Preparation for Adulthood: Shifting Responsibility for Management of Daily Tasks From Parents to Their Children

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Importance: Limited research has described the timing of acquisition of the broad range of skills required for the transition to adulthood.

Objective: To describe the timing of the shift of responsibility for daily tasks from parent to child.

Design: This study used an existing data set of parent responses to 49 items in the Responsibility domain of the Pediatric Evaluation of Disability Inventory Computer Adaptive Tests.

Participants: A U.S. nationally representative sample of 2,205 typically developing children and youth ages 0 to 20 yr.

Outcomes and Measures: Descriptive analyses focused on two ages: (1) starting age (when >50% of parents reported their child was taking at least some responsibility for a task) and (2) full responsibility age (when >50% of parents reported their child was taking full responsibility for the task).

Results: The process of shifting responsibility for daily life tasks from parent to child typically occurred over a long period. Many task items had an interval of 5 yr from starting age to full responsibility age; the longest interval was 15 yr. Youth began assuming responsibility for more complex tasks and tasks that involved more risk at ages 10 to 15.

Conclusions and Relevance: Results can serve as a reference for the timing of the transition to greater self-management of daily life tasks across childhood and adolescence. Timing of responsibility shifts may reflect a combination of development of underlying capacities and social transitions. Executive functioning may be especially relevant for management of the more complex tasks required in daily life in adulthood.

What This Article Adds: The transfer of responsibility for managing tasks of daily life from parents to children often extends over a period of many years. Clinicians may find the results helpful when discussing the future with parents of young people with disabilities and other chronic conditions and the tasks that their children must learn to manage for independent living as an adult.

A ssuming responsibility for managing one's own daily life is a key aspect of transition to adulthood (Arnett, 2000). Demonstrating responsibility includes knowing what tasks need to get done and when to do them, getting the task done on one's own or orchestrating resources to get it done, evaluating if the task was performed properly, identifying solutions if there is a problem, and solving problems until the task is completed satisfactorily (Kao et al., 2015, p. 68). The particular tasks and associated routines that must be learned are defined by the young person's culture and community and reflect the typical roles, norms, and tools of adults in that community.

Caregivers guide their children as they learn to manage the tasks of daily life; however, the process is largely informal and does not generally require explicit, systematic instruction. Most young people acquire the skills necessary to manage their adult lives through participation in family and community life from infancy through adolescence. Rogoff (2003) described this informal learning process as "guided participation." The young person engages in culturally typical daily activities with support from adults, with the form and amount of support provided shifting over time as the young person gains skills. Learning to manage daily life tasks requires mastering concrete performance skills and learning to organize the different activities into effective routines. The activities are integrated with one another and

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adapted to the current context. The shift of responsibility for daily tasks from the caregiver to the young person is complex and is likely shaped by many factors, including development of the young person's underlying performance capacities (e.g., motor coordination, memory, executive functions), culturally specific transitions (e.g., timing of school entry), and cultural and family values and practices (e.g., whether the young person is expected to attend college away from home).

Despite the universality of the phenomenon, limited research has described the timing, sequence, and variation in patterns of acquisition of the broad range of skills that are required for managing daily life tasks in adulthood. Most of the existing literature on responsibility development focuses more on the development of internal cognitive processes involved in taking on responsibility than on changes in task performance as a topic in its own right. For example, several lines of inquiry have focused on the construct of autonomy, which involves the extent to which young people of different ages have decision-making power over their engagement in selected daily activities. Wray-Lake and colleagues (2010, 2016) reported developmental data that illustrate how parents may grant autonomy for low-risk decisions, such as choosing one's clothes, at a younger age than for higher risk activities, such as money management, for which the consequences of making an error are more significant. Literature in several fields has examined facets of the general construct of responsibility from different perspectives, such as self-reliance or self-sufficiency (Ochs & Izquierdo, 2009), identity as a "responsible person" (Bjerke, 2011; Wood et al., 2009), and variations in the personality trait of conscientiousness (Bogg & Roberts, 2004). Other studies have examined the association between parenting style and various adolescent outcomes such as risk taking, communication around decision making, and self-reliance (GroInick et al., 2014; Huebner & Howell, 2003). Although these studies have contributed important knowledge regarding development of young persons' identity or growth in capacity to evaluate the consequences of their decisions, research has not addressed observable differences in daily occupational performance.

