

B.ED. SPL. EDUCATION

INTERVENTION AND TEACHING STRATEGIES



SES MR 03



MADHYA PRADESH BHOJ (OPEN) UNIVERSITY

INTERVENTION AND TEACHING STRATEGIES

B.Ed. Spl. Ed

(SES MR 03)

**MADHYA PRADESH BHOJ (OPEN) UNIVERSITY,
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Bachelor of Special Education

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&



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BLOCK – 1 : INTERVENTION

INTRODUCTION

This block is one of the most important block having the techniques of developing curriculum and transacting curriculum with the target students. Isn't that the main business of a teacher? In fact all other blocks are support units to this block because this is the block that will equip the teacher with competencies in teaching learning activities.

This block has 5 units. You will see that this is the biggest block among the 10 blocks of the course. The 4th unit is further divided into two 'A' & 'B'.

Unit-1 covers details on concepts, principles and approaches of curriculum development. It also briefly talks about the recent trends in curriculum development.

Unit-2 contains information on the concept of Individualized Education Programme (IEP), origin, purpose and methods of developing IEP's. As every child with mental retardation is different from the other and having unique needs, IEP is a must for each child. Without it the teaching learning experience cannot be successful. The unit discusses in detail the various components of IEP with illustrations and examples. Sample IEPs have been arranged at the end of the unit. A teacher of children with mental retardation on the one side has to develop IEP's teaching, giving individualized instructions and on the other side she is expected to manage the group. Obviously it is a difficult task. This unit also gives certain guidelines of group instructions and scope on use of technology.

Unit-3 consists of curriculum content and methods for early childhood special education programmes. The school age for children begins at 3rd year and ideally we include 3-18 years as the school going age. It is important that when a disability is identified early in life, the child must be attended to with appropriate interventions to prevent further damage. This unit discusses early intervention with focus on a suitable model for India which is a very rural country with high illiteracy rate and a large population belonging to low socio-economic status. The unit writer discusses a model for early intervention and early childhood education that she has tried out and has found working well. She also discusses the problems encountered, which have to have solutions found by the implementers.

Unit-4 as mentioned earlier has two parts discussing the curricular content from primary to pre-vocational levels. Part-A covers personal, social, occupational, recreational skills across the level while Part-B is exclusively devoted to teaching of

functional academics. While grouping children based on their age is important, planning for them according to their ability level is also of equal importance. You will agree that it is a difficult task. For these two units, unit writers have beautifully covered the continuum of skills to be taught from primary to prevocational level. You will also find that many activities include the preprimary areas also i.e. beginning from no competency to total independence, the teaching tips have been given. Functional academics is separately covered as Part-B because the teachers always have the problem of “how to teach academics”, “how much to teach academic skills” and “what to do with children who do not learn academic skills”. This unit gives the answers to these queries, which will help the teachers plan teaching of functional academics systematically.

Having covered children from pre primary areas to adolescents, we find that there is a group of children who, because of their severity of mental retardation cannot benefit optimally from the special educational programmes offered in schools. This is the group with profound mental retardation and multiple disabilities. A teacher has to be equipped to manage such children also. Therefore unit 5 gives guidelines on curricular content for children with severe/profound mental retardation and multiple disabilities. The activities listed include the team approach, home based training and center based training and wherever possible training in the special schools.

On completion of these five units you will find that mentally retarded children of school going age i.e. up to 18 years having mental retardation ranging from profound to mild levels are covered here. Briefly the teaching strategies and methods are also provided. Taking these as guidelines, you add your own originality and creativity to reach your student with mental retardation with the right kind of content, process and appropriate documentation of progress.

UNIT 1: CONCEPT, SIGNIFICANCE, RATIONALE, SCOPE, ADVANTAGES OF EARLY INTERVENTION

- Introduction
- Objectives
- Definitions
- Summary
- Revision
- Assignment/Activity
- Points For Discussion And Clarification
- References / Further Readings

- **Introduction**

The early years of a child's life are very important. During the infant and toddler years, children grow quickly and have so much to learn. Some children and families face special challenges and need extra help. Early help does make a difference! The Early Intervention Program is a statewide program that provides many different types of early intervention services to infants and toddlers with disabilities and their families. In New York State, the Department of Health is the lead state agency responsible for the Early Intervention Program.

Within recent decades the chances of a child being diagnosed with autism spectrum disorder has increased dramatically. Some believe this is due to the increased recognition of an autism spectrum disorder in doctors as well as parents/caregivers,

teachers and other individuals that may work with children. According to Centers for Disease Control and Prevention 2010, autism spectrum disorder (ASD) is a group of developmental disabilities that can cause significant social, communication and behavioral challenges. Because delays are pervasive, early intervention (EI) programming is becoming a common tool used to counteract the challenges that may occur due to the delays. According to Schumway and Wetherby, (2009) the second year of life is a critical time to examine the early development and emerging symptoms of ASD with the hope that EI can preempt significant symptoms (pg.1140). Due to this recent knowledge, it is critical to not only identify the disorder early, but also begin to receive various early intervention services in a timely manner. Early intervention is a combination of services such as but not limited to occupational therapy, speech and language therapy, physical therapy, developmental therapy, psychological services, and social work services. Although all of these 2 services are available, depending on the specific child, services will be chosen accordingly. Each child who receives early intervention services is assessed under three categories being “(a)child has a developmental delay, (b) child has a diagnosed medical or physical condition with a high probability of leading to developmental delay, and (c) child is at risk of developmental delay (the final category is up to the state’s discretion)”(Boyd & Shaw, 2010 pg. 215). Children are evaluated and if they qualify under a category listed above, receive an Individualized Family Service Plan (IFSP). The IFSP details specific services, goals, and strategies created and implemented by not only the therapists, but family members as well. Although the typical age of diagnosis for an autism spectrum disorder is older than three years of age, due to the advancement in assessments children are being diagnosed as young as two years of age and younger, allowing for early intervention services (Schertz, H. H., Baker, C., Hurwitz, S., & Benner, L., 2011). I am reviewing the literature about the effectiveness of early intervention services on children with autism spectrum disorders. The reason I am reviewing this is because I want to find out how effective early intervention services are and what services if any, might be more effective in increasing quality of life for people with autism spectrum disorders and their families.

- Objectives

Because early identification is the basis of early intervention, one must consider how this early identification or diagnosis of autism could potentially change the outcome of how a young child with autism will learn and communicate in today’s world. Since communication is usually significantly impacted in individuals with autism, I believe by identifying autism and providing early intervention support earlier will decrease developmental delays resulting in an improvement of overall

quality of life. Articles that examine this process have been included to determine if this claim is valid. In recent years, the typical age for children to be diagnosed with autism was at least three years of age (Schertz et al., 2011). With the recent rise in awareness of symptoms of autism, children two years of age and younger are being diagnosed with more success (Schertz et al., 2011). With increased awareness and diagnosis, early intervention programs have been made more readily available to those in need. EI has successfully promoted early pre-linguistic skills, such as joint attention, which is said to be the foundation of language (Schertz et al., 2011). The National Resource Council (2001) reported that the earlier that intervention begins in children's lives the better the outcomes (Boyd et al., 2010). The rationale for this is that children's brains are constantly growing and have a great deal of plasticity while young making it more likely for the child to improve areas that are delayed due to autism (Landa, 2007). By implementing new behaviors through early intervention programs, children with autism will have significant improvement in developmental delays (Landa, 2007). Wetherby and Woods, 2006 stated "researchers have suggested that the age of entry into intervention is predictive of outcome. Children with ASD who participated in intensive interventions by 3.5 years of age had significantly better outcomes than their peers with ASD who received such interventions after age 5" (pg 67). In a two week pilot, 17 children in the ages of 17-36 months, who were recently diagnosed with having autism, were involved in therapy that focused on three key areas that are typically the most affected areas (Wetherby & Woods, 2006). These areas include eye contact, gestures, and vocalization or words in hope to increase different aspect of communication that is usually effected by autism (Wong & Kwan, 2010). In this study the children were involved in a two week program in which therapy occurred five days a week for a 30 minute time span in the child's home with their caregivers present to allow for more carry over (Wong & Kwan, 2010). This treatment was to decide if an intervention that taught parents to follow their child's lead would improve 7 social communication outcomes (Wong & Kwan, 2010). A delayed treatment control group of the same age was not administered any kind of therapy until a later date then the intervention group and then both groups were analyzed to review any progress that was made and to also look at the effects of delaying treatment in children with ASD. Parents of each group were given specific instruction on different modules to be setup during therapy times which include, setting up the environment, allowing the child to initiate an activity, playing within established routines, facilitating and maintaining states, scaffolding an engagement state, facilitating joint attention, allowing the child to initiate communication, recognizing and responding to the child's joint attention skills, imitating and expanding language, and generalizing skills to other routines (Wong & Kwan, 2010). Results indicated success with "children with autism improving in language/communication, reciprocal social interaction, and symbolic play. Parents

also noted success in improvement of their children's language, social interaction, and their own stress level" (Wong & Kwan, pg 677, 2010). Results also indicated success with the delayed treatment control group, but also showed the success rate was not as high as the intervention group (Wong & Kwan, 2010). This supports the claim that early identification and or diagnosis leads to early 8 intervention of delayed areas resulting in improvement on areas of delay.

- Learn the best ways to care for your child.
- Support and promote your child's development.
- Include your child in your family and community life.

Your home. • Your child care center or family day care home. • Recreational centers, play groups, playgrounds, libraries, or any place parents and children go for fun and support. • Early childhood programs and centers.

- **Definitions**

In 1980 the American Psychiatric Association (APA) came up with a specific definition for autism Three key areas of developmental problems in children diagnosed with autism spectrum disorders: (a) impairment in social interaction (such as impaired nonverbal behaviors, poor peer relationships, difficulty sharing enjoyment and interests with others) and a lack of social or emotional reciprocity; (b) severe delays or lack of language communication skills, impaired ability to initiate or sustain conversation with others, repetitive use of language, and lack of appropriate social imitative play; and (c) repetitive and stereotyped patterns of behavior, interest, and activities including, inflexible adherence to routines or rituals, stereotyped and repetitive motor mannerisms, and persistent preoccupation with parts of objects (Phetrasuwan, Miles, and Mesibov, 2009, p. 206). The American Psychological Association classifies autism spectrum disorders as a neurobiological disorder that impairs social interaction and communication along with restricted, repetitive, and stereotyped patterns of behaviors (as cited in Stahmer and Aarons, 2009). These signs typically show up after a period of what appears to be typical development. This is known as "autistic regression" and is usually reported by the 4 caregiver because of loss of language skills by the child often around the age of two (Boyd & Shaw, 2010). Since autism spectrum disorder is on a spectrum, the severity of each case is on a continuum ranging from high functioning autism to very severe cases (Boyd, Odom, Humphreys, and Sam, 2010). High functioning autism usually is associated with impaired social communication aspects, while on the opposite end of the continuum the more severe cases of autism limit any kind of communication. Rice (2007) stated the current number of children being diagnosed with autism is 1 in every 150 with boys being affected 3 to 4 times more than girls, (as cited in Boyd et al., 2010). There currently is no supporting evidence showing that autism is more likely to occur in a specific race or

socioeconomic class due to the fact that it is found within multiple races as well as socioeconomic classes (Boyd et al., 2010). Although autism spectrum disorder (ASD) is speculated to occur because of different factors including environmental as well as developmental factors, at this present time there is not a specific etiology linked to the disorder. Without a cure or preventative measures, early intervention services are essential to help minimize behaviors and decrease areas of delay within this population.

Developmental delay means that a child has not attained developmental milestones expected for the child's age adjusted for prematurity in one or more of the following areas of development: cognitive, physical (including vision and hearing), communication, social-emotional, or adaptive development. For the purposes of the Early Intervention Program, a developmental delay is a delay that has been measured by qualified personnel using informed clinical opinion, appropriate diagnostic procedures, and/or instruments, and documented as: • A 12-month delay in one functional area; or • A 33% delay in one functional area or a 25% delay in each of two areas; or • If appropriate, standardized instruments are individually administered in the evaluation, a score of at least 2.0 standard deviation below the mean in one functional area or a score of at least 1.5 standard deviation below the mean in each of two functional areas.

- Summary

When early intervention is implemented into the daily life of a child with autism there are certain guidelines as to which programs are to be used. Guidelines are based on programs used in evidence-based practice in which researchers which have produced overwhelming success in the therapy process when working with several different individuals diagnosed with autism. Schertz et al., (2011), talk about a "push down" method of intervention because the therapy tools that are being used presently are being implemented into therapy with older individuals with autism. The programs that this paper will focus on are: Applied Behavior Analysis (ABA) training, naturalistic behavioral program, and Family Involvement. All of these techniques appear to show gains in areas that are lacking in children with autism. Wallace and Rogers, 2010 stated A review of 32 controlled, high-quality experimental studies revealed that the most efficacious interventions routinely used a combination of four specific intervention procedures, including (1) parent involvement in intervention, including ongoing parent coaching that focused both on parental responses and sensitivity to child cues and on teaching families to provide the infant 9 interventions, (2) individualization to each infant's developmental profile, (3) focusing on a broad rather than a narrow range of

learning targets, and (4) temporal characteristics involving beginning as early as the risk is detected and providing greater intensity and duration of the interventions (pg 1300).

Applied Behavior Analysis Training ABA training, includes prompting, reinforcement, task analysis, and time delay procedures during a session that can also be used by caregivers throughout the daily living tasks (Boyd et al., 2010). ABA training (Landa, 2007), is commonly used with children with autism, because it offers reinforcement items that motivate children to continue to work combined prompts to elicit the correct response. I believe that the child with autism will improve areas of delay when he or she is provided with an ABA type of therapy. Intervention is based on trials of antecedent-behavioral-consequence chains (Landa, 2007) that are more clinician led versus client led. Prompting of specific behaviors and communication becomes more predictable and is highly effective when working with new children to the program. One type of ABA training used is one-on-one discrete trial training (DTT), Although ABA training and DTT are commonly used interchangeably, DTT is a specific technique used within the overall form of ABA 10 training. DTT has been shown to be efficient and effective according to a study by producing about 47% of users to be mainstreamed into a general education program once entering school (Stahmer, Collings, & Palinkas, 2005). This supports the claim that if a child with autism is presented with an ABA style of program, he or she will increase areas of delay. This is important for early interventionists to assure they are practicing in an efficacious manner. It is also important for caregivers to know because they may be more apt to implement these techniques in everyday living situations which will provide for more carryover of behaviors. Naturalist Behavioral Programs Naturalistic behavioral programs or intervention has also been referred to as incidental teaching, milieu communication training, and mediated learning (Boyd et al., 2010). Naturalistic programs focus on keeping the child comfortable in their natural environment, such as in the home or community settings, that are natural or normal for a typically developing child of this age with no disabilities present to maximize learning (Schertz et al., 2011). I believe that the child with autism spectrum disorder will improve areas of delay when he or she is provided with naturalistic behavioral program because the will the child feel comfortable in its own environment resulting in more initiated actions to expand on. 11 Naturalistic behavioral programs allow for child-initiated learning. According to Schertz et al., (2011) child-initiated actions are driven by internal motivation, fostering natural extensions of learning across settings, people, and time promoting motivation by challenging children just beyond their current mastery level, scaffolding learning, and providing opportunities for success through ample practice. This requires knowledge of developmental and learning patterns unique to

toddlers that reveal the importance of play-based practices and strong caregiver-child relationships (pg. 5). “Schertz and Odum (2007) found that incorporating naturalist interventions during home routines and play is an effective strategy to increase the joint attention and communication skills of toddler-age children with ASD” (as stated in Boyd et al., 2010). According to Schreibman, Kaneko, and Koegel, 1991 (as cited in Stahmer & Aarons, 2009) research has shown that children have a greater chance of learning new material in a natural setting, which also allows for more generalization of new learned skills. On top of a higher success rate, this type of program is also easier for parents or caregivers to implement in natural environments, due to the ease of use. All of this could be due in part by the fact that the child feels comfortable in their own environment while family 12 members are present allowing for the EI to embed interventions into daily routines (Schertz et al., 2011). This allows for an easier transition for parents and families to continue to work on goals while the clinician is not present. Incidental teaching is a specific component of naturalistic therapy approaches. Unlike traditional ABA therapies, incidental teaching occurs when the clinician follows the child’s lead offering assistance and direction including expansion of topics when the child needs it or will allow for it (Stahmer & Collings, 2005). This information provided supports the claim that if a child with autism will improve areas of delay when he or she is provided with naturalistic behavioral program because the will the child feel comfortable in its own environment resulting in more initiated actions to expand on. This is important information due the fact that this is this type of program is easily transferred into daily living, which makes it more likely for caregivers to transfer from sessions to everyday living tasks. In a study performed by Rickards, Walstab, Wright-Rossi, Simpson, Reddihough, (2009), children with autism were presented with pre and post assessment along with a home-based intervention program to test the effectiveness of this type of program in regards to early intervention skills. In this study a total of 59 children between the ages of 3-5 attended therapy 13 session at two different centers, while half of the participants received an additional 40 weekly visits within the home environment (Rickards et al., 2009). The parents of the intervention group that received additional home visits from a speech language pathologist and an occupational therapist, had the opportunity to ask questions about therapy and were given direct instruction as to what they were to do during therapy sessions. Parents were the main source of instruction for the child, but siblings were introduced if able, and the professionals were strictly there to guide the parents (Rickards et al., 2009). Each participant was assessed prior to any intervention, immediately after therapy and then was reassessed one year after therapy ended; results showed that early intervention has a positive impact on individuals with autism as well as improvement particularly in the area of cognitive development in those individuals who received an extra homebased program. Family Involvement and Family-Professional Partnerships Family involvement falls

in the category of a family centered approach. As stated in Dunst, Trivette, and Hamby, (2007) A family centered approach is characterized by practices that treat families with dignity and respect; information sharing so families can make informed decisions; family 14 choice regarding their involvement in and provision of services; and parent/professional collaborations and partnerships as the context for family program relations (pg 370). Each family member has the right to be involved in the decision making process of their child's intervention services, although sometime families are left feeling discouraged due to their lack of involvement. Family members are active members of early intervention teams including active implementation of behavioral and naturalistic strategies (Boyd et al., 2010). I believe that the child with autism will improve areas of delay when family-involvement due to good family-professional partnerships throughout therapy session. Research has been provided that examines the impact of family involvement in intervention outcome. Parent involvement is crucial in implementing strategies and new techniques into the daily lives of children with autism. The amount of parent involvement could possibly be the most important of all strategies to allow for carry over. The reason for this is because it allows for more family support due to the focus of the caregivers needs. By allowing this caregivers are able to understand how to teach their child while also being able to sustain challenging behaviors that might be exhibited (Moes & Frea, 2002). It is important to incorporate new material 15 that has been learned within the different programs to prevent regression in the child's learning. When family involvement is mentioned as an approach used in early intervention, there are many different things that can happen. It can be as simple as the family implementing what the child is learning during direct therapy hours into everyday living situations, but it can also be direct interventions programs that parents learn how to implement during therapy. This could include the Early Social Interaction program which is a "parent-implemented intervention model designed to individualize social communication goals and monitor child progress, to identify family routines for targeted goals, to teach parents to implement teaching strategies within selected everyday routines, and to support family implementation of intervention" (Wetherby & Woods, pg. 72). A study was conducted to assess the effectiveness of this program used to increase social interactions and address various goals also implemented in therapy sessions. In this study there were three groups with one group of 17 children with under the age of two with the diagnosis of autism spectrum disorder. This group received intervention involving parent training on use of a variety of different interventions that were to be incorporated into their daily routines. The second group consisted of 18 children with ASD in the age range of 25-36 months who have previously been 16 involved in this kind of intervention. Lastly, there was a control group in which children with autism spectrum disorder did not receive treatment due to the late diagnosis of autism spectrum disorder. All groups were

given pre and posttests to measure their social communication skills. Results indicated that by implementing family led therapy, the child has a better understanding of what is accepted in everyday situations and is not so overwhelmed when he or she start school resulting in improved social communication. Also by including the family into therapy sessions the child is more likely to produce the target behavior for the family throughout the day (Wetherby & Woods, 2006). Schertz et al., (2011) argue that Intervention that focuses exclusively on child's changes without meaningful family involvement may, in fact, compromise outcomes because, in addition to lower levels of parental depression, higher levels of parental involvement are associated with their increased knowledge of ASD, increased parent-child interaction, and improved outcomes for children with ASD (pg. 5). As stated in Dunst and Trivette, (2009), "Bronfenbrenner noted in his review of early childhood intervention programs, that the likelihood of these programs being successful is dependent, in part, on supporting parents who, in turn, would have the time and energy to promote their children's development"(pg 120). Dunst and Dempsey, (2007), looked at parent-professional involvement and how the if there was a poor partnership how the impact might hinder how much a family is involved in their child's interventions. According to Dunst and Dempsey (2007), 150 parents/caregivers of infants, toddlers, and preschoolers presented with disabilities or developmental delays that participate in an early intervention program in western North Carolina. Parents were given the Enabling Practice Scale, Everyday Parenting Scale, and personal control and self-efficacy measures, to assess their family involvement within the early intervention program. Each participant was sent a letter including details of the study and copies of the scales. They were asked to complete the scales and to return them when finished for analysis by the authors (Dunst & Dempsey, 2007). Results indicated small but statistical relevance in regards to those with poor family-professional partnership. Results indicated that with greater family-professional partnership, parents are more likely to feel empowered and in return are involved in the intervention process more so than those who do not feel as if they have any responsibility in the plan of care as well as treatment for their child (Dunst & Dempsey, 2007). 18 By allowing for a strong family-professional partnership, confidence is gained paired with a sense of empowerment with in family members or caregivers. Results of parental empowerment are increased in likelihood that the caregiver will communicate with professionals about concerns. Family and caregivers will also feel comfortable in continuing to incorporate newly learned skill with their child.

- Revision
- Assignment/Activity

POINTS FOR DISCUSSIONS / CLARIFICATION

After going through the unit you may like to have further discussion on some points and clarification. Note down those points:-

Points for Discussion

Family Social Work, 12(2), 119-143. Dunst, C. J., Trivette, C. M., & Hamby, D. W., (2007). Metaanalysis of family-centered helping practices research. *Mental Retardation & Developmental Disabilities Research Reviews*, 13(4), 370-378. Hume, K., Bellini, S., & Pratt, C. (2005). The usage and perceived outcomes of early intervention and early childhood programs for young children with autism spectrum disorder. *Topics in Early Childhood Special Education*, 25(4), 195-207. 22 Landa, R. (2007). Early communication development and intervention for children with autism. *Mental Retardation & Developmental Disabilities Research Reviews*, 13(1), 16-25. McConkey, R., & Cassidy, A. (2010). Working with families who have children with autism spectrum conditions. *Learning Disability Practice*, 13(2), 19-22. Moes, D., & Frea, W. (2002). Contextualized behavioral support in early intervention for children with autism and their families. *Journal of Autism & Developmental Disorders*, 32(6), 519. Phetrasuwan, S., Miles, M., Mesibov, G., & Robinson, C. (2009). Defining autism spectrum disorders. *Journal for Specialists in Pediatric Nursing*, 14(3), 206-209. Reed, P., Osborne, L., & Corness, M. (2007). The real-world effectiveness of early teaching interventions for children with autism spectrum disorder. *Exceptional Children*, 73(4), 417-433.

UNIT 2: TYPES OF EARLY INTERVENTION

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
-
- Introduction

Recent advances in brain research have provided new evidence that early experience matters and have greatly increased interest in the effects of early childhood interventions on outcomes for children. This paper reviews what is now known about the potential benefits and potential ill effects of early childhood interventions, with particular attention to evidence from the Rand study of early interventions, recent studies of the Head Start program, and the NICHD study of early child care. The evidence shows that early childhood interventions can make a difference in improving outcomes for children. However, there are two important knowledge gaps. Not enough is known about the types of child care young children in Britain are currently using, and not enough is known about what types of early childhood interventions would achieve the best outcomes for disadvantaged children in Britain.

Recent advances in brain research have provided new evidence that experience in the earliest days, weeks, and years of life matters. The human brain, we now know, grows very rapidly in the first three to five years of life (see Figure 1), and what

happens in those first years can either promote development or curtail it.¹ This new evidence from brain research has greatly increased interest in the effects of early childhood interventions on outcomes for children. This interest tends to focus on two broad questions: what we know about the potential benefits of early childhood interventions; and what we know about the potential ill effects. I am going to argue that we now know a good deal about both sets of questions. But, I am also going to argue that our current knowledge base, particularly with regard to Britain, could be much improved. I first want to touch upon some issues that affect the analysis of early childhood interventions and outcomes. Then I will consider what we know about potential benefits and ill effects, before concluding with some comments about what we don't know

- Objectives

Before reviewing the evidence on early childhood interventions and outcomes, it is important to establish some ground rules for the analysis. The first is that one must be clear about what type of intervention one is analysing. Early childhood intervention and childcare are not synonymous. Early childhood intervention refers to programs such as childcare or home visiting that are designed to promote the development of children from birth through the time they enter school, and typically these programs are targeted to children identified as highrisk for poor development. Childcare, in contrast, is not always designed primarily as an early childhood intervention, and may be targeted to other groups (for instance, the children of employees or students). Childcare is very heterogeneous, with provision ranging from childminders, babysitters, and nannies to playgroups and nurseries and pre-schools.² Moreover, we do not know very much about the quality of childcare being offered in most childcare settings.³ Yet, we know that quality of childcare matters for child outcomes.⁴ Thus, in reviewing any study of early childhood intervention and outcomes, it is important to establish what model of intervention was provided, whether it included childcare, and, if so, what, if anything, we know about the quality of that care. It is also important to think about what the intervention was meant to provide; some models, for instance, place more weight on cognitive development than others. The second ground rule is that one must be clear about when the intervention was provided. In the case of childcare, there is a great deal of evidence that childcare begun in the first year of life has a different effect on later emotional adjustment than care begun thereafter (Haskins, 1985; Belsky and Eggebeen, 1991; Baydar and Brooks-Gunn, 1991; Smith, 1994; Bates et al, 1994). The same may be true of cognitive development, with childcare begun in the first year of life appearing to have negative effects for some groups (Desai, Chase-Lansdale, and Michael, 1988; Blau and Grossberg, 1990; Baydar and Brooks-Gunn,

1991; Smith, 1994), while care after the first year of life seems to have positive effects (Blau and Grossberg, 1990; Baydar and Brooks-Gunn, 1991; Brooks-Gunn, Liaw, and Klebanov, 1992; Brooks-Gunn et al, 1993).⁵ The few studies that have been able to control for childcare quality find that it plays an important mediating role (Vandell, Henderson, and Wilson, 1988; Field, 1991; NICHD, 1997), as does the type of care (Howes, 1988 and 1990; Baydar and Brooks-Gunn, 1991; Field, 1991; Smith, 1994). It may also matter whether the care was full-time or parttime. The third caution is that one must be clear about which children received the intervention. Again using childcare as an example, the age at which a child enters childcare is obviously a critical mediating factor, but so too are factors such as the child's attributes, family background, and current living situation. These characteristics may influence both the type of childcare used and the child's outcomes; thus, if child and family characteristics are not properly controlled, one may erroneously attribute outcomes as the result of childcare when they are in fact the result of other factors. Further complicating the analysis is the fact that childcare and family characteristics may have an interactive effect. For instance, the NICHD study of early childcare in the U.S. found that infants whose parents had more sensitive childrearing styles fared better than other children in early childcare (NICHD, 1997), while many studies have found that children from families that are economically disadvantaged gain more from childcare in terms of their cognitive development than do other children (see, for example, Desai, ChaseLansdale, and Michael, 1988; Vandell and Ramanan, 1992; Caughy, DiPietro, and Strobino, 1994). The fourth point is that one must be clear about what outcomes one cares about. To a large extent, the outcomes one tracks will depend on the type of intervention being considered, the time at which it was delivered, and the type of children who received it, but it is important to remain open to unanticipated outcomes as well. Thus, in tracking the effects of early childcare, it is natural to focus on issues of separation and attachment, but it would be useful to look at later social and cognitive outcomes as well. And, in assessing cognitively-oriented programs for older pre-schoolers, it makes sense to look at school outcomes but it is also important not to lose sight of other outcomes that may be affected. Implicit in this discussion is the notion that it makes sense to look at long-term as well as short-term outcomes, and at potential benefits for society as a whole in addition to those that may accrue to the child and his or her family. With these ground rules in mind, let us now turn to the evidence on the potential benefits, and the potential ill effects, of early childhood interventions. We now know a good deal about what types of interventions at what time can have positive effects for what types of children and in what respects. Much of the evidence comes from research conducted in the United States, and that is also the research that I am most familiar with, so the summary that I present will have a very American flavour. I will have more to say on this point later.⁶ There have been several excellent reviews of the U.S. research

on early childhood interventions and outcomes. The most recent, and the most useful for the purposes of this paper, is the RAND study which rigorously assessed nine early intervention programs (Karoly et al, 1998).⁷ In order to be included in the RAND review, studies had to meet high scientific standards; in particular, they had to have used random assignment or other techniques to control for pre-existing differences between treatment and controls and they had to follow the treatment and control groups over time so that they could assess long-term as well as short-term outcomes. The results of the RAND review, summarised in Table 1, show that well-designed early intervention programs can make a positive difference in the lives of children. The results also show that the effects of programs vary by what specific type of program was offered. Eight of the nine programs were cognitively oriented and all of these programs were successful at raising children's cognitive test scores or school achievement as measured by higher IQ scores, higher school achievement test scores, less time in special education, better grades, less grade repetition, or higher rates of graduation from high school (the one exception, the Elmira PEIP, was a parental support program that was designed to reduce abuse and neglect). But the gains of these programs were not limited to cognitive outcomes. The High/Scope Perry PreSchool Project, for instance, led to higher employment, earnings, and income; it also led to lower rates of crime and delinquency, as did two other programs (the Syracuse FDRP and the Chicago CPC programs). Interestingly, although most programs were child-focused, many were successful at changing parents' behaviours in positive ways: the Elmira PEIP home visiting program reduced abuse and neglect and also reduced parental welfare use; the Houston PCDC and the IHDP home visiting and day care programs improved mother-child interaction and the HOME score (an index of how well the home environment promotes child development); the Syracuse FDRP home visiting and day care program and the Carolina Abecedarian program raised mothers' levels of education; the Carolina Abecedarian and IHDP programs raised maternal employment; and the Chicago CPC day care and followthrough program raised parents' involvement in their child's school.⁸ Some of these effects on parents were intended but most were not. Program outcomes varied by when services were delivered. In general, programs that intervened earlier and that were more intensive (such as Carolina Abecedarian and IHDP) had stronger effects than those that intervened later and less intensively, and programs (such as Carolina Abecedarian and the Chicago Child-Parent Centers) that included a follow-through component were more successful at sustaining gains than those that didn't. Consistent with prior research, some programs were more beneficial for higher-risk children. For instance, the IHDP program produced the greatest IQ gains for the children with the least educated parents, as we can see in Figure 2 (from Ramey and Ramey, 1998c). The RAND study did not include Head Start because no Head Start evaluation met the RAND criteria for scientific rigour. However, Head Start is an important example:

it is the single largest American childcare program and probably the best known. Early studies of Head Start concluded that the program had positive effects on children's cognitive abilities and school achievement but these effects seemed to "fade out" over time (see, for instance, McKey et al, 1985). However, the most recent evidence on Head Start reveals a more nuanced story (Lee et al, 1990; Currie and Thomas, 1995, 1996a, and 1996b). Children who attended Head Start have higher test scores at the end of the program than siblings who stayed at home or attended some other type of preschool. Head Start children are also more likely to be immunised than siblings who stayed home. While the test score effects for AfricanAmerican children fade out fairly rapidly, perhaps because they go on to attend poor schools, the effects for white and Hispanic children are longer-lasting. White and Hispanic children who attended Head Start have higher test scores at age 10 than comparable children who did not attend Head Start. White Head Start children are also less likely to have repeated a grade by age 10 than comparable white children who did not attend Head Start. Head Start continues to enjoy broad public and bipartisan support in the United States, and the program is now being expanded in two directions. First, Early Head Start is now delivering Head Start services to children under the age of three, reflecting the new emphasis on interventions in the first three years of life (and also reflecting the fact that older pre-school age children are increasingly likely to be served by the public schools or other pre-schools). Second, Head Start FollowThrough programs are now following Head Start children into the school years, to see whether Head Start gains can be better maintained if follow-through services are provided.

- Definitions

Early intervention is a system of coordinated services that promotes the child's age-appropriate growth and development and supports families during the critical early years. In the United States, some early intervention services to eligible children and families are federally mandated through the Individuals with Disabilities Education Act. Other early intervention services are available through various national, regional, and state programs such as Crisis Nurseries and Healthy Start/Healthy Families America. Starting with a partnership between parents and professionals at this early stage helps the child, family and community as a whole.

Early intervention services delivered within the context of the family can:

- Help prevent child abuse and neglect
- Mitigate the effects of abuse and neglect
- Improve parenting skills
- Strengthen families
- Improve the child's developmental, social, and educational gains;
- Reduce the future costs of special education, rehabilitation and health care needs;
- Reduce feelings of isolation, stress and frustration that families may experience;
- Help alleviate and reduce behaviors by using positive behavior strategies and interventions; and
- Help children with disabilities grow up to become productive, independent individuals.

The earlier children at high risk for abuse or neglect, of children with or at risk of disabilities receive assistance and the sooner their families receive support towards their child's development, *the farther they will go in life.* ^[2]

Early intervention is a system of coordinated services that promotes the child's age-appropriate growth and development and supports families during the critical early years.

Early childhood intervention is a support and educational system for very young children (aged birth to six years) who have been victims of, or who are at high risk for child abuse and/or neglect. Some states and regions have chosen to focus these services on children with developmental disabilities or delays, but Early Childhood Intervention is not limited to children with these disabilities.

The mission of Early Childhood Intervention is to assure that families who have at-risk children in this age range receive resources and supports that assist them in maximizing their child's physical, cognitive, and social/emotional development while respecting the diversity of families and communities.^[1]

- Summary

There is also a fairly large body of research on the potential ill effects of early childhood interventions, although this research has tended to focus on a very narrow question, namely, whether maternal employment and early childcare – childcare begun in the first year of life – have adverse outcomes for children. Much of the emphasis in this line of research has been on socio-emotional rather than cognitive outcomes, with a particularly vigorous debate about attachment. Several studies found differences in attachment between children who had been in early childcare and those who had not, but experts disagreed about how to interpret these results. If children who had been in early childcare engaged differently with their mothers, this might be a symptom of attachment problems (Belsky, 1988) or it might be a mature, adaptive response to the child care experience (Clarke-Stewart, 1988). Nor was it clear how such attachment differences might affect later outcomes. This line of research, and the associated debate, dominated the childcare research agenda in the United States for many years. Only recently has it given way to an interest in

how specific types of child care early in a child's life can affect outcomes, for good or ill, for specific types of children.⁹ The progress in this area, at least in the U.S., is to a large extent a result of the formation of the NICHD early childcare network. This unprecedented initiative brings together many of the country's leading developmental psychologists, including prominent representatives from both sides of the attachment debate, in a unique national longitudinal study of the effects of early childcare on child outcomes. Results from this study, which is still ongoing, are shown in Table 2. These results suggest that one can not make sweeping conclusions about whether early childcare harms, or helps, children; rather, the effects of early childcare on a child's attachment, child-mother interactions, and cognitive and behavioural outcomes depend critically on the characteristics of that care (including the quality of the care, its continuity, and the number of hours that the child is in care) and the characteristics of the child and family.¹⁰ Thus, increasingly, interest is shifting from the question of whether early childcare (or maternal employment) harms children to the question of what types of early childcare can be most helpful for what types of children. In this concluding section, I want to particularly focus on what we don't know about early childhood interventions and outcomes in Britain. Much of the evidence I have cited comes from the United States which probably at least in part reflects my lack of knowledge about the British research base but also reflects the smaller size of that base.¹¹ I want to focus on two knowledge gaps in particular. One, we don't know enough about who is minding the children while mothers work in Britain. The labour force participation of women with young children, and especially those with infants, has increased sharply over the past few decades and is likely to increase further in future.¹² This trend presents both a challenge and an opportunity (as Lynch (1998) has noted in the American context), and the outcomes for children will depend to a large extent on the type and quality of the care they receive. Yet we know very little currently about what forms of childcare these mothers are using, and the quality of that care.¹³ Nor do we know which children begin care early, how young they are, and how many hours a week they are in care. Before we can begin to analyse the effects of childcare on outcomes for these children, we need to understand who they are, when they are beginning care, and what types of care they are in. Two, we don't know enough about the effects of childcare and other early childhood interventions as delivered in Britain on outcomes for children. Although we can learn a great deal from carefully conducted research in other countries, we do need to be careful to compare like to like. We noted earlier that childcare is very heterogeneous, and of course there is even more variation across countries than there is within them. Moreover, the effects of childcare may also be sensitive to the broader policy context. For instance, we have seen in recent research that the long-run effects of pre-school intervention may depend on how supportive the child's later school is and on whether follow-through programming is provided. Thus,

longitudinal research on British children, receiving British early childhood interventions and then entering British schools, is essential if one wants to know which early childhood interventions would be most effective and whether follow-through programming will be necessary to ensure that effects do not fade out over time.

- Revision
- Assignment/Activity

POINTS FOR DISCUSSIONS / CLARIFICATION

After going through the unit you may like to have further discussion on some points and clarification. Note down those points:-

Points for Discussion

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UNIT 3: INTERVENTION TECHNIQUES

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
-
- Introduction

There are various approaches to supporting individuals in crisis, for example, using non-counseling methods such as psychological first aid, more technical models involving strategies for listening, assessing and acting in crisis intervention, or activities related to responding to trauma. The guidance in this section describes interventions that require specific skills, development training and supervision. Information alone is not sufficient for shelter staff to be able to apply these techniques, and individuals should not conduct crisis intervention without proper training and supervision.

Effective crisis intervention must follow ethical principles which ensure that survivors are not placed in further harm, their decisions and opinions are respected throughout the process and the intervention upholds a rights-based approach. This involves good communication skills, demonstrating empathy, among other support provided by shelter workers.

Listening involves focusing, observing, understanding and responding with empathy, genuineness, respect, acceptance, non-judgment and sensitivity. A number of specific strategies can be used to promote effective listening during crisis intervention. These include:

- Using open-ended questions - “what” or “how” questions. They are used to encourage sharing of information from a woman or girl about her feelings, thoughts and behaviours, and are particularly useful when exploring problems during a crisis. Open-ended questions encourage the woman to provide a greater depth of information including what situations or events mean to her.
- Using close-ended questions that seek specific details and are designed to encourage a woman or girl to share information about behaviours (such as the abuser's specific actions or behavioural coping strategies used by the woman), as well as “yes” or “no” responses. Closed-ended questions usually begin with action words such as "do", "does", "can", "have", "had", "will", "are", "is" and "was". These questions can be used to gather specific information or to understand the woman's willingness to commit to a particular action (e.g. to complete a safety plan).

- Restating and clarifying what the woman has said can help the shelter staff conducting the crisis intervention to clarify whether she has an accurate understanding of what the woman intended to say, feel, think and do. Restating can also be used to focus the discussion on a particular topic, event or issue.
- Owning feelings and using statements that start with “I” in crisis intervention can help to provide direction by being clear about what will occur (e.g. ‘I am going to explain the steps we will take today’), what is being asked of the woman (e.g. ‘I would like to ask whether you agree to the steps I have described’). Staff can be trained in various skills for practicing “I”-statements in order to support clear and effective communication with women in crisis. For example, these statements can also help to acknowledge confusion or convey understanding of what is being discussed (e.g. “I am not sure I understand what happened when you left the house” or “I hear how nervous you felt on the day you left home”).
- Facilitative listening is a strategy which helps to build trust and strengthen relationships with the woman. It involves focusing entirely on the woman's experience by:
 - Noticing the woman's verbal and nonverbal communication. For example, "I noticed that when you talked about the time you spent with your daughter, your eyes lit up and there was excitement in your voice."
 - Noticing when she is ready to make emotional or physical contact.
 - Using non-verbal cues to show that you are listening (e.g. by nodding the head, making eye contact, facing the woman).

- Objectives

Assessment is an intentional practice that occurs throughout the crisis intervention process, and involves seeking information from a woman or girl (although practices for engaging child survivors are distinct from those working with adults), actively listening and interpreting what she shares in order to understand her emotional state, level of emotional mobility or immobility, options for action, coping mechanisms, support systems and other resources.

Assessment allows staff to draw conclusions about the woman's situation and her responses to it, in order to plan and offer ways to assist her.

It is also used to determine the level of risk and any specific threat of self-harm or being killed by their abuser(s).

During crisis intervention, shelter workers should seek to understand the woman's:

- *Emotional state.* Emotional distress is often an initial sign that a woman is experiencing a crisis, which may appear as though she is emotionally "out of control" or severely withdrawn. Shelter staff can be trained to help a woman to regain control and emotional mobility by assisting her to express her specific feelings using language that accurately reflects the emotion.
- *Behavioural functioning.* Observing a woman's behaviour can help to understand her ability to cope with the situation she is experiencing. For example,

noticing whether she is pacing the floor, having difficulty breathing, or sitting calmly, and whether she appears withdrawn or unresponsive. Shelter workers can be trained to assist women to take positive actions that she can able to complete in that moment. For example, asking her to breathe slowly.

- *Cognitive state.* Determining a woman's thinking patterns is essential in assessing her current ability to cope with the situation she is experiencing. When listening to what a woman is saying, staff can be trained to consider whether her verbal communication is coherent and logical, and whether her words make sense.

- **Definitions**

An intervention is a combination of program elements or strategies designed to produce behavior changes or improve health status among individuals or an entire population. Interventions may include educational programs, new or stronger policies, improvements in the environment, or a health promotion campaign. Interventions that include multiple strategies are typically the most effective in producing desired and lasting change.

Interventions may be implemented in different *settings* including communities, worksites, schools, health care organizations, faith-based organizations or in the home. Interventions implemented in multiple settings and using multiple strategies may be the most effective because of the potential to reach a larger number of people in a variety of ways.

Interventions are either direct, typically involving a confrontational meeting with individual in question, or indirect, involving work with a co-dependent family to encourage them to be more effective in helping the individual.

There are three major models of intervention in use today: the Johnson Model, the Arise Model, and the Systemic Family Model.

The use of interventions originated the 1960s with Dr. Vernon Johnson. The Johnson Model was subsequently taught years later at the Johnson Institute. It focuses on creating a confrontation between a group of supporters and the addict in order to expose the addict to the consequences of their addiction. The confrontation serves to precipitate a crisis in the addict's life that is not threatening, damaging, or fatal, and is used to compel them into treatment before they are able to suffer irreparable social or physical damage as a result of their disease.^[1]

The Arise Intervention Model involves exposing the addict and their family members to a collaborative intervention process. Rather than being confrontational, the Arise Model is invitational, non-secretive, and a gradually-escalating process.^[2]

The Systemic Family Model may use either an invitational or confrontational approach. It differs from the Johnson Model in that the focus is on fostering a patient, firm coaching instead of creating a negative confrontation.^[3] Rather than focusing on the addict, the interventionist fosters discussion with the entire family on how their behavior contributes to the addict's continued abuse of substances, and how to approach the problem as a family unit.^[4]

While some interventionists will prescribe to one of the above models over the others, many are able to blend the three models based on what will be most effective for the addict and their family.

