

Research Developments

MayInstitute
Shaping Futures. Changing Lives.

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Conducting Research at May Institute

Educational, clinical, and applied research at May Institute is coordinated through "teams" established at child and adult schools and centers. With oversight provided by the May Center for Applied Research, division vice presidents, center directors, senior clinicians, teachers, therapists, allied health specialists, and other staff participate in monthly meetings that define research projects, supervise implementation, and conduct dissemination activities.

Our research endeavors address many topics, such as evaluating strategies to improve service delivery, discovering innovative instructional approaches, overcoming serious behavior disorders, and learning new ways to manage comprehensive behavioral health-care.

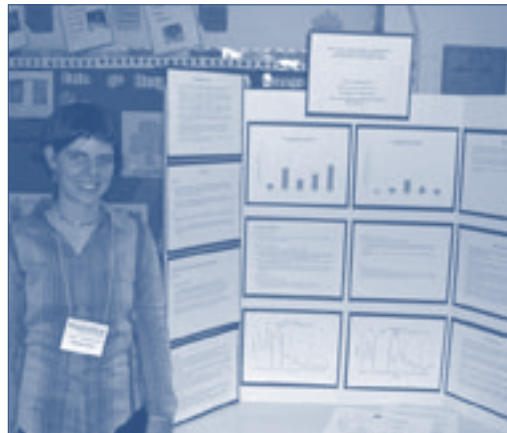
Adhering to a scientist-practitioner model, staff at May Institute participate in and contribute to research projects. They learn to integrate research with their teaching, therapeutic, and community living responsibilities, and receive training and support in research dissemination. The outcomes from these projects are presented at local, regional, and national conferences, and are frequently published in peer-reviewed journals. This issue of *Research Developments* highlights several projects conducted at child and adult schools and service centers during the past year.

Addressing Stereotypic Behaviors of Autistic Children

Stereotypy, or ritualistic and persistent motor behaviors, is a defining characteristic of children with autism. Behaviors such as body rocking, hand flapping, and manipulating objects often interfere with learning and can be socially stigmatizing. It is important, therefore, to identify practical and effective intervention strategies to reduce and possibly eliminate stereotypic behaviors.

A study completed at the May Center for Early Childhood Education in Arlington, Massachusetts, used functional analysis to identify influences of persistent saliva-play by a 6-year-old child with autism. Findings indicated that saliva-play was reinforced by its sensory consequences, leading to an intervention that focused on providing alternative sources of pleasurable sensory stimulation. The intervention evaluation phase of the study found that saliva-play was eliminated when the child had access to an acceptable form of oral stimulation (a therapeutic chew object), but was unaffected when the child was allowed to chew gum.

The significance of this project is the demonstration of a benign, sensory-focused intervention that produced rapid behavior change and could be implemented in a variety of instructional contexts. The study, "Brief Functional Analysis and Intervention Evaluation for Treatment of Saliva-Play," by James K. Luiselli, Ed.D., Joseph N. Ricciardi, Psy.D., Sarah Schmidt, B.A., and Melissa Tarr, OTR/L, will be published this year in *Child and Family Behavior Therapy*.



Teacher Erin Leichman of the May Center for Early Childhood Education in Arlington proudly displays her poster at the Center's open house and research presentation event earlier this year.

Studying Sleep Patterns of Adults With MR

In recent years, there has been increased interest in sleeping patterns and sleep disorders among people with developmental disabilities. A better understanding of sleep hygiene can improve the health status of children and adults, and perhaps explain the occurrence of challenging behaviors and poor skill acquisition. At the May Center for Adult Services in Revere, Massachusetts, a recent research project evaluated sleep patterns of 59 adults with mental retardation living in 16 community-based group homes. A unique feature of this evaluation was having overnight staff record the "sleep behaviors" of residents in real-time, instead of relying on a subjective and retrospective assessment approach.

