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Pants, Jacket, Hat, Boots & Mittens, Boots & Mittens: Toddlers’ acquisition of dressing skills and independence

Kimberly F. Stevenson

St. Catherine University, kfstevenson@stkate.edu

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Pants, jacket, hat, boots & mittens, boots & mittens:

Toddlers’ acquisition of dressing skills and independence

Kim Stevenson

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St. Catherine University

St. Paul, Minnesota

Advisor: ___________________     Date: ___________
Abstract

Toddlers bundled up in snow clothes are adorable. How does one guide a toddler to dress appropriately? This action research project invited older children to spend five weeks assisting toddlers with learning how to put on snow clothes. An attendance and time log chronicled every day of the study. A checklist of progress with articles of clothing and levels of independence helped monitor the toddlers. Field notes and post-study feedback forms collected additional details. The quantitative and qualitative results showed an increase in independent dressing skills. Transition routines and visual schedules received attention in this study on independent dressing skills. This report contains resources for similar studies. In future studies, pairing toddlers with the same older child for every visit and increasing the number of older children are possible options.

Keywords: toddler, dressing skills, independence, dependence, routines, mixed-age groups, transitions
Dressing a toddler appropriately for playing outside in climates with snowy winters is a feat. Parents of twins, triplets or toddler teachers with a whole classroom of toddlers face an even more daunting challenge. People who live in places with beautiful winters need to learn how to dress for enjoying winter safely. How does one accomplish dressing a toddler while simultaneously encouraging the toddler to do more and more of this routine independently? How does a teacher or parent conduct this venture and not walk away feeling like a defeated calf-roper?

Toddlers, with their increasing mobility and communication skills, learn something new every second, minute and day. Careful observation and teaching techniques enhance skills rather than obstruct growth. Some toddlers engage so deeply in the task of putting clothes on that once completely dressed they start undressing and trying on their friends’ clothes or just putting on their own again. Other toddlers get so comfortable in their snow clothes that they just lie down on the floor and fall asleep. Dressing toddlers for playing outside in snow and ice involves many factors. Frostbite and illness are the major safety concerns. Independence is the goal. Toddlers who can dress for outdoors independently can help their classmates and teachers and parents enjoy more time outside and less time learning how to get out the door.

The temperature of the child is important. Is the toddler too cold or too hot? The body temperatures of small children rise and fall more quickly than adults. In a whole class of students, it is not wise to dress one child completely because she may overheat while waiting for the other students and teachers to get ready.
Overheating can cause sweating before going out in the cold, it can cause the child to fall asleep, and it can rapidly change the child’s mood. It is smarter to get them to a halfway point then help another child and let that toddler work on some of the clothing items by themselves and then return to help them when they are stuck or when all other classmates are also halfway dressed.

Appropriately fitting clothing is another factor to consider. If a toddler’s boots are too small, she may not have the words to tell you and may cry instead. Toddlers are building their empathy skills and can still respond like an infant; a second toddler may cry just because the toddler next to her is crying. The domino effect of empathetic crying is not pleasant. If a toddler’s jacket or pants are too short snow will get inside when they are playing and can cause discomfort and another drop in body temperature. As a toddler grows the pants that fit for walking become too short for running and climbing. When a toddler’s physical capability is developing, proper clothing removes obstacles to improving coordination and many other gross motor movements.

Toddlers begin verbalizing when they feel comfortable. The vast range of speaking abilities in toddlers affects their ability to ask for help or clarify where they are struggling in putting on their clothes. Building the skill to ask for help or put on clothing items independently, instead of just waiting for an adult to do it for them, is a large part of learning to communicate and learning how to dress oneself. Observing the child’s body language plays a key role in determining assistance. Offering help with modeling words the child needs solves some struggles. Modeling the fine motor skills necessary for pulling on the cuff of a sleeve or pants solves
other struggles. Attentive parents, teachers, and peers figure out assists that foster progress and do not remove all effort by the child.

As a child's sense of independence grows, he will vary from day to day and minute to minute on how much he wants to do all by himself. In the blink of an eye, a toddler can go from trying to put his boots on to screaming on the floor. He wants to do it by himself, but he got stuck somewhere. The boot does not fit. The zipper or Velcro is stuck. His toes are all squished down into the toe. His toes are in but his heel is stuck, and he has not mastered the art of walking in stiletto heels. His arms are still too short to hold the boot while he pushes his foot inside. How does one give the right amount of assistance and not cross the line into over-helping? Teaching and parenting are full of opportunities to foster independence; changing an approach to guiding a child can make an opportunity blossom or wither.

Friends and siblings have an impact on dressing skills. Classmates ask each other for help and enjoy giving and receiving their peers’ assistance. Peers of similar ages but different dressing abilities influence each other. Peers who are older enjoy playing the role of teacher and often humble actual teachers’ with their patience and effort at trying to help another child. How do friends and siblings encourage independence? Are there methods children use that teachers and parents are not trying? Is there a bond between children that fosters learning and independence in a different manner from a teacher or parent working with a child? In a classroom of toddlers and slightly older children, teachers swim in an environment ripe for discovering effective means of facilitating the growth of independence.
Literature Review

Teaching a child to dress oneself is a challenge for both parents and teachers. Learning can be a challenge for the child. Winter adds to this challenge by requiring appropriate dress to enjoy being outdoors in this season. Each child wavers back and forth on wanting to dress independently or needing assistance. This wavering includes various levels of physical and communication abilities. Researchers have attempted to study various parts of this challenge; a review of their findings is what follows.