Plans for an intervention are made by a concerned group of family, friends, and counselor(s), rather than by the drug or alcohol abuser. Whether it is invitation model or direct model, the abuser is not included in the decision making process for planning the intervention. A properly conducted direct intervention is planned through cooperation between the identified abuser's family or friends and an intervention counselor, coordinator, or educator. Ample time must be given to the specific situation; however, basic guidelines can be followed in the intervention planning process. (An intervention can also be conducted in the workplace with colleagues and with no family present.)

- Summary

There is convincing evidence that targeting self-efficacy is an effective means of increasing physical activity. However, evidence concerning which are the most effective techniques for changing self-efficacy and thereby physical activity is lacking. The present review aims to estimate the association between specific intervention techniques used in physical activity interventions and change obtained in both self-efficacy and physical activity behaviour. A systematic search yielded 27 physical activity intervention studies for 'healthy' adults that reported self-efficacy and physical activity data. A small, yet significant ($P < 0.01$) effect of the interventions was found on change in self-efficacy and physical activity ($d = 0.16$ and 0.21 , respectively). When a technique was associated with a change in effect sizes for self-efficacy, it also tended to be associated with a change ($r_s = 0.690$, $P < 0.001$) in effect size for physical activity. Moderator analyses found that 'action planning', 'provide instruction' and 'reinforcing effort towards behaviour' were associated with significantly higher levels of both self-efficacy and physical activity. 'Relapse prevention' and 'setting graded tasks' were associated with significantly lower self-efficacy and physical activity levels. This meta-analysis provides evidence for which psychological techniques are most effective for changing self-efficacy and physical activity.

Self-efficacy is defined as 'the belief in one's capabilities to organize and execute the courses of action required to produce given attainments' [1] and is a key construct within several theories popular within health psychology, e.g. social

cognitive theory [2], protection motivation theory [3] and theory of planned behaviour (TPB) [4]. It has been consistently shown to be a predictor of the adoption and maintenance of physical activity behaviour in healthy adults [5–7]. Experimental evidence has further demonstrated self-efficacy to be a mediator of the effects of interventions on objectively measured physical activity behaviour [8–10].

It therefore seems reasonable to target self-efficacy in order to change physical activity behaviour. It is thus imperative that effective techniques for changing self-efficacy are identified for inclusion in physical activity interventions. However, there is limited evidence for ‘how’ to do this [11]. Without this evidence, intervention developers may develop ineffective physical activity interventions due to the techniques they employ not changing self-efficacy.

A recent systematic review with meta-analysis, synthesized evidence of the intervention techniques most effective for changing self-efficacy in physical activity interventions for healthy adults [12]. The review was the first to identify which specific behaviour change techniques based on social cognitive theory [1] are associated with an improvement or deterioration in self-efficacy for physical activity. The techniques identified in the review were elaborated from the four sources of self-efficacy behaviour proposed by Bandura [2]; enactive mastery experience, vicarious experience, verbal persuasion and physiological or affective states. The meta-analysis found that interventions that included feedback on past performance or feedback in comparison to others’ performance, and vicarious experience, produced the highest levels of self-efficacy. In contrast, interventions that included persuasion, graded mastery or barrier identification were associated with lower levels of self-efficacy compared with those that did not include these techniques [12]. Some techniques used most commonly were found to be the least effective, e.g. persuasion, and some used rarely were those found to be the most effective, e.g. vicarious experience. This finding highlights the importance of re-evaluating the effectiveness of the intervention techniques that are commonly used by intervention developers.

The Ashford *et al.* [12] review focused on which techniques were associated with change in self-efficacy, not their association with physical activity behaviour change. Consequently, their findings should only be used to inform the development of future physical activity interventions if these techniques also affect physical activity behaviour. Further, evidence is therefore required concerning which of these techniques are associated with change in physical activity behaviour. The potential impact of gathering such evidence is 2-fold. Firstly, the data would provide an evidence base for future intervention developers to draw upon, thus enhancing the effectiveness of interventions to promote physical activity. Secondly, if a comparison of the techniques associated with self-efficacy and physical activity shows the same techniques to be effective in changing both self-efficacy and

physical activity, this would provide further evidence of a causal pathway between the psychological construct and behaviour.

Two previous systematic reviews have examined which specific behaviour change techniques are associated with the effectiveness of physical activity interventions in altering physical activity behaviour [13, 14]. Both reviews used a taxonomy considered to be comprehensive for physical activity and diet behaviours [15] to reliably classify behaviour change techniques and aimed to assess which specific behaviour change techniques were associated with intervention effectiveness. Univariate meta-regression in the Michie *et al.* [13] review identified only one behaviour change technique that was significantly associated with physical activity or healthy eating outcomes; 'prompt self-monitoring of behaviour' [13]. Furthermore, this review found interventions that included self-monitoring plus one of five self-regulation techniques derived from control theory [16, 17] were significantly more effective than those not including these techniques, according to meta-regression [13]. Similarly, Dombrowski *et al.* [14] found no significant effects of behaviour change techniques on physical activity behaviour in their review.

The focus of each review differs from that of the present review in terms of the target population and behavioural outcome investigated. In the study by Michie *et al.* [13], the univariate meta-regression analyses were completed for physical activity or healthy eating outcomes together, consequently, the contribution of each specific intervention technique to physical activity behaviour change in isolation was not assessed. Specifically, it is not possible to tease out which intervention strategies were aimed at physical activity and which were aimed at dietary behaviours in the studies included in this review. The interventions included in the review by Dombrowski *et al.* [14] were weight management interventions for adult obesity. Thus, the findings of the two reviews do not allow us to establish which behaviour change techniques are effective for changing lifestyle physical inactivity behaviour in a non- clinical, 'healthy' population. This is a notable omission considering that physical inactivity is a leading cause of mortality, responsible for an estimated 16.6% of total deaths in the United States [18].

Self-efficacy outcomes were not measured in either systematic review, consequently on the basis of these reviews, we are unable to make inferences regarding the effects of specific intervention techniques on both self-efficacy and physical activity in the same studies.

- Revision
- Assignment/Activity

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UNIT 4: RECORD MAINTENANCE AND DOCUMENTATION

- Introduction
- Objectives
- Definitions
- Summary
- Revision
- Assignment/Activity
- Points For Discussion And Clarification
- References / Further Readings

- Introduction

'If it's not written down, then it didn't happen!' The basic rules in any good manufacturing practice (GMP) regulations specify that the pharmaceutical manufacturer must maintain proper documentation and records. Documentation helps to build up a detailed picture of what a manufacturing function has done in the past and what it is doing now and, thus, it provides a basis for planning what it is going to do in the future. Regulatory inspectors, during their inspections of manufacturing sites, often spend much time examining a company's documents and records. Effective documentation enhances the visibility of the quality assurance system. In light of above facts, we have made an attempt to harmonize different GMP requirements and prepare comprehensive GMP requirements related to

'documentation and records,' followed by a meticulous review of the most influential and frequently referred regulations.

It is a truism that it takes a disaster to happen for people, and especially regulators, to wake up and review the accepted way of doing things. So, too, with the issue of drug safety and drug quality.[1]

The 1972 Devonport, UK, incident resulted in at least five deaths when drug products designed to be sterile became contaminated and recipients developed infections. An unwritten change to autoclave operation, communicated orally between operators, resulted in dextrose intravenous solutions that were not uniformly sterile. The Clothier inquiry, which examined the causes and contributing factors, identified several violations of what we now consider basic good manufacturing practice (GMP).

The chain of events that compromised the safety of the drug product included inadequate maintenance, inadequate understanding of autoclave operation, and regular deviations from the written production instructions (often as an attempt to compensate for equipment malfunction). Together, these factors resulted in a sterilization cycle that did not assure that all vials in the autoclave were sterilized; thus, some doses were safe, while others led to sepsis in patients who received them. This incident helped to define sterility assurance in an operational way. Processes and requirements for equipment validation were created, and legal right of inspection was explicitly given to the agency.

Validation was developed as a means of documenting systematic evaluation of the sterilization cycle — building in a safety factor — and identifying the critical parameters that need to be controlled to assure process performance. The concept that quality must be designed into the process and cannot be achieved only by testing remains a central tenet of current good manufacturing practice (cGMP). In other words, how you make something helps to define its level of quality. Preventing errors is more effective than finding rejects because it is not possible to detect all rejects.[2] The current requirement for 'documented evidence' may be driven by this event of Devenport.

1 Documentation and record keeping are important to ensure accountability, facilitate coordination of care between providers and for service improvement. However, the importance of documentation and record keeping may be overlooked/overshadowed by the focus on direct services to clients. As such, proper documentation and record keeping may be neglected. 2 The following section provides three reasons why it is important to document and maintain proper records:

2.1 Continuity of care. Records provide a case history and a more holistic picture in order to follow-up on services or try different approaches to assist the client. This is especially for clients with long-term or complex needs, or who require multiple services. Accurate and up-to-date recording is important especially when there is an emergency and the staff-in-charge is not available (due to illness, vacation, resignation, etc.). Good records and documentation will facilitate communication between service providers to ensure coordinated, rather than fragmented, service.

2.2 Accountability. It is important to be able to provide relevant client information at any given time and the organisation's response to their needs. The information may be needed to respond to queries from stakeholders, who may include the client's family, funders, donors or the courts. One important source of information is the client records. Documentation forms the nature of the professional relationship with the client. Information on problems encountered and the agency's response would assist in the event of a crisis or investigations.

2.3 Service improvement. Well-documented records can also lead to improved services to the clients by helping the staff organise his/her thoughts. Aggregated client information can also facilitate service planning, service development and service reviews. The information can also form primary data to conduct evidence-based research.

3 Having established the importance of documentation and record keeping as essential elements of professional practice and service to clients, Chapters 2 and 3 will provide guidelines and best practices of documentation respectively. Chapter 4 will elaborate on record-keeping and Chapter 5 will highlight the importance of having good records for service improvement.

- Objectives

Given the diverse nature, size and complexity of client needs and intended client outcomes, there may seem a myriad of information to document and store. What then should be documented? 4.1 History and needs of client. At the point of admission, detailed information on the needs and background of the client is documented during intake assessment. Refer to the Guide on Intake and Assessment, NCSS (2006) for more information. 4.2 Services rendered. When the client is participating in the service/programme, information on services rendered is documented in the client's care plan. Refer to the Guide on Care and Discharge Planning, NCSS (2007) for more information. Other key information to document, accompanied by supporting documents, is fees charged and subsidies received (for e.g., qualifying information for subsidies under means testing or other sources). 4.3 Client outcomes. Agencies should document client outcomes achieved or not achieved during periodic reviews, discharge or follow-up. Additional information may be derived from milestones achieved by the client or caregiver satisfaction surveys. The ability to produce documentation of clients' achievements further enhances the accountability of the programme. 4.4 Programme information. Minutes of meetings, case conferences and email exchanges towards critical decision making are important to record. Such documentation, in addition to other sources of information, could provide a background to the reasons why certain proposals were accepted or rejected.

- Definitions

The principal document to support the water safety plan is a water safety plan operational guide for the water quality control department and a range of tools for use by water quality, water production and operational staff. This also includes documentation of the risk assessment and documents and tools for engaging with communities regarding community-based actions to improve water quality. A code of hygienic working is also available. In addition, all treatment works have appropriate operational manuals. Internal auditing of water safety through regular monitoring and verification is also practiced. A regular dialogue is maintained with

the Ministry of Health and Directorate of Water Development to ensure transparency in the water safety management plan.

Records management (RM), also known as the records and information management or RIM, is the professional practice of managing the records of an organization throughout their life cycle, from the time they are created to their eventual disposal. This includes identifying, classifying, storing, securing, retrieving, tracking and destroying or permanently preserving records.^[1]

The purpose of records management is part of an organization's broader function of Governance, Risk, and Compliance (or "GRC") and is primarily concerned with the managing the evidence of an organization's activities as well as the reduction or mitigation of risk associated with It.^[2]

An organization's records preserve its corporate memory. In determining how long to retain records, their capacity for re-use is important. Many are simply kept as evidence of a transaction. Others document what happened and why.^[3]

A record is something that represents *proof of existence* and that can be used to recreate or prove state of existence, regardless of medium or characteristics. A record is either created or received by an organization in pursuance of or in compliance with legal obligations, or in the transaction of business.^[4] Records can be either tangible objects, such as paper documents like birth certificates, driver's licenses, and physical medical x-rays, or digital information, such as electronic office documents, data in application databases, web site content, and electronic mail (email).

Different staff would have unique writing styles according to individual preferences. To ensure consistency, it is best to bear in mind the following when documenting case notes:

6.1 Concise. Client notes should include only relevant information in appropriate detail, i.e. only provide information that is directly relevant to the delivery of services for intended client outcomes. Staff should try to ensure minimal burden to the client and his caregivers by asking only required information and not asking for them repeatedly. With the client's consent, assessment history should be transferred and verified from a referring provider to the current provider instead of subjecting the client to repeated assessments.

6.2 Accurate. Besides providing accurate information, direct quotes from the client, caregivers or other professional staff (such as comments from psychologists or doctors) could be reflected if necessary to provide a full picture of the client. As the information may be shared with other agencies, the records must be legible; the reference terms used must be consistent and the records free from jargon (meaningless words).

6.3 Up-to-date. Progress notes, crisis intervention or incident reports should be written as soon as possible after an event has happened to prevent loss of information due to time lapse. All significant facts should be recorded. Such reports should not assign blame on individuals and be free from irrelevant speculation or offensive, subjective statements.

6.4 Meaningful. The notes should capture thoughtful reflective thinking and professional judgement of the intervention and services provided. Notes should distinguish clearly between facts, observations, hard data and opinions. Where opinions or professional diagnosis or recommendation of a particular intervention is made, these should be properly acknowledged, dated and signed. Records requiring validation and authorisation must be properly completed and signed.

6.5 Internally consistent. Notes should be structured according to a preset format that may be unique to each organisation or professional group within the organisation (for e.g., use of standard care and discharge plan templates). Acronyms used should be meaningful to all within the organisation. Consistency and standardisation helps to bring clarity to staff and reduces the time taken to search for vital information amidst the huge amount of client information available.

- Summary

The following section provides some guiding principles for good record keeping practices in terms of record retention, transmission and destruction. 8 Record

Retention 8.1 Storing records. Records can be stored as case files, log books, softcopy databases, etc. Agencies should take reasonable steps to ensure that client's records are stored in a secure location and are not available to others who are not authorised to have access. Agencies need to also have a policy on backing up of soft-copy data, access rights and security. Precautions should be made to protect soft copy records from electronic viruses or technical failure, and written records from damage due to fire, water or even rodents (e.g. termites). 8.2 Protecting records. Agencies should develop its own confidentiality policy to protect the client's written and electronic records and other sensitive information, and the obligations of all workers to abide by them. Agencies should seek to balance an individual's right to confidentiality with their right to services, care and protection. 8.3 Access to records. When providing clients with access to their records, staff should take steps to protect confidentiality of other individuals identified or discussed in such records. Both client requests and rationale for withholding records should be documented in client's files. Sensitive and confidential information must be released only to authorised parties; with client consent, wherever applicable. 9 Transmission of information 9.1 Maintain confidentiality. Agencies should take precautions to ensure and maintain confidentiality of information transmitted to others through the use of computers, electronic mail, fax machines, telephones and telephone answering machines. 9.2 Consent. Human interest stories are essential for publicity or fundraising. However, agencies should inform the clients on the purpose of the publicity, whether it is an interview or profiling clients in magazines or annual reports (including sharing of photographs). After giving the information, the agency should seek the client's permission. The client should be given the right to decline without being deprived of service. 9.3 Release of information. Agencies should not disclose sensitive information when discussing clients, whether with the media or to external consultants unless there is a compelling reason to do so. 10 Record Maintenance and Destruction 10.1 Update of records. Agencies should develop its own internal policy on time frames for update of records, including care plans, progress reports, incident reports, etc. 10.2 Termination of service. Agencies should store records following termination of services to ensure reasonable future access. As a general guide, case records should be kept for at least three years, and financial records, seven years. Agencies need to ensure that their record-keeping practices comply with all contractual, regulatory or legal requirements. 10.3 Deceased clients. Agencies should protect the confidentiality of deceased clients with the standards mentioned. The transferring or disposing client records should be conducted in a manner that protects client confidentiality and is consistent with government, contractual and any other regulation. 11 Electronic or hard copy records? 11.1 Electronic records. Keeping client records in soft copies allows for easy access, transfer and saves storage. However, keeping records via an electronic tool such as

the Personal Digital Assistant (PDA) whilst conducting intake assessment of new clients, for e.g., may seem impersonal and inappropriate. If documentation and records are stored electronically, it is important for the organisation to develop its policies and procedures for information management and technology, including system maintenance, monitoring access and staff training. 11.2 Written records. Written records are common and more personable to client, especially in the business of human and social services. However, they are at times difficult to read due to varying and unique handwriting. In addition, duplicate copies have to be made for transmission to other parties or agencies. 11.3 Electronic Case Management System (eCMS). NCSS has developed the eCMS, a software system that allows for comprehensive and systematic documentation of clients' particulars, intake assessment and care plans. The eCMS also allows for sharing of information across agencies that have access to the software, accompanied with privacy and confidentiality safeguards. The eCMS is thus one mode of documentation for agencies to record client information. 11.4 Agencies could consider all factors and choose a system that meets their needs, to ultimately benefit the clients served. Summary When storing, transmitting or destroying any inf

- Revision
- Assignment/Activity

POINTS FOR DISCUSSIONS / CLARIFICATION

After going through the unit you may like to have further discussion on some points and clarification. Note down those points:-

Points for Discussion

Points for Clarification

- References / Further Readings

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UNIT 5:IMPLICATION OF EARLY INTERVENTION FOR PRE-SCHOOL INCLUSION

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
-
- Introduction

Decades of rigorous research show that children's earliest experiences play a critical role in brain development. The Center on the Developing Child at Harvard University has summarized this research.

- Neural circuits, which create the foundation for learning, behavior and health, are most flexible or “plastic” during the first three years of life. Over time, they become increasingly difficult to change.
- Persistent “toxic” stress, such as extreme poverty, abuse and neglect, or severe maternal depression can damage the developing brain, leading to lifelong problems in learning, behavior, and physical and mental health.
- The brain is strengthened by positive early experiences, especially stable relationships with caring and responsive adults, safe and supportive environments, and appropriate nutrition.
- Early social/ emotional development and physical health provide the foundation upon which cognitive and language skills develop.
- High quality early intervention services can change a child’s developmental trajectory and improve outcomes for children, families, and communities.
- Intervention is likely to be more effective and less costly when it is provided earlier in life rather than later

Recent advances in brain research have provided new evidence that experience in the earliest days, weeks, and years of life matters. The human brain, we now know, grows very rapidly in the first three to five years of life, and what happens in those first years can either promote development or curtail it.¹ This new evidence from brain research has greatly increased interest in the effects of early childhood interventions on outcomes for children. This interest tends to focus on two broad questions: what we know about the potential benefits of early childhood interventions; and what we know about the potential ill effects. I am going to argue that we now know a good deal about both sets of questions. But, I am also going to argue that our current knowledge base, particularly with regard to Britain, could be much improved. I first want to touch upon some issues that affect the analysis of early childhood interventions and outcomes. Then I will consider what we know about potential benefits and ill effects, before concluding with some comments about what we don’t know. Before reviewing the evidence on early childhood interventions and outcomes, it is important to establish some ground rules for the analysis. The first is that one must be clear about what type of intervention one is analysing. Early childhood intervention and childcare are not synonymous. Early childhood intervention refers to programs such as childcare or home visiting that are designed to promote the development of children from birth through the time they enter school, and typically these programs are targeted to children identified as highrisk for poor development. Childcare, in contrast, is not always designed primarily as an early childhood intervention, and may be targeted to other groups (for instance, the children of employees or students). Childcare is very heterogeneous, with provision ranging from childminders, babysitters, and nannies to playgroups and nurseries and pre-schools.² Moreover, we do not know very much about the quality of childcare being offered in most childcare settings.³ Yet,

we know that quality of childcare matters for child outcomes.⁴ Thus, in reviewing any study of early childhood intervention and outcomes, it is important to establish what model of intervention was provided, whether it included childcare, and, if so, what, if anything, we know about the quality of that care. It is also important to think about what the intervention was meant to provide; some models, for instance, place more weight on cognitive development than others. The second ground rule is that one must be clear about when the intervention was provided. In the case of childcare, there is a great deal of evidence that childcare begun in the first year of life has a different effect on later emotional adjustment than care begun thereafter (Haskins, 1985; Belsky and Eggebeen, 1991; Baydar and Brooks-Gunn, 1991; Smith, 1994; Bates et al, 1994). The same may be true of cognitive development, with childcare begun in the first year of life appearing to have negative effects for some groups (Desai, Chase-Lansdale, and Michael, 1988; Blau and Grossberg, 1990; Baydar and Brooks-Gunn, 1991; Smith, 1994), while care after the first year of life seems to have positive effects (Blau and Grossberg, 1990; Baydar and Brooks-Gunn, 1991; Brooks-Gunn, Liaw, and Klebanov, 1992; Brooks-Gunn et al, 1993).⁵ The few studies that have been able to control for childcare quality find that it plays an important mediating role (Vandell, Henderson, and Wilson, 1988; Field, 1991; NICHD, 1997), as does the type of care (Howes, 1988 and 1990; Baydar and Brooks-Gunn, 1991; Field, 1991; Smith, 1994). It may also matter whether the care was full-time or parttime.

- Objectives

The third caution is that one must be clear about which children received the intervention. Again using childcare as an example, the age at which a child enters childcare is obviously a critical mediating factor, but so too are factors such as the child's attributes, family background, and current living situation. These characteristics may influence both the type of childcare used and the child's outcomes; thus, if child and family characteristics are not properly controlled, one may erroneously attribute outcomes as the result of childcare when they are in fact the result of other factors. Further complicating the analysis is the fact that childcare and family characteristics may have an interactive effect. For instance, the NICHD study of early childcare in the U.S. found that infants whose parents had more sensitive childrearing styles fared better than other children in early childcare (NICHD, 1997), while many studies have found that children from families that are economically disadvantaged gain more from childcare in terms of their cognitive development than do other children (see, for example, Desai, ChaseLansdale, and Michael, 1988; Vandell and Ramanan, 1992; Caughy, DiPietro, and Strobino, 1994). The fourth point is that one must be clear about what outcomes one cares about. To a large extent, the outcomes one tracks will depend on the type of intervention being considered, the time at which it was delivered, and the type of

children who received it, but it is important to remain open to unanticipated outcomes as well. Thus, in tracking the effects of early childcare, it is natural to focus on issues of separation and attachment, but it would be useful to look at later social and cognitive outcomes as well. And, in assessing cognitively-oriented programs for older pre-schoolers, it makes sense to look at school outcomes but it is also important not to lose sight of other outcomes that may be affected. Implicit in this discussion is the notion that it makes sense to look at long-term as well as short-term outcomes, and at potential benefits for society as a whole in addition to those that may accrue to the child and his or her family. With these ground rules in mind, let us now turn to the evidence on the potential benefits, and the potential ill effects, of early childhood interventions.

4 Potential B We now know a good deal about what types of interventions at what time can have positive effects for what types of children and in what respects. Much of the evidence comes from research conducted in the United States, and that is also the research that I am most familiar with, so the summary that I present will have a very American flavour. I will have more to say on this point later.⁶ There have been several excellent reviews of the U.S. research on early childhood interventions and outcomes. The most recent, and the most useful for the purposes of this paper, is the RAND study which rigorously assessed nine early intervention programs (Karoly et al, 1998).⁷ In order to be included in the RAND review, studies had to meet high scientific standards; in particular, they had to have used random assignment or other techniques to control for pre-existing differences between treatment and controls and they had to follow the treatment and control groups over time so that they could assess long-term as well as short-term outcomes. The results of the RAND review, summarised in Table 1, show that well-designed early intervention programs can make a positive difference in the lives of children. The results also show that the effects of programs vary by what specific type of program was offered. Eight of the nine programs were cognitively oriented and all of these programs were successful at raising children's cognitive test scores or school achievement as measured by higher IQ scores, higher school achievement test scores, less time in special education, better grades, less grade repetition, or higher rates of graduation from high school (the one exception, the Elmira PEIP, was a parental support program that was designed to reduce abuse and neglect). But the gains of these programs were not limited to cognitive outcomes. The High/Scope Perry PreSchool Project, for instance, led to higher employment, earnings, and income; it also led to lower rates of crime and delinquency, as did two other programs (the Syracuse FDRP and the Chicago CPC programs). Interestingly, although most programs were child-focused, many were successful at changing parents' behaviours in positive ways: the Elmira PEIP home visiting program reduced abuse and neglect and also reduced parental welfare use; the Houston PCDC and the IHDP home visiting and day care programs improved mother-child interaction and the HOME score (an index of how well the home environment

promotes child development); the Syracuse FDRP home visiting and day care program and the Carolina Abecedarian program raised mothers' levels of education; the Carolina Abecedarian and IHDP programs raised maternal employment; and the Chicago CPC day care and followthrough program raised parents' involvement in their child's school.⁸ Some of these effects on parents were intended but most were not. Program outcomes varied by when services were delivered. In general, programs that intervened earlier and that were more intensive (such as Carolina Abecedarian and IHDP) had stronger effects than those that intervened later and less intensively, and programs (such as Carolina Abecedarian and the Chicago Child-Parent Centers) that included a follow-through component were more successful at sustaining gains than those that didn't. Consistent with prior research, some programs were more beneficial for higher-risk children. For instance, the IHDP program produced the greatest IQ gains for the children with the least educated parents, as we can see in Figure 2 (from Ramey and Ramey, 1998c).

- Definitions

Early intervention applies to children of school age or younger who are discovered to have or be at risk of developing a handicapping condition or other special need that may affect their development. Early intervention consists in the provision of services such children and their families for the purpose of lessening the effects of the condition. Early intervention can be remedial or preventive in nature--remediating existing developmental problems or preventing their occurrence.

Early intervention may focus on the child alone or on the child and the family together. Early intervention programs may be center-based, home-based, hospital-based, or a combination. Services range from identification--that is, hospital or school screening and referral services--to diagnostic and direct intervention programs. Early intervention may begin at any time between birth and school age; however, there are many reasons for it to begin as early as possible.

There are three primary reasons for intervening early with an exceptional child: to enhance the child's development, to provide support and assistance to the family, and to maximize the child's and family's benefit to society.

Child development research has established that the rate of human learning and development is most rapid in the preschool years. Timing of intervention becomes particularly important when a child runs the risk of missing an opportunity to learn during a state of maximum readiness. If the most teachable moments or stages of greatest readiness are not taken advantage of, a child may have difficulty learning a particular skill at a later time. Karnes and Lee (1978) have noted that "only through

early identification and appropriate programming can children develop their potential" (p. 1).

Early intervention services also have a significant impact on the parents and siblings of an exceptional infant or young child. The family of a young exceptional child often feels disappointment, social isolation, added stress, frustration, and helplessness. The compounded stress of the presence of an exceptional child may affect the family's well-being and interfere with the child's development. Families of handicapped children are found to experience increased instances of divorce and suicide, and the handicapped child is more likely to be abused than is a nonhandicapped child. Early intervention can result in parents having improved attitudes about themselves and their child, improved information and skills for teaching their child, and more release time for leisure and employment. Parents of gifted preschoolers also need early services so that they may better provide the supportive and nourishing environment needed by the child.

A third reason for intervening early is that society will reap maximum benefits. The child's increased developmental and educational gains and decreased dependence upon social institutions, the family's increased ability to cope with the presence of an exceptional child, and perhaps the child's increased eligibility for employment, all provide economic as well as social benefits.

- Summary

The RAND study did not include Head Start because no Head Start evaluation met the RAND criteria for scientific rigour. However, Head Start is an important example: it is the single largest American childcare program and probably the best known. Early studies of Head Start concluded that the program had positive effects on children's cognitive abilities and school achievement but these effects seemed to "fade out" over time (see, for instance, McKey et al, 1985). However, the most recent evidence on Head Start reveals a more nuanced story (Lee e al, 1990; Currie and Thomas, 1995, 1996a, and 1996b). Children who attended Head Start have higher test scores at the end of the program than siblings who stayed at home or attended some other type of preschool. Head Start children are also more likely to be immunised than siblings who stayed home. While the test score effects for AfricanAmerican children fade out fairly rapidly, perhaps because they go on to attend poor schools, the effects for white and Hispanic children are longer-lasting. White and Hispanic children who attended Head Start have higher test scores at age

10 than comparable children who did not attend Head Start. White Head Start children are also less likely to have repeated a grade by age 10 than comparable white children who did not attend Head Start. Head Start continues to enjoy broad public and bipartisan support in the United States, and the program is now being expanded in two directions. First, Early Head Start is now delivering Head Start services to children under the age of three, reflecting the new emphasis on interventions in the first three years of life (and also reflecting the fact that older pre-school age children are increasingly likely to be served by the public schools or other pre-schools). Second, Head Start FollowThrough programs are now following Head Start children into the school years, to see whether Head Start gains can be better maintained if follow-through services are provided. There is also a fairly large body of research on the potential ill effects of early childhood interventions, although this research has tended to focus on a very narrow question, namely, whether maternal employment and early childcare – childcare begun in the first year of life – have adverse outcomes for children. Much of the emphasis in this line of research has been on socio-emotional rather than cognitive outcomes, with a particularly vigorous debate about attachment. Several studies found differences in attachment between children who had been in early childcare and those who had not, but experts disagreed about how to interpret these results. If children who had been in early childcare engaged differently with their mothers, this might be a symptom of attachment problems (Belsky, 1988) or it might be a mature, adaptive response to the child care experience (Clarke-Stewart, 1988). Nor was it clear how such attachment differences might affect later outcomes. This line of research, and the associated debate, dominated the childcare research agenda in the United States for many years. Only recently has it given way to an interest in how specific types of child care early in a child's life can affect outcomes, for good or ill, for specific types of children.⁹ The progress in this area, at least in the U.S., is to a large extent a result of the formation of the NICHD early childcare network. This unprecedented initiative brings together many of the country's leading developmental psychologists, including prominent representatives from both sides of the attachment debate, in a unique national longitudinal study of the effects of early childcare on child outcomes. Results from this study, which is still ongoing, are shown in Table 2. These results suggest that one can not make sweeping conclusions about whether early childcare harms, or helps, children; rather, the effects of early childcare on a child's attachment, child-mother interactions, and cognitive and behavioural outcomes depend critically on the characteristics of that care (including the quality of the care, its continuity, and the number of hours that the child is in care) and the characteristics of the child and family.¹⁰ Thus, increasingly, interest is shifting from the question of whether early childcare (or maternal employment) harms children to the question of what types of early childcare can be most helpful for what types of children.

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BLOCK 2: INDIVIDUALISED EDUCATION PROGRAMME

UNIT 1: NEED, IMPORTANCE AND HISTORICAL PERSPECTIVE OF IEP

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
-
- Introduction

The IEP, Individualized Education Program, is a document that is developed for each public school child who is eligible for special education. The IEP is created through a team effort reviewed periodically.^[1] In the United States, this program is known as an Individualized Education Program (IEP). In Canada and the United Kingdom, an equivalent document is called an Individual Education System.

An IEP defines the individualized objectives of a child who has been found with a disability, as defined by federal regulations. The IEP is intended to help children

reach educational goals more easily than they otherwise would.^[2] In all cases the IEP must be tailored to the individual student's needs as identified by the IEP evaluation process, and must especially help teachers and related service providers (such as paraprofessional educators) understand the student's disability and how the disability affects the learning process.

The IEP describes how the student learns, how the student best demonstrates that learning and what teachers and service providers will do to help the student learn more effectively. Developing an IEP requires assessing students in all areas related to the known disabilities, simultaneously considering ability to access the general curriculum, considering how the disability affects the student's learning, forming goals and objectives that correspond to the needs of the student, and choosing a placement in the least restrictive environment possible for the student.^[3]

As long as a student qualifies for special education, the IEP is mandated to be regularly maintained and updated up to the point of high school graduation, or prior to the 21st birthday. If a student in special education attends university upon graduation, the university's own system and procedures take over. Placements often occur in "general education", mainstream classes, and specialized classes or sub-specialties taught by a special education teacher, sometimes within a resource room.

An IEP is meant to ensure that students receive an appropriate placement, not only special education classrooms or special schools. It is meant to give the student a chance to participate in regular school culture and academics as much as is possible for that individual student. In this way, the student is able to have specialized

assistance only when such assistance is absolutely necessary, and otherwise maintains the freedom to interact with and participate in the activities of his or her more general school peers.

- Objectives

In the US, the IDEA requires public schools to develop an IEP for every student with a disability who is found to meet the federal and state requirements for special education.^[4] The IEP must be designed to provide the child with a Free Appropriate Public Education (FAPE). The IEP refers both to the educational program to be provided to a child with a disability and to the written document that describes that educational program. The IDEA 2004 requires that an IEP must be written according to the needs of each student who meets eligibility guidelines under the IDEA and state regulations, and it must include the following:

- The child's present levels of academic and functional performance
- Measurable annual goals, including academic and functional goals
- How the child's progress toward meeting the annual goals are to be measured and reported to the parents
- Special education services, related services, and supplementary aids to be provided to the child

- Schedule of services to be provided, including when the services are to begin, the frequency, duration and location for the provision of services
- Program modifications or supports provided to school personnel on behalf of the child
- Least Restrictive Environment data which includes calculations of the amount of time student will spend in regular education settings verses time spent in special education settings each day
- Explanation of any time the child will not participate along with nondisabled children
- Accommodations to be provided during state and district assessments that are necessary to the measuring child's academic and functional performance^{15]}
- The student should attend when appropriate. If the student is over 14 they should be invited to be part of the IEP team.
- Additionally, when the student is 16 years old, a statement of post-secondary goals and a plan for providing what the student needs to make a successful transition is required.^{14]} This transition plan can be created at an earlier age if desired, but must be in place by the age of 16.

IEPs also include other pertinent information found necessary by the team, such as a health plan or a behavior plan for some students.

- **Definitions**

The individual needs of each child in the IEP. Such as resources available to ensure they receive accurate education according to their needs.

The IEP, Individualized Education Program, is a document that is developed for each public school child who is eligible for special education. The IEP is created through a team effort reviewed periodically.

- **Summary**

Before an IEP is written for a child with a disability, the school must first determine whether the child qualifies for special education services. To qualify, the child's disability must have an adverse effect on the child's educational progress.

To determine eligibility, the school must conduct a full evaluation of the child in all areas of suspected disability. Based in part on the results of the evaluation, the school along with the parents meet to review the results and the child's current level of performance and to determine whether special education services are needed.

If the child is found eligible for services, the school is required to convene an IEP team and develop an appropriate educational plan for the child. The IEP should be implemented as soon as possible after the child is determined eligible. IDEA does not state specific timeframes for each step. However, some states have added specific timelines that schools must follow for the eligibility, IEP development, and IEP implementation milestones.

The IEP team must include the student and student's parent(s) or guardian(s), a special education teacher / case manager, at least one regular education teacher, a representative of the school or district who is knowledgeable about the availability of school resources, and an individual who can interpret the instructional implications of the child's evaluation results (such as the school psychologist).^[2]

The parent or school may also bring other individuals who have knowledge or special expertise regarding the child. For example, the school may invite related service providers such as speech and occupational therapists. The parent may invite professionals who have worked with or assessed the child, or someone to assist the parent in advocating for their child's needs, such as a parent advocate or attorney.

If appropriate, the child may also participate in IEP team meetings. For example, some children begin participating in their IEP meetings when they reach middle school age.

A typical IEP team meeting includes:

- One or both of the child's parents. Consistent with the IDEA's stated policy, parents should expect to be treated as equal participants with school personnel in developing the IEP.
- A representative of the school district (not the child's teacher) who is qualified to provide or supervise special education.
- The child's teacher(s). If the child has more than one teacher, then all teachers are invited to attend, with at least one teacher required to attend.

- If the program to be recommended includes activities with general education students, even if the child is in a special education class in the school, a general education teacher is required to attend.
- Any provider of a related service to the child. Normally this would be a speech therapist, occupational therapist, or adapted PE.
- Professionals who are qualified to explain the results of the testing. Usually this requires at least the presence of a psychologist and educational evaluator, if an assessment or report is reviewed. This usually occurs at the 3-year review, or triennial IEP.
- Parents may bring with them any others involved with the child who they feel are important for the IEP team to hear; for example, the child's psychologist or tutor.
- Parents may elect to bring an educational advocate, social workers and/or lawyer knowledgeable in the IEP process.
- Although not required, if the child is receiving related services (such as speech therapy, music therapy, physical therapy or occupational therapy), it is valuable for related service personnel to attend the meeting or at least provide written recommendations concerning the services in their area of specialty.
- The child's Guidance Counselor may be needed in attendance to discuss courses that may be required for the child for their education career.

Parents are considered to be full and equal members of the IEP team, along with school personnel.^[2] Parents have the right to be involved in meetings that discuss the identification, evaluation, IEP development and educational placement of their children. They also have the right to ask questions, dispute points, and request modifications to the plan, as do all members of the IEP team.

Although IEP teams are required to work toward consensus, school personnel ultimately are responsible for ensuring that the IEP includes the services that the student needs. By law, school districts are obligated to make a proposal for services to the parent. If agreement cannot be reached, the school district cannot delay in providing the services that it believes are the best services to ensure that the student receives an effective educational program.

Under IDEA Part D, the U. S. Department of Education funds at least one parent training and information center in each state and most territories to provide parents the information they need to advocate effectively for their child.^[6] Some centers may also provide a knowledgeable person to accompany a parent to IEP meetings to assist the parent in the process.

The school is mandated to make an effort to ensure that one or both of the parents are present at each IEP team meeting. If parents do not attend, the school is required to show that due diligence was made to enable the parents to attend, including notifying the parents early enough that they have an opportunity to attend, scheduling the meeting at a mutually agreed on time and place, and offering alternative means of participation, such as a phone conference.^[citation needed]

The school is required to ensure the parent understands the proceedings of IEP team meetings, including arranging for an interpreter for parents who are deaf or whose native language is not English.

After the child is determined to be eligible for special education services, the IEP team is required to develop an individual education plan to be implemented as soon as possible after eligibility is determined. Using the results of the full individual evaluation (FIE), the IEP team works together to identify the child's present level of educational performance, the child's specific academic, and any related or special services that the child needs in order to benefit from their education.

When developing an IEP, the team must consider the strengths of the child, the concerns of the parent for their child's education, results of the initial or most recent evaluation of the child (including private evaluations conducted by the parents), and the academic, developmental, and functional needs of the child. In the case of a child whose behavior impedes the child's learning or that of other children, the team is required to consider the use of positive behavioral interventions and supports to address the behavior.

The IEP team is required to consider the communication needs of the child. For example, if a child is blind or visually impaired, the IEP is mandated to provide for instruction in Braille and the use of Braille unless an evaluation of the child's reading and writing skills, needs, and future needs indicate that this instruction is not appropriate for the child. If a child is deaf or hard of hearing, the team is required to consider the child's language and communication needs, including the

need to communicate with school personnel and peers, and the child's need for direct instruction in the child's language and communication mode. In the case of a child with limited English proficiency, the team is required to consider the language needs of the child as those needs relate to the child's IEP.

A matrix is drafted containing the student's present level of performance, indicators about ways the student's disability influences participation and progress in the general curriculum, a statement of measurable goals, including benchmarks or short-term objectives, the specific educational services to be provided, including program modifications or supports, an explanation of the extent that the child will not participate in general education, a description of all modifications in statewide or district-wide assessments, the projected date for initiation of the services and the expected duration of those services, the annual statement of transition service needs (beginning at age 14), and a statement of interagency responsibilities to ensure continuity of services when the student leaves school (by age 16), a statement regarding how the student's progress will be measured and how the parents will be informed in the process.

IDEA requires a child's IEP be developed solely based on the child's needs, and not based on pre-existing programs or services available in the district. Whether particular services are available in the district should not be considered when identifying the services a child needs to receive an appropriate education.

- **References / Further Readings**

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UNIT 2: STEPS AND COMPONENTS OF IEP

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
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- Introduction

The Individualized Education Program (IEP) is a written education plan for your child that describes the special education and related services your child will receive. Each child, ages 3 through 21, who is eligible to receive special education and related services must have an Individualized Education Program (IEP). If a service or accommodation is included in the IEP, your child has the right to receive it. Your child's first IEP must be written 30 days after he or she qualifies for special education. After the IEP is written, your child's services must be provided as soon as possible. You have the right to receive a copy of your child's IEP, and the IEP must be accessible to each teacher working with your child. Before your child receives special education and related services for the first time, you must give written consent. You have the right to revoke your consent for special education services at anytime, even after the IEP has been implemented.

- Objectives

Your child struggles in math class, and the teacher's interventions—extra help after school, a chance to correct his mistakes—don't help. A scenario like this doesn't make your child eligible for an IEP. Two things must happen before a child can get special education services.

1. An evaluation. Parents, teachers, a counselor, a doctor or anyone else who suspects a child is struggling can request an evaluation. The school psychologist and other professionals may give your child various tests. They also may observe your child in the classroom.

Keep in mind that a physician or another medical professional—not the school—diagnose medical conditions, including ADHD. School evaluators don't offer "diagnoses." Find out more about the comprehensive evaluation process.

2. A decision. The IEP team, which includes parents and school officials, decides whether or not your child needs special education services in order to learn the general education curriculum. IDEA says that having any of 13 disabilities may qualify a child for special education. The school and parents review the evaluation and determine whether the results show that your child needs services and supports.

If the IEP team agrees that your child needs services, then the next step is to create an IEP. If your child is found ineligible, you can still try to get services for your child. For instance, you might pursue a 504 plan.

IEPs are designed to meet kids' unique needs. That means that every IEP will look different. But by law, all IEPs must contain the following elements:

Your child's present level of educational performance (PLOP): This is a thorough description of your child's current abilities, skills, weaknesses and strengths. It's the part of the IEP that explains how your child's learning issues affect his ability to learn the general education curriculum. PLOP (also sometimes called PLP or PLAAFP) includes details on how your child handles academic subjects and everyday or "functional" activities, like socializing.

PLOP should be based on teacher observations *and* objective data, like test results. It's important that PLOP is not simply copied "as is" from one year's IEP to the next. Each year your child matures and masters skills. And each year the work becomes more challenging. So his performance and needs will change.

The results of your child's evaluations and tests: This should include district-wide and state assessments.

Special education and related services to be provided: The IEP spells out what kinds of support and services your child will receive. If your child is going to have speech therapy, for instance, it will say how many minutes a week he will receive this therapy.

Accommodations and modifications: These help your child learn the general education curriculum. Accommodations are changes in *how* a child shows what he has learned. They can help your child work around his learning issues. For example, he may be given extra time on tests.

Modifications are changes in *what* is taught to or expected of a student. Some IEPs have what's called "modified promotional criteria." This defines the percentage of grade-level expectations a child must meet to move on to the next grade.

Supplementary aids and services: These are supports to help a child learn in the general education classroom. They might include a one-on-one aide, highlighted classroom notes, equipment or assistive technology, such as software.