One line of research that does focus on observable differences in performance has investigated taking responsibility for household tasks or chores (Goodnow, 1988; Larson, 2004; White & Brinkerhoff, 1981). Dunn (2004) developed a parent-report measure that describes a child's current participation in specific household tasks and the extent of caregiver support typically provided when they participate. Studies using this measure have examined similarities and differences in the participation of children with and without attention deficit hyperactivity disorder (ADHD), Down syndrome, and cerebral palsy and with families of different socioeconomic circumstances (Amaral et al., 2014; Drummond et al., 2015; Dunn et al., 2009; Dunn & Gardner, 2013).

Other research on the management of daily tasks has involved studies of young people with health conditions and disabilities. This attention may have been stimulated, in part, by data showing the relatively poor employment and independent living outcomes for young adults with disabilities (Newman et al., 2011). Disability or illness in childhood presents unique challenges to learning and applying skills needed in daily life. In addition to the challenges posed by particular impairments, characteristics of the condition may also introduce unique demands that require specialized skills to manage, such as monitoring and managing blood sugar levels for a young person with diabetes (Babler & Strickland, 2015) or managing alternative methods of bowel and bladder care for a young person living with spina bifida (Tarazi et al., 2007).

Moreover, recent literature has documented an association between executive function (EF) and management of daily life tasks (Rosenberg, 2015). EF problems are associated with disorders including ADHD and learning disabilities, autism spectrum disorder, and spina bifida, and studies have shown an association between EF limitations and limitations in daily functioning in people with these disorders (Gardiner & larocci, 2018; Jacobson et al., 2013; Sharfi & Rosenblum, 2016). Families of children with EF challenges may find that the informal approach of guided participation is insufficient to effectively teach these skills, and the families may need additional support to ensure the young person is prepared for successful adulthood.

To date, there is no clear description of the developmental pattern as children and adolescents transition toward taking more responsibility across a broad range of daily life tasks expected in adulthood. This information would provide a useful

guide for families and service providers about when these transitions typically happen, which tasks youth take over earlier, and which tasks require parent involvement for a longer time. In addition, a comprehensive description of developmental patterns may suggest productive areas for further investigation to understand factors that contribute to individual or group variations in the timing and outcome of the transition process. The current study addresses this need by examining two transition points in the shift of responsibility for a wide range of daily life tasks in a representative sample of children and adolescents in the United States. The specific research questions were as follows:

- 1. When do parents begin to engage their child by giving them some responsibility for a daily life task?
- 2. At what age do parents generally hand over management of the tasks completely to the youth?

Method

This study used existing data originally collected to examine the psychometric properties of a revised measure of function for children with disabilities, the Pediatric Evaluation of Disability Inventory Computer Adaptive Tests (PEDI–CAT; Haley et al., 2012). The data are parent reports from a nationally representative sample of 2,205 typically developing children and youth in the United States ages 0–20 yr.

Data and Participants

The data were collected via the internet by an online survey company (YouGov, London, England) between May 2009 and August 2009. The company has an online panel of members (n = 115,000) who have regularly participated in online surveys. The survey company contacted only panel members with one or more children younger than age 21 yr with addresses within the contiguous United States. Details regarding data collection were reported in a prior article (Haley et al., 2011). Parents were asked to answer a series of screening questions (e.g., Was the child receiving early intervention services? Did the child have any limitation in personal care activities, routine needs, play, or recreation?) to determine their eligibility and placement in either the normative or the disability sample.

The analysis in this article focuses on the normative sample, which included 2,205 parents reporting on their typically developing child or adolescent. YouGov used a quota sampling method based on child's age to ensure that sufficient cases were collected in each of the age strata (100 cases for each age year under age 21). The company monitored sample composition to ensure that there were equal proportions of male and female children and youth and that the overall sample was representative of the U.S. population. In general, the distribution of race and ethnicity of the final sample matched the profile of the 2000 U.S. Census (U.S. Census Bureau, 2001), except that this sample had less Asian representation (1.1% vs. 3.6%). Table 1 provides demographic information for the 2,205 children and youth.