Dressing Routines & Transitions

In their descriptive study of winter dressing routines, Hatcher and Squibb (2011) found limited research studies on self-care routines such as dressing. A typical preschool day includes many transitions between the following activities: leaving home, entering school, individual activities, meals, toileting, story time, hand washing, group activities, nap time, outdoor play, and leaving school (Hemmeter, Ostrosky, Artman, & Kinder, 2008; Masterson & Kersey, 2013). Hatcher and Squibb (p. 340) distinguish between a routine and a ritual. They define both as something that happens on a regular basis, but they clarify that rituals express symbolic communication while routines are about action (Hatcher & Squibb, 2011). This study used seven different methods for data collection. One idea from their study proposed using a visual schedule specific to the clothing items involved in the steps of dressing for outside. Two more suggestions were peer dressing activities and incorporating language to encourage children to think about what they get to do outside in the winter. (Hatcher & Squibb, 2011)

Another study, which focused on transitions, suggested incorporating social and emotional learning in the transition (Hemmeter et al., 2008) by helping children name
and acknowledge their feelings in the moment. This study also suggested giving transition warnings before the transition begins to help prepare children for the upcoming transition (Hemmeter et al., 2008). An article by two early childhood researchers echoes the suggestions of routines, transition warnings and incorporating social and emotional development in working with toddlers (Masterson & Kersey, 2013).

**Infant & Toddler Peer Relationships**

Wittmer’s (2012) study included three reasons why teachers should focus on peer relationships for infants and toddlers. Children today are in group care settings at earlier ages than they used to be so there are more opportunities to build social and emotional skills in the group. Infants and toddlers are able to help their peers build social competence while simultaneously building their own. These young children also still have a need for observing examples of healthy social-emotional development, and this comes from bonds and interactions with their adult caregivers (Wittmer, 2012; Mooney, 2000).

Poole’s article succinctly explained the development of compassion in infants and toddlers (2003). She described how babies learn about social cues and relationships from their caregivers. Toddlers begin to distinguish themselves from others and choose their actions to learn through cause and effect (Poole, 2003). A study on empathy between toddlers and elementary age children attempted to foster social and emotional development (Aldrich, 2015). Aldrich’s study asked elementary students to spend time in the toddler room observing and assisting the toddlers. Aldrich (2015) found an increased sense of community at her school and general agreement that elementary students enjoyed helping toddlers (p. 32).
Gagnon, Huelsman, Reichard, Kidder-Ashley, Griggs, Struby, and Bollinger’s (2014) study on social competence looked at different parenting styles, reactivity, regulation, and disruptive and interactive behaviors of the children. Their study found that children who have self-regulation skills were able to interact better with peers regardless of the parenting style. This study gathered data through several different assessments at child-care centers and through parent questionnaires (Gagnon et al., 2014). Additionally, delayed gratification was found to be an element of emotional self-regulation related to success in school. (Garner, 2010)

Gloeckler and Cassell (2012) conducted a study on problem solving in a toddler environment. Aggressive behaviors, gradually developing self-regulation skills and growing problem solving skills are all parts of a toddlers’ development. This study reviewed what teachers do to prevent and solve problems for and with toddlers. The study found that changing the perspective of the teacher to viewing toddler conflicts as a situation for building problem solving skills would improve the child’s social and emotional development and the teacher’s engagement practices. (Gloeckler & Cassell, 2012)

**Emotional Competence & Empathy**

Emotional competence involves more than just knowing the names of emotions. It includes understanding that words and facial expressions have meaning, certain situations call for various emotions and different cultures have different patterns of what is the appropriate emotional response (Garner, 2010). Garner (2010) reviewed the literature available on the influences of emotional competence on teachers, learning, and children. She found that 3 to 6 years olds were the focus of many studies, but there was limited
information on the emotional knowledge of toddlers. Trends in parenting show that parents still help infants with the regulation of emotion through giving attention and addressing needs, but they are less likely to help toddlers. As the toddler is more mobile and beginning to communicate verbally, expectations of internal self-regulation are increased (Garner, 2010). This phase of toddlerhood is often a stressful time for toddlers and their adult caregivers. One action research project introduced yoga as an intervention. Jalalat’s (2014) intervention addressed concerns from a previous study (Watamura, Donzella., Alwin, and Gunnar, 2003 as cited in Jalalat, 2014) that found stress levels rise and fall throughout the day for toddlers.

Similar to studies of transition time in schools, studies of gratitude lessons and interventions with young children are rare (Callaghan, 2015). Adolescents and adults received beneficial results from these gratitude interventions (Callaghan, 2015).

Building altruistic behaviors and empathy are key parts of toddler development. (Wittmer, 2012; Poole, 2003). “Done multiple times a day, this helps children wire their brains for greater empathy, happiness, and well-being, even when coping with sad or difficult events” (Kutt, 2014, p.8). Empathy includes recognizing the feelings of someone else. Empathy is a pro-social behavior. Altruism involves doing something for the benefit of another person. Researcher Nancy Eisenberg and her colleagues define pro-social behaviors as “voluntary behaviors intended to benefit another” (as cited in Hyson & Jackie, 2011). Block-Lerner, Adair, Plumb, Rhatigan, and Orsillo’s (2007) study on mindfulness and empathy provided a helpful overview of the development of empathy. Infants, young toddlers, older toddlers, and 3-year-olds are all at different stages in this development. Infants cry when they hear others cry. Young toddlers often take a
comforting object to the crier. Older toddlers correct what they have just done to make the other child cry so the crying will stop. At three years of age children begin to realize that the other person’s feelings might be different from their own. Then this moves on throughout childhood and into adulthood to the ability to take the perspective of another being or another group of people. (Block-Lerner et al., 2007, p.504)