Annual educational goals: These should be realistic, achievable and measurable. The IEP lists the academic and functional skills that the IEP team thinks your child can achieve by the end of the year. Annual educational goals should help your child participate in the general education classroom.

If your child has multiple or severe disabilities, the law requires that the IEP list short-term goals. These are also called objectives or benchmarks.

A description of how your child's progress will be measured and reported to you: By law, the IEP must explain how the school will track your child's progress toward goals. And it must describe how the school will share those results with you.

For instance, one goal might be that your child be able to read at a third-grade level. The IEP will specify how that will be tracked—informal and formal assessments, for instance—and how often those results will be reported to you. If these interim reports show that your child's progress has stalled, you and the IEP team may discuss new interventions.

An explanation of how much your child will participate in general education classes and extracurricular activities: Participation at the fullest level possible is required by law. This is called the least restrictive environment.

The date the IEP will go into effect: Many states have formal timelines for this.

Depending on your child's age and situation, his IEP might also include:

A transition plan: This kicks in when your child turns 16. Transition planning includes services and support to help a student graduate from high school and achieve post-high school goals.

Extended school year services: Some students receive special education services outside of the regular school year, such as during the summer or, less commonly, during extended breaks like winter break.

Who produces an IEP?

Your child's IEP team creates the IEP. Each person on the team plays an important role. By the law, the team includes:

- You, the student's parent(s). IDEA gives parents the legal right to participate in all of their child's IEP meetings. As the parent, you're a full and equal member of the team. After all, you probably know your child's strengths and struggles better than anyone else. Your concerns and suggestions about his education are invaluable.

- At least one of your child's general education teachers.

- At least one special education teacher or other special education provider.

- A school district representative knowledgeable about both general education and special education. This person also should have the power to make decisions that involve school resources. In other words, if the school rep thinks your child should be given speech therapy, she should have the power to make that happen.

- A school psychologist or other specialist who can interpret the student's evaluation and test results.

- When your child turns 16, he'll be expected to participate as a member of his IEP team and help develop a transition plan. A representative from an outside agency, such as a post-high school vocational program, may join meetings.

You also have the right to invite others to attend your child's IEP meeting. Be sure to send the school advance written notice of additional attendees. You may find it helpful to invite:

- A professional you've hired, who has knowledge or expertise about your child. Examples: a private tutor or health-care professional (such as a speech-language pathologist).
- A friend to serve as an "extra pair of ears" or to take notes for you.
- A translator, if you're deaf or don't speak or read English fluently. You may ask the school to provide a translator. IDEA requires that school districts do their best to accommodate parents who need this service.
- Your child. If your child is young, you may want to talk this over with the IEP team. Consider your child's age, how his condition affects him, his level of maturity and his ability to understand the information discussed during an IEP meeting.

The law requires that every IEP include annual educational goals for the student. IEP goals need to be specific, realistic and measurable. This is very important because it's how you and the team can tell if your child is making good progress.

"Jake will improve his reading skills" is *not* a specific or measurable goal. How do you measure his improvement? How much improvement is enough?

Here's an example of how to make a specific, realistic and measurable goal: "Given a second-grade book, Jake will be able to read a passage orally at 110-130 wpm (words per minute) with random errors."

The IEP team creates the goals in the meeting. When evaluating goals, you discuss:

- Measurements showing your child's progress toward goals. Standardized tests and curriculum-based measurements (CBM) are two objective ways to measure progress. CBM involves teachers doing frequent screenings—brief tests—to determine how well a student is progressing. If the IEP goals are written in a specific and measurable way, this information will give you a good picture of how your child is doing.
 - When progress toward goals will be reported to you. This should be done regularly—not just once a year. You'll typically be sent a report on progress toward goals when report cards are issued.
- What happens at IEP meetings?

The law requires the IEP team to review the IEP at least once a year. But the IEP team can meet any time you or the school want a meeting. Many teams meet more often than once a year.

The IEP meeting is key to making sure your child's IEP is working for him. It gives you a chance to discuss with teachers your child's weaknesses and strengths. If your child didn't meet any or all of his goals that quarter, you can hammer out new ways to help your child. That may mean modifying the goal and adjusting expectations. Or it could mean giving your child more or different kinds of services and support.

The IEP meeting is when you, teachers and the school give and get input on how your child is doing. You'll discuss what's working, what needs to change, and whether your child is catching up or falling further behind. Your child's feelings

and motivations should be included in the conversation, whether or not he attends the IEP meeting.

Here are some other key things you and rest of the team may discuss during the annual IEP review meeting:

- Your child's strengths. Share any success your child has had outside of school. Let's say your child struggles with attention issues and social skills. His IEP team will want to know that he finds it easier to follow directions from his soccer coach and is better at cooperating with teammates.
- Your concerns and suggestions for improving your child's education. The meeting is a good time to share where you still see your child struggling. Does he still have a tough time spelling? Is he constantly losing assignments? If you have any ideas for making these tasks easier for him, you may want to share them.
- How well modifications and accommodations (such as assistive technology) are helping. If they aren't helping your child as expected, the team can discuss upgrading, discontinuing or replacing them. The team can also consider any new instruction and technology tools that might be right for your child.
- The results of your child's first or most recent evaluation, if there is one. Your child should be evaluated every three years. The school psychologist or professional conducting the evaluation will usually explain the results at the IEP meeting.

During the meeting, the team leader will write a statement about your child's present level of academic and functional performance (PLOP) and goals. The statement is based on what you and the team have discussed in the meeting. The team leader will also document any changes to the IEP that the team—including you—have agreed to.

How does an IEP go into effect?

The school can't start providing special education services until you give your permission, which the law refers to as "consent." You may be asked at the end of the IEP meeting to give your consent to the proposed IEP. (Some states require parents to give written consent, like a signature. Some states don't.)

If you don't feel comfortable making a final decision on the spot, you have the right to take the IEP home to review it. Some schools mail a copy of the proposed IEP to you soon after the meeting and ask for your signature. Make sure to double-check everything in it before signing.

If you aren't fully satisfied with the proposed IEP, you have a few options:

- You can accept only parts of the proposed IEP. Say which items you agree to and which items you disagree with, or dispute. Explain your disagreement in writing and ask for your objections to be included in the IEP. The IEP team will include your objections as an addendum to the IEP document. Only the parts of the IEP you agree to will be implemented.

- Refuse the entire proposed IEP. Note your disagreement on the IEP form. If you're asked to sign the IEP to indicate your attendance at the IEP meeting, be sure your signature clearly indicates only your attendance not your consent for the proposed IEP.
- Ask for another meeting to discuss your concerns. You have the legal right to call an IEP team meeting at any time. If you have a good relationship with the other members of the IEP team, you can probably work things out.

It's also important to note that when a school wants to change your child's IEP, the school has to give you what's called "prior written notice." For example, if the school wants to reduce your child's services, add to them or change them in any way, it has to tell you ahead of time in writing. Prior written notice gives parents a chance to withdraw their consent and look for ways to resolve the dispute with the school.

What if you have a dispute?

There may be a time when you and the school don't see eye to eye and can't talk through your differences. If that happens, IDEA gives parents several options.

Here are steps you can take, usually in the order shown:

1. Ask for a mediation session. If the school doesn't automatically offer a mediation session, you can request one. (Be sure to do so in writing.) In this meeting, a

mediator helps each party express their positions and understand those of the other parties. The mediator manages the discussion and helps the group reach an agreement. The mediator does not recommend solutions or take sides.

2. File a due process complaint. If you're not satisfied with the results of the mediation, you can request a due process hearing by writing an official letter, also called a "complaint." A due process hearing is a formal meeting where parents and school officials present arguments and evidence to a hearing officer or administrative law judge. This person is *not* an employee of the school district.

The parents and the district are allowed to bring attorneys and present evidence. (Each state has different procedures; consult your state department of education to find out how to file this complaint and what to include in it.)

3. Hold a resolution session. Before the due process hearing, the school district is required to hold what's called a resolution session. This is a meeting between you, key members of the IEP team and someone authorized to make decisions for the district. You may bring an attorney (at your own expense) but you're not required to. The school district can only bring an attorney if you do.

4. File a civil lawsuit. This is the next option if you aren't satisfied with the result of the due process hearing. It's the most extreme option available to parents. It requires that parents hire an attorney and go through extensive legal proceedings.

5. When an agreement is reached, get it in writing. However you reach an agreement—during mediation, a resolution session or civil suit—you need a copy of

it in writing. In fact, any changes made to your child's IEP and the steps the school will take need to be documented.

Do private schools have IEPs?

Private schools aren't required by law to provide special education services. If your child is in a private school, you can ask the public school district to evaluate your child for special education services. If the district agrees to your request, the evaluation will be conducted at no cost to you.

IDEA requires school districts to set aside some public funding to provide special education services to students in private school. But this funding is limited. If your child's school agrees to work with the district, they may work together to create what's called a "services plan." This plan is likely to provide fewer services than your child would receive in a public school.

What can make the journey easier?

After you agree to your child's IEP and have received a copy, it may be tempting to file it away and forget it. But paying attention will help ensure your child gets the services promised. Since several people are responsible for carrying out the IEP, sometimes the details can be overlooked.

- Contact the IEP team leader when you have concerns. If nobody on the team can address your concerns, you can contact the district special education director. If you don't get answers and action, request an IEP meeting. You *don't* have to wait for the annual IEP meeting.
- Be sure to refer to the IEP during your regular parent-teacher conferences. This is a chance to ask the teacher if the IEP is being followed. You can also express any concerns you have based on what you're observing in your child and his schoolwork.
- Above all, remember that the IEP needs to reflect your child's current needs. Your child is going to progress in school, master skills, acquire knowledge—and perhaps run into new challenges. That's why it's important for his IEP to evolve. It should document what he's mastered and should list new goals and accommodations.
- Connect with other parents who have experience with IEPs. Parents in our online community can be a source of support, understanding and parent-tested advice.

For more practical tips, try using our handy IEP meeting toolkit and other IEP resources to help you prepare for every IEP meeting. You can also turn to our experts for advice on how to understand and make the most of your child's IEP.

- The IEP is the cornerstone of a child's special education program.
- The IEP should reflect your child's strengths, needs and progress as he moves through school.
- You're an important member of your child's IEP team and bring valuable insights and concerns to the table.
- Definitions

While the content in this resource is organized sequentially, the circular diagram at left represents the cyclical process of IEP development, which includes stages of **PLANNING, IMPLEMENTING and EVALUATING**. Within these stages are seven essential components: Assessment, Collaboration, Writing, Introducing, Monitoring, Reviewing and Reporting. Ideally, schools engage in these stages to develop and use the written IEP as an effective tool for the individualized program for a student. The information in this resource is presented using the following format: • The Big Idea, which describes the overarching theme or concept • Key Points that should be considered in the process • Practices that have proven to be effective Definitions of terms, links to legislation, Ministerial Orders, clarifications and additional resources may be found directly by clicking on the highlighted text within the document. Appendices include an array of useful, reproducible tools to assist teachers in planning, implementing and evaluating IEPs.

- Summary

The Individual Education Plan order (M638-95) provides direction about who should and who should not receive an IEP. It states that a board must ensure that an IEP is designed for a student with special needs as soon as practical after the student is so identified by the board. The order indicates three circumstances where an IEP for a student with special needs is not necessary. Those instances are where: • the student with special needs requires no adaptation or only minor adaptations to

educational materials, or instructional or assessment methods • the expected learning outcomes established by the applicable educational program guide have not been modified for the student with special needs • the student with special needs requires in a school year 25 hours or less remedial instruction by a person other than the classroom teacher, in order for the student to meet the expected learning outcomes (To view the order see www.bced.gov.bc.ca/legislation/schoollaw/e/m638-95.pdf) Looking at the inverse circumstances of this may help clarify which students are entitled to an IEP. A student with special needs is entitled to an IEP if: • the student with special needs requires more than just minor adaptations to educational materials, or instructional or assessment methods, or • the student with special needs is working on outcomes other than the prescribed outcomes of the curriculum, or • the student with special needs is working on the regular outcomes with little or no adaptations, but receives 25 hours or more of remedial help from someone other than the classroom teacher to meet the expected learning outcomes Some students, although not identified as having a special need, may require adaptations and remedial help from someone other than the classroom teacher. It is not a requirement that these students have an IEP. In this case, it is good practice to put in place a learning plan to document specific needs of these students. Local school boards may have established practices and templates for learning plans.

Key Points • An IEP provides accountability for: – individualized goals – the means to achieve these goals – additional services and how they will be delivered – responsibility for various aspects of the IEP • An IEP assists teachers in monitoring student growth and progress. • An IEP provides an ongoing record to assist with continuity in programming and transition planning. • An IEP guides the implementation of learning support services inside or outside the classroom to align the educational program with the needs of the student. • Development of an IEP may be undertaken by one teacher in consultation with parents, a small group or an expanded team, depending on the complexity of the student's needs. • An IEP team might include any of the following participants: – teacher(s) – case manager – specialist staff – school counsellor – community specialists – parent(s) or legal guardian – the student, if appropriate • The IEP process, when it works well, involves a dynamic cycle of planning, monitoring and evaluating.

Practices An IEP documents: • individualized goals linked to the student's assessed special needs, and in some cases, shorter term objectives • strategies to be used • services and resources to be provided • measures for tracking achievement • adaptations and/or modifications An IEP may set out a blend of adaptations, modifications and inclusion in the regular curriculum. Program areas in which a

Points for Clarification

- **References / Further Readings**

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UNIT 3:DEVELOPING, IMPLEMENTATION AND EVALUATION OF IEP FOR PWID AND ITS ASSOCIATED CONDITIONS

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
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- Introduction

The past decade has been marked by unprecedented interest in clinical practice guidelines and the processes by which they can best be developed and implemented. This worldwide interest has been prompted by concern about unjustifiable variations in clinical practice for the same condition, the increasing availability of new treatments and technologies, uncertainty about the effectiveness of many interventions in improving people's health, and a desire to make the best use of available health resources. Guidelines are being designed to improve the quality of

health care and decrease the use of unnecessary, ineffective or harmful interventions. In an era of evidence-based medicine (Sackett et al. 1996), guidelines are becoming one of the critical links between the best available evidence and good clinical practice. Guidelines constitute one element of a systems approach to quality health care. Despite the acknowledged need, there are few widely accessible, comprehensive guides for groups seeking to develop clinical practice guidelines. This document puts forward a method for developing clinical practice guidelines in Australia, based on the best available models worldwide. The method has been trialed in Australia in recent years and modified in the light of that experience; it is applicable to a variety of conditions and procedures. In this document the term 'clinical' takes in all health care providers.

- Objectives

Clinical practice guidelines are 'systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances' (Field & Lohr 1990). There is a move towards developing such statements to assist clinicians in the management of specific conditions. The procedures used to develop the statements are increasingly based on a thorough evaluation of the evidence, including, when appropriate, meta-analysis of published research studies on the outcomes of various treatment options, rather than the consensus of expert panels. The statements are intended to be 'a distillation of current evidence and opinion on best practice' (Clover et al. 1995; Grimshaw & Russell 1993). Clinical practice guidelines are often referred to as algorithms, clinical pathways, protocols and practice policies, although these differ from clinical practice guidelines in that they are often much more prescriptive and not always based on evidence. Clinical practice guidelines are one component of good medical decision-making, which takes into account patients' preferences and values, clinicians' values and experience, and the available resources. The guidelines' main purpose is to achieve better health outcomes by improving the practice of health professionals and providing consumers with better information about treatment options. Guidelines can inform consumers about risk factors and how to avert them; they can be used to broaden the education of practitioners and the community, thus contributing to quality assurance processes; and they can assist in the resolution of legal disputes and ethical dilemmas. Research has shown that clinical practice guidelines can be an effective means of changing the process of health care and improving health outcomes (Grimshaw & Russell 1993, EHCB 1994). A systematic review of many studies of guidelines' effectiveness revealed strong evidence that they can change clinical practice. Moreover, of those studies that assessed changes in consumer health, a majority reported an improvement in health outcomes (EHCB

1994). Guidelines vary, however, in the extent to which they produce improved health outcomes. There are two main reasons for this. First, acceptance of a guideline is likely to depend on the quality of the evidence on which it is based. Second, the extent to which the potential health gain is realised from adherence to a guideline will depend on how effectively the guideline is implemented. Traditionally, guidelines have been based on consensus among experts. But this method has its limitations. Expert opinion does not always reflect the state of current medical knowledge (Antman et al. 1992). And, even where guidelines are supported by literature surveys, if the medical literature has been analysed in an unsystematic way biased conclusions can result (Woolf 1992 Vol 152; Mulrow 1994; EHCB 1994). In the past this has led to unnecessary delays in the recommendation of effective interventions and delays in the withdrawal of ineffective or harmful treatments (Antman et al. 1992; Advisory Group on Health Technology Assessment 1992).

The formulation and drafting of guidelines is only one part of the guideline development process. Guidelines will be effective only if they are perceived to be useful and are actually used in clinical decision making. It is therefore important to ensure that clinicians are aware of the guidelines and that the guidelines are incorporated in clinical practice. At present little is known about the relative effectiveness of different dissemination and implementation strategies (Grimshaw & Russell 1994), but the available evidence does suggest that implementation strategies are most likely to succeed if they are relevant to the people the guidelines are targeting and if they are integrated into the health care delivery process (EHCB 1994). Clinical practice guidelines should be linked to effective evaluation plans. This involves documenting the beneficial and adverse consequences of different interventions when applied in normal clinical practice and how their application is viewed by the consumer. Rather than being treated as a stand-alone item, clinical practice guidelines will be most effective when incorporated fully in the health care system and used alongside existing quality assurance activities such as continuing medical education, accreditation, audit and certification. Guidelines will also be most effective when they are part of a system in which good data collection on outcomes is the norm and where the data collected are used to inform the continuing development of the guidelines and their dissemination and implementation. The challenge is to develop a systems approach that can support guideline development, implementation and evaluation as part of mainstream health care delivery. Finally, it must be remembered that there are no 'magic bullets' or simple answers when it comes to developing and implementing guidelines (Oxman et al. 1995). The cycle of development, implementation, evaluation, and revision in the light of new scientific evidence and consumer feedback will be central to the success of future clinical guidelines.

- Definitions
- Summary

The National Health and Medical Research Council has been piloting and funding the process of clinical guideline development in areas such as early breast cancer, coronary heart disease, unstable angina, stroke prevention, preterm birth, depression in young people, uncomplicated lower urinary tract symptoms in men, and diabetic retinopathy. Many individuals and groups found the earlier version of this document, produced in 1995, very helpful in developing guidelines. Feedback collected by the National Health and Medical Research Council, from guideline developers, shows overwhelming support for the idea of evidence-based guidelines. It also shows general agreement about the inclusion of 'decision trees' in guidelines, as well as the need for some kind of systems approach to make the guidelines work effectively. There is, however, a strong feeling that much more attention should be given to implementation and evaluation once guidelines have been developed. Many of those involved in producing guidelines have become frustrated by the lack of implementation. Further, health care professionals' acceptance of clinical practice guidelines has to some degree been marred by lingering concern that the guidelines represent 'cookbook' medicine

THE GUIDING PRINCIPLES

This chapter describes the nine guiding principles underlying the guideline development process. They are as follows: • processes for guideline development and evaluation should be outcome focused; • guidelines should be based on the best available evidence and should include a statement about the strength of recommendations; • the method used to synthesise the available evidence should be the strongest applicable; • the process of guideline development should be multidisciplinary and should include consumers; • guidelines should be flexible and capable of adapting to varying local conditions; • guidelines should be developed with resource constraints in mind; • guidelines should be developed, disseminated and implemented taking into account their target audiences; • the validity and usefulness of the guidelines should be evaluated; and • guidelines should be revised regularly

2.1 Guideline development and evaluation The process for guideline development should be aimed at identifying interventions that will ensure the best possible health

outcomes. A health outcome has been defined as 'a change in the health of an individual, a group of people or population which is attributable to an intervention or a series of interventions' (AHMAC 1993). Donabedian describes outcomes as 'what is accomplished for patients' and points out that they reflect the 'contribution of all those who provide care' as well as the 'appropriateness of the choice of a strategy of care' (1992b). Outcome measures can range from survival rates to quality-of-life attributes. Outcomes can be positive or negative and may differ according to population group—for example, socio-economic group, gender, or current health or risk factor status. To date much of the evaluation of health care has centred around the process of health care (whether clinicians conform to recommended practices), rather than the outcomes (whether the recommended practices produce a change in health). Whilst the ultimate goal of the guideline-evaluation process should be to establish the degree to which the guidelines are effective in producing the health outcomes sought, this may not be practical because of the difficulty of attributing outcomes to the guidelines.

2.2 Using the best available evidence The purpose of clinical practice guidelines is to encourage treatment that offers individual patients maximum likelihood of benefit and minimum harm and is acceptable in terms of cost. Recommendations contained in guidelines should be based on the best possible evidence of the link between the intervention and the clinical outcomes of interest. The evidence on which a recommendation is based can be graded according to level, quality, relevance and strength. Appendix A provides definitions of these criteria, as used by the Health Advisory Committee of the National Health and Medical Research Council. Ideally, recommendations should be based on the highest level of evidence, preferably a systematic review of high-quality randomised controlled clinical trials that measure relevant outcomes and demonstrate a strong, clinically important, beneficial effect of the intervention. It is important, though, to recognise that this ideal may be difficult to attain in the case of public health and social science interventions: these important areas of health care should not be disadvantaged by the rigid application of a 'hierarchy' of evidence. In many cases it may not be possible, or feasible, to evaluate a large-scale public health intervention using a randomised controlled trial. Other forms of evidence—such as well-designed controlled studies and time series analyses—may be the most appropriate and feasible method. Although there is currently no agreed separate grading for assessing the level of evidence in relation to public health interventions, the primary objective is to strive for evidence derived from a study design that is the most practical and feasible available in order to maximally control for potential bias. In addition, evidence derived from a systematic review of all the available studies that meet this criterion is obviously preferable to evidence from a single study. Until an agreed rating scale is developed to assess levels of evidence associated with public

health interventions, guideline developers are advised to use the levels of evidence referred to in this document but to recognise that much of the evidence currently available in relation to public health interventions will be level III—see Appendix B. In this context it is important to note that the evidence from public health interventions is often supported by strong biological data. The level of evidence and the quality of evidence need to be considered together. ‘Level of evidence’ refers to the study design used by investigators to minimise bias (see Appendix B). Level I, the highest level, is generally accorded to randomised clinical trials. A methodologically poor randomised trial (level II) may, however, provide a weaker basis for a recommendation than a high-quality observational study without randomisation, which can provide level III-2 evidence. ‘Quality of evidence’ refers to the methods used by investigators to minimise bias in study design and in the conduct of a study. The types of bias and their possible effects depend on the study type. There are now fairly well established criteria for assessing the quality of randomised trials; they concern the degree to which allocation to treatment groups is concealed from investigator and subject, whether the study is double blind, and the completeness of follow-up of subjects. Methods of assessing the quality of non-randomised studies (levels III-2 and III-3) are less well established and the factors will probably vary depending on the study type. In general, factors that are likely to influence the estimate of the effect size are the methods used to select subjects for the trial, the comparability of the treatment and control (if there is one) groups, the methods of measuring outcomes, and the completeness of the follow-up. The quality of systematic reviews also needs to be considered if they are being used as the basis of guideline development. Standard methods for conducting and reporting systematic reviews have been published (see Greenhalgh 1997).

- Revision
- Assignment/Activity

POINTS FOR DISCUSSIONS / CLARIFICATION

After going through the unit you may like to have further discussion on some points and clarification. Note down those points:-

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UNIT 4: IFSP – PLANNING AND WRITING

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
-
- Introduction

An Individualized Family Service Plan (IFSP) is a working document produced collaboratively by program staff and family members that contains the agreed upon Early Intervention services for an eligible child and family. Based on a multidisciplinary eligibility evaluation and any completed assessments, the plan includes services necessary to enhance the development of an eligible child, and the capacity of the family to meet the child's needs. All certified Early Intervention programs use the current universal IFSP form approved by the Massachusetts Department of Public Health.

- Objectives

It's important to have a plan in writing, which shows the work families and staff will do together. The IFSP is the written plan that lists services and supports to eligible children and families. The plan will include:

- Information about your child - including assessment results, your family's concerns, and your child's strengths.
- The outcomes (goals) you want to achieve for your child and family.
- Strategies and activities to reach those outcomes together .
- The services to be provided - how often, by whom, when, and where.
- The person who is your service coordinator. Your service coordinator will help you develop your plan, make sure it is followed, and explain your family rights and procedural safeguards.
- The steps to help you and your child in the transition from EI.

The major difference between an IFSP and an IEP is that an IFSP focuses on the child and family and the services that a family needs to help them enhance the development of their child. The IEP focuses on the educational needs of the child. An IEP is an education document for children ages 3 to 21. It focuses on special education and related services in schools. An IFSP is much broader. It is used for children from infancy through age 2, involves the family more, and may include professionals from several disciplines in planning for the child. An IFSP is based on an in-depth assessment of the child's needs and the needs and concerns of the family. It contains 1) information on the child's present level of development in all areas; 2) outcomes for the child and family; and 3) services the child and family will receive to help them achieve the outcomes. Services available through the IFSP are

usually provided in the child's home. The federal Individuals with Disabilities Education Act (IDEA) states that services are to be provided in the child's "natural environment." This could include a child care setting, Early Head Start, preschool, or other community setting in which young children without disabilities would typically be found. An IFSP is a document or written plan. The term "IFSP" also refers to the process of determining what services a young child with developmental delays or disabilities needs. It uses an "interagency" approach by involving representatives of several agencies (usually education, health, and human services) and other resources that can help the child and family. This process provides an opportunity for sharing between families and staff so that families can make informed choices about the early intervention services they want for their child and themselves. A "service coordinator" is assigned to assist the child's family with the IFSP process. The service coordinator convenes IFSP planning meetings after contacting professionals who should be involved in the child's plan and others the family would like to attend the meeting. The main purpose of the IFSP meeting is to offer information and resources to the family and talk about their concerns. A planning meeting must also define each agency's role and financial responsibility in the child's plan. The chart on the next page illustrates the differences between an IFSP and an IEP.

- **Definitions**

The IFSP provides the foundation of family-centered early intervention services. The IFSP is an agreement between you and the local Infants and Toddlers Program regarding the early intervention services and supports provided to your child and family. The IFSP is both an agreement and a written document that puts in writing your child's strengths and needs, your family's priorities, and the outcomes you and the team would like your child to achieve. The IFSP provides the "what, when,

where, why, and how” of early intervention services to be provided to your child and family.

For more information, see the PACER Center booklets, “Early Childhood Transition Guidebook,” and “A Guide for Minnesota Parents to the Individualized Education Program (IEP).

- **Summary**

Washington’s Early Support for Infants and Toddlers (ESIT) Program revised its Individualized Family Service Plan (IFSP) form to be used statewide for eligible infants and toddlers and their families. The IFSP was revised in conjunction with stakeholders including parents, Family Resources Coordinators (FRCs), and service providers throughout Washington who used the form and provided valuable feedback. It reflects the entire IFSP process, from initial referral through the development of the IFSP; for this reason, the title of the document is the Individualized Family Services Plan Process Document, or IFSP-PD. For the purposes of this document, the form will be referred to as the IFSP. The purpose of this document is to provide Washington Part C early intervention personnel guidelines for developing an IFSP that encompasses all aspects of the IFSP process including the measurement of the three global child outcome areas required for program accountability. This guidance document provides instructions for completing the IFSP form including sections related to evaluation and assessment of the child, present levels of development including measurement in the three global child outcome areas, functional IFSP outcomes with related supports and services, and resources to assist families. In addition, Washington developed revised procedural safeguard forms and a Procedural Safeguards Technical Assistance (TA) Guide (<http://www.del.wa.gov/publications/esit/>) that are referenced throughout, to be used together with this guide. This guide is designed to facilitate the IFSP process and procedure for measuring the three global child outcome areas and provide a framework for consistent and effective practices, while ensuring compliance with federal regulations. Information is gathered through evaluation and assessment activities, from family members and caregivers, to provide an understanding of the child’s behavior, relationships, knowledge and skills in various daily routines and activities of everyday life. This information is used to develop a plan of services (the IFSP) and to identify functional IFSP outcomes for the child and family. This guide explains the steps of the IFSP process, the state forms related to each step, and instructions for completing the process and forms. The information gathered to complete these forms will be entered into the electronic data management system (DMS) to create the IFSP. This guide will help practitioners:

In the IFSP process, the family and a team of early intervention personnel come together to decide on functional child and family IFSP outcomes based on the concerns and priorities of the family and the abilities and needs of the child. The team also decides on the supports, services and specific strategies that will be used to meet those functional IFSP outcomes. The ESIT DMS contains the IFSP forms and allows ESIT to collect data on the IFSP process and measurement of the three global child outcome areas across the state. It provides an efficient mechanism for FRCs to maintain documentation of the IFSP process and captures families' previous IFSPs, providing documentation of changes over time. The IFSP forms in the DMS were upgraded to reflect the IFSP process and feedback provided by stakeholders in Washington State. The forms and guidance also support the ESIT Guiding Concepts, (<http://www.del.wa.gov/publications/esit>). While IFSP information must be entered into the DMS for storing and archiving, providers may choose whether to complete the IFSP forms by hand or electronically during the IFSP process. All members of the IFSP Team, including the family, must be provided with paper copies of each IFSP document. The revised IFSP form meets the federal Individuals with Disabilities Education Act (IDEA), Part C regulations and Washington state requirements. When the IFSP process is conducted as described in this guidance, the IFSP Team and program administrators can ensure compliance with federal and state requirements. Citations to key regulations are included throughout this document.

The IFSP process begins when your child is referred to your local Infants and Toddlers Program due to a concern about his or her development. The local Infants and Toddlers Program will contact your family within 2 days of receiving the referral. Your early intervention team has 45 days from the date of referral to complete your child's evaluation and assessment and complete an initial written IFSP. Most services contained in the IFSP document begin no later than 30 days after the IFSP has been signed by you. The completion of the IFSP or the start date for an IFSP service may be delayed by a family reason. All partners learn to trust and respect each other's expertise in order to share information and make decisions. Families and early intervention providers bring unique strengths to this collaborative partnership. The first IFSP meeting will include you and your service coordinator, and may include staff that helped complete the developmental evaluation and assessment of your child. Such staff may participate by telephone or by providing a written report. You may invite others to attend the meeting, including family members, friends, and child care providers that you feel should be involved. Together, you will develop an IFSP that supports you and your family. The IFSP process is ongoing. You and your IFSP team will review the IFSP every 6 months after the initial completion date. You may request a review at any time to make sure the IFSP continues to meet the changing needs of your child and family.

Development and review of the IFSP are collaborative processes that take place during IFSP team meetings. You and your service coordinator must be present for all IFSP meetings.

The Individualized Family Service Plan (IFSP) is both an agreement and a legal document that puts in writing information about your child's development, your family's priorities, your child's strengths and needs, and the outcomes you and the IFSP team would like to have your child achieve. It is the plan of action—the who, what, when, where, why, and how of services and supports to be provided to your child and family. This guide introduces you to the various sections of the IFSP document. Your service coordinator and service providers from your local Infants and Toddlers Program will explain the sections in greater detail as you develop the IFSP together.

- Revision
- Assignment/Activity

POINTS FOR DISCUSSIONS / CLARIFICATION

After going through the unit you may like to have further discussion on some points and clarification. Note down those points:-

Points for Discussion

UNIT 5: APPLICATION OF IEP FOR INCLUSION

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
-
- Introduction

The IEP drives your services. The last thing an IEP team does is to make a placement decision. A clever advocate creates an IEP with goals and services that can only be implemented in an inclusive placement. There are ways to make sure this happens. The first thing for you to have in mind are clear goals. If you want an inclusive placement for your child, make it your priority to support every opportunity to develop relationships with children who do not have disabilities. These are referred to as “natural supports” and are an essential part of every day life. It is hard for parents to imagine just what supports are. You may be afraid to ask for them. Everyone has them. Everyone has supplemental aids. Imagine a meeting in a typical conference setting. One person attends in a wheelchair. One way to characterize that meeting is to say that the person with the wheelchair brought his or her own chair. All others had to be “accommodated.” The room where the meeting took place was lighted with a complicated and expensive system

of electrical hookups and wires that run all the way back to a dam or power source. That accommodation is not necessary for a blind person. Electric lights are simply an accommodation for sighted people. Your child's need for accommodation is not so unique, complicated or expensive. Before your meeting get to know the key people. Key people include parents who share your view of inclusive education. If possible get to know and talk with other members of the IEP team and let them know your wishes. Some suggested ways to prepare and organize your input for an inclusive placement: Make a list of your child's strengths and weaknesses. Include input from family members, friends and others who know your child. List your child's needs and things you would like your child to do better. Think about the kinds of environments and/or supports that your child needs to learn new skills. Think of goals that reflect your priorities and think of ways that each could be taught in a regular classroom environment. TIP: When writing goals include phrases such as "with typical peers used for support," "with one prompt from a typical child," "in the presence of children without disabilities." Obviously, once adopted, these goals can only be implemented in an inclusive placement. In determining how appropriate a goal may be, choose those that may interest a typical student the age of your child. Is the goal age-appropriate? Going to see Santa will appeal to nondisabled peers who are 6. When they are 16 that may not be an appropriate goal. What methods are necessary to teach my child appropriate skills? How will my child use new skills in increase opportunities to participate in the community? Document times where inclusion has worked successfully for your child. Video or photograph family vacations, church activity, etc. Request that evaluations be done by people with expertise in supported education. Remember that evaluation results often include placement recommendations. Ask the evaluator to include a description of accommodations and supports that will enable your child to participate successfully with typical peers. Remember that if you disagree with the results, you have the right to ask for an independent evaluation.

- Objectives :

Share your vision and expectations clearly with your team. Keep the focus on your child's strengths. Use words carefully but forcefully. Be assertive, clear and concise. State the things that you want: "building relationships is a priority ... needs experience learning in a group ... develop friendships with children in our neighborhood .. participate in all fourth grade activities ...needs behavior models from typical kids, etc." Evaluate carefully what is being written down. The amount of time not spent in a regular classroom must be listed. Ask yourself questions: How can this skill be taught in a regular classroom? Consider privacy and dignity –

some skills may need to be taught in a different environment. Bring an advocate. Another parent who shares your vision of inclusion is an ideal advocate. But anyone in your life that you trust is also ideal. Outline roles and strategy ahead of time. Who will take notes? Who has the tissues? Who will suggest a break? Consider some kind of collaborative planning process. Think about these issues. What is my child's history?• What are my dreams for my child?• What are my nightmares about my child?• Who is my child?• What are my child's strengths, gifts and abilities?• What are my child's individual needs?• What would my child's ideal day at school look like? What must we do to make that day a reality?•

- Definitions

Special education advocacy is far more art than science. Nowhere is this more true than in writing the goals for the IEP. Here is where inclusion gets written in a way that will require an inclusion placement in order to implement the goals. This is fundamental. Do not wait for the end of the meeting when the placement decision is made. You will not receive an inclusive placement if your goals can be met in a more restrictive setting. Rule Number One: Never write a goal that a dead person can meet. "Adria will sit quietly in her chair" is not an education goal. It is a post mortem. Goals must be written in an active voice and state specifically what your child is going to learn. Think about the difference between these written goals. "Taylor will take piano lessons." Or .. "Taylor will learn to play the piano." "Grendahl will attend 20 specialized reading classes." Or .. "Grendahl will increase his/her reading skill to a 2nd grade level by attending 20 specialized reading classes." The first example tells us little about a measurable outcome. In the second, the students, Taylor and Grendahl, are actually setting a goal to be able to perform a very specific and measurable skill. The second goal is properly written. One important tactic for you to learn and apply is to get the team to buy into IEP goals, one at a time, so that once the document is adopted, it will lead to an inclusive placement. If you include enough references to social situations, support from non-disabled peers, and the need for normalcy, you will have created an IEP that cannot be implemented anywhere other than in an inclusion placement.

- Summary

Today, education is perhaps the most important function of state and local governments . . . it is a principal instrument in awakening the child to cultural values, in preparing him for later professional training, and in helping him to adjust

normally to his environment. In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity . . . is a right which must be made available on equal terms. We conclude that in the field of education, the doctrine "separate and equal" has no place (Brown v. Board of Education, 1954). These same arguments, originally applied to race, have been repeated on behalf of children with disabilities, many of whom continue to be educated separately from their nondisabled peers despite legislation mandating otherwise (U.S. Department of Education, 2003). There is a strong research base to support the education of children with disabilities alongside their nondisabled peers. Although separate classes, with lower student to teacher ratios, controlled environments and specially trained staff would seem to offer benefits to a child with a disability, research fails to demonstrate the effectiveness of such programs (Lipsky, 1997; Sailor, 2003). There is mounting evidence that, other than a smaller class size, "there is little that is special about the special education system," and that the negative effects of separating children with disabilities from their peers far outweigh any benefit to smaller classes (Audette & Algozzine, 1997). Students with disabilities in inclusive classrooms show academic gains in a number of areas, including improved performance on standardized tests, mastery of IEP goals, grades, on-task behavior and motivation to learn (National Center for Education Restructuring and Inclusion, 1995). Moreover, placement in inclusive classrooms does not interfere with the academic performance of students without disabilities with respect to the amount of allocated time and engaged instructional time, the rate of interruption to planned activities and student achievement on test scores and report card grades (York, Vandercook, MacDonald, Heise-Neff, and Caughey, 1992).

The types of instructional strategies found in inclusive classrooms, including peer tutoring, cooperative learning groups and differentiated instruction, have been shown to be beneficial to all learners. For example, Slavin, Madden, & Leavy (1984) found that math scores for students with and without disabilities increased by nearly half a grade level as a result of working in cooperative learning groups. Peer tutoring resulted in significant increases in spelling, social studies and other academic areas for students with and without disabilities (Maheady et al, 1988; Pomerantz et al, 1994). The use of graphic organizers, study guides, and computer accommodations resulted in significantly improved performances on tests and quizzes for students with and without disabilities (Horton, Lovitt, & Berglund, 1990). In addition, children with intellectual disabilities educated in general education settings have been found to score higher on literacy measures than students educated in segregated settings (Buckley, 2000). Quality inclusive education doesn't just happen. Educating children with disabilities in general education settings with access to the general education environment requires careful

planning and preparation (Deno, 1997; King-Spears, 1997; Scott, Vitale, & Masten, 1998). Research shows that principals, special education directors, superintendents, teachers, parents and community members must all be involved and invested in the successful outcome of inclusive education (Villa, 1997; Walther-Thomas, 1997). Teachers — both general and special education — must collaborate to create learning strategies and environments that work for all students. Related service personnel, including speech therapists, occupational therapists, physical therapists and school psychologists will be expected to deliver their services in the general education environment rather than in pull-out rooms and will need to incorporate their services into the general education curriculum and schedule (Ferguson, Ralph, & Katul, 1998). Educators must rethink assessment, as No Child Left Behind and IDEA 2004 both call for more extensive evaluation of student progress, including the use of standardized assessment. Research highlights the benefits of efforts on the part of schools to find meaningful and creative ways for parents of children with disabilities to participate and contribute in the school community (Ryndak & Downing, 1996.) The benefits of strong family-school partnerships are well documented in the literature. Student academic achievement is higher when parents are involved; in fact, the higher the level of parent involvement, the higher the level of student achievement (Dauber & Epstein, 1993; Henderson & Berla, 1994; Christenson & Sheridan, 2001). Other benefits of strong family-school collaboration include improved student attendance, higher aspirations for postsecondary education and career development (Caplan, et. al., 1997), improved social competence, (WebsterStratton, 1993) and lower rates of high-risk behavior on the part of adolescents (Resnick et al., 1997). The Individuals with Disabilities Education Act (IDEA) strongly emphasizes the involvement of families at every step of the special education process, from referral to evaluation, to Individualized Education Program (IEP) development, to monitoring progress. Yet, many parents of students with disabilities are not fully participating members of their child's IEP Team. Data from the first year of the Special Education Elementary Longitudinal Study (SEELS) funded by the Office of Special Education Programs (OSEP) as part of the national assessment of the 1997 Individuals with Disabilities Education Act (IDEA 97), showed that:

- Nearly 90 percent of elementary and middle school students with disabilities had a family member attend their IEP meeting but only two-thirds of parents reported collaborating with school district personnel on the IEP development.
- Parents of students with specific learning disabilities and speech/language impairment were the least likely to attend IEP meetings or training sessions. Since these two disability categories comprise 70 percent of all students (ages 6-21) served under IDEA, the SEELS study implies that the majority of students with disabilities have the least involved families.
- Only 25 percent of students had an adult family member who had participated in an informational or training session on understanding their rights and responsibilities under IDEA.

Those who attended viewed the meetings as very helpful (49%) or somewhat helpful (44%). A national survey by Public Agenda, When Its Your Child: A Report on Special Education from the Families Who Use It, revealed that a large majority (70%) of the parents surveyed say that too many children with special needs lose out because their parents don't know what's available to them. More than half (55%) said that parents have to find out on their own what services and supports are available. This finding underscores the need to provide more training and information to parents on how the special education process works and their rights under IDEA. A lack of information about the special education process can lead to conflicts between parents and schools. In studies of conflict resolution in special education, breakdowns of communication between parents and schools were often caused by "parents not being adequately informed as to what limits are contained in IDEA and School district personnel not being adequately informed about the extent and complexity of the . . . federal statues and regulations" (Feinberg, et al. 2002). This book is our attempt to provide parents with tips and strategies for making inclusive education a reality for their children. It is our hope that these tips will prove useful for families as they advocate for their children, and will allow parents to come to the IEP table as true and equal partners in the IEP process.