Results indicated a low incidence of sleep problems and an average evening sleep duration of 7.9 hours per resident. The average hours of sleep per evening are consistent with data from normative samples and suggest that procedures to ensure good sleep hygiene can be implemented effectively with adults living in community-

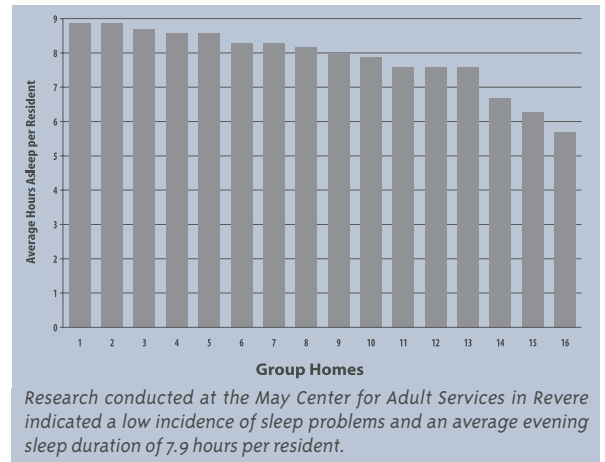
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Recent Publications

- Putnam, R.F., Handler, M.W., Ramirez-Platt, C.R., & Luiselli, J.K. (2003). Improving student bus behavior through a whole-school intervention. *Journal of Applied Behavior Analysis*, 36, 583-589.
- Putnam, R.F., Luiselli, J.K., Handler, M.W., & Jefferson, G.L. (2003). Evaluating student discipline practices in a public school through behavioral assessment of office referrals. *Behavior Modification*, 27, 505-523.
- Ricciardi, J.N., & Luiselli, J.K. (2003). Case report of behavioral intervention to eliminate socially mediated urinary incontinence in a child with autism. *Child & Family Behavior Therapy*, 25, 53-63.
- Eshbaugh, B., Martin, W., Cunningham, K., & Luiselli, J.K. (2004). Evaluation of bedtime medication regimen on daytime sleep and challenging behaviors of an adult with intellectual disabilities. *Mental Health Aspects of Developmental Disabilities*, 7, 21-25.
- Trzepacz, A., & Luiselli, J.K. (2004). Efficacy of stress inoculation training in a case of PTSD secondary to emergency gynecological surgery. *Clinical Case Studies*, 3, 83-92.

Sleep Patterns ... continued from front

based habilitation settings. The study, "Descriptive Assessment of Sleep Patterns Among Community-Living Adults With Mental Retardation," by James K. Luiselli, Ed.D., Christine MaGee, M.S., and James M. Sperry, M.S., has been presented at several conferences and will be submitted for publication.



Testing the Efficacy of Sensory Integration Therapy

Educators and parents of children who have autism are confronted with a myriad of treatments that claim to be effective, but are sometimes not supported by empirical research findings. Sensory Integration Therapy (SIT) is one approach that is frequently recommended but rarely subjected to scientific inquiry. A project conducted at the May Center for Education and Vocational Training in Braintree, Massachusetts, examined the effects of one SIT method — wearing a weighted vest — on stereotypic behaviors and attention to task of four children diagnosed with autism/pervasive developmental disorder (PDD). The children were observed performing leisure activities during

a baseline phase (no vest); while they wore a weighted vest; and while they wore the same vest without weight. For all children, wearing the weighted vest did not reduce stereotypy or increase attention to task. With three of them, it appeared to have a negative influence. These results are similar to other recent studies examining non-empirical or so-called "fad" treatments for autism. The study, "Wearing a Weighted Vest as Intervention for Children With Autism/Pervasive Developmental Disorder," by Amy Kane, M.Ed., James K. Luiselli, Ed.D., Shawna Dearborn, M.A., OTR/L, and Nancy Young, M.Ed., will be published this year in *Scientific Review of Mental Health Practice*.

ABOUT MAY INSTITUTE

May Institute is a private, nonprofit organization committed to providing the highest standard of behavioral healthcare, educational, and rehabilitative services. Featured in the book "In Search of America's Best Nonprofits" (Jossey-Bass, 1997), May Institute has nearly 200 service locations nationwide, and serves more than 25,000 individuals and families each year. An active center of research and training, we maintain affiliations with 44 universities, hospitals, and agencies worldwide, and have a Professional Advisory Board comprised of leading authorities in the field.

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