To limit respondent burden during data collection, a set of four overlapping, shorter PEDI–CAT forms was created for each age group (ages 0–7, 8–14, and 15–21); a total of 12 forms were used. Parents of children in each age group were randomly assigned to one of the four forms in that age group. Using this multiform design, the number of valid responses for each item ranged from 915 (41.5%) to 1,535 (69.6%) of the 2,205 children and youth, with approximately 25% of the participants (n = 573) completing all items in the Responsibility domain. There were no unplanned missing data. For more details regarding this multiform design, see the manual of the PEDI–CAT (Haley et al., 2012).

Instrument

The Responsibility domain is one of four domains in the PEDI–CAT (Haley et al., 2012). This component of the instrument examines parents' perspective on the extent to which a young person is taking responsibility for managing life tasks. The Responsibility domain includes 51 items that describe a range of important daily tasks that enable independent living (e.g., taking care of daily needs, health management, staying safe, organization and planning). An example question is "How much responsibility does your child take for the following activities?" The item "Getting ready

Table 1.	Participant	Demographic	Characteristics	(N = 2,205)
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Characteristic	Child, <i>n</i> (%)	Respondent, <i>n</i> (%)	2000 U.S. Census,
Race or ethnicity ^a			
White	1,438 (65.2)	1,543 (70.0)	69.1
Black	241 (10.9)	267 (12.1)	12.3
Hispanic	207 (9.4)	246 (11.2)	12.5
Asian	30 (1.4)	25 (1.1)	3.6
Native American	13 (0.6)	17 (0.8)	0.9
Mixed	222 (10.1)	60 (2.7)	2.4
Other	53 (2.4)	47 (2.1)	5.5
Gender			
Female	1,079 (48.9)		
Male	1,126 (51.1)		
Age, <i>M</i> (<i>SD</i>)	10.12 (6.07)		
Education level ^a			
No high school		47 (2.1)	
High school graduate		392 (17.8)	
Some college		638 (28.9)	
2-yr college		208 (9.4)	
4-yr college		573 (26.0)	
Postgraduate		346 (15.7)	
Family income			
<\$10,000		54 (2.4)	
\$10,000-\$14,999		41 (1.9)	
\$15,000-\$24,999		154 (7.0)	
\$25,000-\$49,999		494 (22.4)	
\$50,000–\$99,999		833 (37.8)	
\$100,000-\$149,999		307 (13.9)	
≥\$150.000		156 (7.1)	

in the morning on time" includes the tasks % of "Getting up; Getting dressed; Grooming and hygiene activities; Eating breakfast; Completing on time" (Haley et al., 2012, p. 53). Respondents rate the extent to which responsibility for each task is being assumed by the parent and child using a 5point scale in which 1 = Adult/caregiver has full responsibility; the child does not take any responsibility; 2 = Adult/caregiver has most responsibility and child takes a little responsibility; 3 = Adult/caregiver and child share responsibility about equally; 4 = Child has most responsibility with a little direction, supervision, or guidance from an adult/caregiver; and 5 = Child takes full responsibility without any direction, supervision, or guidance from an adult/caregiver (Haley et al., 2012, p. 58). Table 2 provides more examples. The test-retest reliability and discriminant validity of the Responsibility domain have been supported (Haley et al., 2012).

The raw score on each item in the Responsibility domain was used for analysis. Two items, managing menstrual cycle and

voting, were excluded from the analysis because they were not applicable to a large proportion of the respondents because of gender or age.

Data Analysis

The data for the original PEDI–CAT sample included the child's age in whole years. For this analysis, we focused on the timing of two transition points, identified using the frequency table for each item. *Starting age* for a task was defined as the first age group (year) in which more than 50% of parents reported their child was taking at least some responsibility (a rating of 2 or above). This age indicates the point at which, on average, transfer of responsibility from parent to child has begun to occur. *Full responsibility age* was defined as the age at which more than 50% of parents first reported that their child was taking full responsibility for the task (a rating of 5). This age indicates the point at which, on average, the responsibility shift is complete.

Results

Figures 1 and 2 graphically present the results, showing the two transition ages for each Responsibility domain item. The items are ordered by the starting age; for items toward the bottom of the figures, the responsibility shift began at a younger age, and for those toward the top, the shift began at an older age.