- Revision
- Assignment/Activity

POINTS FOR DISCUSSIONS / CLARIFICATION

After going through the unit you may like to have further discussion on some points and clarification. Note down those points:-

Points for Discussion

Buckley, S. and others. (2000). The development of teenagers with Down syndrome in 1987 and 1999: Implications for families and schools. *Down Syndrome News and Update*, 2(2), 3. 3. Caplan and others in Henderson, A. and Berla, N. (1994), *A New Generation of Evidence: The Family is Critical to Student Achievement*. Washington, DC: National Committee for Citizens in Education. Center for Law and Education 4. Christenson, S. L., and Sheridan, S. M. (2001). *School and families: Creating essential connections for learning*. New York: Guilford Press. 5. Dauber, S.L., and Epstein, J. (1993). Parents' attitudes and practices of involvement in inner-city elementary and middle schools. In N. F. Chavkin, *Families and schools in a pluralistic society* (pp. 53-71). Albany, NY: State University of New York Press. 6. Deno, S. and others. (1996). Commentary: Facing the realities of inclusion for students with mild disabilities. *The Journal of Special Education*, 30(3), 345-357. 7. Feinberg, E., Beyer, J., and Moses, P. (2002). *Beyond mediation: Strategies for appropriate early dispute resolution in special education*. Unpublished manuscript. National Center on Alternative Dispute Resolution (CADRE): Eugene, OR 8. Ferguson, D. and others. *Reinventing Schools Research Project: Collaborative Research Project on the Merger of General and Special Education School Reforms*. US Department of Education Publications. 9. Henderson, A., Ed; Berla, N. Ed. (1994). *A New Generation of Evidence: The Family is Critical to Student Achievement*. Washington, DC: National Committee for Citizens in Education. Center for Law and Education 10. Horton, S. and others. (1990). The effectiveness of graphic organizers for three classifications of secondary students in content area classes. *Journal of Learning Disabilities*, 23 (1) 12-22 11. King-Sears, M. (1997). *Best Academic Practices for Inclusive Classrooms*. Focus on Exceptional Children. 29 (7) 1-22 12. LaMorte, M. (1998). *School law: Cases and Concepts*, 6th Ed. Cincinnati: Anderson Publishing Co. 13. Lipsky, D. and Gartner, A. (1997). *Inclusion and School Reform: Transforming America's Classrooms*. Baltimore: Paul H. Brookes. 14. Maheady, L. and others (1988). Peer-mediated instruction: A promising approach to meeting the diverse needs of LD adolescents. *Learning Disability Quarterly*, 11 (2) 08-13 15. Pomerantz, D.J., Windell, I.J., and Smith, M.A. (1994). The effects of class-wide peer tutoring and accommodations on the acquisition of content area knowledge by elementary students with learning disabilities. *Learning Disabilities Forum*, 19 (2), 28-32. 16. Resnick, M. D., and others. (1997). Protecting adolescents from harm: Findings from the national longitudinal study on adolescent health. *The Journal of the American Medical Association*, 278(10), 823-832. 17. Ryndak, D. and others, (1996). *Parent's perceptions of educational settings and services for children with moderate or severe disabilities*.

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BLOCK 3: TEACHING STRATEGIES AND TLM

UNIT 1: STAGES OF LEARNING

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
-
- Introduction

Becoming proficient at using a new strategy involves four basic levels of learning: Awareness, Acquisition, Proficiency, and Generalization. Most teachers address the initial levels, but for various reasons tend not to address the last two levels. Unfortunately, this partial approach to instruction rarely has much of an impact on most students.

Most teachers “teach and hope” – that is, they teach a skill and provide the intensity of instruction needed to enable students to perform the skill correctly and quickly, and then hope students will generalize its use to contexts outside of their classrooms. Unfortunately, a considerable body of research shows that students typically do not generalize skill instruction unless they are explicitly taught how to generalize and unless steps are taken to ensure that generalization occurs and is reinforced. If instruction in a skill or strategy does not result in students

independently using it to be successful at tasks or solving problems, the attempt at teaching is largely a waste of teachers' and students' time and energy. In other words, if nothing changes in the students' lives as a result of instruction, what was accomplished? Such a question is disconcerting, but nonetheless it is one that we cannot ignore if the goal is to change students in ways that lead to independence. A concrete example of levels of learning you have likely experienced was what happened when you learned to drive an automobile. During the initial Awareness stage, you were learning the basics, such as how to start the engine, basic rules of the road, how to steer and brake the vehicle, and so forth. Someone, perhaps your parent, told you what to do (and what not to do), and modeled critical behaviors. During the Acquisition stage, you were mastering the basics of driving. This was the period when it seemed to you that there were a thousand things you had to think about, all at once. Although you managed to learn to parallel park, it probably took you several tries to do it well. You probably had a slightly frightened, slightly amused parent sitting next to you, coaching and providing feedback as you practiced various maneuvers. Gradually, your learning shifted to the Proficiency stage. Here, you practiced driving at every opportunity, gradually moving from very controlled situations (e.g., driving in parking lots or down dirt roads) to driving on highways, and eventually, fast-moving freeways. The more you drove, the easier it seemed to get, and the ready you were to take on more challenging driving conditions. Eventually, it got to the point where much of what was involved in driving an automobile was automatic – that is, you just did it without thinking about it. You reached the Generalization stage of learning when you got your driver's license and no longer needed coaching to help you master the basics of driving, although you probably welcomed a bit of advice from an expert when driving conditions were particularly unusual. During this stage, you used all of the generic driving techniques you had developed to this point as a basis for independently developing specialized driving skills, such as how to drive in bad weather, how to drive in fast-moving heavy traffic, how to drive different kinds of vehicles, and so forth.

- Objectives

During the first phase, Awareness, students develop an understanding of what the skill is, what the steps are to performing the skill, why the skill will be a useful tool to them, and when it can be used. When introducing the skill during this phase, one of the best tactics is to provide a very clear explanation of the skill with particular attention to the specific steps involved when performing it. At this stage of learning, instruction from you regarding how to perform the skill should be direct and explicit – that is, tell students how to perform the skill and model what it looks like.

Think out loud to show students the covert processes that are involved when performing the strategy. As you model the skill, be sure to explicitly label each step as you perform it.

- Definitions
- Summary

There has been renewed interest in the role of strategies in sensorimotor learning. The combination of new behavioral methods and computational methods has begun to unravel the interaction between processes related to strategic control and processes related to motor adaptation. These processes may operate on very different error signals. Strategy learning is sensitive to goal-based performance error. In contrast, adaptation is sensitive to prediction errors between the desired and actual consequences of a planned movement. The former guides what the desired movement should be, whereas the latter guides how to implement the desired movement. Whereas traditional approaches have favored serial models in which an initial strategy-based phase gives way to more automatized forms of control, it now seems that strategic and adaptive processes operate with considerable independence throughout learning, although the relative weight given the two processes will shift with changes in performance. As such, skill acquisition involves the synergistic engagement of strategic and adaptive processes.

At a high school track meet in 1963, an athlete from Oregon changed the face of high jumping by falling, figuratively and literally, into a new technique.¹ Dick Fosbury had struggled to clear even modest heights using the "Western Roll," the popular technique at the time, in which the athlete extends his chest over the bar. After several embarrassing performances, Fosbury reverted to an antiquated scissors technique in which he simply hurdled sideways over the bar. On one attempt, he leaned back, thrusting his hips over the bar, and landing on his back. Not only did he clear the bar, but with subsequent jumps, he began to exaggerate this technique, fully throwing his back over the bar. By the end of the tournament, he had increased his personal record by half a foot. Although this improvement initially brought him up to the level achieved by top performers who were using the Western Roll, Fosbury went on to refine the technique over subsequent years, with his crowning achievement being a gold medal at the 1968 Olympics in Mexico City. Within a few years, nearly all jumpers had adopted the technique that to this day bears his name, the Fosbury Flop. Fosbury's success led to a paradigm shift in the high jumping world. The impact of his technique was similar to that observed with other major innovations in high jumping (Fig. 1). The progression of world records

generally shows a cyclical pattern. After the introduction of a new technique, there is a period in which the world record climbs in a steady manner over a relatively short period, followed by a rather lengthy plateau. Indeed, the current plateau of the Fosbury era has lasted since 1993, when Javier Sotomayor of Cuba cleared 2.45 m. The history of high jumping establishes the theme for this review. When we think about motor skills, we typically focus on the performer's ability to execute a movement: how an exceptional quarterback has a rocket arm, or how the star tennis player gets such extraordinary power on her twohanded backhand. Missing from much of this discussion, however, is the role of insight and strategy. What led Fosbury to try going over the bar backward? How does the application of a cognitive strategy change performance and ultimately affect learning? Studies of motor learning give little consideration to the role of cognitive strategies, in part because such processes are generally hard to formalize and are often variable. We address this limitation in this review and highlight experimental methods that have sought to directly assess the contribution of cognitive strategies in sensorimotor adaptation. We then discuss how computational models can incorporate such processes, and provide a means to understand quantitatively the contribution of cognitive processes to motor learning. Stages of learning Fitts and Posner² proposed a model of skill acquisition that centered on three stages. In their nowclassic theory, performance was characterized by three sequential stages, termed the cognitive, associative, and autonomous stages (Fig. 1B). The cognitive stage marks the period in which the task goals are established and used to determine the appropriate sequence of actions to achieve the desired goal. Learning at this stage generally involves the use of explicit knowledge. For Fosbury, the decision to go over the bar backward would constitute the cognitive stage. Once the action sequence has been determined, the learner enters the associative stage in which attention may be focused on specific details of the sequence, determining the appropriate subparts and transitions. This stage may require some exploration of the solution space, perhaps with one segment being overhauled to ensure that the overall action is executed in a smooth and coordinated manner. Although Fosbury pioneered the idea of leading with his back, other jumpers came along to refine this general strategy and develop the proper foot placement, timing, and body orientation. The final stage of learning is the autonomous stage, the phase in which the action is practiced to hone performance into an automatized routine. For high jumping, we might say that Fosbury and his peers guided a generation of jumpers through cognitive and associative stages. But each of these individuals must put in the countless hours of practice required for elite performance that results from the autonomous stage. More generally, learning curves across a wide range of tasks show a general shape that conforms to the basic model of Fitts and Posner.² There is an initial phase marked by rapid improvements in performance, followed by a more gradual phase in which performance gains accrue much more slowly.

Numerous theories have been proposed to account for these functions.^{3,4} In the Fitts and Posner² model, the emphasis is on a shift in control in which initial, explicit control gives way to more routinized forms of control. Other models have emphasized that these functions may reflect the parallel operation of multiple processes. Logan⁵ introduced a theory in which execution reflected a horse race between an algorithmic, explicit process (akin to the cognitive stage) and a memory-retrieval process. Although both processes were assumed to operate at all stages of performance, a shift in their relative contribution naturally arises over time as the memory base builds up. Psychological theories such as those of Fitts and Posner² or Logan⁵ offer a general framework for understanding skill acquisition functions. Similar learning functions are observed in studies of sensorimotor adaptation. This work has spawned a rich computational literature in which performance changes are analyzed from an engineering perspective grounded in ideas related to control systems. However, this new modeling perspective has just begun to address the role of cognitive processes during motor learning, processes that were inherent in the models of Fitts and Posner² and Logan.⁵

Sensorimotor adaptation A common method to study motor learning is to introduce a perturbation into the experimental context. Participants must learn to compensate for these perturbations to re-achieve a high level of performance. The perturbation introduces an error between a motor command and a desired outcome. This error signal serves as input used to update an internal model, a mapping between a desired goal and the motor response necessary to achieve that goal (Fig. 2A). In this manner, the mapping is re- fined to adjust the motor commands. In general, the goal is assumed to remain constant; for example, the high jumper always wants to clear the bar. Failure to achieve this goal may lead to changes in performance, such as a modification in the takeoff angle or timing of the initial thrust. A wide range of experimental paradigms has been employed to study sensorimotor adaptation. One popular task involves a visuomotor rotation in which the visual feedback indicating hand position is perturbed (Fig. 2B). Visuomotor adaptations are common in everyday life. For example, using a computer mouse requires learning the mapping between the hand-held device and the position of a cursor on a computer screen. In the experimental context, this mapping can be perturbed. In many studies the input–output relationship between a device such as a mouse or joystick is altered. In other conditions, participants make reaching movements in which the hand is not visible, and a cursor is used to provide feedback. The natural mapping between the hand and space is distorted. In a visuomotor rotation, feedback of the hand position is adjusted in a rotational manner. The rotations typically take on values ranging between 30° and 60°. 6–9 This task is nicely situated to examine the interaction of action selection and motor execution. Participants readily adapt to visual perturbations, showing a reduction in target errors with training. Adaptation proceeds in a gradual manner, in which the learning function typically conforms to

an exponentially decaying function. This pattern is consistent with the hypothesis that an error signal is used to continuously adjust the visuomotor mapping, with the magnitude of the change proportional to the error. Thus, large errors observed early in training produce relatively large changes in performance compared to the effects of small changes that occur late in training. After training, the visuomotor rotation is removed and the original environment is reinstated. This induces a pronounced aftereffect with errors now occurring in the opposite direction of the initial distortion. If feedback is provided, the learning process is repeated to “wash out” the effects of the altered sensorimotor mapping and restore the original mapping. The presence of an aftereffect is considered the hallmark of true adaptation. Performance gains (e.g., reduced error) are also possible from the implementation of a strategy or a change in the selected action; however, in either case, an aftereffect should either be absent or diminish rapidly. The term “motor learning” generally encompasses changes that may entail a combination of the alteration of a sensorimotor map from adaptation and performance gains resulting from other, nonadaptive processes.

Movement strategies In the typical visuomotor adaptation study, the perturbation is suddenly introduced after a baseline period of training. On the first trial, the participant will be surprised to see a large error. For example, if feedback is only presented at the endpoint of the movement, the participant suddenly sees feedback indicating an error of 30°. Although one trial may be written off as a chance event, the repetition of this error with subsequent trials leads many participants to become aware that the environment has been perturbed. This awareness suggests an alternative account of visuomotor adaptation: the participant may adopt a strategy to aim their movement in the direction opposite the rotation. It is generally assumed that strategy-based learning is not a major contributing factor in visuomotor adaptation. First, the learning function during the washout period is similar in form, albeit with a steeper learning rate, than that observed during the initial learning phase. If the participant were employing a strategy, one would expect washout to occur in a more or less categorical manner. That is, the participant could simply choose to not apply the strategy to again establish the normal sensorimotor mapping. Nonetheless, although learning may involve more than the instantiation of a strategy, it is important to recognize that there may be a contribution to performance from strategic processes. More importantly, it is important to consider how a strategy, if employed, influences processes involved in sensorimotor adaptation. As an everyday example, consider how people adjust their behavior when riding on a crowded city bus. If forced to stand, one might cocontract the leg muscles to increase stiffness, making the legs (and person) resistant to small and unexpected changes in acceleration. Although this strategy can be effective, it is energetically wasteful. An alternative, more adaptive procedure is for the motor system to predict upcoming perturbations. Suppose both processes are operative. How does the utilization of the cocontraction

strategy influence motor adaptation? If we assume the input to the adaptation system is a motor error, the adaptation system may work in a suboptimal manner because the motor error is significantly reduced by cocontraction. Is the adaptation system able to incorporate information about the level of cocontraction in its computations? Or does this system operate in a modular manner, ignorant of the context created by the decision of the person to stiffen the limbs? One approach to exploring these questions is to compare conditions in which participants are either aware or unaware of an experimentally induced perturbation.^{10,11} As noted above, in the standard visuomotor adaptation task, a large rotation is abruptly imposed. This produces both a large error signal and, in many situations, creates a situation in which the participants are aware that the environment has been altered. Alternatively, the perturbation can be introduced in small increments, such as 1° every 10 trials, with the full 90° rotation only achieved after 300 trials (Fig. 3A). Under these conditions, participants generally have no awareness of the perturbation because the induced visual error is within the bounds of the variability associated with the motor system. Adaptation occurs in a continuous manner under these conditions, preventing the small errors from accumulating to a level that is noticeable (Fig. 3B). By the end of training, the performance of the participants is similar. However, when the rotation is switched off, the aftereffect is generally smaller for participants in the abrupt condition.¹⁰ Moreover, when participants gain knowledge of the rotation through self-inference or instruction, performance is associated with large trial-by-trial variance and longer reaction times, at least in the early stages of adaptation.

In most experimental paradigms, the use of a strategy during motor learning is the prerogative of the participant; the experimenter can only infer strategy use from the behavior. Mazzoni and Krakauer²³ introduced a novel method to directly address the effect of strategy use on visuomotor adaptation. The workspace consisted of a display of eight visual landmarks, spaced 45° apart. On each trial, a visual target appeared at one of the landmarks. Participants were initially trained to reach directly to the target. After this baseline phase, a 45° counterclockwise rotation was introduced (Fig. 4A) and large visual errors were experienced for two trials. The experimenter then instructed the participant to use a strategy to counteract the rotation, aiming 45° in the clockwise direction to the neighboring landmark (Fig. 4B). The strategy was immediately effective, counteracting the visual error. Surprisingly, as training continued, performance deteriorated: the movement endpoints drifted over trials in the direction of the strategy. That is, the heading angles were greater than the instructed 45° (Fig. 4C). Thus, the participants' performance became worse with increasing practice (Fig. 4D). What can account for this puzzling effect? Why would the system continue to change despite good on-target performance? Mazzoni and Krakauer²³ proposed that this phenomenon

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UNIT 2: PRINCIPLES OF TEACHING

- Introduction
- Objectives
- Definitions
- Summary
- Revision
- Assignment/Activity
- Points For Discussion And Clarification
- References / Further Readings

- Introduction

The Principles of Learning and Teaching P-12 were developed as part of the Blueprint for Government School's Flagship Strategy 1. They are designed to support teachers in working with the Victorian Essential Learning Standards, another key component of this Flagship Strategy. The Victorian Essential Learning Standards details the knowledge, skills and behaviours that today's students will need to live fulfilling and productive lives. The Principles focus on the teacher's role in creating and maintaining a learning environment most conducive to meeting students' needs. The Principles can be used independently by schools in a variety of ways. They also form the basis of the structured Principles of Learning and Teaching P-12 (PoLT) program which schools may choose to implement.

- Objectives

There has been an increasing focus over the past 10 years in Victoria and elsewhere on how students learn, and the implications of this for pedagogy. The Middle Years Research And Development (MYRAD) project research showed that different

teaching approaches often result in substantial differences in both the ways students approach their learning and in the quality of that learning. The Quality Schools Project and the Schools for Innovations and Excellence initiative have both provided opportunities for teachers to collaboratively reflect on practice in ways that would improve learning. Indications from schools involved however, are that it can be difficult to find a fruitful way to structure reflection on practice because learning and teaching are complex, multifaceted and highly interconnected activities. The Principles were developed to provide a structure to help teachers find a focus for their professional learning. They have evolved from similar sets of principles (or components as they were then referred to) developed as the basis for the Science in Schools (SIS) and the Middle Years Pedagogy Research and Development Project (MYPRAD). The Principles of Learning and Teaching P-12 are however applicable across all key learning areas and all stages of learning

It is clear from research that there is no single 'right' or 'best' way to teach and it is important to recognise that the Principles are not an attempt to mandate a single 'one size fits all' approach. However, there is an increasing recognition of the importance of classrooms that can be characterised as 'learning communities'. In these classrooms, there is an emphasis on building rich meanings for ideas rather than completing tasks. Students in these classrooms are intellectually engaged, and they feel a sense of collaborative partnership with their peers and their teachers. Classrooms like these are extremely rewarding places to teach and learn in.

- Definitions

WHAT ARE THE PRINCIPLES? The Principles comprise six statements about the quality learning and teaching practices required for building effective learning communities. Each of these statements is accompanied by a subset of components that describe the teacher's role in relation to each statement. Whilst they have been developed through extensive consultation they are not, of course, incontestable. They are designed to be interpreted and interrogated against particular learning contexts and in this way to stimulate reflection and conversations about pedagogy that will provide starting points for practitioner research. Meanings of the Principles will be constructed differently by different groups of teachers as they connect them to specific examples of classroom practice. The Principles are not standards or curriculum statements. They do however provide an effective basis for discussions about pedagogy amongst teachers who are jointly responsible both for delivering the curriculum and ensuring that their students reach the standards expected. The Principles focus on what teachers should do but they also flow from core beliefs about learning (eg 'All children can learn').

WHAT IS PEDAGOGY? Pedagogy involves much more than its most obvious component, the tasks that teachers set. It includes the ways in which teachers interact with students; that is how they question and respond to questions, use students' ideas and respond to students' diverse backgrounds and interests. It includes the social and intellectual climate that teachers seek to create and the types of learning that they set out to promote. It also includes the decisions they make about framing the content around a series of tasks to be completed or as key ideas and skills that are revisited and built on. Teachers also need to think about how they link and sequence activities and how and what they assess. Professional learning teams will have rich and productive conversations and plan more effectively when they consciously address the many aspects of pedagogy described above.

- Summary

One of the challenges faced by professional learning teams in conducting these conversations about pedagogy is that much of it is tacit. A teacher may share an innovative activity s/he has designed, but may not include subtle changes in some teacher behaviours that are crucial to its success. This means that when other teachers try it things may not be as successful. The thinking that informs teachers' actions and decision making is complex. Making this thinking explicit to oneself and other teachers in a range of ways can be very helpful to the development and sharing of practice. There is a growing recognition in the research literature of both the importance and the richness of the different types of knowledge generated by skilled teachers and of the difficulty of articulating and documenting such knowledge.

The Principles provide a scaffold for teachers to assist them in making explicit both the obvious and the more tacit aspects of their practices. They offer a stimulus for discussion and the sharing of experiences in ways oriented more toward articulating, sharing and documenting all aspects of pedagogy rather than just 'good activities'. Key considerations Sustaining good professional learning in busy schools requires careful planning and an on-going commitment to its importance. There are a number of considerations for schools and teachers planning to use the Principles to promote effective professional learning. These considerations have been addressed within the structured PoLT program offered to schools. 1. Teacher ownership Teachers need to own their professional learning. This includes deciding on goals and determining how these might be achieved, and the desired timeframe. The PoLT program provides a structure for thinking about practice designed to help teachers set their own goals and develop action plans to explore issues that matter to them. Experience has shown that it can be very rewarding for teachers to feel a

sense of personal progress in achieving classroom change. 2. Teachers as generators of knowledge Whilst there is a role for external ideas and partnerships with others, the most meaningful professional learning is done by and with teachers, not to teachers. The PoLT program is underpinned by a shift in thinking about professional development away from models that position teachers as the receivers of knowledge developed by others. This shift is a key reason for government support in the last few years for initiatives that encourage teachers to engage in action research. 'Action research' refers to a process in which practitioners, often in collaborative groups, research their own practice through a cycle of identifying an area of interest or concern, developing and trialling a relevant intervention, reflecting on the outcome, reframing, elaborating or extending the original concern and developing a further intervention. The 'research' goals do not remain fixed, but evolve and change as the teachers learn more about their own practice. Teachers may begin with questions that act as prompts for inquiry and research. For example, How can we formally encourage students to link ideas in their learning? What tasks will enable them to do this effectively? How do we get them to do this independently? The questions should be quite specific and provide a clear impetus for innovation but not be so narrow as to be limiting. This type of questioning can sustain professional conversations and learning over a long period of time.

- Revision

Teachers cannot be expected to create a vigorous community of learners among students if they have no parallel community to nourish themselves. Group support and stimulation is critical for professional learning. An effective professional learning team provides time and space for the cycle of reflective practice; it promotes the social construction of new knowledge as existing ideas are shared and new ones emerge from within the group. It also stimulates and supports innovation and risk taking. Meetings and professional conversations matter. However, discussions where good ideas are shared without an explicit and agreed purpose generally wind down before any clear goals have been established. There is often little response possible beyond 'That was a good idea'. In contrast, when a group has developed shared purposes, the successful experience or idea can be questioned (in an affirming way) against how and why it met one of these purposes such as students taking responsibility for their learning (Component 2.1). The Principles provide a starting point for identifying and clarifying shared goals and purposes as well as providing a scaffold for later reflection. 4. A willingness to question existing practice Most experienced teachers will get through their teaching week without crisis. The student learning agenda is not about resolving crises. It is about teachers identifying and sharing areas of apparently successful practice where they would like to do better. The Principles, together with an associated component mapping process that forms part of the structured PoLT program provide a

framework and process that helps teachers do this. Questioning of practice cannot be forced. It flows from teachers being willing to inquire into their practice. The following reflection raises questions about two aspects of practice that offered new challenges to the teachers concerned. Asking good questions and higher order thinking are intertwined. We need to value the questions students ask and encourage it in our assessment. [we should] value, questions not answers. (I&E Cluster Meeting) These teachers realised that they needed to be seen to be genuinely valuing (and using) students' questions. This inevitably leads to classrooms that are more fluid, responsive and hence unpredictable and raises interesting challenges for their practice. They went further and set out to see if and how they could value question asking in their assessment. The teachers challenged their existing practice, but did so in a way that provided them with an opportunity to achieve further affirming progress as they developed and shared ways of meeting this new challenge.

Attempts at educational change have not been successful when they assume that teachers and students can and will make immediate and large scale changes to how they operate in classrooms. The Principles are intended to help teachers select a focus that matters to them and to begin and sustain a cycle of trying something new - with a purpose - in one aspect of pedagogy and then building on this for other, incremental changes. This is very different from following a prescriptive set of materials. It positions teachers not as technical implementers of overly neat packages, but as genuine professionals, valuing the authority of their experiences and taking charge of their practice.

- Assignment/Activity

POINTS FOR DISCUSSIONS / CLARIFICATION

After going through the unit you may like to have further discussion on some points and clarification. Note down those points:-

- **References / Further Readings**

THE PRINCIPLES OF LEARNING AND TEACHING P-12

UNIT 3: MULTI-SENSORY APPROACHES – MONTESSORI METHODS, VAKT METHOD, ORTON - GILLINGHAM METHOD, AUGMENTATIVE AND ALTERNATIVE COMMUNICATION

- Introduction
- Objectives
- Definitions
- Summary
- Revision
- Assignment/Activity
- Points For Discussion And Clarification
- References / Further Readings

- Introduction

Most students on the autistic spectrum learn best through visual or multi-sensory presentations, and thus they are not likely to do well in a traditional classroom, where material is commonly presented verbally to the entire class at once. In a Montessori environment, children have an opportunity to learn through hands-on

explorations, research, and experimentation instead of abstract verbal instruction. Montessori instructional materials are scientifically based and incorporate built-in mechanisms for self correction. They are rich in content, and physically appealing, and enable each child to express her individual sensory preference and sensory style of learning. These materials are indispensable in mastering abstract concepts and are in many ways superior to materials used in ABA drills, which tend to be basic and repetitive.

The effectiveness of combining the Montessori method with a Multisensory Structured Language (MSL) Therapy approach to introducing written language to children at-risk for specific learning disabilities is assessed. At-risk children were identified with a battery of tests which indicated a pattern normal intellectual ability; below average performance on tests of visual and auditory perceptual skills; and deficits in coordination, language and/or attention. Combining Montessori and MSL methods reduced processing errors and enhanced beginning reading skills in at-risk children. Pre and post data comparisons revealed statistically significant gains on verbal intellectual measures, the Draw a Person Test (Goodenough Harris Scale), visual-motor perception tests, upper and lower case recognition, sound/symbol correspondence, and blending sounds into words. Though significant gains were achieved, we suggest continuing language therapy for at-risk children through the early elementary grades. Specific modifications in Montessori presentations for at-risk children are suggested.

The preschool child who is at-risk for specific learning disabilities (Brutten, Richardson, and Mangel 1973; Critchley 1964; Shedd 1967) has deficits in attention, organization, motor skills, perception, and concept formation, and may evidence weaknesses in oral and written language. In *Succeeding Against the Odds* the author states "Public Law 94-142, the Education for All Handicapped Children Act, defines learning disability as 'a disorder in one or more of the basic psychological processes involved in understanding and using language, spoken or written,

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- Objectives

From observations in this children's center, she expanded her ideas about the critical components of a pre-school program. She advocated a "prepared environment" with materials appropriate to the size of the children. To devise this richly "prepared environment," Dr. Montessori clearly delineated the areas of learning, invented materials to present each concept, and wrote detailed descriptions of how each concept could be demonstrated to the child (Montessori 1967). Each presentation proceeded from simple to complex and from concrete to abstract. The classroom teacher presented each activity and invited each child to imitate the task. Young children learn by imitation, and the activities she presented focused each child's "absorbent mind" on interactions with the environment she prepared. Montessori believed that each child passes through many "sensitive periods" for learning certain

skills. Between birth and five years of age (Montessori 1967), each child's development proceeds in a different way at a different rate. Therefore, she let the child choose activities as much as possible, trusting that the child's sensitive periods would guide the work for which he is ready. The teacher follows the child through these basic sensitive periods, guiding as much as she is actually needed. For this "match" system to work, both a clear classroom structure and an observant teacher are needed.

A child's work, Dr. Montessori wrote, "is to create the man he will become. An adult works to perfect the environment but a child works to perfect himself" (Montessori 1967). The Montessori Curriculum encompasses nine basic disciplines divided into four major areas of concentration: Practical Life, Sensorial, Language, and Mathematics. These four major areas are complimented by Social Studies (Geography and History) and Science, and are enriched by art, music, and perceptual motor skills. The Practical Life curriculum includes skills which help the young child master care of self and environment. Motor development and interpersonal relationship skills are incorporated in these tasks. The Practical Life exercises have several primary aims: independence, improvement of eye-hand coordination, enhancement of fine motor skills, concentration, sense of order and sequence, as well as task completion. The Sensorial Curriculum provides a child with visual, auditory, tactile-kinesthetic, gustatory, and olfactory identification and discrimination. "Our senses are the tools for the perception of our surroundings. The environment reaches the individual through the use of the senses" (Montessori 1967). The senses are the receptors of information, the brain interprets the sensorial information, and the nerves transmit energy to the muscles which control movement. Through movement, information seeking (and hence learning) is practiced and refined. This understanding of sensori-motor learning was taken from Sequin (1907) who wrote "Perceptions are acquired by the mind through the senses not by the senses." Piaget also placed strong emphasis on the value of sensori-motor training in the child's cognitive development. "Sensorimotor intelligence lies at the source of thought, and continues to affect it throughout life through perceptions and practical sets ... The role of perception in the most highly developed thought cannot be neglected, as it is by some writers"

- Definitions

the levels of "just noticeable differences." The teacher presents contrast and gradation to the child. The child experiences ever closer discriminations within the sensory information. Attention to detail is enhanced. The importance of the Sensorial area is to refine and train the child's senses, allowing the child to establish

an order and to clarify what is sensed. These exercises teach the child to become a precise observer (that is, to contrast, gradate, and generalize) which leads to the abstraction of ideas and to logical thinking. The materials also expand the child's vocabulary. Terms (like large, larger, largest) are taught in a concrete way by feeling the differences. The child becomes more sensitive to the impressions of the environment and is able to distinguish, categorize, and relate new information to that already known. This is the beginning of cognitive development. Since the perceptual interpretations of the at-risk child may be faulty or variable, the use of this curriculum is beneficial in providing the child with experiences which ameliorate misperceptions. Without accurate discrimination, the child will be handicapped in categorizing and classifying their world. With increased discrimination, the child can categorize and classify more accurately and reasoning skills develop.

- Summary

Multisensory Structured Language Method (MSL) The Alphabetic Phonetic Structural Linguistic Approach to Literacy (APSL), written by Dr. Charles Shedd, was used in this study. The tenants of APSL were used as the basis for a specific manual for younger children (five-seven) in later early childhood studies. This age appropriate multisensory structured linguistic material was titled Sequential English Education (SEE). All multisensory structured linguistic therapy procedures have a core content which must be present. This content includes Phonology, Sound/Symbol Association, Syllabication, Morphology, Syntax, and Semantics. Direct instruction must be synthetic/analytical and proceed in a simultaneous multisensory process which is systematic, cumulative, and taught to automaticity. APSL and SEE present decoding through a word family approach. The letter g and the short vowel sound "a" are taught as the first letter in the series. The consonant Us taught and its sound "t" associated. Each letter and sound in the series is introduced in a procedure in which visual, auditory, kinesthetic and tactile senses are utilized in learning. When the "a" and "t" sounds are recognized, they are blended to make the word family "at." The next letters taught are other consonant sounds which allow the child to build a decoding vocabulary by reading the word family, adding the beginning sound, then blending the two sound units together to decode a word. The meaning of the word is immediately associated. This strategy is used for all short and long vowel word families in a linguistic hierarchy. The regular patterns of the language are mastered to 90% accuracy before proceeding to more complex irregular patterns as seen in vowels with land r, diphthongs, irregular vowel and consonant sounds. The entire series is in four manuals with an 18,000 word vocabulary base. The words in the series are taught to enhance reading, writing, and spelling. As each language pattern from the simplest pattern (CVC) to increasingly more irregular patterns are taught, the words for each pattern are

practiced in reading, writing, and spelling single words. Each lesson also includes reading the words of the designated patterns in sentences and taking sentence dictation. This requires the child to increase auditory discrimination and memory to proficiency. At the highest level of application, the child is required to create sentences and paragraphs using the word patterns being mastered at a level of independent written expression including punctuation and grammar.

Fernald's VAKT Method (1943) Step ONE - Ask the learner to suggest a word that he/she wishes to learn. Step TWO - The teacher then writes the word in large handwriting, speaking the word in a natural way as it is written Step THREE - The learner traces the word with his/her finger while speaking the whole word and being careful to begin and end speech and writing at the same time. Step FOUR - The learner does this as often as is needed, until he/she feels certain that he/she has learned it. Step FIVE - The learner then visualizes it and traces it in the air with his/her finger. Step SIX - The learner turns the word card over, takes another piece of paper and tries to write the word from memory, writing, and speaking at the same time Step SEVEN - The learner compares hi/her version of the word with the original model. Step EIGHT - In extraordinary cases a tray may be filled with moist sand, and the child may be urged to trace the word in the sand Step NINE - The words taught in this way should be reviewed daily in a short list with other words. In this way all modality

Over the last 30 years, a significant amount of research has compared the effectiveness of different approaches to teaching beginning reading to Adults. It consistently concludes that approaches that include a systematically organized and explicitly taught program of phonics result in significantly better word recognition, spelling, vocabulary, and comprehension (Chall et al ,1890) Reading Skills class depends on the mastery of specific subskills, I find it helpful to teach these explicitly. I organize the class into blocks of time in which, with the help of two volunteers, I directly teach eight components of reading: phonological awareness, word analysis, sight word recognition, spelling, oral reading for accuracy, oral reading for fluency, listening comprehension, and writing. These components embody the skills and strategies that successful readers have mastered, either consciously or unconsciously. My lesson plan also includes an intensive writing component. For this reason, I directly teach the structure of the English language using a phonics-based approach. I draw from a number of phonics-based reading

programs, including the Wilson Reading System, the Orton-Gillingham System, and the Lindamood-Phoneme Sequencing Program). The Wilson Reading System is a multisensory, phonics-based program developed specifically for adults, who have difficulty with decoding (reading) and encoding (spelling). It is a complete curriculum that has 12 steps, beginning with phoneme segmentation. Its main goal is to teach students language and word structure through a carefully planned program. The program was developed in Massachusetts in the 1980s by Barbara A. Wilson, based on knowledge gained from working with adults with dyslexia using Orton-Gillingham methodology at Massachusetts General Hospital's Language Disorders Unit, and with students in an after-school reading clinic founded with her husband, Ed Wilson. The Wilson Reading System, published in 1989, is now commonly used in various settings throughout the United States and several other countries. Wilson Reading System is useful for one-to-one tutoring, in small groups, and in reading classes. There are two different vocabulary levels: The first one is the "Level A" which is appropriate for elementary, English-as-a-Second-Language and older students with inadequate vocabularies; and the second one is the "Level B" is appropriate for students who are beyond elementary grades with more complex vocabularies. The program incorporates five elements for teaching at-risk populations: phonemic awareness• direct instruction of word analysis, prosody and comprehension• coordination of reading and spelling instruction• intensive, cumulative instruction• teaching for mastery•

The second programme which I applied is The Orton-Gillingham program. It is a phonics-based program similar to the Wilson Reading System but designed for dyslexic children. Students learn about syllables much later in the program. I find particularly helpful the Orton-Gillingham technique for learning phonetically irregular sight words. Samuel Torrey Orton (1879–1948), a neuropsychiatrist and pathologist at Columbia University, brought together neuroscientific information and principles of remediation. As early as the 1920s, he had extensively studied children with the kind of language processing difficulties now commonly associated with dyslexia and had formulated a set of teaching principles and practices for such children. Anna Gillingham (1878–1963) was an educator and psychologist at Teachers College, Columbia University. Working with Dr. Orton, she trained teachers and compiled and published instructional materials. Gillingham combined Orton's teaching methods with her analysis of the structure of the English/American language and with Bessie Stillman, she wrote what has become the Orton-Gillingham manual: Remedial Training for Children with Specific Disability in Reading, Spelling and Penmanship. First published in 1935/6, this work is updated and republished regularly. This programme has five features such as: 1. Language-

based: The Orton-Gillingham approach is based on a technique of studying and teaching language, understanding the nature of human language, the mechanisms involved in learning, and the language-learning processes in individuals. 2. Multisensory: Orton-Gillingham teaching sessions are action-oriented and involve constant interaction between the teacher and the student and the simultaneous use of multiple sensory input channels reinforcing each other for optimal learning. Using auditory, visual, and kinesthetic elements, all language skills taught are reinforced by having the student listen, speak, read and write. For example, a dyslexic learner is taught to see the letter A, say its name and sound and write it in the air – all at the same time. The approach requires intense instruction with ample practice. The use of multiple input channels is thought to enhance memory storage and retrieval by providing multiple "triggers" for memory. 3. Structured, Sequential, and Cumulative: The Orton-Gillingham teacher introduces the elements of the language systematically. Sound-symbol associations along with linguistic rules and generalizations are introduced in a linguistically logical, understandable order. Students begin by reading and writing sounds in isolation. Then they blend the sounds into syllables and words. Students learn the elements of language—consonants, vowels, digraphs, blends, and diphthongs—in an orderly fashion. They then proceed to advanced structural elements such as syllable types, roots, and affixes. As students learn new material, they continue to review old material to the level of automaticity. The teacher addresses vocabulary, sentence structure, composition, and reading comprehension in a similar structured, sequential, and cumulative manner. 4. Cognitive: Students learn about the history of the English language and study the many generalizations and rules that govern its structure. They also learn how best they can learn and apply the language knowledge necessary for achieving reading and writing competencies. 5. Flexible: Orton-Gillingham teaching is diagnostic and prescriptive in nature. Teachers try to ensure the learner is not simply recognising a pattern and applying it without understanding. When confusion of a previously taught rule is discovered, it is re-taught from the beginning. The third approach which I have mentioned above is The LiPS Program. It is useful for helping students acquire an awareness of individual sounds in words. This ability, referred to as phonemic awareness, is a prerequisite for reading and spelling. A primary cause of decoding and spelling problems is weak phonemic awareness, the ability to think about sound (phonemes) within words. A significant number of students- even those who have received phonics instruction- only perceive words as a whole, and can't tell what the component sounds are and their order. Thus, they can't figure words out, and must memorize or guess from context. LiPS (formerly known as Auditory Discrimination in Depth) provides theory and methodology for successfully developing phonemic awareness. The program begins with discovering how speech sounds are articulated, and extends into multisyllable and contextual reading and spelling. LiPS uses a

multisensory approach for increasing knowledge of letter symbols and their accompanying sounds. In particular, LiPS teaches children to identify sounds from the feedback from the positions of their lips, tongue, and jaw to help them discriminate sounds from each other. Hands-on instruction with use of manipulatives is incorporated to assist children in combining sounds into words for reading and spelling

2. Literature Review

Phonological awareness, which involves the ability to differentiate and manipulate the individual sounds, or phonemes, in words, is the strongest predictor of future reading success for children (Adams, 1995). No research exists that describes the affects of phonological awareness on reading for adults. However, I have found that teaching phonological awareness to my certificate-reading adults significantly improves their reading accuracy and spelling, especially for reading and spelling words with blends. Three phonological tasks that I use with my students, in order of difficulty, are auditory blending, auditory segmenting, and phonemic manipulation. Auditory blending involves asking students to blend words that the teacher presents in segmented form. For example, I say "/s/-/k/-/i/-/r/-/t/" and the students responds with "/splash/". Auditory segmenting is exactly the opposite. I present the word "/sprint/" and the student must segment the word into its individual sounds "/s/-/k/-/i/-/r/-/t/" Phonemic manipulation, which is the strongest predictor of reading acquisition, is also the most difficult. The student must recognize that individual phonemes may be added, deleted, or moved around in words. The following exchange is an example of a phonemic manipulation task. I ask the student to repeat a word such as "sand". Then I ask the student to say the word again, changing one of the phonemes. For example, "Say it again without the "/l/". The student responds with "/sink/". While phonological awareness does not include the student's ability to associate sounds with letter symbols, and tasks are presented orally, the research concludes that the most effective way to promote phonemic awareness is in conjunction with the teaching of sound-to-symbol relationships (Torgesen, 1998).

1.1 Word Analysis with Syllable Pattern Word analysis, or phonics, involves teaching the alphabetic principle: learning that the graphic letter symbols in our alphabet correspond to speech sounds, and that these symbols and sounds can be blended together to form real words. Word analysis strategies enable students to "sound out" words they are unable to recognize by sight. Explicit, direct instruction in phonics has been proven to support beginning reading and spelling growth better than opportunistic attention to phonics while reading, especially for students with suspected reading disabilities (Blackman et al., 1984; Chall, 1967, 1983). Beginning

readers should be encouraged to decode unfamiliar words as opposed to reading them by sight, because it requires attention to every letter in sequence from left to right. This helps to fix the letter patterns in the word in a reader's memory. Eventually, these patterns are recognized instantaneously and words appear to be recognized holistically (Ehri, 1992; Adams, 1990). I use the Wilson Reading System to teach phonics because the six syllable types are introduced early on. This enables even beginning-level adults to read words that are part of their oral vocabulary and overall cognitive abilities. After learning the closed syllable rule, for example, students are able to read three-syllable words such as "Wisconsin," "fantastic," and "Atlantic." Reading multisyllabic words provides my students, who have acquired a history of reading failure, with an unexpected sense of accomplishment and opens possibilities for them. Recognizing syllable types is important because the syllable pattern determines the sound of the vowel and how the word must be pronounced. [Insert Table 2 here] I have found that the Wilson Reading System Sound Tapping technique is a particularly effective way to teach decoding. In this technique, each sound in a word is represented by one tap. Students tap the first sound with their index finger and thumb, the second sound with their middle finger and thumb, the third sound with their ring finger and thumb, etc. If the student runs out of fingers, he or she returns to the index finger. Digraphs - two letters that make one sound (/sh/, /ch/, /th/, /ck/, /ph/) - are represented with one tap. Example: bed = 3 sounds, 3 taps; shed = 3 sounds, 3 taps; stint = 5 sounds, 5 taps. This technique helps students to hear all the sounds in a word.

2.2 Memorization through Visualization "Sight Word" Recognition

I have experienced some success in teaching sight words using the Visual-Auditory-Kinesthetic-Tactile (V-A-K-T) method that is part of the Orton-Gillingham program. The VAKT method, which emphasizes memorization through visualization, involves asking the student to say the name of each letter in a word and to trace each letter with his or her finger in the air before covering the word and attempting to spell it on paper. The VAKT method may be used to help students with both the reading and spelling of phonetically irregular words. Since many of the words that appear most frequently in print are phonetically irregular, even beginning readers must learn to recognize some words by sight. Students with reading disabilities have typically relied almost entirely on their ability to memorize words. In most cases, however, their strategies for remembering the way words look in print have proved ineffective. To avoid unnecessary frustration, it is best to tell beginning readers which words they should decode and which words they must recognize by sight. Effective technique for the spelling of phonetically regular words is the LiPS technique. This involves asking students to put down a poker chip for each sound they hear. After identifying the correct number of sounds in the word, students locate the vowel sound and place a different-colored chip over the chip that represents the vowel sound. Only after they have identified the sounds and isolated

the vowel sound are students asked to select the letter symbols that represent the sounds in the word. Nonsense words require the student to use word attack strategies as opposed to sight recognition. Spelling is an effective way to reinforce both word analysis skills and automatic word recognition. Research consistently indicates that fluent, skilled readers (both children and adults) make use of spelling patterns when they read and, conversely, reading itself reinforces a knowledge of spelling patterns (Adams, 1995).

tegrating IMSE's Orton-Gillingham (OG) methodologies in the classroom requires organization and preparation. It also requires ongoing assessment and lesson plan customization. Interactive OG - IMSE's Orton-Gillingham Lesson Planning and Assessment tool - allows teachers to plan their own lessons, store and share lesson ideas, assess students individually and as a class, and pull from a resource of masters from IMSE's Comprehensive Training. This technology supports teachers in every aspect of integrating IMSE's OG into the classroom, keeping them organized and prepared. With Interactive OG, teachers enter the classroom armed with a full set of tools and can concentrate on truly driving reading excellence in every child.