Besides knowing when empathy develops, it is important to note there are different kinds of empathy: emotional, cognitive, proximal, altruistic and self-corrective (Quann & Wien, 2006; Wittmer, 2012). Proximal empathy is having concern for someone nearby who is in distress (Quann & Wien, 2006; Block-Lerner, et. al, 2007). One example of this is when infants start to cry when they hear someone else or another baby cry. Altruistic empathy is taking an action to help the other person. Toddlers do this by offering what comforts themselves (Quann & Wien, 2006; Block-Lerner, Adair, Plumb, Rhatigan, & Orsillo, 2007). Self-corrective empathy includes changing what action was just completed to go back to when the other person was not upset (Quann & Wien, 2006). Proximal and altruistic are types of emotional empathy because they are individual reactions to what someone is witnessing. Self-corrective is an example of cognitive empathy. “Cognitive empathy is the ability to imagine another’s experience” (Aldrich, 2015). Perspective-taking is a more advanced example of cognitive empathy (Block-Lerner et al., 2007).

Mixed-Age Groups

Lev Vygotsky introduced educators to the zone of proximal development (as cited in Mooney, 2000, p. 83). “He believed that a child on the edge of learning a new concept can benefit from the interaction with a teacher or a classmate.” (Mooney, 2000) He also
encouraged learning through conversations and interactions with teachers and peers.

Derscheid (1997) reviewed the literature on mixed-age groups and found that the literature highlights the benefits to the younger child. Her review also found studies that discussed the influences of siblings. Her study attempted to see these behaviors between siblings in mixed-age group school environments. Her study found positive influences on helping behaviors from the mixed-age group setting, and the longer the child attended, the stronger the effect.

**Low Empathy, Bullying & Aggression**

Bullying is a major concern in society today. An extensive review of the literature on bullying discusses types of aggression and the roles played in bullying incidents (Vlachou, Andreou, Botsoglou, & Didaskalou, 2011). These studies are indirect information and reasons to teach social and emotional skills before bullying starts (Vlachou et al., 2011). Relational, physical and verbal aggression were the types of aggression listed in this study. The roles in bullying incidents included: bully, assistant, reinforcer, defender, victim, and outsider. The bully and the victim are usually the focus of the incident. Social and emotional competence of the peripheral participants in a bullying incident might lower or prevent bullying (Vlachou et al., 2011).

**Conclusion**

Toddlers learning how to dress often hit a plateau where they want an adult caregiver to put their clothes on for them. This skill of dressing is part of caring for oneself and developing independence. Research studies on self-care routines such as dressing are limited, and these routines are often activities of transitions to another part of the day. Past studies recommended visual schedules, transition warnings, peer dressing
activities, and incorporating social and emotional development activities in the routine. (Hatcher & Squibb, 2011; Hemmeter et al., 2008; Masterson & Kersey, 2013)

Mixed-age group settings are one area that has been researched involving peer activities. Findings show that the interactions benefit both the younger and the older child socially, emotionally and cognitively. (Aldrich, 2015; Derscheid, 1997; Mooney, 2000)

Research on social and emotional competence includes many facets. One facet is empathy. Researchers have identified a timeline of when empathy develops and different types of empathy: emotional, cognitive, proximal, altruistic and self-corrective. Toddlers are beginning to develop empathy that includes actions towards others. (Aldrich, 2015; Block-Lerner et al., 2007; Hyson & Jackie, 2011; Kutt, 2014; Poole, 2003; Quann & Wien, 2006; Witmer, 2012) Literature on empathy and bullying were viewed during preparation for this study to consider the involvement of older children and prepare for the interactions that could take place in a group of children. Previous studies show that the challenges toddlers face parallel where each child is at developmentally and deserve future research attention.

**Research Question**

Dressing oneself is a skill learned through practice. Along the path to obtaining this skill are challenges for children, parents, and teachers. This action research study investigated the following: Will interactions with older children influence toddlers’ independence in the acquisition of skills for dressing in snow clothes?

**Description of Action Research Process**
The toddlers acquiring independent dressing skills study occurred over the course of seven weeks. I documented the influence of the older children on the toddlers’ snow clothes dressing abilities using five data tools. I collected one week of baseline data at the beginning, five weeks with older children visiting and helping the toddlers during the dressing routine, and one last week of post-study data during week seven.

During week one (January 18, 2016) I started observing the toddlers with the Time and Attendance Log (Appendix A). This observation tool cataloged how long the snow clothes dressing routine lasted each day of the week and how many students were present on each day. At this school, not all children attend Monday through Friday, so there are varying numbers of students on each day. This school also has flexible schedules for teachers. Teachers who work three or four 10-hour days are considered full time. There are three main teachers for this toddler room, and occasionally there are substitute teachers. While my co-teachers were participants in the toddlers overall care and learning, I was orchestrating this action research project for my master’s degree. My teaching schedule was Monday through Thursday for the duration of the study. Fridays were my day off and did not involve interventions nor data collection.