Items with an earlier starting age (see Figure 1) cover a wide range of areas: basic self-care (e.g., managing bowel and bladder through the day), safety (e.g., eating safely), preparation for school life (e.g., getting ready in the morning),

ltem	Content Domain						
Component	Organization and Planning	Health Management	Taking Care of Daily Needs	Staying Safe			
Question stem	How much responsibility does you	r child take for the following activities	s?				
Example items	Getting ready in the morning on time	Managing routine health appointments and related activities	Fixing simple meals that do not involve cooking such as cereal or a sandwich	Traveling safely within the community			
	Includes: Getting up; Getting dressed; Grooming and hygiene activities; Eating breakfast; Completing on time	Includes: Making and keeping appointments with doctors or dentists; Refilling prescriptions	Includes: Identifying what is available to eat; Selecting the needed food and utensils; Preparing by mixing, pouring, etc.	Includes: Identifying and following a safe route; Using available methods of transportation (e.g., walking, driving, public transportation)			
Rating scale ^a	Adult/caregiver has full responsi	bility; the child does not take any res	ponsibility.				
	Adult/caregiver has most responsibility and child takes a little responsibility.						
	Adult/caregiver and child share responsibility about equally.						
	Child has most responsibility with a little direction, supervision, or guidance from an adult/caregiver.						
	D Child takes full responsibility without any direction, supervision, or guidance from an adult/caregiver.						

Table 2.	Example Items From the	Responsibility Domain	of the Pediatric Evaluat	ion of Disability Invento	ry Computer Adaptive Tests
	Example Reme Frenchard	noopononsinty Boman		and of Broasting intente	

^aIn the data analysis, we assigned a score to each rating option. The option with the child taking full responsibility was assigned a score of 5, and the option with the adult or caregiver taking full responsibility was assigned a score of 1.

chores (e.g., putting items or objects away after use, maintaining cleanliness and upkeep of living space), and selfregulation (e.g., coping with stress, worry, or anger). The majority of parents started to transfer some responsibility in these areas when their child was around 2 or 3 yr old.

Items with a later starting age (see Figure 2) also reflect a wide range of areas: money management (e.g., paying bills), health (e.g., managing health appointments), and some complex life tasks (e.g., resolving errors in personal business, locating needed services or supports). The majority of parents reported transferring some responsibility in these areas when their child was between ages 13 and 15.

Items for which parents reported that their child had full responsibility at an earlier age (see Figure 1) include managing bowel and bladder through the day, managing bowel and bladder through the night, eating safely, and testing and adjusting water temperature. The majority of parents reported that their child was fully in charge in these areas when between ages 5 and 9.

Items with a later full responsibility age (see Figure 2) include completing legal and/or other personal paperwork, locating needed services or supports, resolving errors in personal business, and organizing important papers and information. These four items also had a late starting age.

For most items in the Responsibility domain, the transfer of responsibility occurred across a long time interval. The item with the longest interval is maintaining cleanliness and upkeep of living space; the starting age was 3 yr, whereas the full responsibility age was 18. Other items with a long gap between ages are coping with stress, worry, or anger; putting items and objects away after use; and getting ready in the morning.

Discussion

This cross-sectional study describes the timing of the shift in responsibility for managing daily tasks from parents to children in a typically developing sample in the United States. Overall, we found that there was a long period between the starting and full responsibility ages for most tasks represented by the items in the Responsibility domain of the PEDI–CAT. For many of these items, the gap was 5 yr or longer, and the longest gap was 15 yr. In other words, the shift of responsibility from parent to child occurred gradually in most areas of daily life. This finding is consistent with Young and colleagues' (2008) report in which parents described the experience of preparing children for adulthood as a natural and gradual process.



Figure 1. Age patterns for the PEDI-CAT Responsibility domain items with starting ages of 2-7 yr.

Note. PEDI–CAT = Pediatric Evaluation of Disability Inventory Computer Adaptive Tests. Copyright © 2011 Trustees of Boston University, under license to CRE Care, LLC. Adapted and reproduced with permission of publisher. All rights reserved. "Pediatric Evaluation of Disability Inventory Computer Adaptive Test" and "PEDI-CAT" are trademarks, in the United States and/or other countries, of Trustees of Boston University or its affiliates. Items have been shortened for visual presentation. Please see the PEDI–CAT manual for the original items.