IMSE's Orton-Gillingham (OG) is astoundingly powerful when used for reading remediation, however the multisensory component impacts all children. The uniqueness of this type of instruction is that it allows the educator to capitalize on an individual student's dominant learning modality, while delivering instruction that will strengthen the remaining learning pathways. The IMSE approach allows teachers to incorporate into their daily lessons the five components essential to an effective reading program: phonemic awareness, phonics, vocabulary development, fluency, and comprehension strategies. Our method works to support teachers' current reading programs instead of disrupting it. It is an additional tool to incorporate into your literacy instruction, and since it's integrated in the general classroom, it's flexible enough to fit the needs of all types of learners.

The Orton-Gillingham Approach to reading instruction was developed in the early-20th century.

It is language-based, multisensory, structured, sequential, cumulative, cognitive, and flexible.^[1]

The Orton-Gillingham Approach has been in use since the 1930s. An intensive, sequential phonics-based system teaches the basics of word formation before whole meanings. The method accommodates and utilizes the three learning modalities, or pathways, through which people learn—visual, auditory and kinesthetic. Unlike some scripted and rigid reading programs, the Orton-Gillingham Approach is a system that allows for flexibility.

Samuel Torrey Orton (1879–1948), a neuropsychiatrist and pathologist at Columbia University, brought together neuroscientific information and principles of remediation. As early as the 1920s, he had extensively studied children with the kind of language processing difficulties now commonly associated with dyslexia and had formulated a set of teaching principles and practices for such children.

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Features of the Approach[edit]

Language-based: The Orton-Gillingham approach is based on a technique of studying and teaching language, understanding the nature of human language, the

mechanisms involved in learning, and the language-learning processes in individuals.

Multisensory: Orton-Gillingham teaching sessions are action-oriented and involve constant interaction between the teacher and the student and the simultaneous use of multiple sensory input channels reinforcing each other for optimal learning. Using auditory, visual, and kinesthetic elements, all language skills taught are reinforced by having the student listen, speak, read and write. For example, a dyslexic learner is taught to see the letter A, say its name and sound and write it in the air – all at the same time. The approach requires intense instruction with ample practice. The use of multiple input channels is thought to enhance memory storage and retrieval by providing multiple "triggers" for memory.^[2]

Structured, Sequential, and Cumulative: The Orton-Gillingham teacher introduces the elements of the language systematically. Sound-symbol associations along with linguistic rules and generalizations are introduced in a linguistically logical, understandable order. Students begin by reading and writing sounds in isolation. Then they blend the sounds into syllables and words. Students learn the elements of language—consonants, vowels, digraphs, blends, and diphthongs—in an orderly fashion. They then proceed to advanced structural elements such as syllable types, roots, and affixes. As students learn new material, they continue to review old

material to the level of automaticity. The teacher addresses vocabulary, sentence structure, composition, and reading comprehension in a similar structured, sequential, and cumulative manner.

Cognitive: Students learn about the history of the English language and study the many generalizations and rules that govern its structure. They also learn how best they can learn and apply the language knowledge necessary for achieving reading and writing competencies.

Flexible: Orton-Gillingham teaching is diagnostic and prescriptive in nature. Teachers try to ensure the learner is not simply recognising a pattern and applying it without understanding. When confusion of a previously taught rule is discovered, it is re-taught from the beginning.

Research support[edit]

The Florida Center for Reading Research reported in 2006 that it was unable to identify any empirical studies examining the efficacy of the approach specifically as described in Orton-Gillingham training materials. Thus there was no direct research evidence to determine its effectiveness, although there are a variety of studies of derivative methods that incorporate aspects of Orton-Gillingham in combination with other techniques.^[3]

An overview of all reported studies of Orton-Gillingham derivative methods, such as Alphabetic Phonics or Project Read, revealed only a dozen studies with inconsistent results and a variety of methodological flaws. Despite these conclusions, the article does provide a detailed overview of the available research, which viewed most favorably would show some evidence of benefit from classroom use of OG methods with first graders, and use in special education or resource room settings with older children with learning disabilities.^[4]

In July 2010, a US Department of Education agency reported that it could not find any studies meeting its evidence standards to support the efficacy of Orton-Gillingham based strategies.^[5]

One study found it was effective for students who were English Language Learners.^[6]

Research has indicated the system is effective in remediating instruction for students with dyslexia.^[7] Although further research mentions that its efficacy is yet to be determined.^[8]

The Orton Gillingham Approach (the how)

Below is a summary of the detailed description of the Orton Gillingham method, as provided at the Academy's website.

Personalized

Recognizes the individual needs of learners. While dyslexic students share similarities, there are always differences between students. Dyslexics students often have additional problems that complicate learning such as attention deficit hyperactivity disorder (ADHD) or dysgraphia.

Multisensory

Uses all the learning strands: seeing, hearing, feeling (tactile), and awareness of motion (kinesthetic). For example, letters can be written in the air while the sound is said aloud. Even math can be multisensory!

Diagnostic and Prescriptive

It is diagnostic in the sense that the instructor continuously monitors the verbal, non-verbal, and written responses of the student in order to understand both the student's challenges and progress. This information is used to plan the next lesson. That lesson is prescriptive in the sense that it is designed to help resolve the

student's difficulties and build upon the student's progress noted in the previous lesson.

Direct Instruction

Lesson content includes explaining to students what is to be learned, why it is to be learned, and how it is to be learned.

- Revision
- Assignment/Activity

POINTS FOR DISCUSSIONS / CLARIFICATION

After going through the unit you may like to have further discussion on some points and clarification. Note down those points:-

Points for Discussion

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**UNIT 4: TEACHING STRATEGIES – TASK ANALYSIS,
CHAINING, SHAPING, MODELLING, PROMPTING, FADING
AND REINFORCEMENT, ROLE PLAY, PLAY WAY METHOD**

- Introduction
- Objectives
- Definitions
- Summary
- Revision
- Assignment/Activity
- Points For Discussion And Clarification
- References / Further Readings

- Introduction

Much of what is commonly claimed as ‘effective teaching practice’ and implemented during the early and middle years of schooling in Australian schools, for either mainstream students or for those experiencing learning difficulties, is not grounded in findings from evidencebased research. Of particular concern is that despite a lack of supporting evidence for its utility, the prevailing educational philosophy of constructivism (a theory of self-directed learning rather than a theory of teaching) continues to have marked influences on shaping teachers’ interpretations of how they should teach – aided and abetted by the content emphasis given during pre-service teacher education, as well as in-service teacher professional development programs. However, in contrast to teacher-directed methods of teaching there is strong evidence that exclusive emphasis on constructivist approaches to teaching are neither initially nor subsequently in the

best interests of any group of students, and especially those experiencing learning difficulties. Following a brief outline of controversies surrounding 'effective teaching practice', this paper focuses on teaching strategies that are demonstrably effective in maximising the achievement progress of students during the early and middle years of schooling. Further, key findings are presented from a recent national project designed to identify effective teaching practices for Year 4-6 students with learning difficulties in Reading and Numeracy, drawn from government, Catholic and independent schools. These findings indicate that since teachers are the most valuable resource available to schools, an investment in teacher professionalism is vital by ensuring that they are equipped with an evidence-based repertoire of pedagogical skills that are effective in meeting the developmental and learning needs of ALL students.

The objective of this experiment was to uncover the effects of innovative teaching techniques used by the grade 1 science teacher. The techniques the researcher used during this one month of experiment were: • Team projects • Individual projects • Field trip • Flash cards • Real objects • Audio- visual aids • Internet access • Computer assisted instructions • Role play • Work sheets • Smart Boards • Group discussions • Quizzes • Mind Maps

- Objectives

Teaching strategies have long generated debate and ideological controversy, especially as to 'best practice'. Two clear orientations have provided the basis for this controversy: direct (or explicit) instruction, and student-centred constructivist approaches. Whereas neither of these teaching methods alone (or their variants) is appropriate for engendering all types of learning (see: Purdie & Ellis, 2005; Westwood, 1999, 2006), the widespread and mostly unquestioning adoption of constructivist orientations towards teaching in most areas of the curriculum throughout Australian schools and higher education institutions is problematic. A key reason for this is that despite strong supporting evidence for the superior effects of teacher-directed approaches on student learning (i.e., direct instruction),² the philosophy of constructivism (a cognitive theory of learning rather than of teaching) has enduring influences on the content of teacher education courses (see: Louden et al., 2005a; Rohl & Greaves, 2004; Rowe, 2005a,b), supported by prescribed literature such as: Cambourne (2002); McInerney and McInerney (1998, 2002, 2006), as well as on the content of in-service teacher professional development programs. Moreover, constructivist approaches to teaching prevail as predominant methods throughout school systems in many western countries, and are given high prominence in the content of curriculum standards (or essential learning) documents currently provided by all Australian States and Territory government departments of education and training. However, there is a strong body of evidence that exclusive

emphasis on constructivist approaches to teaching are neither initially nor subsequently in the best interests of any group of students, and especially for those experiencing learning difficulties (see: Center, 2005; Farkota, 2003a, 2005; Moats, 2000; Swanson, 1999; Swanson & Deshler, 2003; Westwood, 1999; 2000, 2001, 2003a,b,c, 2004, 2006). For children from disadvantaged backgrounds who often do not have rich phonological knowledge and phonemic awareness upon which to base new learning, being taught under constructivist modes has the effect of compounding their disadvantage once they begin school (Munro, 1997, 1998, 1999, 2000a,b). This is particularly the case for children from non-English speaking backgrounds including Indigenous children, where English may be their second or third language. Indeed, Farkota (2005) argues that many cases of learning difficulty and related under-achievement can be attributed to inappropriate or insufficient teaching, rather than to deficiencies intrinsic to students such as cognitive, affective and behavioural difficulties, as well as their socio-cultural backgrounds and contexts, with constructivist approaches being major protagonists. A brief explication of constructivist approaches to teaching is warranted here.

- **Definitions**

Teaching methods that are described as ‘student-centred’ tend to be aligned with constructivism – an established and widely espoused theory of knowing and learning – can be traced to advocates of active and experimental methods reflected in the work of educational theorists such as Ausubel (1968), Bruner (1961, 1966), Dewey (1933), Piaget (1954), Rousseau (1762, 1979) and Vygotsky (1978). More recently, advocates of constructivism have coined various labels for constructivist approaches to both learning and teaching, including: ‘anchored instruction’, ‘situated learning’, ‘discovery learning’, ‘task-based learning’ and ‘scaffolding’ – each of which share many common features. Further, as noted by Westwood (2006): “‘problem-based learning’ (PBL) – also known as ‘issues-based learning’ – has gained popularity in recent years as a method for use in higher education, particularly in the medical, therapeutic and other professional fields where the ‘problem’ is often in the form of a ‘case study’” (p. 36). PBL encompasses many of the ‘student-centred’ approaches to teaching and learning for which the underlying rationale is essentially twofold: • students should be intrinsically motivated and actively involved in the learning process; and • subject matter studied should, as far as possible, be ‘authentic’, ‘interesting’ and ‘relevant’. The implicit assumptions underlying such rationale are that ‘intrinsically motivated’ learners, independent of explicit instruction provision, have acquired sufficient prior knowledge and skills (particularly basic literacy, numeracy and study skills) to engage effectively and productively for generating new learning in a given subject matter domain. The

compelling evidence that this is not the case for medical students in the acquisition of differential diagnostic skills, for example, applies equally for children learning to read, write, spell and undertake mathematical computation. In the case of medical students, the necessity of explicit instruction by subject matter experts for efficient knowledge acquisition in the basic sciences of anatomy, physiology, biochemistry and pathology is foundational. Similarly, for children learning to read, write, spell and compute, explicit instruction in the alphabetic principle of letter-sound relationships (especially in English) and the mathematical principles underlying computation in number operations, space and measurement, are also foundational to literacy and numeracy learning.

Despite strong evidence for the limitations of exclusive constructivist methods of teaching, they are widely endorsed and practiced. For example, in their opening chapter titled: *Effective teaching and learning—constructivist perspectives*, McInerney and McInerney (2006, p. 3) write: These approaches explicitly emphasise the intrapersonal dimensions of learning and, in particular, posit that knowledge is not transmitted directly from one knower to another, but is actively built up by the learner through child-determined exploration and discovery rather than direct teaching. These claims are extraordinary on at least two counts: (a) they are not supported by findings from a large body of evidence-based research,⁴ and (b) give rise to deleterious effects of educators absolving their professional responsibility to be instructionally effective in teaching foundational knowledge and skills (e.g., Creemers, 1994; Hattie, 2003, 2005; Muijs & Reynolds, 2001; Rowe, 2005b, 2006; Slavin, 1994).

The key element in constructivism is that the learner is an active contributor to the learning process, and that teaching methods should focus on what the student can bring to the learning situation as much as on what is received from the environment. This approach is expressed by Ausubel's (1968) contention that "the most important single factor influencing learning is what the learner already knows" (p. 332). Learning that builds effectively on the learner's current knowledge is said to be within the student's zone of proximal development (ZPD). The ZPD establishes what the learner already knows, and can do with minimal assistance by a teacher or peer – following which the individual is expected to undertake learning tasks independently. Hence, the role of the teacher is to be a facilitator of learning (rather than a director or an orchestrator), and to provide opportunities for individual learners to acquire knowledge and construct meaning through their own activities, and through discussion, reflection and the sharing of ideas with other learners with minimal corrective intervention (Cambourne, 2002; Daniels, 2001; McInerney & McInerney, 1998, 2002 2006; Selley, 1999; Von Glasersfeld, 1995). Sasson (2001,

p. 189) refers to constructivism as "... a mixture of Piagetian stage theory with postmodernist ideology" that is devoid of evidence-based justification for its adoption as an effective method of teaching. Similarly, in highlighting the inappropriateness of constructivism as an operational theory of teaching, Wilson (2005, pp. 2-3), posits: ... We largely ignore generations of professional experience and knowledge in favour of a slick postmodern theoretical approach, most often characterised by the misuse of the notion of constructivism. ... Australian operational views of constructivism ... confuse a theory of knowing with a theory of teaching. We confuse the need for the child to construct her own knowledge with a form of pedagogy which sees it as the child's responsibility to achieve that. We focus on the action of the student in the construction of knowledge rather than the action of the teacher in engaging with the child's current misconceptions and structuring experiences to challenge those misconceptions. ... The constructivist theory of knowing has been used to justify a noninterventionist theory of pedagogy, whereas it is a fair interpretation to argue that constructivism requires vigorous interventionist teaching: how, after all, is a student with misconceptions supposed to challenge them unaided? How does she even know they are misconceptions? We need, instead, a view of teaching which emphasises that the role of the teacher is to intervene vigorously and systematically; that is done on the basis of excellent knowledge of a domain and of student conceptions and misconceptions in that domain, assembled from high quality formative assessments; and that the purpose of the intervention is to ensure that the child's construction of knowledge leads her to a more correct understanding of the domain. These assertions by Wilson are consistent with expressed concerns that most faculties and schools of education in Australian universities currently providing pre-service teacher education base their programs on constructivist views of both learning and teaching.⁵ Westwood (1999), for example, highlights the results of a small South Australian study which found that most teachers (79%) had been strongly encouraged to use a constructivist approach in their initial teacher education courses and during in-service professional development programs. Even more notably, 67 per cent of the teacher trainees in this study indicated that constructivism was the only teaching approach to which they had been exposed in their teaching method courses. Commenting on these findings, Westwood (1999, p. 5) declares: At the same time as constructivist approaches have been promoted, direct teaching methods have been overtly or covertly criticised and dismissed as inappropriate, with the suggestion that they simply don't work and are dull and boring for learners. The message that most teachers appear to have absorbed is that all direct teaching is old-fashioned and should be abandoned in favour of student-centred enquiry and activity-based learning.

- Summary

In commenting on what is arguably the most comprehensive report on initial teacher education and professional development compiled to date, *Teachers Matter* (OECD, 2005), Caldwell (2006, p. 112) observes: The focus of training programs for teachers has been overwhelmingly on initial teacher education, which includes training on pedagogy, the subject matter that the pre-service teacher aims to teach and, often, subject-specific pedagogy. This report suggest that pre-service education needs to be more focused on the things teachers will be expected to know and do once in the classroom. This is excellent advice, provided that teacher educators and in-service professional development providers base their curricular for teaching practice on findings from the extensive body of research evidence that clearly indicates what works (e.g., see cited references given in footnote 4). The fact that this is most often not the case is alarming (Rowe, 2005a,b, 2006). For example, in highlighting the evidence indicating that failure in student learning is strongly linked to deficiencies in teaching practice, Wheldall (2006, p. 177) notes: [A] necessary condition for learning to take place is effective instruction, but we hardly ever seem to employ it in schools! This is particularly evident in the teaching of reading. In spite of the failure of so-called whole language in teaching reading [a constructivist orientation], this is the approach that most teachers identify with and which dominates practice in our schools. ... This frustration with ineffective instruction in reading and related skills led to our development of MULILIT [Wheldall & Beaman, 2000]. By employing a rigorous, intensive, systematic, skills-based program of instruction, we have demonstrated that low progress readers can make extraordinary progress. These observations correspond with the purpose of the present paper, namely to highlight local and international evidence-based research findings that identify ‘best’ teaching practice for student learning, especially for those who experience learning difficulties. Compared with constructivist pedagogies, the key elements of Direct Instruction and the research evidence that support its utility are worth noting here – albeit briefly.

Key features of Direct Instruction and its research- base

Direct instruction (DI) – sometimes referred to as explicit instruction – “is a systematic method for presenting learning material in small steps, pausing to check for student understanding, and eliciting active and successful participation from all students” (Rosenshine, 1986, p. 60). DI modes of instruction are well grounded in findings from evidence-based research in cognitive science (see references cited in

footnote 2), and give little attention to the 'causes' of underachievement, learning difficulties, or to students' underlying abilities (Casey, 1994). Thus, DI programs are designed according to what, not who, is to be taught. Individual differences among students are allowed for through different entry points, reinforcement, amounts of practice, and correction strategies (see: Engelmann, 1980, 1999; Farkota, 2003a,b, 2005; Hempenstall, 1996, 1997). Direct Instruction is based on both the theory and evidence that learning can be greatly accelerated if instructional presentations are clear, minimise misinterpretations, and facilitate generalizations (Northwest Regional Education Laboratory, 2003). The principles upon which DI approaches are based include: • all children can learn, regardless of their intrinsic and context characteristics; • the teaching of basic skills and their application in higher-order skills is essential to intelligent behaviour and should be the main focus of any instructional program, and certainly prior to student-directed learning activities; and • instruction with students experiencing learning difficulties must be highly structured and permit large amounts of practice (Block, Everson, & Guskey, 1995; Bowey, 2000; Engelmann, 1999). Evidence for the utility of DI for the acceleration of student learning has been well demonstrated in findings from Project Follow Through, the largest and most costly research study in the history of education, in which both constructivist 'student-centred' (or 'studentdirected') models of teaching and 'teacher-directed' models were evaluated in terms of student learning gains.⁷ The project began in 1967 with President Lyndon Johnson's 'war on poverty' and was government-funded until 1995 (Grossen, 1995). This massive government initiative was aimed at breaking poverty cycles by providing disadvantaged students with a 'better education'. Over a period of almost 30 years and at cost of more than one billion US dollars, Project Follow Through included over 70,000 students in more than 180 schools. The project's objective was to identify 'teaching methods that are demonstrably effective in improving the academic performance of students in America's underprivileged schools – from at and below the 20th percentile level to the 50th percentile levels (Adams & Engelmann, 1996). In the final analysis (Stebbins et al., 1977) students being taught under the Direct Instruction model scored close to the 50th percentile in every subject, while for the other student-directed models, students consistently scored beneath the 20th percentile. Analysts of Project Follow Through evaluation data were unanimous in their agreement that teacher-directed methods of instruction resulted in consistently stronger student learning gains than those obtained from student-directed methods (Bereiter & Kurland, 1981; Lindsley, 1992; Stebbins et al., 1977). An analysis of the comparison data reported by Engelmann et al. (1988) also showed that of all the teaching models evaluated in Project Follow Through,

Pre-test/post-test data from students in both intervention and reference schools were collected in March 2005 and again in September 2005. In addition to the collection

of repeated measures of students' achievements in Reading and Numeracy, repeated measures of students' externalizing behaviours were obtained for three domains: Sociable, Attentive and Settled, from teacher-ratings on the Rowe Behavioral Rating Inventories 12-Item Teacher Form (Rowe & Rowe, 1997, 1999). Repeated measures of students' experiences and attitudes towards school were also collected for three domains: Enjoyment, perceived Curriculum Usefulness and Teacher Responsiveness – employed in earlier longitudinal studies (e.g., Rowe, 1995; Rowe & Hill, 1998). Data analyses and statistical modelling of have taken into account the measurement, distributional and structural properties of the data. The results of key findings are summarised below.

- Revision

- Assignment/Activity

POINTS FOR DISCUSSIONS / CLARIFICATION

After going through the unit you may like to have further discussion on some points and clarification. Note down those points:-

Points for Discussion

York: Holt, Rinehart & Winston. Bereiter, C., & Kurland, M. (1981). A constructive look at Follow Through results. *Interchange on Educational Policy*, 12(1), 1-22. Blatchford, P., & Mortimore, P. (1994). The issue of class size for young children in schools: What can we learn from research? *Oxford Review of Education*, 20, 411-428.

UNIT 5: DEVELOPMENT AND USE OF TLM FOR ID

- Introduction
- Objectives
- Definitions
- Summary
- Revision
- Assignment/Activity
- Points For Discussion And Clarification
- References / Further Readings

- Introduction

The purpose of this paper is elaboration of the elements and dimensions that need to be considered by material developers, facilitators/teachers and others involved during the process of production and development of learning materials. It also tries to set out the linkage between development of materials and non-formal education settings and to some extent formal education in a developing country like Nepal, which does not ensure system support for adequate learning material. It highlights the low production cost and use of materials locally available in the community. In addition, the information included in this paper covers definition of learning material, level of understanding of target audience, analysis of learning need, the option to explore opportunities and using local techniques for producing learner-appropriate contextual materials. It also includes some important tips for material designers/developers on simple ways of producing contextual learning material at the community level.

- Objectives

Learning is a process of gaining or receiving knowledge of things in the world around us, through sight, sound, smell, taste and touch. Learning takes place in everyone's life all the time from a very early stage in life, and human beings keep on learning all the time. Learning starts from childhood and it is a continuous and life long process. Through learning an individual gains the skills to cope with life. Learning occurs in the family and the community, in formal and informal settings. The word learning encompasses a wide range of connotations across different spheres of life. Learning takes place in any environment and is wide in scope. The term as defined here is limited to forms of learning in formal and informal settings for adult learners, some of which can be used beyond a prescribed setting. In this connection learning materials become an important tool in facilitating learning. There are different kinds of tools, which facilitate learning. The later part of the paper will cover a description of the different kinds of learning tools for different levels of learners. The triangular relationship between learner, learning and material is always important. One can create a learning-friendly environment only through a balanced handling of these three elements. For the purpose of my deliberation I have given greater focus to learning materials than the other two important elements mentioned above. To understand the different dimensions of learning material we first need to ask the question: why learning materials?

Learning materials cannot be devised or thought of on their own without linking them with the bigger objective of an education programme. For any education programme- be it formal or informal - learning material is devised in a linking up with the curricular objective. A national educational programme defines a curricular objective. Most often in the developing countries the communities in rural areas do not get adequate learning and teaching materials. In Nepal teachers in rural communities are left with a bare set of textbooks to use without additional learning materials. On top of that, very few teachers are trained to use locally available learning material and opportunities. As a result a large number of programme participants/ learners do not achieve the learning objective. Different elements contribute to this situation and are related to: - lack of systematic programme planning in large scale - low budget allocation - inadequate training for teachers and facilitators - selection system of teachers - community mobilization plans for

resource generation at the local level.

- Definitions

I have mentioned all this as teaching and learning material cannot be devised in isolation without linking up with some educational objective under an educational programme. While the hierarchy of programme objectives may change or differ at the community and national levels, the objective of learning should link up with the ultimate goal when evaluating the impact at the end of an intervention. Teachers and facilitators are left in isolation with the task of making a difference in the lives of women and children. The choice is in the hands of teachers or facilitators to make the difference. The content of this paper elaborates some ways at the disposal of teachers and facilitators. Facilitators are not there by choice or aptitude but by default, due to lack of opportunity. A teacher who has freely chosen his calling does not get adequate training and is left alone in the community to teach there.

- Summary

Most often developing countries have difficulty in delivering adequate learning material for the education outlet. And because of this learning objectives are often not met. As a result there is poor realization of educational goal, and objectives go largely unmet. There are different factors behind this. These include low budget allocation for production and distribution, poor monitoring mechanism, and weak political commitment. It is a compounded problem. Even if there is intention the limitations are also there.

(1) Material centrally produced is not need based a. Centrally through out perspectives are imposed b. Degeneration of interest (2) Irrelevance to the context of local environments a. Dress b. Work in every day life (3) Vocabulary a. National language b. Multi-lingual situation (4) No cultural sensitivity a. Do not reflect day-to-day way of life b. Community values (5) Inadequate supply a. Expensive for the government (6) No system support a. Distribution b. Capacity building c. Monitoring/Evaluation 6. Steps to Develop Learning Material (1) Identification of

problem and need (2) Analysis of the problem a. Resistance pattern/KAP (3) Analysis of the problem a. Identification of need and motivating factors b. Persuasion tactics (4) Objective setting (5) Selection of the topics (6) Format selection (7) Content arrangement a. Script visual (8) Editing (9) Testing (10) Revision

Ways to Develop Simple Learning Materials Against this background on meaning, rationale and clarity of learning material the topic elaborates on a few tips for using different forms of possible communication format to facilitate learning in the communities. If a facilitator/material developer does not have the skills to develop learning material, there is always the possibility of using talent of different caliber available in the teaching and learning environment. In most communities there is always some natural talent in expressing feelings through song, the spoken word or symbolic visual forms. A good facilitator can always use such talent as a resource for devising learning material that suits the community. The topics in this chapter suggest a few tips for use in audio-visual format and the print medium.

Clip art: A collection of illustrations which cover common topics such as health education, nutrition, environment education and other issues relating to the development of education. The clip can be imported in a computer to produce a computer graphic as per the requirements of the material as desired. In the absence of computers there are several ways of using and copying illustrations in clip art by tracing, copying and adapting to the needs of a local situation.

Stick pictures Stick pictures are simple to illustrate. You do not need to be an artist to be able to draw in this style. The point is just to convey the message. A facilitator, with a bit of practice, can find this picture form handy.

Printed material could be a great resource for developing learning materials. There are always some kinds of printed materials like newspapers and magazines available in the community. With a bit of mobilization of learners or participants, there is always the possibility of collection old magazines with pictures that can be used for creating learning material.

As said earlier there is always talent among the participants or in a classroom situation. We will find different skills in writing and visualizing. It is only a matter

of identifying them. As for the quality output, the illustration and their content do not have to sound at the beginning. The other participants can always chip in to enrich content that has meaning for their need. It is important to note that the material produced is not for academic excellence, but for a learning purpose.

The mimeograph is a simple device for making copies of printed material at community learning center level. The copies can easily be made at small cost, and this method has proven to be an extremely useful means for duplication of simple learning material in the CLC-See Mimeograph Manuals for details.

Students at the Owen School's Strategy in the New Economy seminar enter a classroom that looks like any other, except that a projection system and video screen have been installed. Their professor announces that today they will be joined by a guest lecturer, a senior VP from a Fortune 500 corporation. What makes this guest lecture unique is that the students are sitting in a Nashville classroom but the guest lecturer is speaking from his home office in Estonia, via video technology.

This is an example of one of the creative ways faculty members at Vanderbilt are using technology to enhance their students' learning. In the scene described above, Owen Professor David Owens, along with Professor Bart Victor, use video conferencing to bring an international guest speaker to their organization studies seminar. Across the University, faculty are using technology to help students master subjects from elementary and secondary school instruction to bioengineering to structural equation modeling. They are developing their own skills while making students comfortable with the technology that will help them be successful after leaving Vanderbilt. As they introduce more and more technology into the classroom, faculty are finding it raises the quality of class discussion and involves students much more deeply in their own education.

For this issue of the Teaching Forum, we spoke to four Vanderbilt faculty members, each of whom is using technology to enhance their students' learning.

Owen Management Professor David Owens uses videoconference links to bring in guest speakers and incorporates video and audio technology into most of his lectures.

Psychology Professor Andy Tomarken teaches methods and statistics courses in a computer lab, allowing him to integrate traditional lecture with demonstration projects using the methods he is teaching.

Peabody Professor Margaret Smithey guides her students in the preparation of multi-media classroom presentations including clips from the Internet, video, audio, and news archive footage. She has opened an e-conference for interns from her courses who want to stay in touch with their fellow students and professors, and she maintains a library of digitized video clips, taken from live and simulated classroom settings.

Department of Biomedical Engineering Chair Tom Harris directs a new NSF-funded center focused on developing technology-based bioengineering teaching materials and curriculum. He is collaborating with several partners, including Peabody Professor John Bransford.

What Technology Brings to the Classroom What these faculty members have in common, and what they share with many others across the campus, is a commitment to exploring the opportunities technology offers for improving the quality of classroom instruction.

Professor Margaret Smithey describes how technology allows her to capitalize on unexpected turns in class discussion. "Yesterday afternoon my students had specific questions about classroom management, so at that point I said 'let's look at these scenarios that I have on a CD.' The CD brought to life their questions. I think

seeing actual classroom scenarios related to their questions makes learning come alive for my students better than if I gave my opinion or told a story.”

Professor Tomarken, who teaches advanced statistics and methods classes, says incorporating computers into class discussion can also make extremely difficult courses much easier for students to grasp.

One of the challenges of teaching advanced statistics to students who often lack a strong math background is “translating theoretical stuff into a workable set of concrete analysis, “Tomarken says. “I find that it’s really important to talk about different types of models from the point of view of specific problems and that’s really where the ability in class to have stuff be on the projection system is critical.”

Access to a computer-equipped classroom can also be important. “I like to get students interacting with software in the class, “Tomarken says. “I find if you just send them home to do it on their own, they run into real problems. When they follow me, typing in on their own computers, that facilitates their learning.”

Last semester, Tomarken also faced another problem – the lack of a good textbook for teaching structural equation modeling to social science students – that he solved using technology. “There is no book that is perfect, that really is appropriate, for this class. There are either books that tend to be too easy or too hard or just not broad enough in scope.” Tomarken solved this problem using the Prometheus system, by placing his lecture notes on the web. This not only replaced the textbook, it allowed students to spend more time focused on the lecture and less time copying formulas from the board. “I told them, you don’t have to write anything, it’s all on the web, just listen.”

Technology Changes Teaching, Not Teachers While all the faculty members interviewed for this article believe technology has great power to influence their

teaching, no one feels it fundamentally changes them as teachers. "I've always wanted a very interactive classroom," Smithey says. "I want it to be very theoretically based and I know exactly what I want my students to learn. I think technology has improved the quality of what we can access." Smithey also emphasizes the importance of technology being used for a clear purpose. "I never want to use technology just for technology's sake but to support my students' learning."

Professor Tomarken feels that integrating statistical software and visual models into his courses means he comes into class "better prepared" but doesn't think it changes him as a teacher. "I usually am pretty interactive with the class." He does, however, credit the accessibility of computers with reducing the "passivity factor" in his classes. "They have to type things in, they have to click on the mouse. I think it's pretty lively in a lot of ways."

How Technology Enhances Learning Professor Owens, Smithey, and Tomarken all feel they can see technology enhancing their students' learning, particularly when students use the technology directly. David Owens requires his students to do at least one group project entirely over the Internet. "They're not allowed to do it face to face," Owens says. "They aren't allowed to say, 'I'll call you tonight.' They have to do everything virtually. In this project, they have a lot to figure out about group process, what things are done best face to face, what things are done best asynchronously, what things are done best in an anonymous chat room. And they figure it out. It's...so much more powerful than my sitting up there saying "the group process models show..."

Professor Smithey requires her students to complete a series of computer assignments from a course CD that she has developed. Smithey values these pre-class assignments because they save classroom time and improve the quality of class discussion. "When the students complete their CD assignments, they come to

class with a common context. We are able then to discuss particular class dilemmas or teaching dilemmas that everyone has watched, analyzed and reflected upon. So, we can start there and go with our class discussion rather than having to take 20 or 30 minutes of class showing the video and asking the specific questions. They've done all that in the computer lab."

Technology can also improve the dynamics between teachers and students, often leading to enhanced learning. "Students can see you're doing a lot of work to further their education and I think that there's an appreciation factor that ultimately contributes to their own motivation," Tomarken says.

Students who may question how much their professors care about teaching can also see evidence of the time and trouble taken to prepare for class. "I think sometimes graduate students, or possibly even undergraduate students, go in with the mindset that this teachers doesn't really give a darn about teaching and I think using technology is a real way of communicating 'yes I do,'" Tomarken adds.

Technology Brings Challenges Introducing technology into the classroom can also bring a set of challenges. First among them is finding the time needed to incorporate new technology into courses. Professor Smithey not only uses the technology herself but also requires her student to produces multi-media projects during the semester. "If you're going to ask the students to do such a challenging project, you have to be available to them. You have to have support. There has to be some relief time to learn about the technology. You don't have to know the details of technology but you have to understand it well enough that you can envision what your students need to know about using it."

The technology itself can fail, leaving an instructor to resort to back up. Technology also changes rapidly and it takes time to keep up with technical changes that influence how equipment and software perform in the classroom. Professor Owens

points to a digitized news show he purchased from CBS: "I have the CD in here and one of my fears is that someday I'll pop it in the classroom and it won't work. It's a constant upkeep."

Professors Tomarken and Owens also note that having computers in the classroom can distract students from the class itself. Teaching in a classroom equipped with computers "actually introduces the potential for students to be doing something on the computer that doesn't have anything to do with the class," Tomarken says.

"I occasionally go parading around and check out what people are up to," Owens says. Some people take notes on the computer, some people try to get the lecture slides up on their screen so they can see them up close, some people do e-mail, surf the net, do whatever." He agrees with Tomarken that students' personal use of computers in class is an issue that needs to be examined, "through whether that's worse than day dreaming I don't know."

Need for University Support Support by the University for the use of technology is also critical. Bringing technology into the classroom uses resources ranging from computers to classrooms to graduate assistants, and university wide coordination is essential for ensuring an effective learning environment for students.

"One element that is essential is support in the form of graduate students to help students with technology," Smithey says. "It is impossible for one faculty member to support an entire class of students in creating innovative ways to use technology. You can continue to use CDs that you have in your own library, you can continue to connect to the Internet from the classroom, but additional faculty support is necessary to take technology use to the next level of requiring our students to use technology in a way that prepares them for using it in the future classrooms."

Physical facilities are also important. Keeping the technology in working order is crucial but so are other issues such as ensuring a classroom's physical design supports the best possible use of the technology. "You have a very real problem if you have big nice screens and nice projectors but the screen is in front of the white board; if you want to write and have slides at the same time, it's difficult if not impossible," Owens says.

Moving Forward with Technology As the University moves towards an increasingly coordinated approach to the use of technology, several efforts are underway at Vanderbilt to determine just how technology can be used to most effectively enhance learning. One effort is the VaNTH Center in Bioengineering Educational Technologies, a joint effort between Vanderbilt, Harvard University, University of Texas, and Northwestern. Among is several priorities is research into the value of technology, such as web-based education for teaching bioengineering. The research team is collaborating with specialists from the Learning Technology Center at Peabody and with the Institute for Software Integrated Systems (ISIS).

"It's recognized that bioengineering teaching materials are not very well developed and there is not a broad consensus on bioengineering curricula," says Thomas R. Harris, chair of Vanderbilt's Department of Biomedical Engineering. "We need a new way to look at bioengineering education. Why not use the modern methods that we've been developing in the learning sciences and learning technology, and really take a look at this from an entirely new point of view?"

The result is a \$10 million NSF grant for Vanderbilt and its academic partners to develop a new curriculum in bioengineering, one that utilizes fundamental principles of learning science and "is driven by technology, web based technology, simulations, slides, interactive systems, and tutoring and homework systems," Harris says.

Although the grant focuses on the development of bioengineering, the collaboration between Peabody's Learning Technology Center and the Department of Biomedical Engineering has the potential to benefit students and faculty in all areas of the university because part of the research involves determining exactly which technological tools best enhance learning.

“One of the things of concern is that in higher education a lot of people are very critical of technology as being just a waste of time and money and so forth. Well, is that right or not?” Harris asks.

“If a particular piece of learning technology is no good, we're going to be happy to identify it as such. We'd like to be able to guide the decision of educators and administrators about what is effective and what is not. And if you can begin to show major advances for some of this, then the justification for the additional investment is there.”

Another potential benefit this research offers is the opportunity to develop a much better understanding of the kinds of resources required for faculty to use technology in ways that consistently enhance student learning.

- Revision
- Assignment/Activity

POINTS FOR DISCUSSIONS / CLARIFICATION

After going through the unit you may like to have further discussion on some points and clarification. Note down those points:-

- **References / Further Readings**

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Block 4: Intervention for Mal-adaptive Behaviour

UNIT 1: DEFINITION AND TYPES OF MAL-ADAPTIVE BEHAVIOUR

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
-
- Introduction

In Dutch secondary vocational education a lot of maladaptive social behaviour is reported; about 40 % of the students reported incidentally or frequently to skip school, 28 % of the students reported being a victim of verbal violence, 2 % has been actually threatened, about 8% of the students and staff did not feel safe at school and 5 % reported to carry a weapon (Neuvel, 2004). Implementing security staff, rules about students' identification and even detection gates are consequences of these experiences. It is important to understand why these behaviours occur, in order to be able to decrease and/ or prevent undesired behaviour at schools in the future. Research on the occurrence of maladaptive social behaviour (MSB) has a long history. From several theoretical points of view this topic has been investigated. For example, Freud explained MSB by the oppression of human drifts, some trait theorists (e.g., Eysenk) argued that MSB was shown by people with an extreme position on a personality trait. Behaviourism explained MSB through stimuli in the environment, and cognitive theories argued that MSB was a logic

reaction on inaccurate cognitive representations. Some researchers described individual characteristics that are related to MSB (i.e. intelligence, self-esteem, gender, ethnicity, age), other researchers focused on the effect of home-environment factors (i.e. social economic status, educational level of parents, parenting styles), school factors (i.e. school-climate, teacher expectancy of competencies, teacher and student support), and societal factors (i.e. discrimination, chance for unemployment, compulsory education) on MSB. Numerous studies have investigated developmental trajectories of MSB (e.g., Compas, Hinden & Gerhardt, 1995; Moffitt, 1993), and both continuity and discontinuity of MSB have been proven. Maughan & Rutter noticed, [...]'that most severely antisocial adults have long histories of disruptive behaviour reaching back to childhood'], but [...]'most conduct disordered children did not grow up to be severely antisocial adults'] (Maughan & Rutter, 1998, pp1). Moffitt (1993) introduced the terms 'adolescence-limited' and 'life-course persistent' antisocial behaviour. Life-course persistent antisocial behaviour is shown by people during their whole life, often starting in childhood and enduring until adulthood. Adolescence-limited antisocial behaviour is shown in adolescence only. Other pathways are also possible, as Compas et al. (1995) noticed; some children start showing MSB in adolescence and keep doing so in adulthood, some stop showing MSB during adolescence or never show any at all. In order to explain MSB in secondary vocational education the developmental phase of the population should be taken into account. Most students in this type of education are between 16 and 20 years, and thus are in (late) adolescence. Although the above mentioned research has provided insight into the occurrence and development of MSB, it does not reveal why specific adolescents expose specific types of MSB in a specific context, and what can be done to prevent or decrease MSB. It is (among other) difficult to solve this problem as MSB is operationalized differently by researchers. The first aim of the present conceptual review is to gain insight into how different researchers conceptualized an operationalized MSB in adolescent students.

A first important question to be answered is 'what is MSB?' In the social sciences many terms are used to indicate norm-deviant behaviour, for example problem behaviour (e.g., Jessor & Jessor, 1977), deviant behaviour (e.g., Akers, 1985), and antisocial behaviour (e.g., Olweus, Block and Radke-Yarrow, 1986). Jessor and Jessor (1977) defined 'problem behaviour' as "Behaviour that is socially defined as a problem, a source of concern, or as undesirable by the norms of conventional society and the institutions of adult authority, and its occurrence usually elicits some kinds of social control response(p.33)". Akers (1985) defined 'deviant behaviour' as "disapproved behaviour considered serious enough to warrant major societal efforts to control them, using strong negative sanctions or treatmentcorrective techniques" (p. 9). Olweus, Block and Radke-Yarrow (1986)

defined 'antisocial behaviour' as "a violation of a formal or informal rule, including serious criminal acts or flagrant disregard for conventional standards of approved behaviour, as well as more private and momentary oppositional and hurtful acts." (p. 2). The definition of Akers (1985) refers to serious acts. The definitions of Jessor et al., and Olweus et al., are broader and refer to less serious behaviours as well. We adopt the latter approach but choose the term Maladaptive Social Behaviour. The definition of Jessor & Jessor refers in our opinion to both severe problematic behaviour, and to behaviours that are not necessarily experienced as problematic, but are undesired, for example 'not stepping aside to let someone pass', or 'ignoring a customer'. All behaviours are maladaptive; inappropriate in a situation. We add 'social' to the definition to emphasize the social dimension of behaviour. Behaviour is only problematic or maladaptive when experienced by other people. These experiences can vary from very direct to very indirect; e.g., a person might be (or perceive to be) the victim of MSB (e.g., being threatened, yelled at), might experience the consequences of maladaptive behaviour later (e.g., his things are being stolen, or his car has been vandalized), behaviour that is directed to someone else (e.g., people fighting with each other), and behaviour that is not directed to anyone at all (e.g., throwing litter on the street, burping). A judgement is made on personal norms. To a large extent these norms are shared in a certain community. Students in late adolescence have almost reached adulthood. In western societies their behaviour is judged on ground of the general societal norms that are in force. Thus, they are expected to behave according to these norms; to be polite, friendly, do not obstruct other people's behaviour and respect other people's opinion. With respect to the school context the same community norms apply and additionally some specific school norms and rules, for example rules on absenteeism, how to handle schoolwork and how to behave in the classroom. Accordingly we define maladaptive social behaviour as "behaviour that is undesirable or inappropriate by the norms of the context the behaviour is exposed in". The aim of this review is to understand students' MSB in a school context. We will make an inventory of empirical studies that are relevant to school related MSB in adolescence. The review is presented in two main sections: In the first section we explore how researchers have operationalized MSB; what specific behaviours are assessed. Furthermore we study how these behaviours are assessed, what instruments are used, and investigate the relationship with relevant variables. In the second section we focus on research that assessed specific types of MSB at school and summarize relevant findings with respect to adolescents' MSB in a school context.