For week one and week seven I took photographs of the toddlers. Near the end of the study, I examined these pictures for the appropriate size of clothing, expressions on children’s faces and body language of the toddlers, and to analyze the space inside the classroom where dressing happened. Photographs were not taken during week two through six to allow more time for recording observations of independence and to spend less time snapping photos. Out of respect for the age of the participants, I did not display actual photographs in this report.
For all seven weeks, I filled out checklists of each child’s ability to dress in snow clothes. The Checklist of Snow Clothes Progress (Appendix B) recorded progress for five different items of snow clothes: pants, boots, jacket, hat, and mittens. For each outerwear item, a note was made as to whether the toddler put this clothing item on independently, with an adult assisting them, with an older child assisting, or with a fellow toddler assisting. An additional column for observations regarding a certain clothing item was on the checklist. If a child put boots on before snow pants and had to take them off, a note about this was recorded here. If I was able to notice while continuing to help dress toddlers, I recorded backward snow pants or boots on the wrong feet in the comments column of the checklist.

My Teacher Observation Journal and Field Notes form (Appendix C) is where I added additional observations, thoughts, and reflections on the study. Before week one, I printed twenty copies of this form. The first column chronicled the date and time of day the notes were recorded. This column was included to help review when reflections on the study differed and if this paralleled an interesting detail that I recorded on one of the other data tools. Field notes were filled out daily on the dressing routine. My teacher break time, toddler naptime, and in the evening at home were the three most common times for writing reflections on the day’s events. When ideas arose while writing sections of this research report, I added notes to this journal.

Substitute teachers were also part of this study. During week one there was a substitute teacher for the first day of collecting baseline data. I verbally informed her of what was happening in the study and prepared her with an overview of the toddler’s daily schedule. I used the same procedure of briefing about the study and the plan for the day
with the substitute teachers who taught during weeks two and three. During weeks four, five, and seven there were no substitute teachers. I took a sick day during week six and to aid my recovery I was present at school but did not record data on Monday, Tuesday and Wednesday of this week.

January 25, 2016 was the first day of week two. Week two was the first week that I invited older students to visit the toddler room and help with dressing in snow clothes. The older student classroom included both four and five-year-old students. I invited the older children to assist the toddlers in pairs. Since the intervention was only going to last for a few weeks and there were a high number of older students, visiting the toddlers in pairs allowed for more visiting opportunities for the older students.

I used two methods to bring older children to the toddler room. I called the other classroom and notified one teacher of the older students that the toddlers were finished eating their snack and ready for older children helpers. Then the older student teachers would ask for two helpers and escort them down the hallway to the toddler room. The second method involved bringing toddlers with me for a walk to the older children’s classroom. I brought the first one or two toddlers who were finished eating their snack with me to ask for helpers. At the entrance to the older student classroom, I would ask for two helpers. After finding two helpers, the older children would walk back with us to the toddler classroom. Both methods kept all classrooms in the ratio for safe supervision of the students.

To ensure two visits for each older child, I kept a log of which older children were helpers on each day. After their first visit, not all the older children wanted to make the second visit. Then I still maintained the log and a few older children were allowed to be
helpers more than two times. Since older students were voluntary participants and not the focus of the study, I did not ask further questions about why the older students only wanted to visit once.

To record when the dressing routine started, I chose the end of morning snack as the signal. For the toddlers’ daily routine, morning snack and hand washing preceded dressing in snow clothes. When the first toddler indicated she was finished eating snack by clearing her table and walking to the bathroom, I knew the dressing routine was about to start. When she finished washing her hands and walked to her cubby containing her snow clothes, I looked at the clock and recorded the start time of the dressing routine. For the end time of the dressing routine, the last fully dressed child indicated completion, and I wrote down that time in the time and attendance log. When the last child was fully dressed, a co-teacher or I escorted the toddlers outside. Once the toddler class was on the playground, I walked with the older children back to their classroom and thanked them for their help for that day.

I documented dressing skills and progress on my Checklist of Snow Clothes Progress (Appendix B) during every week of the study. When designing this form I made space for data for three children on one page. I had printed several copies of this form before the study began. When analyzing the data collected on the checklists, I created a new spreadsheet in Excel to look at the data by student and day of the study. I recorded the children’s initials on the checklist. Before I transferred this data to the electronic form, I assigned letters to each child’s initials to protect the anonymity of the participants. After I had completed my coding of the initials, I entered electronic records by letter
only. The original checklist form I designed (Appendix B) was helpful for collecting data quickly but not for analyzing.

One field trip interrupted my study on a Thursday (January 28, 2016) during week two. My co-teacher and I took the toddlers in their snow clothes on the local bus to see a temporary art exhibit. The toddlers wore their snow clothes, but we did most of the dressing to ensure the class was ready in time to catch the bus. The following Monday, February 1, 2016, the older children did not come to help teach the toddlers how to dress in snow clothes. The reason for this was to help contain the spread of a cold going throughout the school. To minimize interactions with more contagious children, I decided to postpone the intervention for that day. Four interruptions changed the original plan for this study: the field trip, the Monday listed above, one teacher work day, and three days when I was sick.

During week seven I had my two co-teachers record their thoughts, impressions, and observations of the intervention on the Post Study Feedback Form (Appendix D). I recorded their valuable input. I included this data in my final analysis, discussion of results and conclusions of this report. In the last few pages of this report, my appendices contain the data tools I designed for this study.