As discussed earlier, the timing of the shift of responsibility across the different tasks likely reflects a complex set of factors. For example, Wray-Lake and colleagues (2010), in a study of developmental patterns of decision-making autonomy, found that money management was the area in which autonomy increased most slowly. Similarly, in the current study, the age of full responsibility was much later for items such as paying bills and managing daily expenses. In addition, Wray-Lake et al. found that for chores, decision-making autonomy remained low across childhood and through adolescence. In our study, although parents started to shift responsibility to their children at an early age for some chores, such as putting items away after use and maintaining cleanliness and upkeep of living space, there was a

Resolving errors in personal business]				19 19
Completing legal/personal paperwork				15 18	13
Paying bills					
Taking precautions to avoid STD/pregnancy				15 18	
Locating needed services/supports					19 I9
Organizing important papers/information			1:	, 	19
Informing home/school/work when absent			1		
Managing routine health appointments				3 18	
Taking precautions to protect the privacy of personal information			11	18	
Buying clothing			11	17	Starting Age
Managing food needs for week			10	18	
Communicating health needs			10	18	
Managing daily expenses			10	17	= Full
Traveling safely within community			9	16	Responsibility Age
Cleaning/caring for clothes			8	18	Aye
Seeking medical help			8	18	
Seeking out/joining club/group			8	17	
Supervising/caring for another person			8	17	
Tracking spending and managing money			8	17	
Using safe food handling practices			8	16	
Determining the safety of a new location			8	16	
			8	16	
Following health and medical treatment			8	15	
Using the internet safely	-		8	15	
Keeping personal electronic devices working					
	0	5	10	15	20
			Age (Years)		

Figure 2. Age patterns for the PEDI–CAT Responsibility domain items with starting ages of 8–18 yr.

Note. PEDI–CAT = Pediatric Evaluation of Disability Inventory Computer Adaptive Tests; STD = sexually transmitted disease. Copyright © 2011 Trustees of Boston University, under license to CRE Care, LLC. Adapted and reproduced with permission of publisher. All rights reserved. "Pediatric Evaluation of Disability Inventory Computer Adaptive Test" and "PEDI-CAT" are trademarks, in the United States and/or other countries, of Trustees of Boston University or its affiliates. Items have been shortened for visual presentation. Please see the PEDI–CAT manual for the original items.

long gap of 13–15 yr between the starting and full responsibility ages for these items. Similarly, the area of health was identified by Wray-Lake et al. as one in which autonomy remained low across middle childhood to late adolescence, and we found that youth assumed full responsibility for health-related tasks at older ages (e.g., age 18 for managing health appointments).

The timing of the shift of responsibility for many tasks may be related to the development of children's EF. A previous study found that children's EF was associated with the level of assistance needed in daily life situations (Rosenberg, 2015). In the current study, we found that many of the items had a starting age of around 5–8 yr and a full responsibility

age around 15–19 yr. In the development of EF, children show significant gains in working memory in the 5–8 yr age range (De Luca & Leventer, 2008). As children's working memory develops, they are more able to learn and recall the steps required to complete a daily life task. When children start to remember the procedure or the directions for a task, parents may begin to involve children more in the task or may lessen supervision. Although planning and problem solving continue to mature during young adulthood, adolescents show significant gains in strategic planning and problem solving around ages 15–19 (De Luca & Leventer, 2008). This growth may help explain why youth assumed full responsibility for many items in the Responsibility domain in this age period. Many of the items with a later transition age require the young person to plan actions and identify feasible methods to solve problems, which reflect EF skills (e.g., prioritizing multiple goals, resolving errors in personal business).

The timing of responsibility shifts may also be related to important milestones in young people's lives—for example, entering school or leaving home for college or work. The shift we found around ages 5–8 yr on many items is also the period when formal schooling starts in the United States. Parents may become more focused on preparing their children for school life and teaching them to be responsible for school-related tasks. There also are many changes in children's social context during this period. A child's world broadens when entering school. Exposure to a new social environment and new performance demands within the school environment may give children opportunities to learn new skills. In turn, these skills enable children to begin to take responsibility for some daily tasks.