- Objectives

We selected empirical articles on the topic of maladaptive social behaviour of adolescents in an attempt to determine what behaviours are measured, how they are measured, and with what kind of factors they are related. Next, we selected studies that analyzed MSB at school. We searched the literature for relevant articles using Webspirs 5 (including Econlit, Eric, Pais, PsychInfo and Sociological Abstracts; April 2004). A first search was done on 'maladaptive behaviour' or synonyms (e.g. problem behaviour, antisocial behaviour, abnormal behaviour, disruptive behaviour, deviant behaviour, asocial behavior/ behaviour). This search provided over 10.000 hits. A selection was made by searching for the terms 'adolescen*' and 'school*' somewhere in these articles, to increase the possibility that the article was about adolescent behaviour and the factor school was involved. To search for these terms 'anywhere in the article' (e.g., title, abstract) chances were high that relevant articles were included that would have been excluded if these terms were searched in the subject only. Approximately one thousand hits were found after adding these selection criteria. Further selection took place, by judging the abstracts on relevance. Apart from double references, articles were excluded when they were not empirical, referred to a collection of papers, manuals, were not addressing maladaptive behaviour, addressed clinically labeled adolescents, when it concerned maladaptive behaviour of adolescents younger than 15 years old or adults, non English articles, published before 1970, or not available in peer reviewed journals (i.e. dissertations or books). About 400 articles remained. Some studies used a cross-sectional or a longitudinal design. For these studies information on the operationalization and measurement of MSB is presented for each sub-sample from 15 year or older only. These 400 articles were used in the review. Again some articles were eliminated on the exclusion criteria mentioned and thirty-two articles could not be acquired. Finally 220 articles were analyzed in this study. The results are summarized

As can be seen in Table 1, many different operationalizations of maladaptive social behaviour are used. It appeared complicated to summarize the assessed MSB in the school-related literature, because each study used its own terms and operationalizations. A specific topic of interest was the investigation of substance (ab)use. In 84 of the 220 articles substance abuse was investigated as a separate category. In 16 articles this was even the only problem behaviour investigated. Most frequently assessed was the use of cigarettes, alcohol and marijuana, but also regularly studied was the use of cocaine, speed, heroin, inhalants, pain-killers or other medicines, PCP, hallucinogens, barbiturates or tranquilizers. Substance use

was also commonly investigated as part of the construct 'maladaptive social behaviour'

- Definitions

Maladaptive behavior is defined as behavior that interferes with an individual's activities of daily living or ability to adjust to and participate in particular settings.

Maladaptive behaviors lie along a spectrum from more minor, less impairing behaviors (i.e., nail biting, difficulty separating) to more severely impairing behaviors (i.e., self-injurious or over-sexualized behaviors) that seriously interfere with individuals' ability to maintain relationships with others, learn, and/or engage in adaptive, age-appropriate activities and settings. Because of their impairing nature, maladaptive behaviors are often the target of interventions. Problem behaviors are often a concern for children with developmental disabilities; maladaptive behaviors commonly associated with autism spectrum disorders include self-injurious behaviors (e.g., headbanging), stereotypies, aggression, and temper tantrums.

- Summary

In 155 articles general problem behaviour was the object of investigation. Synonyms commonly used were delinquent behaviour, deviant behaviour, high risk behaviour, conduct problems or antisocial behaviour. Operationalizations of these constructs vary and there is considerable overlap between these mentioned constructs. Commonly measured behaviours within this construct were theft, robbery, vandalism (damaging property), violent behaviours (fighting, assault, threatening, hit someone), carrying weapons, social problems (bullying, peer problems), authority conflicts (opposition, rule breaking, lying, running away), hyperactive behaviour (impulsiveness), substance abuse and internalizing behaviour (anxiety, depression, somatisation, withdrawal, inhibition, embarrassment). Several of these types of behaviour were incidentally measured as separate constructs, for example aggressive behaviour (9 studies), violence (12 studies), and as mentioned

previously, substance abuse. Less commonly measured were sexual behaviour (6 studies), theft (4 studies), bullying, (4 studies), fighting (2 studies), problem driving (2 studies), weapon carrying (2 studies), truancy (2 studies), vandalism (2 studies), and gambling (1 study). Finally, some studies assessed MSB from a clinical perspective and aimed to identify clinical disorders, namely eating disorders (2 studies) or other behavioural disorders (11 studies), for example antisocial personality disorder, substance abuse disorder, conduct disorders or ADHD. In these cases the definition of the constructs was based on clinical criteria (usually DSM-III or IV). In 49 articles a substantial amount of problem behaviour at school was measured. In Table 1 these articles are marked with a *. In the next section we will discuss these articles jointly. Measurement of General MSB Remarkable is that in 77 studies none of the used instruments were named explicitly, nor could a reference be found to the instruments used. The most frequently used method to assess the different types of problematic behaviour is self-report. Almost every study (91%) used one or more self-report measures. Of the used self-report measures, sixty-four were explicitly named, and/or justified. For the measurement of general problem behaviours several instruments have been developed. The most frequently used, validated self-report instruments are (adaptations or parts of) the Youth Self Report (YSR; Achenbach, 1991a) (15 articles), the Delinquency scale of the National Youth Survey (NYS), developed by Elliott, Huizinga and Ageton (1985) (13 articles), the Diagnostic Interview Schedule for Children (DISC; Costello, Edelbrock, Dulcan, Kalas & Klaric, 1984) (11 articles), a questionnaire developed by Gold (1970) (8 times), a measure developed by Kaplan, Johnson & Bailey, 1986) (7 studies), the Self Report Early Delinquency Scale (SRED; Moffitt & Silva, 1988) (6 studies), and the Self Report Delinquency Interview (SRDI; Elliott & Huizinga, 1989) (5 studies). Other self-report measures were used less than 5 times. Four of these instruments (NYS, SRDI, measure of Gold, measure of Kaplan) predominantly aim to describe delinquent behaviours. These behaviours are rather serious and frequently forbidden by law. The other three instruments (YSR, DISC, SRED) have a clinical purpose. The YSR measures a wide range of behaviours, from externalising to internalising. Syndromes for boys and girls with clinical norms have been identified to distinguish adolescents who are in trouble. The DISC and SRED are based on clinical criteria. Questions in these instruments are constructed to identify disorders, as described by DSM-III/IV

Of the 84 studies that measured substance abuse as a separate construct, 31 referred to an existing questionnaire or explained where the items were derived from. Thirteen of these instruments were solely used for the assessment of substance use. Most frequently mentioned instruments to assess substance abuse (a part or adaptation of) was the Monitoring the Future Questionnaire (O'Malley & Johnston, 1999) (6 studies). Also relatively frequently mentioned were the Rutgers Alcohol

Problem Index (RAPI; White & Labouvie, 1989) (3 studies), and the Composite International Diagnostic Interview (Cottler, Robins, Grant, Blaine, Towle, Wittchen, Sartorius, and the participants in the WHO/ADAMHA Field Trial, 1991) (5 studies). Parent reports were used in 31 studies, teacher reports in 23 studies, and peer reports in 5 studies. Seven parent report instruments were employed in the reviewed articles, seven teacher report instruments, and only one peer report instrument. The DISC (Costello et al., 1984) is used for gathering information from parents as well (7 studies). Beside the DISC, most commonly used to assess parents' estimation of their children's behaviour is the equivalent questionnaire of the YSR: The Child Behaviour Check List, (CBCL; Achenbach, 1991b) (11 articles). The Revised Behaviour Problem Checklist (RBPC; Quay & Peterson, 1983) was used in 6 studies and the Rutter Home Behaviour Scale for parents (Rutter, Tizard & Whitmore (1970) in 5 studies. All parent report instruments aimed to identify a clinical group. The CBCL comprises the same scales as the YSR. The DISC for parents is an equivalent to the DISC for adolescents. The RBPC and the Rutter-Home Scale use different scales than the YSR but their scales also range from externalising to internalising behaviour. The most frequently mentioned teacher report instrument is the Teacher Report Form (Achenbach & Edelbrock, 1986) it is an equivalent of the YSR, with slightly different scales. The Rutter School Behaviour Scale for teachers (Rutter et al. 1970) is used in 5 studies. This instrument has the same scales as the parent version, except for the scale Psychosomatic Symptoms. This scale is solely designed for parents. Other parent and teacher report instruments were mentioned only once in the reviewed articles. The only peer report instrument that was mentioned in the reviewed articles was the Multidimensional Peer Rating Scale (Bierman, Morrison & Bitner, 1995 in: Pope, & Bierman, 1999) (1 study). This instrument assesses similar constructs as the YSR, RBPC and Rutter Scales, and comprises items varying from externalising to internalising behaviour as well. In 12 studies other assessment methods were used to measure problem behaviour or to validate self-report measures, namely official police records, school records, and interview ratings. As mentioned previously, assessment of misbehaviour at school will be discussed in the next section

- Revision
- Assignment/Activity

POINTS FOR DISCUSSIONS / CLARIFICATION

After going through the unit you may like to have further discussion on some points and clarification. Note down those points:-

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UNIT 2: IDENTIFICATION OF MAL-ADAPTIVE BEHAVIOUR

- Introduction
- Objectives
- Definitions
- Summary
- Revision
- Assignment/Activity
- Points For Discussion And Clarification
- References / Further Readings

- Introduction

It is well known that children with Autistic Disorder (AD) often engage in maladaptive behaviours such as aggression, self-injurious behaviour, and stereotyped behaviour (e.g., Dominick, Davis, Lainhart, Tager-Flusberg, & Folstein, 2007), and that these correlate positively with levels of stress in caregivers (e.g., Hastings, Kovshoff, Ward, degli Espinosa, Brown, & Remington, 2005). The presence of maladaptive behaviours also places a child at a heightened risk for social exclusion and makes it difficult to acquire education in a typical school setting (Horner, Carr, Strain, Todd, & Reed, 2002). Thus, it is important to explore this area in an effort to minimize its negative impact. However, the measurement of maladaptive behaviours is an important issue that has received inadequate attention, and there is no standard measure currently employed. This brief report summarizes findings of a study exploring the use of the Maladaptive Behaviour Domain of the new Vineland scales to measure maladaptive behavior. The Second Edition of the Vineland Adaptive Behavior Scales (Vineland-II; Sparrow, Cicchetti, & Balla, 2005) is an assessment measure of adaptive skills. Along with several other updates,

the Vineland-II includes a reorganized its Maladaptive Behavior Domain, which has four sections assessing different groups of maladaptive behaviour: Internalizing, Externalizing, Critical, and Other. The Vineland-II is routinely used in psychological assessments of children with autism (and other children). However, since it is relatively new, there is a very limited literature about it, and none of it addresses the use of the Maladaptive Behavior Domain among children with AD. Based on previous literature, we hypothesized that scores on the Maladaptive Behavior Domain would be positively correlated with autism severity, negatively correlated with cognitive ability, and uncorrelated with adaptive skill level or age. We also expected that there would be modest gender differences, with boys scoring higher on Externalizing and girls scoring higher on Internalizing.

- Objectives

Maladaptive behaviors are a common occurrence in children with ASD. It is usually caused by a characteristic of their diagnosis and not necessarily directly caused by the diagnosis. For example, a non-verbal child with autism may tantrum when he wants a drink. The tantrum behavior is not a symptom of autism, but it is a cause from the child not being able to communicate they want a drink (characteristic of autism). Behavior is a way for children with autism to communicate their wants and needs. It can take many forms - aggressions, tantrums, self-injury, eloping, self-stimulation. If we give into the maladaptive behaviors, we are telling the children this is an appropriate way to communicate. It is important to teach the child appropriate ways to communicate. For example, if the child tantrums to avoid doing work, you can teach them to request a break. If they have a tantrum at work time, it is very important to make them do some of the task. Otherwise you run the risk of reinforcing the tantrum as a way to get out of work. Instead, reinforce the work which was done without the maladaptive behavior. We must gain an understanding of what is causing the behavior to occur and figure out the best strategy to handle it. When a child keeps repeating a maladaptive behavior, that behavior must be serving some sort of purpose or function for the child – otherwise he/she would not keep repeating it. It is best to think about what happened immediately before the behavior and treat it accordingly. There are four functions of behavior

Escape/avoid a task or demand • Get something they want (tangible) • Get attention • Self-stimulatory (sensory input) •

Escape Children will exhibit behaviors in order to escape something or get out of doing something. Behaviors can vary greatly. They may tantrum when you ask them to do work or in an over-stimulating environment they want to leave. They can also want to escape due to anxiety over a task. It is important to stay consistent and follow through with what they were asked to do. You do not have to expect the entire thing, but they must at least do some of the task without behaviors. Each time make them do a little bit more. If the child needs to leave an environment due to over-stimulation, it is important to teach him/her appropriate ways to communicate.

Gain something When an individual is unable to communicate what he/she wants it leads to extreme frustration causing maladaptive behaviors. The easiest way to deal with this is to develop a communication system for the child. Simple picture boards in a book to make a choice are easy to make and use. Have your child practice asking for things by using the book and encourage them to use the book every time they get something so they make a connection. If the behaviors are due to a communication issue it is crucial, once they have calmed down, to have them communicate what they want and then give it to them. The faster they learn to communicate what they want, the faster the behaviors will decrease. Another cause is not being allowed to have something they want. If a child asks for some candy and are told no, they can become upset and exhibit maladaptive behaviors. This is due to frustration of being denied what they want. If you give a child what they ask for when they are exhibiting behaviors they are very likely to exhibit behavior every time they are told "no". It is important to teach your child to handle hearing the word "no". This can be done by reinforcing them with an alternative reinforcer for not exhibiting maladaptive behaviors when you say "no". You reinforce the appropriate behavior, or reinforce the absence of the maladaptive behavior. For example, if the child wants candy and you tell him no, if he does not exhibit any maladaptive behaviors you can reinforce him with a sticker.

Get attention Children can exhibit behaviors in order to gain attention from an adult or peers. This may be caused by a lack of ability to appropriately interact. Children also may associate some type of social activity with you that they act up in order for you to interact with them. Any kind of attention either when they are doing something good or getting in trouble is still reinforcing for the child. It is important to not give them verbal interaction if this is the cause. Do not make eye contact and redirect them to what they are suppose to be doing. Ignore the behavior, but not the child! Reinforce frequently for doing what they are supposed to be doing and do not attend to them when they are exhibiting maladaptive behaviors. Sometimes this means leaving the room or turning your back to the child and engaging in something else.

Self-stimulatory Self-stimulatory behavior is different than the other three. The others involve tantrums, self-injury, and aggression. Self-stimulatory behavior is a bit different. It can involve vocals, hand/arm flapping, jumping, rocking. Although they may seem harmless, they are not socially acceptable and it can interfere with other

activities. It is important to reinforce the child for NOT exhibiting the behavior; also blocking the behavior when it occurs. These behaviors can happen often when the child is bored; it is important to keep your child engaged in activities. Self stimulatory behaviors can also occur during times of stress or anxiety.

- Definitions

Adaptive behavior includes the age-appropriate behaviors necessary for people to live independently and to function safely and appropriately in daily life. Adaptive behaviors include life skills such as grooming, dressing, safety, food handling, working, money management, cleaning, making friends, social skills, and the personal responsibility expected of their age and social group.

Adaptive behavior is a type of behavior that is used to adjust to another type of behavior or situation. This is often characterized as a kind of behavior that allows an individual to change a nonconstructive or disruptive behavior to something more constructive. These behaviors are most often social or personal behaviors. For example a constant repetitive action could be re-focused on something that creates or builds something. In other words the behavior can be adapted to something else.

In contrast, maladaptive behavior is a type of behavior that is often used to reduce one's anxiety, but the result is dysfunctional and non-productive. For example, avoiding situations because you have unrealistic fears may initially reduce your anxiety, but it is non-productive in alleviating the actual problem in the long term. Maladaptive behavior is frequently used as an indicator of abnormality or mental dysfunction, since its assessment is relatively free from subjectivity. However, many behaviors considered moral can be apparently maladaptive, such as dissent or abstinence.

Adaptive behavior may be affected by mechanisms in the brain that lead to addiction. Regarding addiction as a disease provides opportunities for its treatment.^[1]

Adaptive behavior reflects an individual's social and practical competence of daily skills to meet the demands of everyday living. Behavior patterns change throughout a person's development, across life settings and social constructs, changes in personal values, and the expectations of others. It is important to assess adaptive behavior in order to determine how well an individual functions in daily life: vocationally, socially, educationally,

To determine a student's adaptive behavior capacities, professionals focus on the student's conceptual skills, social skills, and practical skills. To measure adaptive skills, professionals use adaptive behavior scales that have been normed on individuals with and without disabilities. Most adaptive behavior scales are completed by interviewing a parent, a teacher, or another individual who is familiar with the student's daily activities. Students may have a combination of strengths and needs in any or all of the areas regarding conceptual, social and practical skills.

Behavior scales help to measure possible impairments or delays in everyday life that are often related to a disability or illness. Measures of adaptive behavior must assess typical behavior rather than optimal performance. Adaptive behavior assessments are important for diagnosing intellectual disabilities.

The Vineland Scales-II is an instrument for supporting the diagnosis of intellectual and developmental disabilities. It not only aids in diagnosis but also provides valuable information for intervention plans and educational strategies. Additionally it helps determine eligibility for special programs and services. The scales of the Vineland II were organized within a four-domain structure: Communication, Daily Living, Socialization, and Motor Skills. In addition, Vineland-II offers an optional Maladaptive Behavior Index. It includes four forms: Survey Interview, Parent/Caregiver Rating, Teacher Rating, and Expanded Interview, which provide in-depth information and covers the full spectrum of adaptive behavior.

AAIDD plans to release a new Diagnostic Adaptive Behavior Scale (DABS) in 2015 to provide an additional comprehensive standardized assessment of adaptive behavior. This scale emphasizes the importance of adaptive behavior in the diagnosis of intellectual disabilities because of its implications for special education services, home and community-based services, Social Security Administration benefits, and specific treatment within the criminal justice system

- Summary

Multiple children may display the same behavior; however the underlying causes of the behavior can be very different. A behavior shown by one child may be maintained by attention while second child exhibits the exact same behavior in order to avoid something unpleasant. Therefore, focusing on the behavior only will usually give little information about effective interventions. Identifying the

underlying cause(s) of a child's behavior, however, or, more specifically, what the child "gets" or "avoids" through the behavior, can provide the team with the information necessary to develop positive behavioral strategies that are created to address behaviors that interfere with the child's life.

While this study provides insight into how different emotional components contribute to maladaptive behavior in ASD, there are a few limitations to be addressed. First, the present study is cross-sectional; this design is useful for exploring potential directional relationships among emotion experience, regulation, and maladaptive behavior, but does not allow for drawing conclusions about causality. Longitudinal designs could provide stronger evidence of directional relationships (with the potential to infer causality) between emotional components and maladaptive behavior. In addition, the current study relied mainly on observational data. However, experimental in contrast to observational study designs would help to further examine the underlying mechanisms that lead to maladaptive behavior. Second, our study used a relatively small sample of individuals with ASD. Although an advantage of the current study is that we included a few individuals with FSIQ ≥ 70 resulting in a broader range of individuals with ASD, this was nonetheless a higher functioning sample on average. Future studies should include larger samples with a broader range of cognitive functioning. This would allow a deeper understanding of emotion experience and regulation in relation to maladaptive behavior in the ASD population. In addition, future research could look at how associations among emotion experience, regulation, and maladaptive behavior may be conditional on higher and lower functioning individuals using moderation analyses. Third, while the present study examined individuals with ASD compared to age and gender group matched TD participants, we did not include a psychiatric control group. Future studies need to include psychiatric controls to get a better idea about the specificity of the effects for the ASD population and to learn more about possible effects of ASD core features on emotional problems and resulting maladaptive behavior. Fourth, the present study focused on positive versus negative emotional experiences only and included a narrow range of emotion regulation strategies. Especially regarding negative emotions, it is possible that experiencing anger and experiencing sadness, for example, are differentially related to maladaptive behaviors. Moreover, expressive suppression is one form of generally maladaptive emotion regulation, but other maladaptive emotion regulation strategies may be more strongly associated with maladaptive behavior. Future studies should examine more closely a variety of different types of emotions, as well as include a broader range of emotion regulation strategies to gain further insight into mechanisms that lead to maladaptive behavior in ASD. Finally, the present study used the maladaptive behavior index of the VABS-2 (Sparrow et al. 2005) to assess maladaptive behavior, which includes

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UNIT 3: FUNCTIONAL ANALYSIS AND BEHAVIOUR MODIFICATION TECHNIQUES, COGNITIVE BEHAVIOUR TECHNIQUES (CBT)

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
-
- Introduction

This manual is the result of an adaptation of the Cognitive-Behavioral model developed by Muñoz, Aguilar-Gaxiola and Guzmán for the treatment of depression. The original manual consisted of a group intervention model for adults with depression. This intervention was used with adult Hispanic populations in the San Francisco area. The main aims of this intervention are to decrease depressive symptoms, shorten the time the adolescent is depressed, learn new ways to prevent becoming depressed and feel more in control. The original manual was subjected to various changes in order to adapt it for use with Puerto Rican adolescents. To this end, the following changes were made: (1) The group format was adapted to an individual treatment modality. In this manner, the therapy focuses more on the adolescents' problems and uses their thoughts, experiences, actions, and relationships as examples of the material to be presented. This makes for a more dynamic and interactive therapy, thus allowing the adolescent to assume a more

active role. (2) The original manual referred to the participants in the formal second person voice "usted". The formal "usted" was substituted for the familiar second person voice "tu" in order to eliminate the interpersonal distance associated with "usted" in a youth population. (3) The language was simplified to make it more accessible to adolescents. For example, the word "nullity" was substituted for the phrase "I am nothing." (4) The examples were substituted, broadened, or complemented by situations that have arisen in our work with Puerto Rican adolescents. (5) Some of the content was adapted to Puerto Rican culture. (6) Many adolescents are resistant to completing assignments or tasks. For this reason, the manual format is more flexible. Therefore, the therapist has two choices: talk about the adolescent's thoughts about the assignment, and/or complete the assignment at the beginning of the therapy session. These tasks or exercises were called personal projects. (7) The therapist meets the adolescent and his/her parent(s) before the therapeutic process begins. This creates an open session to establish rapport with the adolescent and explore in detail his/her condition. This manual was used as part of a research project on the treatment of depression in Puerto Rican adolescents sponsored by the National Institute for Mental Health (NIMH) and the Institutional Funds for Research (FIPI, in Spanish) of the University of Puerto Rico. This adapted Cognitive Behavioral Therapy (CBT) manual has been used in three clinical trials where it has been efficacious in treating depression in Puerto Rican adolescents (Rosselló & Bernal, 1996; 1999; 2005; Rosselló, Bernal & Rivera, in press). After the original adaptation in the first clinical trial, the manual has continuously been refined based on our experiences with its use with Puerto Rican adolescents. Examples have been added based on real experiences that adolescents have brought up in therapy. More detailed instructions for therapists have been provided to facilitate the use of the techniques described in the manual. We also developed a manual for the participants' that summarizes the main points from each session as well as worksheets to be used in-session and in between sessions.

- Objectives

Research studies carried out during the last decades have consistently shown that CBT is efficacious in treating adolescent mental disorders such as depression, anxiety or oppositional defiant disorders (Bedrosian, 1981; Block, 1978; Barber & DeRubies, 1989; Clarke, Lewinsohn & Hops, 1990; Compton et al., 2004; DiGuiseppe, 1988; Melvin et al., 2006; Schrodtt & Wright, 1986; Schrodtt & Fitzgerald, 1987; Snyder & White, 1979; Weisz, McCarty, & Valeri, 2004; Zarb, 1992). Most therapeutic interventions used with adolescents are the result of adaptations of interventions used with adults. Cognitive-behavioral therapy is based on the interrelationship of thoughts, actions, and feelings. In order to work with

feelings of depression, this model establishes the importance of identifying the thoughts and actions that influence mood. In this manner the adolescent learns to gain control of his/her feelings. Therapy sessions are divided into three topics or modules that consist of four sessions each. The first four sessions work on how thoughts influence mood. The next four sessions discuss daily activities that affect mood. The last four sessions address how interactions with others affect our mood.

- Definitions

What is CBT? Cognitive Behavioural Therapy (CBT) is a talking therapy which can help people look at the different situations that they find themselves in, and to understand their thoughts, emotions and behaviours. The idea is that our thoughts, emotions, physical symptoms and behaviour can all influence one another and therefore help to maintain unhelpful moods such as low mood. Take a look at the diagram below.

The CBT model emphasises that it is not the situation that causes the emotional distress that an individual experiences. CBT argues that it is the individual's interpretation or view of that event or situation which causes the emotional distress. CBT works by focussing on the negative thoughts and learning how to challenge them, as well as learning how to change unhelpful behaviours such as avoidance.

When feeling low or anxious, it is common to have negative automatic thoughts or nats. These are unhelpful thoughts that pop into our minds without any effort. With anxiety, nats are often about overestimating threat and underestimating an individual's ability to cope, which can maintain any anxiety. Sometimes people find coping mechanisms which help them deal with the situation. This may involve avoiding the situation, or doing something differently in order to help control their anxiety. Although this may lower their anxiety in the short term, it can actually maintain and reinforce it in the long term. Breaking this vicious cycle may cause an increase in anxiety to begin with but ultimately help reduce it. The example below is of Linda. Her situation is chairing a meeting at work. Her thoughts, emotions, physical symptoms and behaviours are all influenced by each other. She thinks that "everyone will think that I am stupid," which contributes to her feeling embarrassed, as well as making her heart beat faster and becoming sweaty. As a result of this, she now actively avoids going to any meetings. This can cause Linda to feel even more anxious and embarrassed and strengthens her negative thoughts. If Linda thought she was able to chair the meeting, and did not avoid future meetings, this can then help create a more balanced emotion and to manage anxiety.

With low mood, people tend to think about themselves, the world and the future in a very negative way. For example, someone might have thoughts that “I am useless” and “It is pointless trying, as there is no point”. The lower a person feels, the more negative thoughts they will have and the more negative thoughts, the lower a person will feel. This forms a vicious circle that needs to be broken. Look at the example below of Mike. Mike has been having problems at work and over the last few months has been feeling very low. His situation is that he has been asked to go to a party by an old friend. Again, notice how his thoughts, emotions, behaviour and physical sensations are all influenced by each other. He thinks negatively about the invitation and thinks that “no-one will talk to me”. As a result, he decides not to go to the party and feels even lower. If Mike had gone to the party and found that people did talk to him this may have helped him feel better and improved his low mood.

- Summary

Anxiety is an emotion which usually involves an element of worry and fear. It is a state of mind but can also affect our thoughts, behaviours and physical reactions in our body. Although anxiety can be unpleasant, it is actually an evolutionary survival mechanism. When we find ourselves in dangerous or stressful situations, anxiety helps us by preparing our body to either run away or fight back. This is known as the “fight versus flight” response. Although anxiety can help us survive, it can start to become a problem when we use the fight versus flight response when there is no need. Anxiety is natural and helpful in dangerous or stressful situations but becomes a problem when we experience anxiety when we are not in a dangerous or stressful situation or long after a dangerous or stressful situation has passed.

Low mood is another emotion which can cause emotional distress. People can often experience a number of different symptoms that can affect the way that we think, the things that we do, as well as the physical symptoms that we can experience. This can then impact people further by causing their mood to deteriorate even more. Research has shown that the main causes for low mood can be linked to genetics, biology, early experiences in life, a combination of stressful events or even major life events such as a relationship breakdown, loss of a loved one or any traumatic event. When feeling low, people may find themselves thinking negatively about themselves and thinking that other people do not like them. A common symptom of low mood is that people tend to withdraw from activities or social interaction, as well as having difficulties staying or trying to sleep, as well as eating. People experiencing low mood can also think that life is not worth living, or may even

Points for Clarification

- **References / Further Readings**

Anger: Anxiety: Health Anxiety: Self-Esteem: Depression: OCD: Phobias: Pain: Panic: Social Anxiety: PTSD: Further Reading Overcoming Anger and Irritability: A self-help guide using cognitive behavioural therapy - by Davies William (2000) Feel the Fear and do it anyway - by Susan Jeffers (2007) Overcoming Anxiety - by Helen Kennelly (2009) Overcoming Anxiety - by Chris Williams (2003) The Worry Cure - by Robert Leahy (2006) Introduction to Coping with Health Anxiety - by Charles Young (2007) Overcoming Low Self-Esteem: a Self Help Guide Using Cognitive Behavioural Therapy - by Melanie Fennel (1999) Feeling good handbook - by David Burns (1999) Overcoming Depression: a Self Help Guide Using Cognitive Behavioural Techniques - by Paul Gilbert (2007) Overcoming Obsessive Compulsive Disorder: a Self Help Guide Using Cognitive Behavioural Techniques - by David Veale (2009)

**UNIT 4: MANAGEMENT OF MAL-ADAPTIVE BEHAVIOUR
AT HOME AND SCHOOL, PARENTAL COUNSELLING -
INDIVIDUAL, GROUP AND COMMUNITY**

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
-
- Introduction

This study evaluated the usefulness of the Maladaptive Behavior Domain of the Vineland Adaptive Behavior Scales-II in assessing maladaptive behaviour in children with autism. Our sample was composed of 117 children with autism or Pervasive Developmental Disorder – Not Otherwise Specified (PDD-NOS). Scores from the Maladaptive Behavior Domain were examined in relation to autism severity, cognitive ability, age, gender, and adaptive skills, all of which have been found to be related to maladaptive behaviour in previous research. Our results were mostly inconsistent with recent research, calling into question the validity of the Maladaptive Behavior Domain in its present form for use with children with autism. It is well known that children with Autistic Disorder (AD) often engage in maladaptive behaviours such as aggression, self-injurious behaviour, and stereotyped behaviour (e.g., Dominick, Davis, Lainhart, Tager-Flusberg, & Folstein,

2007), and that these correlate positively with levels of stress in caregivers (e.g., Hastings, Kovshoff, Ward, degli Espinosa, Brown, & Remington, 2005). The presence of maladaptive behaviours also places a child at a heightened risk for social exclusion and makes it difficult to acquire education in a typical school setting (Horner, Carr, Strain, Todd, & Reed, 2002). Thus, it is important to explore this area in an effort to minimize its negative impact. However, the measurement of maladaptive behaviours is an important issue that has received inadequate attention, and there is no standard measure currently employed. This brief report summarizes findings of a study exploring the use of the Maladaptive Behaviour Domain of the new Vineland scales to measure maladaptive behavior. The Second Edition of the Vineland Adaptive Behavior Scales (Vineland-II; Sparrow, Cicchetti, & Balla, 2005) is an assessment measure of adaptive skills. Along with several other updates, the Vineland-II includes a reorganized its Maladaptive Behavior Domain, which has four sections assessing different groups of maladaptive behaviour: Internalizing, Externalizing, Critical, and Other. The Vineland-II is routinely used in psychological assessments of children with autism (and other children). However, since it is relatively new, there is a very limited literature about it, and none of it addresses the use of the Maladaptive Behavior Domain among children with AD. Based on previous literature, we hypothesized that scores on the Maladaptive Behavior Domain would be positively correlated with autism severity, negatively correlated with cognitive ability, and uncorrelated with adaptive skill level or age. We also expected that there would be modest gender differences, with boys scoring higher on Externalizing and girls scoring higher on Internalizing

- Objectives

Severity of autism was measured using the Childhood Autism Rating Scale (CARS; Schopler, Reichler, & Renner, 1988). Verbal, Non-Verbal, and Full-Scale Ratio IQ scores were derived from the Mullen Scales of Early Learning (Mullen, 1995), Wechsler Preschool and Primary Scale of Intelligence Third Edition (Wechsler, 2002), or Stanford-Binet Intelligence Scales-Fifth Edition (Roid, 2003), depending on the child's age and functioning level. The Vineland Adaptive Behavior Scales-II (Sparrow et al., 2005) were administered by parent interview to determine the children's adaptive skills (i.e., Communication, Daily Living Skills, Socialization, Motor Skills, and Adaptive Behavior Composite) as well as Maladaptive Behavior (i.e., Internalizing, Externalizing, Other, and Critical raw scores, and Maladaptive Behavior Index (MBI standard score).

- Definitions

The goal of this study is to better understand the mechanisms that lead to maladaptive behavior in individuals with ASD. We examined the sequential effects of emotion experience and regulation to determine whether emotional experiences (i.e., high levels of negative emotion and low levels of positive emotion), use of emotion regulation strategies (more maladaptive than adaptive), or both emotional experiences and strategy use lead to maladaptive behavior. Since these emotional components (i.e., emotion experience and regulation) are intertwined and influence each other, they should be differentiated as well as examined in tandem to better understand how they give rise to maladaptive behaviors. Gaining insight into such processes will help to improve treatment for individuals with ASD. To measure maladaptive behaviors, we used the maladaptive behavior index of the Vineland Adaptive Behavior Scales (2nd Edition, VABS-2, Sparrow et al. 2005), which includes externalizing, internalizing and other behaviors that are known to interfere with adaptive behavior. We hypothesized that individuals with ASD, compared to TD participants, would experience less positive and more negative emotions, and would use cognitive reappraisal less frequently (Samson et al. 2012, 2014b, c) based on parent and self-reports. Given the mixed findings on the use of expressive suppression, we did not formulate a hypothesis for suppression (Samson et al. 2012, 2014b, c). We expected that (parent-reported) decreased positive emotions, increased negative emotions, and less frequent cognitive reappraisal would be associated with increased maladaptive behaviors in individuals with ASD compared to TD participants. These associations were tested via 2-path mediation designs. Based on these 2-path model results, we then tested sequential effects of emotion experience and regulation on maladaptive behavior in 3-path mediation designs. Two plausible models here are that emotion experience affects emotion regulation and in turn is associated with maladaptive behavior, or that emotion regulation impacts emotion experience and in turn is associated with maladaptive behavior.

- Summary

Recent advances in affective science have suggested a framework for conceptualizing and examining emotional reactivity and emotion regulation. Emotional reactivity can be seen as loosely coupled experiential, behavioral, and physiological responses (Gross and Thompson 2007). Emotions vary in their

quality, duration, and intensity. One way to categorize emotions is to distinguish between positive emotional experiences on the one hand, and negative emotional experiences on the other (Watson et al. 1988). Studying individual profiles in negative and positive emotions is informative, especially in relation to psychopathology. Emotion regulation takes place when one activates a goal to influence the emotion-generative process (Gross et al. 2011). Depending on the context, the individual, and the emotion, a specific emotion regulation strategy can be considered as adaptive or maladaptive (Aldao and NolenHoeksema 2012). While there are many forms of emotion regulation (Gross 2014), two prototypical examples of such

adaptive and maladaptive strategies are widely studied in the literature. Cognitive reappraisal, on the one hand, is a strategy involving cognitive change and is generally seen as adaptive. In the other hand, expressive suppression involves modulating the outward expression of the emotional response, and can be considered as a maladaptive strategy if used on a typical basis. Emotion Experience and Emotion Regulation in Autism Spectrum Disorder Traditionally, emotional problems have not been seen as a defining feature of ASD. However, there is mounting evidence that emotional components are affected in this disorder. Indeed, ASD is increasingly viewed as a disorder that involves problematic emotion frequency and intensity. For example, compared to TD individuals, those with ASD infrequently display positive empathic responses (Maskey et al. 2013) and report lower levels of amusement in the context of social types of humor (Samson 2013), while anger and anxiety tend to be more frequent and more intense (Ho et al 2012; Quek et al. 2012; Samson et al. 2014c). These problematic patterns of emotion intensity, duration, frequency, or type can result from difficulties regulating emotions (Konstantareas and Stewart 2006; Laurent and Rubin 2004; Mazefsky et al. 2013, 2014; Rieffe et al. 2011; Samson et al. 2012, 2014a, b). It seems that individuals with ASD suffer from emotion regulation failure (i.e., not engaging in regulation, Gross 2013), and if there is regulation, it is usually not as adaptive as in TD individuals, resulting in less effective emotion regulation patterns (Samson et al. 2014c). Several studies showed that adaptive strategies—such as cognitive reappraisal, acceptance, and problem solving—were used less frequently and less efficiently compared to TD controls (Samson et al. 2012, 2014b, c). In addition, studies have shown that individuals with ASD use maladaptive ER strategies – such as rumination or shutting down—more frequently (Kohr et al. 2014; Mazefsky et al. 2014; Samson et al. 2012, 2014b). However, the less frequent use of adaptive emotion regulation strategies and increased use of maladaptive strategies are not evident in every study. For example, one study showed similar levels of using adaptive strategies (Mazefsky et al. 2014), and expressive suppression—as one example of a generally maladaptive strategy—was more frequently used in ASD

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UNIT 5: ETHICAL ISSUES IN BEHAVIOUR MANAGEMENT AND IMPLICATIONS FOR INCLUSION

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
-
- Introduction

The topic of how to manage student behavior (i.e., a clearly defined and observable act) in schools has been around as long as there have been schools. Behavior management has been and still is the chief concern of educators across the country (Dunlap, Iovannone, Wilson, Kincaid, & Strain, 2010; Westling, 2010). When students misbehave, they learn less and keep their peers from learning. Classroom behavior problems take up teachers' time and disrupt the classroom and school. In fact, difficulty managing student behavior is cited as a factor associated with teacher burnout and dissatisfaction. For example, "50 percent of urban teachers leave the profession within the first five years of their career, citing behavior problems and management as factors influencing their decision to leave" (McKinney, CampbellWhately, & Kea, 2005, p. 16). More should be done to create effective classroom environments through the use of better classroom management approaches (McKinney et al., 2005; Westling, 2010). Every year, "new and

improved” behavior management approaches hit the schools only to be thrown out by the end of the year. There are at least five possible causes for this cycle. First, preservice teachers may not be trained well in behavior management methods. Typically, a single classroom management class that provides a superficial view of behavior management is offered. Second, teachers may not be trained to analyze research on behavior management approaches. We tend to flock to the “flavor of the month” procedures without a great deal of regard for what has been shown to work. Third, there is no unified theory of behavior management. Because the causes of behavior problems are often not agreed on, teachers may become confused about the causes of student behavior. Fourth, schools often do not have a seamless and consistent approach to behavior management utilized across classrooms, teachers, and grade levels. Teachers tend to implement their own procedures causing confusion on the part of students. Finally, behavior management is often viewed as a reactive approach to behavior problems rather than as a proactive one. We believe behavior management planning must occur at three levels. Figure 1.1 shows behavior management as three concentric circles. The smallest circle relates to the implementation of individualized behavior management supports for the most troubled students. Traditionally, behavior management training in special education has occurred at the individualized level. The middle circle is handled from a classroom perspective and includes effective instructional supports. Behavioral and academic programming are key aspects in the prevention of and reaction to problem behavior in the classroom. The largest circle represents schoolwide supports designed to prevent and respond to behavior difficulties at the school level. These concentric circles are dependent on one another and form a comprehensive approach to behavior management. This comprehensive approach is important given the recent shift by schools from a reactive approach to behavior management to a proactive one (Lane, Wehby, Robertson, & Rogers, 2007). Viewing behavior management in this way is also helpful in reducing the staggering drop-out rates in the United States (Dynarski et al., 2008). This chapter describes what is meant by discipline and various models used in schools to deal with student behavior. An analysis of each of the models is provided including their positive aspects and weaknesses. Additionally, five concrete recommendations to help teachers reduce common behavior problems are described along with a description of the behavioral model. Given that the conceptual focus of this textbook is behavioral, we discuss the misunderstandings of the behavioral model. Finally, behavioral ethics are highlighted via position statements from the Association for Behavior Analysis. Essentially, these statements lay out the rights individuals have to effective behavioral treatments and to an effective education. If we use effective management methods derived from the research literature, we can make significant positive gains in the lives of teachers and students.

- Objectives

Over the years, discipline has been equated with punishment, specifically, corporal punishment. Punishment and discipline, however, are not the same thing. Discipline involves teaching others right from wrong. Specifically, discipline includes methods to prevent or respond to behavior problems so they do not occur in the future (Slavin, 2009). The following are common definitions of the word discipline found in most dictionaries: training to act in accordance with rules, instruction, and exercise designed to train proper conduct or action; behavior in accordance with rules of conduct; and a set or system of rules and regulations. As seen in these definitions, discipline is about teaching students how to behave appropriately in different situations. It is not punishment, although punishment is one possible way of disciplining students.

With the changing attitudes toward the use of punishment-based disciplinary procedures, schools have looked for alternative models of student discipline. These models were and are aimed at developing and maintaining appropriate student behavior. The authors of these models try to describe why they work. Unfortunately, many of them have overlooked some important fundamentals; that is, they ignore the effects on students and fail to use scientific, functionally based definitions in their models. Following are brief descriptions of some of the various behavior management models used in schools. Table 1.1 provides a sample of the most commonly used models.

- Definitions

Management ethics is the ethical treatment of employees, stockholders, owners and the public by a company. A company, while needing to make a profit, should have good ethics. Employees should be treated well, whether they are employed here or overseas. By being respectful of the environment in the community a company shows good ethics, and good, honest records also show respect to stockholders and owners.

Ethics and ethical behavior are the essential parts of healthy management. From a management perspective, behaving ethically is an integral part of long-term career success. Wide access to information and more business opportunities than in the past makes ethics a need in modern business world.

- Summary

Canter and colleagues developed the assertive discipline model, originally based on nine major aspects (shown in Table 1.1). As seen in the table, discipline rests on how the teacher responds to misbehavior. It is up to the teacher to keep students in line during class. Canter and colleagues have modified assertive discipline over the years (Charles, 1996; Malmgren, Trezek, & Paul, 2005). Originally, Canter tried to get teachers to be strong leaders in the classroom. Therefore, his focus was on getting and keeping teachers in charge. In more recent times, however, Canter emphasizes the importance of focusing on student needs by talking with students more and teaching them how to behave appropriately. Therefore, Canter modified his model to make it more focused on positive discipline methods than on the use of force and coercion. Canter and Canter (1992) describe the following five steps of assertive discipline. First, teachers must acknowledge that they can and do affect student behavior. Second, teachers must learn to display an assertive response style, which is the most effective style they can have. Third, teachers must make a discipline plan that contains good rules and clear, effective consequences. Fourth, teachers must provide student instruction on the discipline plan. Finally, teachers should instruct students on how to behave responsibly. Malmgren et al. (2005) summarized the four main components of the model. First, teachers should develop a set of rules for the classroom. Second, teachers should determine a set of positive consequences for following the rules. Third, teachers should establish a set of negative consequences for not following the rules. Finally, teachers should implement the model with the students. Even after being taught the discipline plan, however, some students will continue to misbehave. Three approaches are used to work with these difficult students. First, a one-on-one problem-solving conference is scheduled at which the student and the teacher try to gain insight into the student's behavior. The purpose is not to punish the student but to provide guidance. Second, a relationship is built from the use of positive support. The

teacher should show the student that he or she cares about the student as a person and should make an attempt to get to know the student on a more personal basis. The student must feel that the teacher truly cares about him or her. Finally, an individualized behavior plan should be developed that is more specialized to the student's individual needs compared with the needs of the other students. Analysis. Assertive discipline is based on the assumptions that teachers are the leaders of the classroom and that they should use punishment to bring control to the classroom, if needed. A major positive aspect of assertive discipline is the concept that student behavior in a classroom results from what teachers do in the classroom. Also, Canter has attempted to add more proactive methods of preventing management problems through teaching students about rules and expectations. Unfortunately, assertive discipline has several major weaknesses. An operational definition of punishment (see Chapter 2) is not used. Punishment is assumed to be in effect with Assertive Discipline. Second, there is inadequate research to suggest the approach works. Much of the reported data on assertive discipline includes teacher testimonials or perceptions (e.g., Wood, Hodges, & Aljunied, 1996) or poor research (Nicholls & Houghton, 1995; Swinson & Cording, 2002). Although testimonials are important to consider, other important data sources are missing, and many questions remain unanswered. Does assertive discipline result in a decrease in the level of student misbehavior in the classroom as measured by direct observation? Does assertive discipline result in a decrease in the level of office referrals? A third problem is the reliance on threats, warnings, and a discipline hierarchy. Research evidence suggests threats and warnings tend to escalate problem behaviors in the classroom (Nelson, 1996b). When teachers use threats and warnings, students are more likely to become aggressive than when threats and warnings are not used. Finally, Canter misuses the term consequence to suggest it refers only to punishment. A consequence is anything that occurs, such as a reinforcer or punisher, after a behavior occurs. Assertive discipline seems to be a behavior reduction method that can work under certain circumstances. Unfortunately, if assertive discipline does work to suppress unwanted behavior, it does so in a manner that may well make the long-term problem of disruptive behavior worse. The use of threats and warnings along with a lack of reinforcement for appropriate behavior may seriously compromise the efficacy of this approach.