**Data Analysis & Results**

This action research study investigated the following question: Will interactions with older children influence toddlers’ independence in the acquisition of skills for dressing in snow clothes? I collected both quantitative and qualitative data to observe whether this intervention fostered the growth of independent dressing skills. The following discussion and figures present what I learned from this study.
The quantitative data obtained in the Time and Attendance Log (Appendix A) showed me information about the dressing routine as a whole. The start of the dressing routine, just after students finished morning snack, ranged from 9:30 am to 10:08 am (see Figure 1).

![Figure 1. Start Times of Dressing Routine](image)

While the start times were not the same each day, the finish times also differed. This was not just due to a different start time. Every day the dressing routine did not require the same amount of time. Some days required less time, and some days required more. The number of toddlers was also different. These end of routine clock times can also be looked at to see what time of day we were able to get outside (see Figure 2).
Figure 2. Finish Times of Dressing Routine. This figure displays the time on the clock when the dressing routine was finished for each day.

The earliest all toddlers were ready to go outside was 9:50 am and the latest time was 10:25 am. These two figures (Figure 1 and Figure 2) show that while toddler classrooms have a daily schedule, toddlers and toddler teachers do not run strictly on schedule and the day runs according to a sequence of events more than by the time on the clock. Several factors, including the deliciousness of morning snack, affect the start time of the dressing routine. Messy and appetizing snacks last longer. In a future study, it would be interesting to compare the start and end times of getting dressed at home to dressing at school.

For the purpose of this study, I defined the start time as when the first child finished washing hands after morning snack and was walking to put on snow clothes. As the last child was fully dressed for outside and sitting with all the other fully dressed...
toddlers, I observed and wrote the time at which the routine was finished. Using these definitions helped me decide when to write down the time, and therefore clarified an observable start time and closure of the routine.

I measured the duration of each day’s dressing routine in minutes. The shortest time for the routine included two days at 17 minutes. The day with the longest routine ran for 38 minutes. I included all recorded durations to show a picture of the whole study (see Figure 3).

![Figure 3](image.png)

**Figure 3.** Duration of Dressing Routines. This figure shows the dressing routine is not the same length of time for each school day.

While the difference in the dressing routine durations was 21 minutes between the longest (38 minutes) and the shortest (17 minutes), the average dressing routine over the
The course of the seven weeks was 24.2 minutes. Every day on the three previous figures show differences, so a longer study would be needed to look for strong patterns and trends. This shorter study does show a good range for planning a toddler’s day. I learned that close to 30 minutes should be allowed for a dressing routine for four or more children. Trying to dress a group of toddlers in a shorter time is probably stressful for children and adults.

In this study, the day with the longest duration of 38 minutes coincided with not having any older children helpers. The reason the older children did not visit was to prevent spreading illness throughout the school. Several children at the school were contracting the same illness. I decided to avoid extra child-to-child interactions for two days; one day at the end of week two and one day at the beginning of week three.

Another factor in this study is attendance. The day with the longest dressing routine included five toddlers. A full class included eight toddlers. The two days with the shortest routines had attendance of four and six toddlers (see Figure 4). This visual comparison (Figure 4) also shows that just the ratio of children to teacher does not always determine how long the routine takes. Days with longer times had a low attendance; days with shorter times had more children present.
Figure 4. Attendance of Toddlers & Duration of Dressing Routine. This figure compares attendance to total time in minutes of the routine on each day of the study.

In this next series of figures (Figure 5 to Figure 9), I found how independent dressing skills for each item of snow clothes changed from the first week of the study to the last week. I displayed clothing item data in the order they were listed on the checklist: pants, boots, jacket, hat and mittens. The instances of growing independence were not easily determined. Looking at changes in the activity of both toddlers and adults during the dressing routine helped me identify some trends. The toddlers became more aware of the routine and initiated more participation by interacting with the older children and their peers. Participating in dressing rather than waiting for it to be done to them showed me an active step toward independence and away from dependence.
Figure 5 (below) showed whether pants were put on independently or with an adult during the first and last weeks of the study. In week one there are no items put on with the help of older children or toddlers. There were no older children present during this week of the study because I wanted to see a starting point. In week seven I saw a rise in the number of pants that were put on independently. There is also a decrease in adult assistance. I obtained this data on rises and decreases from the Checklist of Dressing Skills (Appendix B). My co-teachers and I still helped put on snow pants, but the number of independent actions grew (see Figure 5).

Figure 5. Progress of Pants Dressing Skills. This figure shows pants dressing skills at the beginning and end of this study. In each week there were four days of data collected so the first two light and dark bars of week 1 represent Monday.
Whether boots were put on independently or with the assistance of an adult changed throughout this study. In week one, only one toddler was putting boots on independently. By week seven up to six toddlers were putting boots on independently. The data shows a move away from dependence on the adult and an increase in activity of individual toddlers (see Figure 6).

*Figure 6. Progress of Boots Dressing Skills. This figure shows boots dressing skills at the beginning and end of this study.*

Independent skills and adult assistance with putting on jackets showed similar results to pants, boots, hats, and mittens. Again there was an observable change in skills (see Figure 7).
Figure 7. Progress of Jacket Dressing Skills. This figure shows jacket dressing skills at the beginning and end of this study.

The preferred technique for putting jackets on included flipping over the head to slide on the arms and torso. On a side note, this is the way firefighters put their jackets on too. When the toddlers stand near the hood or neck tag of the jacket and place their hands in the armhole of the jacket, they can slide a jacket on more easily than one arm at a time. One of the older children explained a third method to me. This child told me to put the hood on first and then reach and bend arms and hands into the sleeves. This technique also makes the challenge, finding the armhole in a jacket when it is out of sight, easier for children who are still learning how to dress themselves and are still growing into their
bodies. I thanked this child for the tip and recorded this information in my notes for that day.