Many tasks had a full responsibility age between 17 and 19 yr. This is the period when many young people in the United States leave home for college or work. As young people move away from home, their parents may no longer be geographically close enough to provide regular supervision or guidance for most tasks.

Items with the greatest gap between the two transition ages were in areas in which research has shown that parents and adolescents have frequent conflicts: maintaining cleanliness and upkeep of living space, putting objects away after use, and getting ready in the morning. Riesch et al.'s (2000) survey of 163 parent and young adolescent dyads found that getting up in the morning, putting clothes away, helping out around the house, and cleaning up one's bedroom were ranked among the top 10 topics that parents and adolescents had the most frequent disagreements about. Parents may have certain expectations for how these tasks should be performed, whereas children may want the freedom to decide how they handle these tasks. Parents and children may argue about these tasks for many years, but eventually a balance may be reached when parents adjust their expectations, children meet their parents' expectations, or a combination of both. This interpretation echoes a theme in the literature on autonomy development suggesting that parents' expectations and children's expectations gradually converge between early and late adolescence (Zimmer-Gembeck & Collins, 2006).

Several features of the study design and secondary data analysis must be considered when interpreting these findings. First, the data were collected in the United States, and thus the results may not be generalizable to other countries. Different countries may have different regulations regarding the age at which young people may complete legal documents, work, obtain a driver's license, or access certain financial services (e.g., debit or credit card). These regulations are likely to influence the timing of transfer of responsibility for these tasks. In addition, culture may influence parents' beliefs about appropriate child-rearing practices and shape the ways in which parents engage their children in daily life, such as whether children should have chores (Drummond et al., 2015; Rogoff, 2003). Given the likelihood of differences across countries and cultures, cross-cultural comparison studies would be valuable to help service providers better understand how the timing of responsibility shifts differs between cultures and what factors are associated with those differences.

Second, although the overall sample of this study represented the racial and ethnic proportions of the 2000 U.S. Census, further research is needed with minority (e.g., Hispanic Americans, Asian Americans) and other subgroups (e.g., young people growing up in rural areas) to determine whether the timing of transitions varies and, if so, in which task areas.

Third, this study used a cross-sectional design to describe the timing of the transfer of responsibility from parents to their children; therefore, it is not possible to conclude that the reported timetable reflects only the effects of age. A cross-sectional study is an efficient way to expand knowledge regarding this everyday phenomenon in a population across a broad age range. However, future research with a longitudinal design that follows families for many years would be valuable to help service providers better understand the process through which parents transfer responsibility to their children and the factors associated with variations in this process. Moreover, studies of young people with disabilities would provide valuable information about how variations in disability and environmental factors affect the timing of transfer of responsibility to provide further guidance for service providers working with families and youth as they transition to adulthood.

Implications for Occupational Therapy Practice

The findings of this study have the following implications for occupational therapy practice:

- The timing of the shift of responsibility for important daily tasks from parent to child varies significantly by task.
- Data on the typical timing of transitions in responsibility can provide a useful starting point for conversations with parents about their expectations and priorities for their children and the ways they are assisting them to manage daily tasks.
- Clinicians who work with children with disabilities may reference these overall patterns to guide programming throughout childhood and adolescence to prepare young people for adult tasks.
- Clinicians should consider families' cultural beliefs, expectations, and unique circumstances when discussing the timing of their children's responsibility for daily tasks.

Conclusion

The results of this study indicate that the transfer of responsibility for managing tasks of daily life from parents to their children often extends over a period of many years. The findings may serve as a useful starting point for conversations with parents about their expectations for their children and the steps they are taking to assist their children to manage important tasks on their own. Clinicians may find the results helpful when discussing the future with parents of young people with disabilities and other chronic conditions and the tasks that their children must learn to manage for independent living as an adult. Readers are cautioned that the timetable described in this article reflects the overall patterns of the population sampled and that the timetable for an individual child and family may vary according to their unique circumstances.