- Revision
- Assignment/Activity

- References / Further Readings

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Block 5: Therapeutic Intervention

UNIT 1: OCCUPATIONAL THERAPY – DEFINITION, OBJECTIVE, SCOPE, MODALITIES AND INTERVENTION

- Introduction
- Objectives
- Definitions
- Summary
- Revision
- Assignment/Activity
- Points For Discussion And Clarification
- References / Further Readings

- Introduction

Occupational therapy is an essential health service dedicated to helping people achieve independence, meaning and satisfaction in all aspects of their lives. Whether it is in the home, hospital, community, school or private practice, occupational therapists are available to help. The use of the term “occupation” refers to everything that people do during the course of everyday life, or all the activities that occupy one’s time. The profession itself is built on the belief of strength and ability, and uses everyday activities (or occupations) as the foundation for supporting health and well-being through actions related to self-care, productivity and leisure.

You’re entering an admirable health profession with roots that go back at least 200 years in history. A brief understanding of the establishment of the occupational therapy profession will give you a sense of its purpose and its approach to treatment. Occupational therapy today is used to treat both physical and psychiatric conditions in patients. However, the first philosophical foundations of occupational

therapy can be found in the area of treating mentally ill patients. In 1786, French physician Philippe Pinel used manual activity as a means of returning psychiatric patients to their previous interests, work, and final recovery. During that same time, an American physician, Benjamin Rush, was the primary supporter for the use of labor, exercise, and interests in the recovery of patients with mental illnesses. In 1892, Adolf Meyer, an American psychiatrist, promoted the use of gratifying activity which helped mentally ill patients return to normal function in society. He stressed the importance of a balance of work, play, and rest. Meyer's later published works began to outline a formal philosophy for what would eventually become the occupational therapy profession. In 1914, a New York architect named George Edward Barton opened an institution which used work as a means of therapy in treating a wide range of physical and mental illnesses and disabilities. Convinced of the benefits of using meaningful activity in rehabilitation, Barton named his approach to treatment occupational therapy. Occupational therapy was formally established as a profession in March 1917 at the first meeting of the National Society for the Promotion of Occupational Therapy. The name was changed to American Occupational Therapy Association (AOTA) in 1923 (Figure 1). As injured soldiers returned from World War I, the need for occupational therapy in treating physical disabilities increased. Reconstruction aides were the forerunners of modern occupational therapists. These aides were civilian employees who worked with patients suffering from both physical and mental disabilities. World War II further expanded the use of occupational therapy in physical injury rehabilitation. The AOTA has grown from only 40 members at its creation to well over 50,000 members in 1998. The purpose of the AOTA is to support a professional community for members and to promote occupational therapy as a profession. The Association also issues guidelines and standards that ensure a high quality of patient rehabilitation care. The AOTA publishes three periodicals for its membership, which provide information on developments within the profession, employment opportunities, and continuing-education programs. Check the Resources section in this study unit for more information on AOTA periodicals and other publications that will help you in your new career.

Occupational therapists are educated to evaluate aspects of the occupational therapy domain and their transactional relationships. Occupational therapists and occupational therapy assistants are educated about the aspects of the occupational therapy domain and apply this knowledge to the intervention process as they work to support the health and participation of their clients. Occupational therapists are responsible for all aspects of occupational therapy service delivery and are accountable for the safety and effectiveness of that service delivery process. Occupational therapy assistants deliver occupational therapy service under the supervision of and in collaboration with an occupational therapist (AOTA, 2004b).

- Objectives

So what does the occupation in occupational therapy actually mean? Occupations are activities or tasks that use a person's resources of time and energy. As the definition of occupational therapy indicates, the tasks used in treatment are activities that a person uses to take care of oneself, to do work, and to enjoy leisure time. Examples of a patient's occupations could include getting dressed, entering data into a computer, and crocheting.

One of the distinctive traits of occupational therapy is that it treats the patient as a whole individual. Therefore, occupational therapy employs the entire range of a person's activities and interests to promote rehabilitation. Treatment begins by addressing the most basic self-care activities. Self-care tasks are sometimes referred to as activities of daily living (ADL). These tasks can include grooming, bathing, toileting, dressing, eating, socializing, communicating, mobility, and sexual expression. Occupational therapy also uses activities that patients perform in order to meet their need to be productive individuals. These work activities, or productive activities, fall into four general categories: (1) home management, (2) care of others, (3) educational activities, and (4) vocational activities. Work activities may include—but aren't limited to—meal preparation and cleanup, shopping, money management, work or job performance, retirement planning, going to school, and caring for a family member. Occupational therapy is concerned with patients' ability to receive satisfaction and enjoyment from their environments. Play activities, or leisure activities, are activities that individuals do for recreation or relaxation. These activities can include hobbies, sports activities, and creative activities.

- Definitions

You'll notice some new terms and concepts in this section. Be sure to read the definitions but don't be too concerned if you don't understand the full meanings at first. We'll be reviewing the most important concepts throughout this program. As you continue to study, you'll soon become comfortable with the ideas and vocabulary related to your new career. What exactly is occupational therapy? Occupational therapy is the therapeutic use of self-care, work, and play activities to increase independent function, enhance development, and prevent disability. Occupational therapy may include the accommodation of a task or environment to

achieve maximum independence and quality of life. Let's take a look at each part of this definition to make sure you understand what it means.

- Summary

Independent function describes a patient's ability to perform a task with as little reliance on others as possible. For the patient with a physical disability, increasing independent function might involve performing strengthening exercises, installing grab bars in a hallway, and training the patient to prepare meals using modified techniques. With occupational therapy treatment, the patient would be able to go about daily life with greater independence than before treatment. Occupational therapy is used to enhance development in cases where patients have disorders that cause deficiencies or delays in proper functioning. Development-enhancing treatment is often given to premature infants and children who have cerebral palsy or muscular dystrophy. In these cases, therapy would focus on promoting development of movement and/or communication functions. Without treatment, certain conditions may cause temporary or permanent disability. For instance, individuals with tendon injuries can potentially lose some or all of the function in the injured part of the body. Occupational therapy prevents disabilities by providing treatment to avoid the loss of function. Occupational therapy may also include adapting a task or an environment to gain the highest degree of independence and the greatest quality of life for the patient. For example, an occupational therapy professional might suggest the use of a dressing stick for someone who is unable to dress independently due to limitations in movement (Figure 3). An occupational therapist might also recommend the use of a transfer board for someone who has difficulty moving from a chair to a bed. Purposeful activity has always been a central focus of occupational therapy. Purposeful activities are the behaviors or tasks that make up occupations. These behaviors or tasks are directed towards a specific goal. To be considered a purposeful activity, the individual must be participating actively and voluntarily toward a goal that the individual considers meaningful. For a mentally ill patient who previously enjoyed woodworking as a hobby, for example, occupational therapy treatment may include the purposeful activity of constructing a desktop bookshelf. Occupational therapy practitioners use purposeful activity to evaluate, simplify, restore, or maintain a patient's ability to function in his or her daily occupations. Using purposeful activity in therapy produces many benefits, including the following:

Now let's take a moment to review. Occupational therapy focuses on patients' day-to-day involvement in occupations (activities) that organize their lives and meet their needs. These needs would include taking care of themselves (self-care), being productive (work), and receiving enjoyment and satisfaction in their environments (leisure). Occupational therapy includes performing activities of daily living (ADL) as routine as bathing and dressing. Occupational therapy also addresses more involved and complex tasks that are related to one's work and leisure environments. Patients engage in purposeful activities, or therapeutic activities, that are meaningful to them and promote independence. If necessary, tasks and environments are changed to meet the ability level of the patient. Occupational therapy treatment considers all physical, psychological, and social factors related to individuals' ability to function in their particular home, work, or leisure environment (Figure 5). The therapist discovers what personal goals the patients have, and what motivates the patients toward the achievement of these goals. The therapist needs to know something about the patient's family structure and network of friends to design and implement effective treatment. A patient's cultural traditions that influence food preparation, clothing restrictions, and/or holiday observances are factored into therapy when necessary. These factors are examined in order to make treatment as effective and as meaningful to the individual as possible.

When a patient is able to return home after a hospital stay, the physician may recommend additional therapy at an outpatient clinic or center. These facilities offer occupational and physical therapy to patients who are able to live at home and come to the facility to receive daily or weekly treatment. Offering therapy on an outpatient basis is less expensive for health care providers because the patient doesn't require around-the-clock nursing or supervision. Outpatient therapy also allows patients to return to the comfort of familiar surroundings, which can also mean a quicker return to normal routines and independence. Some outpatient clinics offer services in very remote rural settings. However, these clinics offer the same quality and range of services as a hospital. The advantages to the patient of attending an outpatient clinic include convenience and less crowded surroundings. Many employees are injured on the job each year or are disabled by off-the-job accidents or other medical conditions. Work-hardening focuses on helping patients regain the functions they need to return to their jobs as soon as possible without reinjuring themselves. Both occupational and physical therapy professionals work in outpatient work-hardening centers. These professionals work with disabled employees on an outpatient basis to perform the specific occupations the workers need to get back to work. Work-hardening centers set up simulated work

Points for Clarification

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UNIT 2:PHYSIOTHERAPY – DEFINITION, OBJECTIVE, SCOPE, MODALITIES AND INTERVENTION

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
-
- Introduction

Physical therapy or physiotherapy(often abbreviated to PT) is a physical medicine and rehabilitation specialty that remediates impairments and promotes mobility, function, and quality of life through examination, diagnosis, prognosis, and physical intervention (therapy using mechanical force and movements). It is carried out by physical therapists (known as physiotherapistsin most countries).

In addition to clinical practice, other activities encompassed in the physical therapy profession include research, education, consultation, and administration. In many settings, physical therapy services may be provided alongside, or in conjunction with, other medical services.

Physiotherapy led rehabilitation is a clinically and cost effective intervention for those patients whose life has been adversely changed by injury, illness or disease.

The World Confederation for Physical Therapy (WCPT) is committed to supporting Member Organisations. It is in this spirit that this description of physical therapy has been drawn up in response to the expressed need of members. As a Position Statement it is open to Member Organisations to adopt fully or in part or to develop further to meet the evolving needs of the profession. Research is continually providing new evidence upon which future practice will be built. Nowhere is this more apparent than in our understanding of human movement which is central to the skills and knowledge of the physical therapist. The uniqueness of the contribution which physical therapy can make to health care/services in the coming years remains to be fully defined. This statement is the basis upon which subsequent reviews will build, in response to developing knowledge in physical therapy and the profession's response to society's changing health needs.

Physiotherapy aims to publish original research and facilitate continuing professional development for physiotherapists and other health professions worldwide. Dedicated to the advancement of physiotherapy through publication of research and scholarly work concerned with, but not limited to, its scientific basis and clinical application, education of practitioners, management of services and policy.

We are pleased to receive articles reporting original scientific research, systematic reviews or meta-analyses, theoretical or debate articles, brief reports and technical reports. All papers should demonstrate methodological rigour.

- Objectives

Physical therapy provides services to individuals and populations to develop, maintain and restore maximum movement and functional ability throughout the

lifespan. This includes providing services in circumstances where movement and function are threatened by ageing, injury, disease or environmental factors. Functional movement is central to what it means to be healthy. Physical therapy is concerned with identifying and maximising quality of life and movement potential within the spheres of promotion, prevention, treatment/intervention, habilitation and rehabilitation. This encompasses physical, psychological, emotional, and social well being. Physical therapy involves the interaction between physical therapist, patients/clients, other health professionals, families, care givers, and communities in a process where movement potential is assessed and goals are agreed upon, using knowledge and skills unique to physical therapists.

Physical therapists are qualified and professionally required to:

- Undertake a comprehensive examination/assessment/evaluation of the patient/client or needs of a client group
- Formulate a diagnosis, prognosis, and plan
- Provide consultation within their expertise and determine when patients/clients need to be referred to another healthcare professional
- Implement a physical therapist intervention/treatment programme
- Determine the outcomes of any interventions/treatments
- Make recommendations for self management

The physical therapist's extensive knowledge of the body and its movement needs and potential is central to determining strategies for diagnosis and intervention. The practice settings will vary according to whether the physical therapy is concerned with health promotion, prevention, treatment/intervention, habilitation or rehabilitation.

The physical therapist's extensive knowledge of the body and its movement needs and potential is central to determining strategies for diagnosis and intervention. The practice settings will vary according to whether the physical therapy is concerned with health promotion, prevention, treatment/intervention, habilitation or rehabilitation. Physical therapists operate as independent practitioners, as well as members of health service provider teams, and are subject to the ethical principles of WCPT. They are able to act as first contact practitioners, and patients/clients may seek direct services without referral from another health care professional. Physical therapy is an established and regulated profession, with specific professional aspects of clinical practice and education, indicative of diversity in social, economic, cultural and political contexts. But it is clearly a single profession, and the first professional qualification, obtained in any country, represents the completion of a curriculum that qualifies the physical therapist to use the professional title and to practice as an independent professional.

- **Definitions**

Diagnosis and prognosis arise from the examination and evaluation and represent the outcome of the process of clinical reasoning and the incorporation of additional information from other professionals as needed. This may be expressed in terms of movement dysfunction or may encompass categories of impairments, activity limitations, participatory restrictions, environmental influences or abilities/disabilities. Prognosis (including plan of care/intervention) begins with determining the need for care/intervention and normally leads to the development of a plan of care/intervention, including measurable outcome goals negotiated in collaboration with the patient/client, family or care giver. Alternatively it may lead to referral to another agency or health professional in cases which are inappropriate for physical therapy. Intervention/treatment is implemented and modified in order to reach agreed goals and may include manual handling; movement enhancement; physical, electro-therapeutic and mechanical agents; functional training; provision of assistive technologies; patient related instruction and counselling; documentation and co-ordination, and communication. Intervention/treatment may also be aimed at prevention of impairments, activity limitations, participatory restrictions, disability and injury including the promotion and maintenance of health, quality of life, workability and fitness in all ages and populations. Re-examination necessitates determining the outcomes.

- **Summary**

Physical therapy is an essential part of the health and community/welfare services delivery system. Physical therapists practice independently of other health care/service providers and also within interdisciplinary rehabilitation/habilitation programmes to prevent, gain, maintain or restore optimal function and quality of life in individuals with loss and disorders of movement. Physical therapists are guided by their own code of ethical principles. Thus, they may be concerned with any of the following purposes: • promoting the health and well being of individuals and the general public/society, emphasising the importance of physical activity and exercise • preventing impairments, activity limitations, participatory restrictions and disabilities in individuals at risk of altered movement behaviours due to health or medically related factors, socio-economic stressors, environmental factors and lifestyle factors • providing interventions/treatment to restore integrity of body

systems essential to movement, maximise function and recuperation, minimise incapacity, and enhance the quality of life, independent living and workability in individuals and groups of individuals with altered movement behaviours resulting from impairments, activity limitations, participatory restrictions and disabilities

- modifying environmental, home and work access and barriers to ensure full participation in one's normal and expected societal roles

Physical therapists may also contribute to the development of local, national and international health policies and public health strategies. Settings in which physical therapy is practised

Physical therapy is delivered in a variety of settings which allow it to achieve its purpose. Prevention, health promotion, treatment/intervention, habilitation and rehabilitation take place in multiple settings that may include, but are not confined to, the following:

- community based rehabilitation programmes
- community settings including primary health care centres, individual homes, and field settings
- education and research centres
- fitness clubs, health clubs, gymnasia and spas
- hospices
- hospitals
- nursing homes
- occupational health centres
- out-patient clinics
- physical therapist private offices, practices, clinics
- prisons
- public settings (e.g., shopping malls) for health promotion
- rehabilitation centres and residential homes
- schools, including pre-schools and special schools
- senior citizen centres
- sports centres/clubs
- workplaces/companies

Physical therapy involves the illnesses, or injuries that limit their abilities to move and perform functional activities as well as they would like in their daily lives.^[1] PTs use an individual's history and physical examination to arrive at a diagnosis and establish a management plan and, when necessary, incorporate the results of laboratory and imaging studies like X-rays, CT-scan, or MRI findings. Electrodiagnostic testing (e.g., electromyograms and nerve conduction velocity testing) may also be of assistance.^[2] PT management commonly includes prescription of or assistance with specific exercises, manual therapy and manipulation, mechanical devices such as traction, education, physical agents which includes heat, cold, electricity, sound waves, radiation, rays, prescription of assistive devices, prostheses, orthoses and other interventions. In addition, PTs

work with individuals to prevent the loss of mobility before it occurs by developing fitness and wellness-oriented programs for healthier and more active lifestyles, providing services to individuals and populations to develop, maintain and restore maximum movement and functional ability throughout the lifespan. This includes providing therapeutic treatment in circumstances where movement and function are threatened by aging, injury, disease or environmental factors. Functional movement is central to what it means to be healthy.

Physical therapy is a professional career which has many specialties including sports,neurology, wound care, EMG, cardiopulmonary, geriatrics, orthopaedic and pediatrics.Neurological rehabilitation is in particular a rapidly emerging field. PTs practice in many settings, such as private-owned physical therapy clinics, outpatient clinics or offices, health and wellness clinics, rehabilitation hospitals facilities, skilled nursing facilities, extended care facilities, private homes, education and research centers,schools, hospices, industrial and this workplaces or other occupational environments,fitness centers and sports training facilities.^[3]

Physical therapists also practise in the non-patient care roles such as health policy,^{[4][5][6][7]} health insurance, health care administration and as health care executives.^{[8][9]} Physical therapists are involved in the medical-legal field serving as experts, performing peer review and independent medical examinations.^[10]

Points for Clarification

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UNIT 3: SPEECH THERAPY – DEFINITION, OBJECTIVE, SCOPE AND TYPES OF SPEECH, LANGUAGE AND HEARING DISORDERS AND INTERVENTION

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
-
- Introduction

Speech-language pathology is a field of expertise practiced by a clinician known as a Speech-Language Pathologist (SLP), also called speech and language therapist,^[1] or speech therapist, who specializes in the evaluation and treatment of communication disorders and swallowing disorders.

The components of speech production include: phonation, producing sound; resonance; fluency; intonation, variance of pitch; and voice, including aeromechanical components of respiration. The components of language include: phonology, manipulating sound according to the rules of a language; morphology, understanding and using minimal units of meaning; syntax, constructing sentences by using languages' grammar rules; semantics, interpreting signs or symbols of communication to construct meaning; and pragmatics, social aspects of communication.^[2]

Swallowing disorders includes oropharyngeal and functional dysphagia in adults and children and feeding disorders in children and infants.

Online Speech Therapy or Telepractice is the use of technology to provide speech therapy via high speed internet, webcam, headset with microphone or any other form of communication.^{[1][2][3]} Online therapy is a clinical arrangement where the patient and a speech-language certified pathologist communicate and interact face-to-face over the Internet.^[4] The session involves a suite of therapeutic exercises including listening, speaking, reading and writing.^[5] The recorded videos are assessed by the pathologist to generate an activity report for evaluating progress and usage.^[6]

Telepractice is a method of reaching students and individuals in any distant location.^[7] Telepractice is defined by the American Speech–Language–Hearing

Association(ASHA) as the use of technology to provide speech therapy services to remote regions.^[8] Janet Brown, the Director of Healthcare services in SLP at ASHA has stated "research shows that with telepractice a speech-language pathologist can provide speech therapy services, with the same results, as being there in person."

- Objectives

Speech-Language Pathologists provide a wide range of services, mainly on an individual basis, but also as support for individuals, families, support groups, and providing information for the general public. Speech-language pathologists (SLPs) work to prevent, assess, diagnose, and treat speech, language, social communication, cognitive-communication, and swallowing disorders in children and adults.^[3] Speech services begin with initial screening for communication and swallowing disorders and continue with assessment and diagnosis, consultation for the provision of advice regarding management, intervention and treatment, and provision counseling and other follow up services for these disorders. Services are provided in the following areas:

- cognitive aspects of communication (e.g., attention, memory, problem solving, executive functions).
- speech (phonation, articulation, fluency, resonance, and voice including aeromechanical components of respiration);

- language (phonology, morphology, syntax, semantics, and pragmatic/social aspects of communication) including comprehension and expression in oral, written, graphic, and manual modalities; language processing; preliteracy and language-based literacy skills, phonological awareness.
- swallowing or other upper aerodigestive functions such as infant feeding and aeromechanical events (evaluation of esophageal function is for the purpose of referral to medical professionals);
- voice (hoarseness (dysphonia), poor vocal volume (hypophonia), abnormal (e.g. rough, breathy, strained) vocal quality. Research demonstrates voice therapy to be especially helpful with certain patient populations; individuals with Parkinson's Disease often develop voice issues as a result of their disease
- sensory awareness related to communication, swallowing, or other upper aerodigestive functions.

Speech, language, and swallowing disorders result from a variety of causes, such as a stroke, brain injury, hearing loss, developmental delay, a cleft palate, cerebral palsy, or emotional issues

- Definitions

Treatment of speech defects and disorders, especially through use of exercises and a audio-visual aids that develop new speech habits.

The treatment of speech and communication disorders. The approach used varies depending on the disorder. It may include physical exercises to strengthen the muscles used in speech (oral-motor work), speech drills to improve clarity, or sound production practice to improve

- **Summary**
Language

There are two types of language difficulties:

Receptive

People with receptive language difficulties have problems understanding spoken and written language. Because of this they usually also have expressive language difficulties although this is not always the case.

Expressive

People with expressive language difficulties are able to understand but cannot say the words and sentences they want to. This may be because of word finding difficulties or problems making sentences.

In children language difficulties are divided up into

- **delay:** language follows the normal developmental pattern but at a slower rate e.g. a four year old may have the language skills of someone 12 months younger.
- **disorder:** language is not following typical development.

Where language difficulties occur with no other difficulties the child may be diagnosed with Specific Language Impairment.

In adults acquired receptive and expressive language impairments are known as aphasia. There are many different types of aphasia depending on which areas of the brain are damaged and what symptoms they show.

Assessment for online speech therapy consists of an informal oral exam by a licensed trained professional through video conferencing or a web application. Patients are initially screened for communication disorders with diagnosis and consultation for provision counseling including cognitive aspects of communication, syntax, hypophonia and upper aerodigestive functions. The therapist and patient communicate via telecommunication technology where they can interact in real time. Therapy may cover speech sound production, fluency, language, cognition and written language.^[9]

The therapists create an assessment document or report that is updated after every session. The document is reported to the parents or the referral source in compliance with HIPAA and FERPA. The Health Insurance Portability and Accountability Act also known as HIPAA is a federal law that protects patient medical records. HIPAA specifically protects “individually identifiable health information.” The Family Educational Rights and Privacy Act known as FERPA is a federal law that protects student education records. FERPA gives parents certain rights with respect to their children’s education records until they turn 18 or transfer to a school higher than the high school level, thus making them “eligible students.”^[10] Clinical departments in Universities also offer speech and language therapy services where they keep

recorded video of sessions between clinicians and patients secured through password security services

Speech and language impairment are basic categories that might be drawn in issues of communication involve hearing, speech, language, and fluency.

A speech impairment is characterized by difficulty in articulation of words. Examples include stuttering or problems producing particular sounds. Articulation refers to the sounds, syllables, and phonology produced by the individual. Voice, however, may refer to the characteristics of the sounds produced—specifically, the pitch, quality, and intensity of the sound. Often, fluency will also be considered a category under speech, encompassing the characteristics of rhythm, rate, and emphasis of the sound produced^[1]

A language impairment is a specific impairment in understanding and sharing thoughts and ideas, i.e. a disorder that involves the processing of linguistic information. Problems that may be experienced can involve the form of language, including grammar, morphology, syntax; and the functional aspects of language, including semantics and pragmatics^[1]

An individual can have one or both types of impairment. These impairments / disorders are identified by a speech and language pathologist.

Multi-discipline collaboration

Speech-Language Pathologists collaborate with other health care professionals often working as part of a multidisciplinary team, providing referrals to audiologists and others; providing information to health care professionals (including physicians, dentists, nurse practitioners, nurses, occupational therapists, dietitians), educators, behavior consultants (applied behavior analysis) and parents as dictated by the individual client's needs.

In relation to Auditory Processing Disorders^[4] collaborating in the assessment and providing intervention where there is evidence of speech, language, and/or other cognitive-communication disorders.

The treatment for patients with cleft lip and palate has an obvious interdisciplinary character. The speech therapy outcome is even better when the surgical treatment is performed earlier.^[5]

Working environments

Speech-Language Pathologists work in a variety of clinical and educational settings. SLPs work in public and private hospitals, skilled nursing facilities (SNFs), long-term acute care (LTAC) facilities, hospice,^[6] and home healthcare. SLPs may also work as part of the support structure in the education system, working in both public and private schools, colleges, and universities.^[7] Some speech-language pathologists also work in community health, providing services at prisons and young offenders' institutions or providing expert testimony in applicable court cases.^[8]

Subsequent to the American Speech-Language-Hearing Association's (ASHA's) 2005 approval of the delivery of Speech-Language Pathology services via video conference, or telepractice,^[9] SLPs have begun delivering services via this service delivery method.

- Revision
- Assignment/Activity

POINTS FOR DISCUSSIONS / CLARIFICATION

After going through the unit you may like to have further discussion on some points and clarification. Note down those points:-

Points for Discussion

2. Jump up^ *Block, Frances K.; Amie Amiot, Cheryl Deconde Johnson; Gina E. Nimmo; Peggy G. Von Almen; Deborah W. White; and Sara Hodge Zeno (1993), "Definitions of Communication Disorders and Variations", Ad Hoc Committee on Service Delivery in the Schools, ASHA, doi:10.1044/policy.RP1993-00208, retrieved 2010-08-07* Cite uses deprecated parameter lcoauthors=(help)
3. Jump up^ *"Speech-Language Pathologists". American Speech-Language-Hearing Association. Retrieved 6 April 2015.*
4. Jump up^ *DeBonis DA, Moncrieff D (February 2008). "Auditory processing disorders: an update for speech-language pathologists". Am J Speech Lang Pathol 17 (1): 4–18. doi:10.1044/1058-0360(2008/002). PMID 18230810.*
5. Jump up^ *Mihaela Frăţilă, Emil Urtilă, Maria Ştefănescu (Oct 2011). "Speech therapy — criteria for determining the time of the surgical operation in surgery of labio-palato-velars cleft". Rev. chir. oro-maxilo-fac. implantol. (in Romanian)2 (2): 21–23. ISSN 2069-3850. 33. Retrieved 2012-06-06. (webpage has a translation button)*
6. Jump up^ *Pollens R (October 2004). "Role of the speech-language pathologist in palliative hospice care". J Palliat Med 7(5): 694–702. doi:10.1089/jpm.2004.7.694. PMID 15588361.*
7. Jump up^ *"Speech and language therapist - NHS Careers".*
8. Jump up^ *"What is speech and language therapy?".*
9. Jump up^ *"ASHA Telepractice Position Statement". Asha.org. Retrieved 2010-04-15.*

10. Jump up^ <http://www.asha.org/uploadedFiles/Accreditation-Standards-Graduate-Programs.pdf>
11. Jump up^ <http://www.asha.org/certification/Clinical-Fellowship.htm>. Missing or empty title= (help)
12. Jump up^ *"Professional Profile of the Speech and Language Therapist"*.
13. Jump up^ *"Roles and Responsibilities of Speech-Language Pathologists in Schools"*.
14. Jump up^ Bellani, M.; Moretti, A.; Perlini, C.; Brambilla, P. (Dec 2011). *"Language disturbances in ADHD."* *Epidemiol Psychiatr Sci* 20 (4): 311–5. doi:10.1017/S2045796011000527. PMID 22201208.
15. Jump up^ *"International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10) Version for 2010"*. World Health Organisation. 2010.
16. Jump up^ <https://www.nidcd.nih.gov/health/voice/pages/autism.aspx>
17. Jump up^ http://www.ninds.nih.gov/disorders/asperger/detail_asperger.htm
18. Jump up^ <http://asha.org/telepractice/>
19. Jump up^ <http://vocalsaints.co.nz/>
20. Jump up^ <http://www.nhs.uk/Conditions/pregnancy-and-baby/pages/helping-your-childs-speech.aspx#close>

UNIT 4: YOGA AND PLAY THERAPY – DEFINITION, OBJECTIVE, SCOPE AND INTERVENTION

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
-
- Introduction

Play therapy is generally employed with children aged 3 through 11 and provides a way for them to express their experiences and feelings through a natural, self-guided, self-healing process. As children's experiences and knowledge are often communicated through play, it becomes an important vehicle for them to know and accept themselves and others. This approach is common to young children.

Play therapy is a form of counseling or psychotherapy that uses play to communicate with and help people, especially children, to prevent or resolve psychosocial challenges. This is thought to help them towards better social integration, growth and development, emotional modulation, and trauma resolution.

Play therapy can also be used as a tool of diagnosis. A play therapist observes a client playing with toys (play-houses, pets, dolls, etc.) to determine the cause of the disturbed behavior. The objects and patterns of play, as well as the willingness to interact with the therapist, can be used to understand the underlying rationale for behavior both inside and outside of therapy session. Caution, however, should be taken when using play therapy for assessment and/or diagnostic purposes.^[1]

According to the psychodynamic view, people (especially children) will engage in play behavior in order to work through their interior obfuscations and anxieties. According to this particular viewpoint, play therapy can be used as a self-help mechanism, as long as children are allowed time for "free play" or "unstructured play." However, some forms of therapy depart from non-directiveness in fantasy play, and introduce varying amounts of direction, during the therapy session.

An example of a more directive approach to play therapy, for example, can entail the use of a type of desensitization or relearning therapy, to change troubling behaviors, either systematically or through a less structured approach. The hope is that through the language of symbolic play, such desensitization will likely take place, as a natural part of the therapeutic experience, and lead to positive treatment outcomes.

Play has been recognized as important since the time of Plato (429-347 B.C.) who reportedly observed, "you can discover more about a person in an hour of play than in a year of conversation." In the eighteenth century Rousseau (1712-1778), in his book 'Emile' wrote about the importance of observing play as a vehicle to learn about and understand children. Friedrich Fröbel, in his book *The Education of Man* (1903), emphasized the importance of symbolism in play. He observed, "play is the highest development in childhood, for it alone is the free expression of what is in the child's soul.... children's play is not mere sport. It is full of meaning and import." (Fröbel, 1903, p. 22) The first documented case, describing the therapeutic use of play, was in 1909 when Sigmund Freud published his work with "Little Hans." Little Hans was a five-year-old child who was suffering from a simple phobia. Freud saw him once briefly and recommended that his father take note of Hans' play to provide insights that might assist the child. The case of "Little Hans" was the first case in which a child's difficulty was related to emotional factors.

Hermine Hug-Hellmuth (1921) formalized the play therapy process by providing children with play materials to express themselves and emphasize the use of the play to analyze the child. In 1919, Melanie Klein (1955) began to implement the technique of using play as a means of analyzing children under the age of six. She believed that child's play was essentially the same as free association used with adults, and that as such, it was provide access to the child's unconscious. Anna Freud (1946, 1965) utilized play as a means to facilitate positive attachment to the therapist and gain access to the child's inner life.

In the 1930s David Levy (1938) developed a technique he called release therapy. His technique emphasized a structured approach. A child, who had experienced a specific stressful situation, would be allowed to engage in free play. Subsequently, the therapist would introduce play materials related to the stress-evoking situation allowing the child to reenact the traumatic event and release the associated emotions.

In 1955, Gove Hambidge expanded on Levy's work emphasizing a "Structured Play Therapy" model, which was more direct in introducing situations. The format of the approach was to establish rapport, recreate the stress-evoking situation, play out the situation and then free play to recover.

Jesse Taft (1933) and Frederick Allen (1934) developed an approach they entitled relationship therapy. The primary emphasis is placed on the emotional relationship between the therapist and the child. The focus is placed on the child's freedom and strength to choose.

Carl Rogers (1942) expanded the work of the relationship therapist and developed non-directive therapy, later called client-centered therapy (Rogers, 1951). Virginia Axline (1950) expanded on her mentor's concepts. In her article entitled 'Entering the child's world via play experiences' Axline summarized her concept of play therapy stating, "A play experience is therapeutic because it provides a secure relationship between the child and the adult, so that the child has the freedom and room to state himself in his own terms, exactly as he is at that moment in his own way and in his own time" (Progressive Education, 27, p. 68).

In 1953 Clark Moustakas wrote his first book *Children in Play Therapy*. In 1956 he compiled *Publication of The Self*, the result of the dialogues between Abraham Maslow, Carl Rogers, Clark Moustakas and others, forging the Humanistic Psychology movement.

Filial therapy, developed by Bernard and Louise Guerney, was a new innovation in play therapy during the 1960s. The filial approach emphasizes a structured training program for parents in which they learn how to employ child-centered play sessions in the home. In the 1960s, with the advent of school counselors, school-based play therapy began a major shift from the private sector. Counselor-educators such as Alexander (1964); Landreth (1969, 1972); Muro (1968); Myrick and Holdin (1971); Nelson (1966); and Waterland (1970) began to contribute significantly, especially in terms of using play therapy as both an educational and preventive tool in dealing with children's issues.

1973 Clark Moustakas continues his journey into play therapy and publishes his novel "The child's discovery of himself". Clark Moustakas' work as being concerned with the kind of relationship needed to make therapy a growth experience. His stages start with the child's feelings being generally negative and as they are expressed, they become less intense, the end results tend to be the emergence of more positive feelings and more balanced relationships. Today, his daughter Kerry Moustakas continues his legacy as an author and president of The Michigan School of Professional Psychology. 2004 Clark and Kerry Moustakas publish *Loneliness, Creativity and Love: Awakening Meanings in Life*.

In 1982, the Association for Play Therapy (APT) was established marking not only the desire to promote the advancement of play therapy, but to acknowledge the extensive growth of play therapy. Currently, the APT has almost 5,000 members in twenty-six countries (2006). Play therapy training is provided, according to a survey conducted by the Center for Play Therapy at the University of North Texas (2000), by 102 universities and colleges throughout the United States. The APT provides certification in play therapy and play therapy supervision for clinicians. They also offer a list of play therapists by local and training opportunities.

In 1985, the work of two key Canadians in the field of child psychology and play therapy, Mark Barnes and Cynthia Taylor, resulted in the establishment of Certification Standards through the non-profit Canadian child psychotherapy and play therapy association. A fledgling group of practising Canadian child psychotherapists and play therapists worked on developing an organization to meet professional needs. It gradually expanded and eventually a Board of Directors was formed; objects and by-laws were designed, revised, re-revised and finally approved by the Government of Canada. The Canadian association was eventually recognized as a non-profit organization in 1986.

During 1995/1996, a whole new horizon opened up for the profession of play therapy as a result of the Canadian Play Therapy Institute's pioneering efforts on an International basis. Play Therapy International was founded from the Canadian Play Therapy Institute and there now existed a mutually supportive recognition between Play Therapy International/The International Board of Examiners of Certified Play

Therapists, The Canadian Play Therapy Institute, as well as a number of other professional bodies throughout the world.

In the UK, The British Association of Play Therapists (BAPT) was distinguished from its American counterpart in 1996 and was granted charity status within the UK in 2006 by the UK Charities Commission. The United Kingdom Society for Play and Creative Arts Therapies Limited (known in short as PTUK) was originally set up in October 2000 as Play Therapy UK with the encouragement of Play Therapy International.

The Australasia Pacific Play Therapy Association (APPTA) was formed in 2007 with headquarters based in Australia.

By 2010 Play Therapy International has partnered sister organisations in Ireland, Canada, Australasia, France, Spain, Wales, Malaysia, Romania, Russia, United Kingdom, Slovenia, Germany, New Zealand, Hong Kong, Korea and Ethiopia.

- Objectives

Play therapy can be divided into two basic types: non-directive and directive. Non-directive play therapy is a non-intrusive method in which children are encouraged to work toward their own solutions to problems through play. It is typically classified as psychodynamic therapy. In contrast, directive play therapy is a method that includes more structure and guidance by the therapist as children work through emotional and behavioral difficulties through play. It often contains a behavioral component and the process includes more prompting by the therapist. Directive play therapy is more likely to be classified as a type of cognitive behavioral therapy.^[2] Both types of play therapy have received at least some empirical

support.^[3] On average, play therapy treatment groups, when compared to control groups, improve by .8 standard deviations.^[3]

Non-directive play therapy, also called client-centred and unstructured play therapy, is guided by the notion that if given the chance to speak and play freely under optimal therapeutic conditions, troubled children and young people will be able to resolve their own problems and work toward their own solutions. In other words, non-directive play therapy is regarded as non-intrusive.^[4] The hallmark of non-directive play therapy is that it has few boundary conditions and thus can be used at any age.^[5] This therapy originates from Carl Rogers's non-directive psychotherapy and in his characterisation of the optimal therapeutic conditions. Virginia Axline adapted Carl Rogers's theories to child therapy in 1946 and is widely considered the founder of this therapy.^[6] Different techniques have since been established that fall under the realm of non-directive play therapy, including traditional sandplay therapy, family therapy, and play therapy with the use of toys. Each of these forms is covered briefly below.

Play therapy using a tray of sand and miniature figures is attributed to Margaret Lowenfeld, who established her "World Technique" in 1929. Dora Kalff combined Lowenfeld's World Technique with Jung's idea of the collective unconscious and received Lowenfeld's permission to name her version of the work "sandplay" (Kalff, 1980)

As in traditional non-directive play therapy, research has shown that allowing an individual to freely play with the sand and accompanying objects in the contained space of the sandtray (22.5" x 28.5") can facilitate a healing process as the unconscious expresses itself in the sand and influences the sand player. When a client creates in the sandtray, little instruction is provided and the therapist offers

little or no talk during the process. This protocol emphasises the importance of holding what Kalf (1980) referred to as the "free and protected space" to allow the unconscious to express itself in symbolic, non-verbal play. Upon completion of a tray, the client may or may not choose to talk about his or her creation, and the therapist, without the use of directives and without touching the sandtray, may offer supportive response that does not include interpretation. The rationale is that the therapist trusts and respects the process by allowing the images in the tray to exert their influence without interference.

- Definitions

Among the most well-known types of yoga are Hatha yoga and Rāja yoga.^[6]

The origins of yoga have been speculated to date back to pre-Vedic Indian traditions, is mentioned in the Rigveda,^[note 1] but most likely developed around the sixth and fifth centuries BCE, in ancient India's ascetic and śramaṇa movements.^{[8][note 2]} The chronology of earliest texts describing yoga-practices is unclear, varyingly credited to Hindu Upanishads^[9] and Buddhist Pāli Canon,^[10] probably of third century BCE or later. The *Yoga Sutras of Patanjali* date from the first half of the 1st millennium CE,^{[11][12]} but only gained prominence in the West in the 20th century.^[13] Hatha yoga texts emerged around the 11th century with origins in tantra.^{[14][15]}

Yoga gurus from India later introduced yoga to the west,^[16] following the success of Swami Vivekananda in the late 19th and early 20th century.^[16] In the 1980s, yoga became popular as a system of physical exercise across the Western world.^[15] Yoga in Indian traditions, however, is more than physical exercise, it has a meditative and spiritual core.^[17] One of the six major orthodox schools of

Hinduism is also called Yoga, which has its own epistemology and metaphysics, and is closely related to Hindu Samkhya philosophy.^[18]

Many studies have tried to determine the effectiveness of yoga as a complementary intervention for cancer, schizophrenia, asthma, and heart disease.^{[19][20]} The results of these studies have been mixed and inconclusive, with cancer studies suggesting none to unclear effectiveness, and others suggesting yoga may reduce risk factors and aid in a patient's psychological healing process

In Vedic Sanskrit, yoga (from the root *yuj*) means "to add", "to join", "to unite", or "to attach" in its most common literal sense. By figurative extension from the yoking or harnessing of oxen or horses, the word took on broader meanings such as "employment, use, application, performance" (compare the figurative uses of "to harness" as in "to put something to some use"). All further developments of the sense of this word are post-Vedic. More prosaic moods such as "exertion", "endeavour", "zeal", and "diligence" are also found in Indian epic poetry.^[21]

There are very many compound words containing *yoga* in Sanskrit. *Yoga* can take on meanings such as "connection", "contact", "union", "method", "application", "addition" and "performance". In simpler words, Yoga also means "combined". For example, *guṇáyoga* means "contact with a cord"; *chakráyoga* has a medical sense of "applying a splint or similar instrument by means of pulleys (in case of dislocation of the thigh)"; *chandráyoga* has the astronomical sense of "conjunction of the moon with a constellation"; *puṁyoga* is a grammatical term expressing "connection or relation with a man", etc. Thus, *bhaktiyoga* means "devoted

attachment" in the monotheistic Bhakti movement. The term *kriyāyoga* has a grammatical sense, meaning "connection with a verb". But the same compound is also given a technical meaning in the *Yoga Sūtras* (2.1), designating the "practical" aspects of the philosophy, i.e. the "union with the supreme" due to performance of duties in everyday life^[22]

According to Pāṇini, a 6th-century BCE Sanskrit grammarian, the term yoga can be derived from either of two roots, *yujir yoga* (to yoke) or *yuj samādhau* (to concentrate).^[23] In the context of the *Yoga Sūtras of Patanjali*, the root *yuj samādhau* (to concentrate) is considered by traditional commentators as the correct etymology.^[24] In accordance with Pāṇini, Vyasa who wrote the first commentary on the *Yoga Sūtras*,^[25] states that yoga means *samādhi* (concentration).^[26]

According to Dasgupta, the term yoga can be derived from either of two roots, *yujir yoga* (to yoke) or *yuj samādhau* (to concentrate).^[23] Someone who practices yoga or follows the yoga philosophy with a high level of commitment is called a yogi (may be applied to a man or a woman) or yogini (traditionally denoting a woman).

