☐	☐	☐	☐
Get my chores done	☐	☐	☐	☐	☐	☐	☐	☐
Get enough sleep	☐	☐	☐	☐	☐	☐	☐	☐
Have enough time to do things I like	☐	☐	☐	☐	☐	☐	☐	☐
Take care of my things	☐	☐	☐	☐	☐	☐	☐	☐
Get around from one place to another	☐	☐	☐	☐	☐	☐	☐	☐
Choose things that I want to do	☐	☐	☐	☐	☐	☐	☐	☐
Keep my mind on what I am doing	☐	☐	☐	☐	☐	☐	☐	☐
Do things with my family	☐	☐	☐	☐	☐	☐	☐	☐
Do things with my friends	☐	☐	☐	☐	☐	☐	☐	☐