Hat dressing skills provided intriguing data. Before the older children came to help, few toddlers were putting hats on independently. After five weeks of visits by the older children, up to six toddlers were putting hats on independently. Hats are the easiest item to put on independently. Unexpectedly, teachers or older children put the hats on for the toddlers several times in this study.

![Figure 8. Progress of Hat Dressing Skills](image)

How receptive was the toddler was to assistance? If they were completely receptive to help, they just waited for every item to be put on. Similarly, if they were not
receptive to help from a teacher or older child, a hat was quickly placed on the toddler's head to finish the task and get the group outside and end the negative reinforcement of attention. To clarify this mention of negative reinforcement, a few children who were not putting their hats on were the oldest toddlers. The actions of these older toddlers were distracting me from helping the younger toddlers or they were the toddlers starting a game of “fetch my hat” with the older child. In all observed instances, the toddler was instigating this game and the older child was still trying to help those toddlers. My reaction to this game was to inform the older child that they were free to help a different toddler. Then I also told the toddler that help is hard to give when the person who is being helped is not helping or acting like they want help.

Receptiveness to help and dependence on help can look very similar in a toddler. Independent actions are easier to determine, partly because it is one person doing something alone and it is not two people doing something together. Finding balance between helping and giving too much help is often a challenge for teachers and parents. Observing when toddlers want their independence and what they can do independently is one way to recognize areas and situations where too much help is being given.

The data from the checklist for mittens supported my observation that mittens are the articles of clothing that requires the most assistance. The change in whether mittens were put on independently or with an adult was the smallest. Toddlers did not progress very much with putting on both of their own mittens (see Figure 9).
Figure 9. Progress of Mitten Dressing Skills. This figure shows the mitten dressing skills at the beginning and end of this study.

Mittens are the most difficult item to put on properly, especially the second mitten. Tucking mittens in the cuff of the jacket is also challenging for toddlers. By the end of the study, toddlers were putting one mitten on independently and then receiving help on the second. A select few toddlers could do all items, including both mittens, independently.

Surprisingly, during week three, the teacher of the older children made a visit to the toddler room to let us, the toddler teachers, know that the older students were helping each other with mittens, and she had not witnessed that very often before the start of this study. This was only the second week that the older children had been visiting the toddlers. The older children continued to visit for three more weeks.

Figures 5 through 9 (above) display data from the checklist of snow clothes progress (Appendix C). The incidences of toddlers helping other toddlers with clothing
items remained the lowest throughout the study. This low helping rate supports theories of child development. Toddlers' minds are focused on the individual self more than on helping others (Mooney, 2000). Toddlers can help each other, but they are more inclined to want to do something “all by myself.” There were also a few examples of toddlers who refused help from the older children. On those days, that toddler usually did most of the items independently. The toddlers who refused the helpers went straight to dressing themselves and were focused until completely dressed; their body language in these moments did not indicate they were afraid of the older children. While there were only a few instances of this behavior, it is an example of independence, so the intervention influenced that moment.

Descriptions of actions that demonstrated independence or toddlers moving away from dependence on an adult caregiver were recorded in my daily field notes (Appendix D) and the post study feedback forms (Appendix E). To display the patterns of growing independence found in these qualitative observations tools, verbs were the focus. I generated a list of 70 different verbs from both the field notes and feedback forms. Then I separated this list of verbs into two categories: verbs describing independence of toddlers (such as attempt or find) and or verbs describing dependence of toddlers (such as wait or cry). I created a pie chart to present this comparison of independent and dependent actions (see Figure 10).
Figure 10. Descriptions of Independence and Dependence. This figure shows a comparison of how many verbs described independence and dependence of toddlers.

Forty-seven verbs out of 70 described steps towards independence. Twenty-three verbs described relying on an adult caregiver. Independent actions described in these two qualitative observation tools outweigh dependent actions. Independent dressing skills of toddlers increased during the course of this study.

I chose to implement a visual schedule for dressing in snow clothes prior to the study. I posted it in the classroom in October when snow clothes were added to the daily schedule as the colder weather arrived. I used this visual schedule to orient the older children when they entered the classroom. The pictures guided how to help the toddlers.
The visual schedule reminded both the toddlers and older children what order to put clothing items on to avoid getting stuck or repeating steps.

During the study, I observed several different orders for putting on clothing items. The visual schedule displayed this sequence: snow pants, boots, jacket, hat, and then mittens. We, teachers, sometimes did mittens before jackets and used this sequence: snow pants, boots, hat, mittens, and then jacket. Securely covering the wrist and arms of toddlers and making it less likely for mittens to fall off were my reasons for dressing in this order. Sometimes hats were put on last. One day a toddler put pants, jacket and hat on very quickly but not boots or mittens. This example parallels the difficulty of each item. Boots and mittens are challenging to put on for a toddler. This sequence of items showed the toddlers confidence and ability with three clothing items but not with the other two. Often, a toddler can do things, but can’t describe verbally that the ability exists. This served as a reminder to me that an unusual order of actions by a toddler demonstrates ability and where help is needed.