The ultimate goal of Yoga is *moksha* (liberation), although the exact definition of what form this takes depends on the philosophical or theological system with which it is conjugated.

According to Jacobsen, "Yoga has five principal meanings."^[28]

1. Yoga, as a disciplined method for attaining a goal;
2. Yoga, as techniques of controlling the body and the mind;

3. Yoga, as a name of one of the schools or systems of philosophy (*darśana*);
4. Yoga, in connection with other words, such as "hatha-, mantra-, and laya-," referring to traditions specialising in particular techniques of yoga;
5. Yoga, as the goal of Yoga practice."^[28]

According to David Gordon White, from the 5th century CE onward, the core principles of "yoga" were more or less in place, and variations of these principles developed in various forms over time:^[29]

1. Yoga, as an analysis of perception and cognition; illustration of this principle is found in Hindu texts such as the *Bhagavad Gita* and *Yogasutras*, as well as a number of Buddhist Mahāyāna works,^[30]
2. Yoga, as the rising and expansion of consciousness; these are discussed in sources such as Hinduism Epic *Mahābhārata*, Jainism *Praśamaratiprakarana*,^[31]
3. Yoga, as a path to omniscience; examples are found in Hinduism Nyaya and Vaisesika school texts as well as Buddhism Mādhyamaka texts, but in different ways;^[32]
4. Yoga, as a technique for entering into other bodies, generating multiple bodies, and the attainment of other supernatural accomplishments; these are described in Tantric literature of Hinduism and Buddhism, as well as the Buddhist *Sāmaññaphalasutta*,^[33]

White clarifies that the last principle relates to legendary goals of "yogi practice", different from practical goals of "yoga practice," as they are viewed in South Asian thought and practice since the beginning of the Common Era, in the various Hindu, Buddhist, and Jain philosophical schools.^[34]

Schools of Yoga[edit]

The term "yoga" has been applied to a variety of practices and methods, including Jain and Buddhist practices. In Hinduism these include Jnana Yoga, Bhakti Yoga, Karma Yoga, Laya Yoga and Hatha Yoga.

The so-called Raja Yoga refers to Ashtanga Yoga, the eight limbs to be practiced to attain *samadhi*, as described in the Yoga Sutras of Pantajali.^[35] The term *raja yoga* originally referred to the ultimate goal of yoga, which is usually *samadhi*,^[36] but was popularised by Vivekananda as the common name for Ashtanga Yoga.^[37]

Buddhism[edit]

Main articles: Buddhist meditation, Dhyāna in Buddhism, Yogacara and Vajrayana

Buddhist meditation encompasses a variety of meditation techniques that aim to develop mindfulness, concentration, supramundane powers, tranquility, and insight.

Core techniques have been preserved in ancient Buddhist texts and have proliferated and diversified through teacher-student transmissions. Buddhists pursue meditation as part of the path toward Enlightenment and Nirvana.^[note 3] The closest words for

meditation in the classical languages of Buddhism are *bhāvanā*^[note 4] and *jhāna/dhyāna*.^[note 5]

Hinduism[edit]

Classical Yoga[edit]

Yoga is considered as a philosophical school in Hinduism.^[38] Yoga, in this context, is one of the six *āstika* schools of Hinduism (those which accept the Vedas as source of knowledge).^{[39][40]}

Due to the influence of Vivekananda, the *Yoga Sutras of Patanjali* are nowadays considered as the foundational scripture of classical yoga, a status which it only acquired in the 20th century.^[37] Before the twentieth century, other works were considered as the most central works, such as the *Bhagavad Gita* and the *Yoga Vasistha*,^[37] while Tantric Yoga and Hatha Yoga prevailed over Ashtanga Yoga.^[37]

Ashtanga Yoga[edit]

Main articles: Yoga Sutras of Patanjali and Rāja yoga

Yoga as described in the *Yoga Sutras of Patanjali* refers to Ashtanga Yoga.^[37] The *Yoga Sutras of Patanjali* is considered as a central text of the Yoga school of Hindu philosophy,^[41] It is often called "Rāja yoga", "yoga of the kings," a term which originally referred to the ultimate, royal goal of yoga, which is usually *samadhi*,^[36] but was popularised by Vivekananda as the common name for Ashtanga Yoga.^[37]

Ashtanga Yoga incorporates epistemology, metaphysics, ethical practices, systematic exercises and self-development techniques for body, mind and spirit.^[42] Its epistemology (*pramanas*) is same as the Samkhya school. Both accept three reliable means to knowledge – perception (*pratyākṣa*, direct sensory observations), inference (*anumāna*) and testimony of trustworthy experts (*śabda*, *agama*). Both these orthodox schools are also strongly dualistic. Unlike Sāṃkhya school of Hinduism which pursues non-theistic/atheistic rationalist approach,^{[43][44]} Yoga school of Hinduism accepts the concept of a "personal, yet essentially inactive, deity" or "personal god".^{[45][46]} Along with its epistemology and metaphysical foundations, Yoga school of Hindu philosophy incorporates ethical precepts (*yamas* and *niyamas*) and an introspective way of life focused on perfecting one's self physically, mentally and spiritually, with the ultimate goal being *kaivalya* (liberated, unified, content state of existence).^{[42][47][48]}

Hatha yoga[edit]

Main article: Hatha yoga

Hatha yoga, also called *hatha vidyā*, is a kind of yoga focusing on physical and mental strength building exercises and postures described primarily in three texts of Hinduism:^{[49][50][51]}

1. *Hatha Yoga Pradipika*, Svātmārāma (15th century)
2. *Shiva Samhita*, author unknown (1500^[52] or late 17th century)
3. *Gheranda Samhita* by Gheranda (late 17th century)

Many scholars also include the preceding *Goraksha Samhita* authored by Gorakshanath of the 11th century in the above list.^[49] Gorakshanath is widely considered to have been responsible for popularizing hatha yoga as we know it today.^{[53][54][55]}

Vajrayana Buddhism, founded by the Indian Mahasiddhas,^[56] has a series of asanas and pranayamas, such as tummo (Sanskrit *caṇḍālī*)^[57] and trul khor which parallel hatha yoga.

Shaivism[edit]

Main articles: Shaivism, Shaiva Siddhanta and Nath

In Shaivism, yoga is used to unite *kundalini* with Shiva.^[58] See also 'tantra' below.

Jainism[edit]

Main article: Jain meditation



Mahavira, 24th Tirthankara

Jain meditation has been the central practice of spirituality in Jainism along with the Three Jewels.^[59] Meditation in Jainism aims at realizing the self, attain salvation, take the soul to complete freedom.^[60] It aims to reach and to remain in the pure state of soul which is believed to be pure conscious, beyond any attachment or aversion. The practitioner strives to be just a knower-seer (*Gyata-Drashta*). Jain meditation can be broadly categorized to the auspicious *Dharmya Dhyana* and *Shukla Dhyana* and inauspicious *Arta* and *Raudra Dhyana*.

Tantra[edit]

Main articles: Tantra, Yogi and Siddhi

Samuel states that Tantrism is a contested concept.^[61] Tantra yoga may be described, according to Samuel, as practices in 9th to 10th century Buddhist and

Hindu (Saiva, Shakti) texts, which included yogic practices with elaborate deity visualizations using geometrical arrays and drawings (mandala), fierce male and particularly female deities, transgressive life stage related rituals, extensive use of chakras and mantras, and sexual techniques, all aimed to help one's health, long life and liberation.^{[61][62]}

Modern health application[edit]

Apart from the spiritual goals, the physical postures of yoga are used to alleviate health problems, reduce stress and make the spine supple in contemporary times. Yoga is also used as a complete exercise program and physical therapy routine.^[63]

While the practice of yoga continues to rise in contemporary American culture, sufficient and adequate knowledge of the practice's origins does not. According to Andrea R. Jain, Yoga is undoubtedly a Hindu movement for spiritual meditation, yet is now being marketed as a supplement to a cardio routine. This scope "dilutes its Hindu identity." Contemporaries of the Hindu faith argue that the more popular yoga gets, the less concerned people become about its origins in history. These same contemporaries do state that while anyone can practice yoga, only those who give Hinduism due credit for the practice will achieve the full benefit of the custom.^[64]

In 2015 the Australian Government's Department of Health published the results of a review of alternative therapies that sought to determine if any were suitable for being covered by health insurance; Yoga was one of 17 practices evaluated for which no clear evidence of effectiveness was found, with the caveat that

"Reviewers were limited in drawing definite conclusions, not only due to a lack of studies for some clinical conditions, but also due to the lack of information reported in the reviews and potentially in the primary studies."^[65]

History[edit]

The origins of yoga are a matter of debate.^[66] There is no consensus on its chronology or specific origin other than that yoga developed in ancient India. Suggested origins are the Indus Valley Civilization (3300–1900 BCE)^[67] and pre-Vedic Northeast India,^[68] the Vedic period (1500–500 BCE), and the śramaṇa movement.^[69] According to Gavin Flood, continuities may exist between those various traditions:

[T]his dichotomization is too simplistic, for continuities can undoubtedly be found between renunciation and vedic Brahmanism, while elements from non-Brahmanical, Sramana traditions also played an important part in the formation of the renunciate ideal.^{[70][note 6]}

Pre-philosophical speculations of yoga begin to emerge in the texts of c. 500–200 BCE. Between 200 BCE–500 CE philosophical schools of Hinduism, Buddhism and Jainism were taking form and a coherent philosophical system of yoga began to emerge.^[72] The Middle Ages saw the development of many satellite traditions of yoga. Yoga came to the attention of an educated western public in the mid 19th century along with other topics of Indian philosophy.

Medical yoga, or *Medical Yogatherapy* as it is sometimes also referred to, is a blend of 'modern science' and classical 'Hatha Yoga'. From modern science, diagnostic tests and imaging like - Blood Tests, X-rays, M.R.I. scans etc. are used to get an objective measurement and/or picture of the underlying problem. After such an individualised medical diagnosis, selected Hatha Yoga Asanas are prescribed but with modifications that use specially designed props such as benches, bolsters, ropes, belts et.al.; though the use of props makes it a 'passive' therapy (in that it significantly *reduces* the 'active' mental actuation of and expansive awareness of body muscles, mandated while performing classical Yoga asanas), the use of props use enables patients to hold the posture for much longer---if being able to do it at all---than the unassisted classical Yoga asana.

A customized sequence of 3 to 5 Yogatherapy-asanas is generally required to achieve the desired therapeutic effect. A trained therapist typically assists the patient by tying few ropes and belts on the patient's body in ways that accomplish the desired stretch and restoration of alignment at the affected joint(s). However, this can typically be learnt and done by most patients themselves, once they get acquainted with the methodology, and ideally further understand their therapeutic rationale. Such asanas are modified with the intent of making them very easy, comfortable and SAFE for even the aged and infirm to do, because they are done often against the support of a wall and with the help of specially designed props like chairs, benches, bolsters, pillows, ropes, belts etc. A typical daily session lasts an hour or two.

Today, Medical Yoga Therapy is being widely used---in applicable cases---as a drugless treatment of musculoskeletal conditions such as osteoarthritis of the knee, spondylitis of lower back or neck, frozen shoulder etc., as also of stress management and other physiological conditions such as Type 2 diabetes, bronchial/allergic asthma, etc. There are dozens of centres in India delivering this kind of yoga therapy to patients and conducting classes for students to train as therapists too.

Categories:

- Yoga
- Summary

Play therapy has been considered to be an established and popular mode of therapy for children for over sixty years.^[10] Critics of play therapy have questioned the effectiveness of the technique for use with children and have suggested using other interventions with greater empirical support such as cognitive behavioral therapy.^[2] They also argue that therapists focus more on the institution of play rather than the empirical literature when conducting therapy.^[11] Classically, Lebo argued against the efficacy of play therapy in 1953, and Phillips reiterated his argument again in 1985. Both claimed that play therapy lacks in several areas of hard research. Many studies included small sample sizes, which limits the generalisability, and many studies also only compared the effects of play therapy to a control group. Without a comparison to other therapies, it is difficult to determine

if play therapy really is the most effective treatment.^{[12][13]} Recent play therapy researchers have worked to conduct more experimental studies with larger sample sizes, specific definitions and measures of treatment, and more direct comparisons.^[11]

Research is lacking on the overall effectiveness of using toys in non-directive play therapy. Dell Lebo found that out of a sample of over 4,000 children, those who played with recommended toys vs. non-recommended or no toys during non-directive play therapy were not more likely to verbally express themselves to the therapist. Examples of recommended toys would be dolls or crayons, while example of non-recommended toys would be marbles or a checker game.^[8] There is also ongoing controversy in choosing toys for use in non-directive play therapy, with choices being largely made through intuition rather than through research.^[9] However, other research shows that following specific criteria when choosing toys in non-directive play therapy can make treatment more efficacious. Criteria for a desirable treatment toy include a toy that facilitates contact with the child, encourages catharsis, and lead to play that can be easily interpreted by a therapist.^[9]

Several meta analyses have shown promising results toward the efficacy of non-directive play therapy. Meta analysis by authors LeBlanc and Ritchie, 2001, found an effect size of 0.66 for non-directive play therapy.^[4] This finding is comparable to the effect size of 0.71 found for psychotherapy used with children,^[14] indicating that both non-directive play and non-play therapies are almost equally effective in

treating children with emotional difficulties. Meta analysis by authors Ray, Bratton, Rhine and Jones, 2001, found an even larger effect size for nondirective play therapy, with children performing at 0.93 standard deviations better than non-treatment groups.^[2] These results are stronger than previous meta-analytic results, which reported effect sizes of 0.71,^[14] 0.71,^[15] and 0.66.^[4] Meta analysis by authors Bratton, Ray, Rhine, and Jones, 2005, also found a large effect size of 0.92 for children being treated with non-directive play therapy.^[3] Results from all meta-analyses indicate that non-directive play therapy has been shown to be just as effective as psychotherapy used with children and even generates higher effect sizes in some studies.^{[2][3]}

There are several predictors that may also influence the effectiveness of play therapy with children. Number of sessions is a significant predictor in post-test outcomes, with more sessions being indicative of higher effect sizes.^[2] Although positive effects can be seen with the average 16 sessions,^[6] there is a peak effect when a child can complete 35-40 sessions.^[4] An exception to this finding is children undergoing play therapy in critical-incident settings, such as hospitals and domestic violence shelters. Results from studies that looked at these children indicated a large positive effect size after only 7 sessions, which provides the implication that children in crisis may respond more readily to treatment^[3] Parental involvement is also a significant predictor of positive play therapy results. This involvement generally entails participation in each session with the therapist and the child.^[16] Parental involvement in play therapy sessions has also been shown to diminish stress in the parent-child relationship when kids are exhibiting both

internal and external behaviour problems.^[17] Despite these predictors which have been shown to increase effect sizes, play therapy has been shown to be equally effective across age, gender, and individual vs. group settings.^{[2][3]}

Directive play therapy is guided by the notion that using directives to guide the child through play will cause a faster change than is generated by nondirective play therapy. The therapist plays a much bigger role in directive play therapy. Therapists may use several techniques to engage the child, such as engaging in play with the child themselves or suggesting new topics instead of letting the child direct the conversation himself.^[18] Stories read by directive therapists are more likely to have an underlying purpose, and therapists are more likely to create interpretations of stories that children tell. In directive therapy games are generally chosen for the child, and children are given themes and character profiles when engaging in doll or puppet activities.^[19] This therapy still leaves room for free expression by the child, but it is more structured than nondirective play therapy. There are also different established techniques that are used in directive play therapy, including directed sandtray therapy and cognitive behavioral play therapy.^[18]

Directed sandtray therapy is more commonly used with trauma victims and involves the "talk" therapy to a much greater extent. Because trauma is often debilitating, directed sandplay therapy works to create change in the present, without the lengthy healing process often required in traditional sandplay therapy.^[20] This is why the role of the therapist is important in this approach. Therapists may ask clients questions about their sandtray, suggest them to change the sandtray, ask them to

elaborate on why they chose particular objects to put in the tray, and on rare occasions, change the sandtray themselves. Use of directives by the therapist is very common. While traditional sandplay therapy is thought to work best in helping clients access troubling memories, directed sandtray therapy is used to help people manage their memories and the impact it has had on their lives.^[20]

Roger Phillips, in the early 1980s, was one of the first to suggest that combining aspects of cognitive behavioral therapy with play interventions would be a good theory to investigate.^[12] Cognitive behavioral play therapy was then developed to be used with very young children between two and six years of age. It incorporates aspects of Beck's cognitive therapy with play therapy because children may not have the developed cognitive abilities necessary for participation in straight cognitive therapy.^[21] In this therapy, specific toys such as dolls and stuffed animals may be used to model particular cognitive strategies, such as effective coping mechanisms and problem-solving skills. Little emphasis is placed on the children's verbalizations in these interactions but rather on their actions and their play.^[19] Creating stories with the dolls and stuffed animals is a common method used by cognitive behavioral play therapists in order to change children's maladaptive thinking.

- Revision
- Assignment/Activity

Points for Clarification

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UNIT 5: THERAPEUTIC INTERVENTION: VISUAL AND PERFORMING ARTS (EG: MUSIC, DRAMA, DANCE MOVEMENT, SPORTS, ETC.)

- Introduction
 - Objectives
 - Definitions
 - Summary
 - Revision
 - Assignment/Activity
 - Points For Discussion And Clarification
 - References / Further Readings
-
- Introduction

An intervention is an orchestrated attempt by one or many people – usually family and friends – to get someone to seek professional help with an addiction or some kind of traumatic event or crisis, or other serious problem. The term intervention is most often used when the traumatic event involves addiction to drugs or other items. Intervention can also refer to the act of using a similar technique within a therapy session.

Interventions have been used to address serious personal problems, including alcoholism, compulsive gambling, drug abuse, compulsive eating and other eating disorders, self harm and being the victim of abuse.

Interventions are either direct, typically involving a confrontational meeting with individual in question, or indirect, involving work with a co-dependent family to encourage them to be more effective in helping the individual.

There are three major models of intervention in use today: the Johnson Model, the Arise Model, and the Systemic Family Model.

The use of interventions originated the 1960s with Dr. Vernon Johnson. The Johnson Model was subsequently taught years later at the Johnson Institute. It focuses on creating a confrontation between a group of supporters and the addict in order to expose the addict to the consequences of their addiction. The confrontation serves to precipitate a crisis in the addict's life that is not threatening, damaging, or fatal, and is used to compel them into treatment before they are able to suffer irreparable social or physical damage as a result of their disease.^[1]

The Arise Intervention Model involves exposing the addict and their family members to a collaborative intervention process. Rather than being confrontational, the Arise Model is invitational, non-secretive, and a gradually-escalating process.^[2]

The Systemic Family Model may use either an invitational or confrontational approach. It differs from the Johnson Model in that the focus is on fostering a patient, firm coaching instead of creating a negative confrontation.^[3] Rather than

focusing on the addict, the interventionist fosters discussion with the entire family on how their behavior contributes to the addict's continued abuse of substances, and how to approach the problem as a family unit.^[4]

While some interventionists will prescribe to one of the above models over the others, many are able to blend the three models based on what will be most effective for the addict and their family.

Plans for direct intervention[edit]

Plans for an intervention are made by a concerned group of family, friends, and counselor(s), rather than by the drug or alcohol abuser. Whether it is invitation model or direct model, the abuser is not included in the decision making process for planning the intervention. A properly conducted direct intervention is planned through cooperation between the identified abuser's family or friends and an intervention counselor, coordinator, or educator. Ample time must be given to the specific situation; however, basic guidelines can be followed in the intervention planning process. (An intervention can also be conducted in the workplace with colleagues and with no family present.)

Prior preparation[edit]

Prior to the intervention, the family meets with a counselor or interventionist. Families prepare letters in which they describe their experiences associated with the addict's behavior, to convey to the person the impact his or her addiction has had on others. Also during the intervention rehearsal meeting, a group member is strongly urged to create a list of activities by the addict that they will no longer tolerate,

finance, or participate in if the addict does not agree to check into a rehabilitation center for treatment. These consequences may be as simple as no longer loaning money to the addict, but can be far more serious, such as losing custody of a child.

Family and friends read their letters to the addict, who then must decide whether to check into the prescribed rehabilitation center or deal with the promised losses.

Controversy[edit]

There are questions about the long-term effectiveness of interventions for those addicted to drugs or alcohol. A study examining addicts who had undergone a standard intervention (called the Johnson Intervention) found that they had a higher relapse rate than any other method of referral to outpatient Alcohol and Other Drug treatment.^[5] "The Johnson Institute intervention entails five therapy sessions that prepare the client and his or her family members for a family confrontation meeting."^[6]

More research needs to be done in the area of long term effectiveness of pre-treatment interventions specific to drug and alcohol abusers.

Community Reinforcement Approach and Family Training (CRAFT) apparently has had much more success than the Johnson Intervention method or Al-Anon/Alateen(*see article: CRAFT*).

Civil liberty and forcible intervention[edit]

Sometimes direct interventions involve physical force (for example, by family members or friends) to capture or confine the targeted person. In such cases the

intervention may be illegal because it deprives the person of liberty without due process of law.

- Objectives

Cognitive behavioral therapy (CBT) is a form of psychotherapy.^[1] It was originally designed to treat depression, but is now used for a number of mental disorders.^{[2][3]}

It works to solve current problems and change unhelpful thinking and behavior.^[1] The name refers to behavior therapy, cognitive therapy, and therapy based upon a combination of basic behavioral and cognitive principles.^[1] Most therapists working with patients dealing with anxiety and depression use a blend of cognitive and behavioral therapy. This technique acknowledges that there may be behaviors that cannot be controlled through rational thought, but rather emerge based on prior conditioning from the environment and other external and/or internal stimuli. CBT is "problem-focused" (undertaken for specific problems) and "action-oriented" (therapist tries to assist the client in selecting specific strategies to help address those problems),^[4] or directive in its therapeutic approach. It is different from the more traditional, psychoanalytical approach, where therapists look for the unconscious meaning behind the behaviors and then diagnose the patient. Instead, behaviorists believe that disorders, such as depression, have to do with the relationship between a feared stimulus and an avoidance response, resulting in a conditioned fear, much like Ivan Pavlov. Cognitive therapists believed that

conscious thoughts could influence a person's behavior all on its own. Ultimately, the two theories were combined to create what is now known as cognitive behavioral therapy.^[5]

CBT is effective for a variety of conditions, including mood, anxiety, personality, eating, addiction, dependence, tic, and psychotic disorders. Many CBT treatment programs have been evaluated for symptom-based diagnoses and been favored over approaches such as psychodynamic treatments.^[6] However, other researchers have questioned the validity of such claims to superiority over other treatments.

- Definitions

A cognitive intervention is a form of psychological intervention, a technique and therapy practiced in counseling. The various types of cognitive interventions are practiced in cognitive psychology.

Therapeutic Crisis Intervention is a crisis management protocol developed by Cornell University for residential child care facilities. The purpose of the TCI protocol is to provide a crisis prevention and intervention model for residential child care facilities which will assist them in:

- Preventing crises from occurring
- De-escalating potential crises

- Effectively managing acute crisis phases
- Reducing potential and actual injury to children and staff
- Learning constructive ways to handle stressful situations
- Developing a learning circle within the organization^[1]

The protocol was developed beginning in 1979 through funding from a grant by the National Center on Child Abuse and Neglect.

A review by the Social Care Institute for Excellence SCIE (KNOWLEDGE REVIEW 22 SUMMARY Working with challenging and disruptive situations in residential child care: Sharing effective practice) found however only two rigorous evaluations of Therapeutic Crisis Intervention (TCI) have been conducted, and these presented mixed conclusions as to its effectiveness.

- Summary

Therapeutic assessment is a psychological assessment procedure which aims to help people gain insight and apply this new insight to problems in their life.^[1] This paradigm is contrasted with the traditional, information-gathering model of psychological assessment, the main goal of which is to accurately diagnose, plan treatments, and evaluate treatment effectiveness.^{[1][2]} Traditional, information-gathering assessment is sometimes viewed as the phase before treatment, whereas therapeutic assessment can be considered the first phase of treatment or as a brief standalone treatment. The term 'Therapeutic Assessment' was coined in 1993 by Stephen E. Finn to describe the semi-structured collaborative assessment paradigm developed by himself and colleagues at the Center for Therapeutic Assessment in Austin, Texas.^[3] Finn suggests differentiating the capitalized "Therapeutic

Assessment" or the abbreviation, "TA" as the paradigm developed by himself and his colleagues and the lowercase "therapeutic assessment" as the more general term which describes a variety of humanistically based assessment models.

In applied psychology, interventions are actions performed to bring about change in people. A wide range of intervention strategies exist and they are directed towards various types of issues. Most generally, it means any activities used to modify behavior, emotional state, or feelings.^[1] Psychological interventions have many different applications and the most common use is for the treatment of mental disorders, most commonly using psychotherapy. The ultimate goal behind these interventions is not only to alleviate symptoms but also to target the root cause of mental disorders.

To treat mental disorders psychological interventions can be coupled with psychoactive medication. Psychiatrists commonly prescribe drugs to manage symptoms of mental disorders. Psychosocial interventions have a greater or more direct focus on a person's social environment in interaction with their psychological functioning.

Psychological interventions can also be used to promote good mental health in order to prevent mental disorders. These interventions are not tailored towards treating a condition but are designed to foster healthy emotions, attitudes and habits. Such interventions can improve quality of life even when mental illness is not present.^[2]

Interventions can be diverse and can be tailored specifically to the individual or group receiving treatment depending on their needs. This versatility adds to their effectiveness in addressing all kinds of situations.^[3]

Psychotherapy, also known as talk therapy, promotes a relationship between a trained psychotherapist and a person suffering from a psychological disorder.

Positive activity interventions (PAIs) are a part of Positive Psychology. PAIs can be used in psychotherapy as well as outside of it. Examples include helping clients to focus on good things, the future self, gratitude, affirmation of the self and kindness towards others.

Mainstream cognitive behavioral therapy assumes that changing maladaptive thinking leads to change in affect and behavior,^[9] but recent variants emphasize changes in one's relationship to maladaptive thinking rather than changes in thinking itself.^[10] The goal of cognitive behavioral therapy is not to diagnose a person with a particular disease, but to look at the person as a whole and decide what needs to be fixed. The basic steps in a cognitive-behavioral assessment include:

Step 1: Identify critical behaviors

Step 2: Determine whether critical behaviors are excesses or deficits

Step 3: Evaluate critical behaviors for frequency, duration, or intensity (obtain a baseline)

Step 4: If excess, attempt to decrease frequency, duration, or intensity of behaviors; if deficits, attempt to increase behaviors.^[11]

These steps are based on a system created by Kanfer and Saslow.^[12] After identifying the behaviors that need changing, whether they be in excess or deficit, and treatment has occurred, the psychologist must identify whether or not the intervention succeeded. For example, "If the goal was to decrease the behavior, then there should be a decrease relative to the baseline. If the critical behavior remains at or above the baseline, then the intervention has failed."^[12]

Therapists or computer-based programs use CBT techniques to help individuals challenge their patterns and beliefs and replace "errors in thinking such as overgeneralizing, magnifying negatives, minimizing positives and catastrophizing" with "more realistic and effective thoughts, thus decreasing emotional distress and self-defeating behavior."^[9] These errors in thinking are known as cognitive distortions. Cognitive distortions can be either a pseudo-discrimination belief or an over-generalization of something.^[13] CBT techniques may also be used to help individuals take a more open, mindful, and aware posture toward them so as to diminish their impact.^[10] Mainstream CBT helps individuals replace "maladaptive... coping skills, cognitions, emotions and behaviors with more adaptive ones",^[14] by challenging an individual's way of

thinking and the way that they react to certain habits or behaviors,^[15] but there is still controversy about the degree to which these traditional cognitive elements account for the effects seen with CBT over and above the earlier behavioral elements such as exposure and skills training.^[16]

Modern forms of CBT include a number of diverse but related techniques such as exposure therapy, stress inoculation training, cognitive processing therapy, cognitive therapy, relaxation training, dialectical behavior therapy, and acceptance and commitment therapy.^[17] Some practitioners promote a form of mindful cognitive therapy which includes a greater emphasis on self-awareness as part of the therapeutic process.^[18]

CBT has six phases:^[14]

1. Assessment or psychological assessment;
2. Reconceptualization;
3. Skills acquisition;
4. Skills consolidation and application training;
5. Generalization and maintenance;
6. Post-treatment assessment follow-up.

The reconceptualization phase makes up much of the "cognitive" portion of CBT.^[14] A summary of modern CBT approaches is given by Hofmann.^[19]

There are different protocols for delivering cognitive behavioral therapy, with important similarities among them.^[20] Use of the term *CBT* may refer to different interventions, including "self-instructions (e.g. distraction, imagery, motivational self-talk), relaxation and/or biofeedback, development of adaptive coping strategies (e.g. minimizing negative or self-defeating thoughts), changing maladaptive beliefs about pain, and goal setting".^[14] Treatment is sometimes manualized, with brief, direct, and time-limited treatments for individual psychological disorders that are specific technique-driven. CBT is used in both individual and group settings, and the techniques are often adapted for self-help applications. Some clinicians and researchers are cognitively oriented (e.g. cognitive restructuring), while others are more behaviorally oriented (e.g. *in vivo* exposure therapy). Interventions such as imaginal exposure therapy combine both approaches

In adults, CBT has been shown to have effectiveness and a role in the treatment plans for anxiety disorders,^{[23][24]} depression,^{[25][26]} eating disorders,^[27] chronic low back pain,^[14] personality disorders,^[28] psychosis,^[29] schizophrenia,^[30] substance use

disorders,^[31] in the adjustment, depression, and anxiety associated with fibromyalgia,^[9] and with post-spinal cord injuries.^[32]

In children or adolescents, CBT is an effective part of treatment plans for anxiety disorders,^[33] body dysmorphic disorder,^[34] depression and suicidality,^[35] eating disorders and obesity,^[36] obsessive-compulsive disorder,^[37] and posttraumatic stress disorder,^[38] as well as tic disorders, trichotillomania, and other repetitive behavior disorders.^[39] CBT-SP, an adaptation of CBT for suicide prevention (SP), was specifically designed for treating youths who are severely depressed and who have recently attempted suicide within the past 90 days, and was found to be effective, feasible, and acceptable.^[40] *Sparx* is a video game to help young persons, using the CBT method to teach them how to resolve their own issues. CBT has also been shown to be effective for posttraumatic stress disorder in very young children (3 to 6 years of age).^[41] Cognitive Behavior Therapy has also been applied to a variety of childhood disorders,^[42] including depressive disorders and various anxiety disorders.

Cochrane reviews have found no evidence that CBT is effective for tinnitus, although there appears to be an effect on management of associated depression and quality of life in this condition.^[43] Other recent Cochrane Reviews found no convincing evidence that CBT training helps foster care providers manage difficult behaviors in the youths under their care,^[44] nor was it helpful in treating men who abuse their intimate partners.^[45]

According to a 2004 review by INSERM of three methods, cognitive behavioral therapy was either "proven" or "presumed" to be an effective therapy on several specific mental disorders.^[46] According to the study, CBT was effective at treating schizophrenia, depression, bipolar disorder, panic disorder, post-traumatic stress, anxiety disorders, bulimia, anorexia, personality disorders and alcohol dependency.^[46]

Some meta-analyses find CBT more effective than psychodynamic therapy and equal to other therapies in treating anxiety and depression.^{[47][48]} However, psychodynamic therapy may provide better long-term outcomes.^[49]

Computerized CBT (CCBT) has been proven to be effective by randomized controlled and other trials in treating depression and anxiety disorders,^{[24][26][50][51][52][53][54]} including children,^[55] as well as insomnia.^[56] Some research has found similar effectiveness to an intervention of informational websites and weekly telephone calls.^{[57][58]} CCBT was found to be equally effective as face-to-face CBT in adolescent anxiety^[59] and insomnia.^[56]

Criticism of CBT sometimes focuses on implementations (such as the UK IAPT) which may result initially in low quality therapy being offered by poorly trained practitioners.^{[60][61]} However evidence supports the effectiveness of CBT for anxiety and depression.^[52]

Mounting evidence suggests that the addition of hypnotherapy as an adjunct to CBT improves treatment efficacy for a variety of clinical issues.^{[62][63][64]}

CBT has been applied in both clinical and non-clinical environments to treat disorders such as personality conditions and behavioral problems.^[65] A systematic review of CBT in depression and anxiety disorders concluded that "CBT delivered in primary care, especially including computer- or Internet-based self-help programs, is potentially more effective than usual care and could be delivered effectively by primary care therapists."^[50]

Emerging evidence suggests a possible role for CBT in the treatment of attention deficit hyperactivity disorder (ADHD),^[66] hypochondriasis,^[67] coping with the impact of multiple sclerosis;^[68] sleep disturbances related to aging;^[69]^[needs update] dysmenorrhea;^[70] and bipolar disorder,^[71] but more study is needed and results should be interpreted with caution. CBT can have a therapeutic effects on easing symptoms of anxiety and depression in people with Alzheimer's disease.^[72] CBT has been studied as an aid in the treatment of anxiety associated with stuttering. Initial studies have shown CBT to be effective in reducing social anxiety in adults who stutter,^[73] but not in reducing stuttering frequency.^{[74][75]}

Martinez-Devesa *et al.* (2010) found no evidence that CBT is effective for tinnitus, although there appears to be an effect on management of associated depression and quality of life in this condition.^[43] Turner *et al.* (2007) found no convincing evidence that CBT training helps foster care providers manage difficult behaviors in the youths under their care,^[44] and Smedslund *et al.* (2007) found that it was not helpful in treating men who abuse their intimate partners.^[45]

In the case of metastatic breast cancer, Edwards *et al.* (2008) maintained that the current body of evidence is not sufficient to rule out the possibility that psychological interventions may cause harm to women with this advanced neoplasm.^[76]^[needs update]

There is some evidence that CBT is superior in the long-term to benzodiazepines and the nonbenzodiazepines in the treatment and management of insomnia.^[77] CBT has been shown to be moderately effective for treating chronic fatigue syndrome.^[78]

In the United Kingdom, the National Institute for Health and Care Excellence (NICE) recommends CBT in the treatment plans for a number of mental health difficulties, including posttraumatic stress disorder, obsessive-compulsive disorder (OCD), bulimia nervosa, and clinical depression.

CBT has been shown to be effective in the treatment of adult anxiety disorders.^[80]

A basic concept in some CBT treatments used in anxiety disorders is *in vivo* exposure. The term refers to the direct confrontation of feared objects, activities, or situations by a patient. For example, a woman with PTSD who fears the location where she was assaulted may be assisted by her therapist in going to that location and directly confronting those fears. Likewise, a person with social anxiety disorder who fears public speaking may be instructed to directly confront those fears by giving a speech.^[81] This "two-factor" model is often credited to O. Hobart Mowrer.^[82] Through exposure to the stimulus, this harmful conditioning can

be "unlearned" (referred to as extinction and habituation). Studies have provided evidence that when examining animals and humans that glucocorticoids may possibly lead to a more successful extinction learning during exposure therapy. For instance, glucocorticoids can prevent aversive learning episodes from being retrieved and heighten reinforcement of memory traces creating a non-fearful reaction in feared situations. A combination of glucocorticoids and exposure therapy may be a better improved treatment for treating patients with anxiety disorders.

Cognitive behavioral therapy has been shown as an effective treatment for clinical depression.^[25] The American Psychiatric Association Practice Guidelines (April 2000) indicated that, among psychotherapeutic approaches, cognitive behavioral therapy and interpersonal psychotherapy had the best-documented efficacy for treatment of major depressive disorder.^{[84][page needed]} One etiological theory of depression is Aaron T. Beck's cognitive theory of depression. His theory states that depressed people think the way they do because their thinking is biased towards negative interpretations. According to this theory, depressed people acquire a negative schema of the world in childhood and adolescence as an effect of stressful life events, and the negative schema is activated later in life when the person encounters similar situations.^[85]

Beck also described a negative cognitive triad, made up of the negative schemata and cognitive biases of the person, theorizing that depressed individuals make negative evaluations of themselves, the world, and the future. According to this theory, depressed people have views such as "I never do a good job", "It is

impossible to have a good day", and "things will never get better." A negative schema helps give rise to the cognitive bias, and the cognitive bias helps fuel the negative schema. This is the negative triad. Beck further proposed that depressed people often have the following cognitive biases: arbitrary inference, selective abstraction, over-generalization, magnification, and minimization. These cognitive biases are quick to make negative, generalized, and personal inferences of the self, thus fueling the negative schema.^[85]

In long-term psychoses, CBT is used to complement medication and is adapted to meet individual needs. Interventions particularly related to these conditions include exploring reality testing, changing delusions and hallucinations, examining factors which precipitate relapse, and managing relapses.^[29] Several meta-analyses suggested that CBT is effective in schizophrenia,^{[30][86]} and the American Psychiatric Association includes CBT in its schizophrenia guideline as an evidence-based treatment. There is also limited evidence of effectiveness for CBT in bipolar disorder^[71] and severe depression.^[87]

A 2010 meta-analysis found that no trial employing both blinding and psychological placebo has shown CBT to be effective in either schizophrenia or bipolar disorder, and that the effect size of CBT was small in major depressive disorder. They also found a lack of evidence to conclude that CBT was effective in preventing relapses in bipolar disorder.^[88] Evidence that severe depression is mitigated by CBT is also lacking, with anti-depressant medications still viewed as

significantly more effective than CBT,^[25] although success with CBT for depression was observed beginning in the 1990s.^[89]

According to Cox, Abramson, Devine, and Hollon (2012), cognitive behavioral therapy can also be used to reduce prejudice towards others. This other-directed prejudice can cause depression in the "others," or in the self when a person becomes part of a group he or she previously had prejudice towards (i.e. deprejudice).^[90] Devine and colleagues (2012) developed a successful Prejudice Perpetrator intervention with many conceptual parallels to CBT.^[91] Like CBT, their intervention taught Sources to be aware of their automatic thoughts and to intentionally deploy a variety of cognitive techniques against automatic stereotyping.

Philosophical roots[edit]

Precursors of certain fundamental aspects of CBT have been identified in various ancient philosophical traditions, particularly Stoicism.^[106] Stoic philosophers, particularly Epictetus, believed logic could be used to identify and discard false beliefs that lead to destructive emotions, which has influenced the way modern cognitive-behavioral therapists identify cognitive distortions that contribute to depression and anxiety.^[107] For example, Aaron T. Beck's original treatment manual for depression states, "The philosophical origins of cognitive therapy can be traced back to the Stoic philosophers".^[108] Another example of Stoic influence on cognitive theorists is Epictetus on Albert Ellis.^[109] A key philosophical figure who also influenced the development of CBT was John Stuart Mill.^[110]

Behavior therapy roots[edit]

The modern roots of CBT can be traced to the development of behavior therapy in the early 20th century, the development of cognitive therapy in the 1960s, and the subsequent merging of the two. Groundbreaking work of behaviorism began with Watson's and Rayner's studies of conditioning in 1920.^[111] Behaviorally-centered therapeutic approaches appeared as early as 1924^[112] with Mary Cover Jones' work dedicated to the unlearning of fears in children.^[113] These were the antecedents of the development of Joseph Wolpe's behavioral therapy in the 1950s.^[111] It was the work of Wolpe and Watson, which was based on Ivan Pavlov's work on learning and conditioning, that influenced Hans Eysenck and Arnold Lazarus to develop new behavioral therapy techniques based on classical conditioning.^{[111][114]} One of Eysenck's colleagues, Glenn Wilson showed that classical fear conditioning in humans could be controlled by verbally induced cognitive expectations,^[115] thus opening a field of research that supports the rationale of cognitive behavioral therapy.

During the 1950s and 1960s, behavioral therapy became widely utilized by researchers in the United States, the United Kingdom, and South Africa, who were inspired by the behaviorist learning theory of Ivan Pavlov, John B. Watson, and Clark L. Hull.^[112] In Britain, Joseph Wolpe, who applied the findings of animal experiments to his method of systematic desensitization,^[111] applied behavioral research to the treatment of neurotic disorders. Wolpe's therapeutic efforts were precursors to today's fear reduction techniques.^[112] British psychologist Hans Eysenck presented behavior therapy as a constructive alternative.^{[112][116]}

At the same time of Eysenck's work, B.F. Skinner and his associates were beginning to have an impact with their work on operant conditioning.^{[111][114]} Skinner's work was referred to as radical behaviorism and avoided anything related to cognition.^[111] However, Julian Rotter, in 1954, and Albert Bandura, in 1969, contributed behavior therapy with their respective work on social learning theory, by demonstrating the effects of cognition on learning and behavior modification.^{[111][114]}

The emphasis on behavioral factors constituted the "first wave" of CBT.^[117]

Cognitive therapy roots[edit]

One of the first therapists to address cognition in psychotherapy was Alfred Adler with his notion of basic mistakes and how they contributed to creation of unhealthy or useless behavioral and life goals.^[118] Adler's work influenced the work of Albert Ellis,^[118] who developed one of the earliest cognitive-based psychotherapies, known today as Rational emotive behavior therapy, or REBT.^[119]

Around the same time that rational emotive therapy, as it was known then, was being developed, Aaron T. Beck was conducting free association sessions in his psychoanalytic practice.^[120] During these sessions, Beck noticed that thoughts were not as unconscious as Freud had previously theorized, and that certain types of thinking may be the culprits of emotional distress.^[120] It was from this hypothesis that Beck developed cognitive therapy, and called these thoughts "automatic thoughts".^[120]

It was these two therapies, rational emotive therapy and cognitive therapy, that started the "second wave" of CBT, which was the emphasis on cognitive factors.^[117]

Behavior and cognitive therapies merge[edit]

Although the early behavioral approaches were successful in many of the neurotic disorders, they had little success in treating depression.^{[111][112][121]} Behaviorism was also losing in popularity due to the so-called "cognitive revolution". The therapeutic approaches of Albert Ellis and Aaron T. Beck gained popularity among behavior therapists, despite the earlier behaviorist rejection of "mentalist" concepts like thoughts and cognitions.^[111] Both of these systems included behavioral elements and interventions and primarily concentrated on problems in the present.

In initial studies, cognitive therapy was often contrasted with behavioral treatments to see which was most effective. During the 1980s and 1990s, cognitive and behavioral techniques were merged into cognitive behavioral therapy. Pivotal to this merging was the successful development of treatments for panic disorder by David M. Clark in the UK and David H. Barlow in the US.^[112]

Over time, cognitive behavior therapy became to be known not only as a therapy, but as an umbrella term for all cognitive-based psychotherapies.^[111] These therapies include, but are not limited to, rational emotive therapy, cognitive therapy, acceptance and commitment therapy, dialectical behavior therapy, reality therapy/choice theory, cognitive processing therapy, EMDR, and multimodal therapy.^[111] All of these therapies are a blending of cognitive- and behavior-based elements.

This blending of theoretical and technical foundations from both behavior and cognitive therapies constitute the "third wave" of CBT,^[117] which is the current wave.^[117] The most prominent therapies of this third wave are dialectical behavior therapy and acceptance and commitment therapy

- Revision
- Assignment/Activity

POINTS FOR DISCUSSIONS / CLARIFICATION

After going through the unit you may like to have further discussion on some points and clarification. Note down those points:-

Points for Discussion

Points for Clarification

- References / Further Readings

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