

SAFETY, INDEPENDENCE, AND MATURITY. WHEN IS A CHILD READY FOR POWER?

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Children with complex disabilities and/or developmental delay are often discounted as candidates for power mobility by well meaning providers and funding sources. There is concern about issues such as the child's (and bystander's) safety, just how much independence a device will afford, and if the child is sufficiently mature for independent mobility. Expectations are set for minimum skill levels from the perspective of adults with a wealth of mobility experience. How do we set reasonable and age appropriate expectations of performance for a child who may be a candidate for a power chair?

Most funding sources require clinicians to use evidence when submitting for power mobility devices; therefore, it is imperative, as providers, we understand how to articulate clients' skills and abilities prior to prescribing such a device. It is possible, ethical and essential to justify a power wheelchair using developmental and neurological evidence along with orthopedic justification. Evidence exists linking independent mobility with improved communication, (Butler 1986), problem-solving, and spatial relation skills (Tefft, Guerette, & Furumasu, 1999), skills necessary to be independent and safe in one's environment. In other words, without independent mobility, the child is not able to develop some of the very skills needed to successfully and safely operate a power wheelchair.

"It is quite possible... that school-aged children who have not experienced some form of early independent mobility may pass a critical window of learning in which certain cognitive, emotional, and psychological skills develop, and may have extreme difficulty acquiring these skills later in life" (Tefft, Guerette, & Furumasu, 1999). It is essential, as providers, that we understand how learning may be delayed if we do not facilitate the client, family and other health care providers to confront their misperceptions concerning powered mobility. Researchers have noted that the lack of independent mobility results in depressed motivation, apathy and a stifling of initiation (Beckwith, 1971 as cited in Staincliffe, 2003), resulting in 'learned helplessness" (Maier and Seligman, 1976 as cited in Staincliffe, 2003). According to Seligman's (1976, as cited in Deitz et al.) learned helplessness hypothesis is that "when events are uncontrollable the organism learns that its behavior and outcomes are independent". If one does not have control over the environment, he/she will eventually give up. When this happens, it is difficult to learn cause-effect, which is a key factor in problem-solving, a necessary skill to move independently in one's environment. Researches have found that "...cause-effect relationships are found in tools that affect all the senses, the whole body, a powered wheelchair is such a tool" (Nilsson & Nyberg, 1999).

Some of the skills necessary to operate a power wheelchair develop at different stages. As clinicians, it is necessary to understand developmental stages and inherent learning needs. Safety, for example, can be analyzed by skill and expectation. A typically developing three-year-old child is not expected to operate his/her body proficiently and independently throughout the home or school. There will always be supervision and the opportunity to explore the environment. Children with disabilities should be afforded this same opportunity. Dependent mobility does not allow the child to interact with the environment and experience its three-dimensional qualities (Butler 1986). It becomes more difficult for the child to understand where he/she stops and the environment begins. All problem-solving and mobility skills may be affected. When assessing a child for power mobility, how does the clinician "predict" a child's readiness for power? What is safety? What is expected from a child given his/her developmental age? These are questions that current research evidence can help us answer.