In my experience monitoring the growth of a toddler’s independence in dressing, longer dressing times does not always indicate less independence. Longer dressing times could mean the child is doing more for himself, but taking longer to do it than with adult assistance. Allowing children extra time to do it by themselves for a few weeks saves time later. As their dressing skills increase the time the toddlers spend on dressing decreases. A judgment call by teachers is an important part of how long or short the routine lasts. Is it cold outside? Spending just a little more time to get dressed might be appropriate for that particular day. Are the students bouncing off the walls and they need
to get outside to expel energy? The dressing routine may shorten or lengthen as I respond to and monitor the overall climate of the class.

A difficult day felt more than twice as long for the routine. For some of these difficult days, however, the routine was only slightly longer than 20 minutes. This shows us that when both the teachers and toddlers are stressed our perception of time changes. It feels like it is taking longer but the time that has passed may not be as long one thinks.

Days with a late start to the routine also meant less time outside. With toddlers, it is important to follow a schedule. Outside time is occasionally used to get back on schedule, so lunch and nap are not pushed back too far. If the dressing routine can be streamlined to optimal learning and assistance, time outside can be protected or enhanced instead of sacrificed.

I found that data recorded on days with five or fewer students reinforced the benefits of smaller ratios of teachers to toddlers because each child had more attention. However does giving more attention help or hinder independence? On some days of the study, I noticed teachers put on more hats and toddlers did less. This piece of data brings up the question of whether the child was learning to wait patiently for help rather than be independent on that day. Waiting patiently, being independent, and seeking attention are all components of toddler to toddler teacher interactions.

When more peers are around is there an incentive to play or to be independent? As the toddlers became more comfortable with the older children in their environment, I gave more redirections to stay on task and not play. Initially, the toddlers were shy around the older children. The older children were more focused on task completion; the toddlers were more focused on observing this slightly bigger person. Towards the end of
the study the toddlers were more comfortable with the strange but slightly larger beings. The toddlers allowed the older children to touch their clothing items and come into close personal space much faster than on the first day.

Setting up this study helped me engage my co-teachers more deeply in the process of learning how to dress. Overall, older children helping for five weeks increased the toddler’s independence with dressing. The degree of influence is hard to determine and had to be detected through both qualitative and quantitative tools. Putting on snow pants and boots independently showed greater growth than that of jackets, hats and mittens. This is still a relevant step towards independence because snow pants need to be put on before boots or jackets. If boots are put on before pants, the process must be restarted.

Learning that there is an order and a process is a big step for toddlers. Knowing where to start is huge for trying to dress on one’s own. The rest of the process and confident skills with each article of clothing take longer than seven weeks to master and should be studied over a longer period of time and with more toddlers. A whole winter long study (October to March) might generate better answers to the research question. What actually influences the independent dressing skills? Age, parents, teachers, order of items, techniques, language abilities, moods of children, space of dressing area, attention, communication, teacher patience and stress, distractions and other variables deserve attention in future research.

**Action Plan**

This study discovered older children had a positive influence on the toddlers’ acquisition of independent dressing skills. How and what did the older children do differently to teach the toddlers? The older children did not reveal clear examples of
techniques that we could repeat and use as teachers. Action research includes doing while investigating. My ability to observe while assisting is growing, and doing research while teaching is a cultivating challenge. The presence of older children made it a positive experience for all toddlers, teachers, and older children. Smiles were in abundance.

To find examples of the effect of older children I measured independence. Independently putting on boots are observable actions of toddlers. Independent actions of toddlers increased during these seven weeks. Understanding how toddlers feel when older children are next to and helping is much harder to observe and measure. A future mixed-age group study on dressing routines could explore emotions of both the toddlers and the older children.

Both co-teachers suggested that we increase the number of older children in a future study. A one-on-one experience for toddlers and older children allows the teachers a better opportunity to observe mixed-age group learning. Considerations for the right space to observe this future study include the number of students and the articles of clothing necessary for each child. Would the toddler classroom, older child classroom, hallway or another space be best for these interactions and how many teachers would be present? Authentic Primary Montessori schools have the 2.5 to 6 years age range and could attempt this matching of older and younger inside just one classroom. What about two classrooms working together? Several schools have toddler classrooms. With careful planning, an entire early-childhood classroom could try helping a toddler room during a small part of the day. This type of study or interaction has the potential to build relationships between classrooms and increase the sense of community within a whole school.
Dressing skills for snow pants and boots showed more improvement than hats, jackets or mittens. This positive step shows the toddlers initiating the dressing process. Trying to put the articles of clothing on that must go on first is progress. The inconsistency in whether they put their hat or jacket on every day may resolve as soon as they can regularly and confidently put on their pants and boots. Mittens are still very challenging. Toddlers should be practicing how to put these on, but success in putting them on every time will come when they are older. After starting the process of dressing gets easier and goes more smoothly, the middle and end of the process should follow suit.

At this point, when toddlers start to dress independently, adults must be aware of assistance feeding dependence. Once toddlers start dressing on their own, how quickly do adult caregivers taper giving assistance and let toddlers go for it? In a group of toddlers, how do teachers keep all toddlers interested in the dressing routine? Communication modeling, language practice, and visual schedules are techniques I am going to utilize before stepping in and finishing dressing for them.

When the children become stuck during dressing, I will prompt for words. I will identify their struggle and describe it in words. Then I will ask them to ask for help before I give it. These prompts and questions respond to their frustration and build language skills. Children who ask for help will receive help first and before the children who just stop or have not yet started. The ones who are not acting may be possibly learning through observation. I am going to give them a few more minutes of time to observe.