References

- Amaral, M. F., Drummond, A. F., Coster, W. J., & Mancini, M. C. (2014). Household task participation of children and adolescents with cerebral palsy, Down syndrome and typical development. *Research in Developmental Disabilities*, *35*, 414–422. https://doi.org/10.1016/j.ridd.2013.11.021
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469–480. https://doi.org/10.1037/0003-066X.55.5.469
- Babler, E., & Strickland, C. J. (2015). Moving the journey towards independence: Adolescents transitioning to successful diabetes self-management. *Journal of Pediatric Nursing*, *30*, 648–660. https://doi.org/10.1016/j.pedn.2015.06.005
- Bjerke, H. (2011). Children as "differently equal" responsible beings: Norwegian children's views of responsibility. *Childhood*, 18, 67–80. https://doi.org/10. 1177/0907568210371987
- Bogg, T., & Roberts, B. W. (2004). Conscientiousness and health-related behaviors: A meta-analysis of the leading behavioral contributors to mortality. *Psychological Bulletin*, *130*, 887–919. https://doi.org/10.1037/0033-2909.130.6.887
- De Luca, C. R., & Leventer, R. J. (2008). Developmental trajectories of executive functions across the lifespan. In V. Anderson, R. Jacobs, & P. J. Anderson (Eds.), *Executive functions and the frontal lobes: A lifespan perspective* (pp. 23–56). Psychology Press.
- Drummond, A. de F., Gomes, A. M., Coster, W. J., & Mancini, M. C. (2015). Predictive factors of household task participation in Brazilian children and adolescents. *OTJR: Occupation, Participation and Health*, *35*, 101–109. https://doi.org/10.1177/1539449215573005