For the children who do not start the process, I plan to increase my use of visual schedules. I will invite these children to view the visual schedule and see what step
comes first. Next I will ask them to find that article of clothing. After they attempt, I will help. Then we will go back to the visual schedule, if necessary, and look at what step comes next. In this study, we did not need to revisit the visual schedule more than two times in one day. As spring approaches, I am currently changing my snow clothes visual schedule and replacing it with one about using the toilet and hand washing. I am excited to see if the visual schedule improves our toilet learning process.

Self-confidence may relate to the current inconsistency in putting a hat on independently one day and not the next day. Once the child’s confidence in her dressing skills has grown, she will likely demand more independence. How do we improve this confidence? We practice this skill every day. A second reason for inconsistency is brain pathways. The forgetfulness may fade as the routine is practiced and the brain pathway of how to put a hat on strengthens with repetition.

Attentive caregivers gradually do less as the child does more. Gradual steps involve watching and talking the child through the process, but not leaving their side. Just being next to them and acknowledging their incremental success is sometimes the correct amount of assistance. Walking away or firmly saying “you’ve done it once you can do it again” will not work for every child. Proximity and attention provide comfort and security for toddlers. Toddlers go in and out of separation anxiety as they grow. Toddler teachers are sometimes the first regular adults in the child’s life after family. When the parent or the teacher gets up and walks away from the toddler, the toddler may think dressing time is over, or the adult is leaving them. Staying near and working on language while dressing mitigates this concern for the toddler.
Fear of the older children did not seem to be a variable. Communication abilities, curiosity, and interest in each other played larger roles for the older children and toddlers. The independent dressing skills were the focus of this research, so emotions were observed but not thoroughly investigated. I was also monitoring the interaction for safe behaviors. As behaviors drifted towards play and away from dressing, teachers redirected the toddlers and older children. Proactive redirection worked well. Safety of both the toddlers and older children existed throughout the intervention. Mixed-age group interactions and their effects on emotional development and communication are topics that deserve more attention. Researching toddler emotions could provide insights for Montessori schools and sibling relationships in homes.

Are attention-seeking behaviors also steps towards or away from independence? This question deserves further study because attention-seeking behaviors and the attention received can be both positive and negative. In order to narrow down the effects of attention-seeking behaviors on the development of independence, future research could examine what behaviors interrupt the dressing process.

Discovering which behaviors interrupt an individual versus the whole group is an option. Classifying interruptions as positive or negative would enhance this future research proposal. Behaviors may be attempts to communicate or to act. One child’s zipper is stuck so she lays down on the ground and stops trying. A different child’s zipper is stuck so he stares at the teacher. Lying on the ground could be viewed as a more negative behavior because of how animated and dramatic it seems. The second child staring at the teacher is less dramatic, but both children stopped dressing. Non-verbal communication and body language shows these children need guidance.
At this moment, where the child stops dressing, the teacher can come to help. Does she prompt words to build language skills? Does she hold the zipper together with the child and pull it past the stuck point to encourage fine and gross motor skills? Which teacher response and form of attention builds independence? Which child deserves attention and which child does one leave for a few minutes longer to see that child's next action or behavior? Veteran teachers and experienced parents find methods to use as they learn what works for each child. In a study, one could find out which methods of assistance move children further towards independence. Research could also find ways to avoid reinforcing negative attention-seeking behaviors. Giving useful reinforcement of children’s actions challenges novice teachers and parents.

Dressing safely to enjoy being outdoors in winter is a lifelong skill. Being outdoors is good for physical, mental, emotional and spiritual health. As technology advances and the time humans spend in front of electronic screens grow, children going outside and away from those screens becomes vital. Stepping away from screens is good for reducing eye fatigue and time spent sitting, interacting with people, and increasing exposure to fresh air and vitamin D. If a teacher or parent wants to avoid going out because of the process of getting there, both the child and the adult are going to feel negative effects as the time inside increases and the time outside is missed. How do we make that process easier? We foster the child’s independence with dressing. Then we go with the child and enjoy the sunshine and the fresh air and the sounds of nature. Visual schedules, talking about struggles, asking for help, and daily routines assist the growth of independent dressing skills.
References


http://sophia.stkate.edu/maed/46/


Poole, C. (2003). 0 to 2 "I give her the blankie!". *Scholastic Early Childhood Today, 18*(3), 35-36.


### Appendix A

#### Snow Clothes Study: Time & Attendance log

**Week 1 - January 18-22, 2016**

<table>
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**Week 4 - February 8-12, 2016**

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### Appendix B

**Checklists of Snow Clothes for each student - Use daily to measure progress of self-care**

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<tr>
<td>Child's Initials</td>
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<td></td>
<td>boots</td>
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<td>jacket (arms)</td>
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<tr>
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<td>hat</td>
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<td>mittens/gloves</td>
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**Notes on Independence**

1. Independence
2. Toddler help
3. Older child help
4. Adult help

**Key for notes**

- T: Toddler help
- O: Older child help
- A: Adult help
### Snow Clothes Dressing Routine Field Notes

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<th>DATE &amp; TIME</th>
<th>OBSERVATIONS OF DRESSING SKILLS &amp; INDEPENDENCE</th>
<th>THOUGHTS &amp; REFLECTIONS ABOUT OBSERVATION</th>
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Appendix C
Appendix D

Post Study Feedback form for Toddler Co-teachers

Date: _______________ Name: _______________

Check the box most appropriate for your situation:

I would like to give feedback, but
☐ prefer not to have my responses included in this study.

8 What would you do differently in a future study?