- Dunn, L. (2004). Validation of the CHORES: A measure of school-aged children's participation in household tasks. *Scandinavian Journal of Occupational Therapy*, *11*, 179–190. https://doi.org/10.1080/11038120410003673
- Dunn, L., Coster, W. J., Orsmond, G. I., & Cohn, E. S. (2009). Household task participation of children with and without attentional problems. *Physical and Occupational Therapy in Pediatrics*, 29, 258–273. https://doi.org/10.1080/01942630903008350
- Dunn, L., & Gardner, J. (2013). Household task participation of children with and without physical disability. *American Journal of Occupational Therapy*, *67*, e100–e105. https://doi.org/10.5014/ajot.2013.008102
- Gardiner, E., & larocci, G. (2018). Everyday executive function predicts adaptive and internalizing behavior among children with and without autism spectrum disorder. *Autism Research*, *11*, 284–295. https://doi.org/10.1002/aur.1877
- Goodnow, J. J. (1988). Children's household work: Its nature and functions. Psychological Bulletin, 103, 5–26. https://doi.org/10.1037/0033-2909.103.1.5
- Grolnick, W. S., Raftery-Helmer, J. N., Marbell, K. N., Flamm, E. S., Cardemil, E. V., & Sanchez, M. (2014). Parental provision of structure: Implementation and correlates in three domains. *Merrill-Palmer Quarterly*, *60*, 355–384. https://doi.org/10.13110/merrpalmquar1982.60.3.0355
- Haley, S. M., Coster, W. J., Dumas, H. M., Fragala-Pinkham, M. A., Kramer, J., Ni, P., . . . Ludlow, L. H. (2011). Accuracy and precision of the Pediatric Evaluation of Disability Inventory computer-adaptive tests (PEDI–CAT). *Developmental Medicine and Child Neurology*, 53, 1100–1106. https://doi.org/ 10.1111/j.1469-8749.2011.04107.x
- Haley, S. M., Coster, W. J., Dumas, H. M., Fragala-Pinkham, M. A., & Moed, R. (2012). PEDI–CAT: Development, standardization, and administration manual. CRE Care.
- Huebner, A. J., & Howell, L. W. (2003). Examining the relationship between adolescent sexual risk-taking and perceptions of monitoring, communication, and parenting styles. *Journal of Adolescent Health*, 33, 71–78. https://doi.org/10.1016/S1054-139X(03)00141-1
- Jacobson, L. A., Tarazi, R. A., McCurdy, M. D., Schultz, S., Levey, E., Mahone, E. M., & Zabel, T. A. (2013). The Kennedy Krieger Independence Scales–Spina Bifida Version: A measure of executive components of self-management. *Rehabilitation Psychology*, 58, 98–105. https://doi.org/10.1037/ a0031555
- Kao, Y.-C., Kramer, J. M., Liljenquist, K., & Coster, W. J. (2015). Association between impairment, function, and daily life task management in children and adolescents with autism. *Developmental Medicine and Child Neurology*, 57, 68–74. https://doi.org/10.1111/dmcn.12562
- Larson, E. A. (2004). Children's work: The less-considered childhood occupation. American Journal of Occupational Therapy, 58, 369–379. https://doi.org/10. 5014/ajot.58.4.369
- Newman, L., Wagner, M., Knokey, A. M., Marder, C., Nagle, K., Shaver, D., & Wei, X. (2011). The post-high school outcomes of young adults with disabilities up to 8 years after high school: A report from the National Longitudinal Transition Study–2 (NLTS2) (NCSER Report No. 2011-3005). SRI International.
- Ochs, E., & Izquierdo, C. (2009). Responsibility in childhood: Three developmental trajectories. *Ethos*, *37*, 391–413. https://doi.org/10.1111/j.1548-1352. 2009.01066.x.392
- Riesch, S. K., Bush, L., Nelson, C. J., Ohm, B. J., Portz, P. A., Abell, B., . . . Jenkins, P. (2000). Topics of conflict between parents and young adolescents. *Journal for Specialists in Pediatric Nursing*, *5*, 27–40. https://doi.org/10.1111/j.1744-6155.2000.tb00083.x
- Rogoff, B. (2003). The cultural nature of human development. Oxford University Press.
- Rosenberg, L. (2015). The associations between executive functions' capacities, performance process skills, and dimensions of participation in activities of daily life among children of elementary school age. *Applied Neuropsychology: Child*, *4*, 148–156. https://doi.org/10.1080/21622965.2013.821652
- Sharfi, K., & Rosenblum, S. (2016). Executive functions, time organization and quality of life among adults with learning disabilities. *PLoS One, 11*, Article e0166939. https://doi.org/10.1371/journal.pone.0166939
- Tarazi, R. A., Mahone, E. M., & Zabel, T. A. (2007). Self-care independence in children with neurological disorders: An interactional model of adaptive demands and executive dysfunction. *Rehabilitation Psychology*, 52, 196–205. https://doi.org/10.1037/0090-5550.52.2.196
- U.S. Census Bureau. (2001). Profiles of general demographic characteristics. https://www2.census.gov/census_2000/datasets/demographic_profile/0_ United_States/2kh00.pdf
- White, L. K., & Brinkerhoff, D. B. (1981). Children's work in the family: Its significance and meaning. *Journal of Marriage and Family*, 43, 789–798. https://doi.org/10.2307/351336
- Wood, D., Larson, R. W., & Brown, J. R. (2009). How adolescents come to see themselves as more responsible through participation in youth programs. *Child Development*, *80*, 295–309. https://doi.org/10.1111/j.1467-8624.2008.01260.x
- Wray-Lake, L., Crouter, A. C., & McHale, S. M. (2010). Developmental patterns in decision-making autonomy across middle childhood and adolescence: European American parents' perspectives. *Child Development*, 81, 636–651. https://doi.org/10.1111/j.1467-8624.2009.01420.x
- Wray-Lake, L., Syvertsen, A. K., & Flanagan, C. A. (2016). Developmental change in social responsibility during adolescence: An ecological perspective. Developmental Psychology, 52, 130–142. https://doi.org/10.1037/dev0000067
- Young, R. A., Marshall, S. K., Domene, J. F., Graham, M., Logan, C., Zaidman-Zait, A., & Lee, C. M. (2008). Transition to adulthood as a parent–youth project: Governance transfer, career promotion, and relational processes. *Journal of Counseling Psychology*, 55, 297–307. https://doi.org/10.1037/0022-0167.55. 3.297
- Zimmer-Gembeck, M. J., & Collins, W. A. (2006). Autonomy development during adolescence. In G. R. Adams & M. D. Berzosky (Eds.), *Blackwell handbook of adolescence* (pp. 174–204). Blackwell Publishing. https://doi.org/10.1002/9780470756607.ch9

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