

CLUMSY CHILD SYNDROMES

Descriptions, Evaluation and Remediation

Bryant J. Crafty
University of California Los Angeles, USA

harwood academic publishers

USA • Switzerland • Australia • Belgium
France • Germany • Great Britain • India • Japan
Malaysia • Netherlands • Russia • Singapore

Copyright © 1994 by Harwood Academic Publishers GmbH, Poststrasse 22, 7000 Chur,
Switzerland. All rights reserved.

Harwood Academic Publishers

No part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system, without permission in writing from the publisher. Printed in the United States of America.

Chapter 10

Social and Emotional Accompaniments to Poor Motor Coordination

INTRODUCTION

Those studying and chronicling the characteristics and habits of awkward children have been virtually unanimous in the observation that various emotional problems accompany physical ineptitude. It seems logical to assume that negative social feedback and poor self-assessments resulting from the inability to write well in a classroom, coupled with poor play skills, will likely result in lowering awkward children's self-esteem. Much of the available evidence from contemporary, databased studies is beginning to confirm this hypothesis.

Self-esteem is believed by many to be an important cornerstone of good mental health. Thus it seems reasonable to hypothesize that incoordination accompanies emotional states that are less than adequate. Furthermore, poor feelings about the self often result in undesirable social behaviors, reflecting attempts at over-compensation.

The logical relationships between motor incoordination and poor self-esteem, have inspired several recent studies whose data seems to substantiate this assumption. Data from the studies available, together with field observations, seem to support the conclusion that motor incoordination undermines the formation of an adequate self-concept resulting in immature and insecure social functioning.

DATABASED EVIDENCE

The empirical studies available reflect several approaches to the exploration of possible relationships between mental health and physical coordination. In one type of study comparisons have been made between the self-concept of children labeled clumsy, in contrast to how physically average children report feeling about themselves. In an investigation of this type conducted by me and post-doctoral students several years ago, a questionnaire-type self-concept test was used containing questions reflecting children's feeling about their appearance and physical ability. The test was originally constructed by Dale Harris and Ellen Piers (1964) (*See Appendix*).

In four of the twenty questions tendered to the 222 male subjects differences were found between the two populations contrasted (Cratty et al 1972). The awkward boys reported, more often than did the physically adequate boys, that they were sad most of the time, that they did not believe themselves, strong, and that they would rather watch than play games. A significantly larger percent of the awkward boys also reported that reading was not easy for them. This final finding perhaps reflects the presence of a significant percent of boys with learning difficulties often found within populations of awkward children.

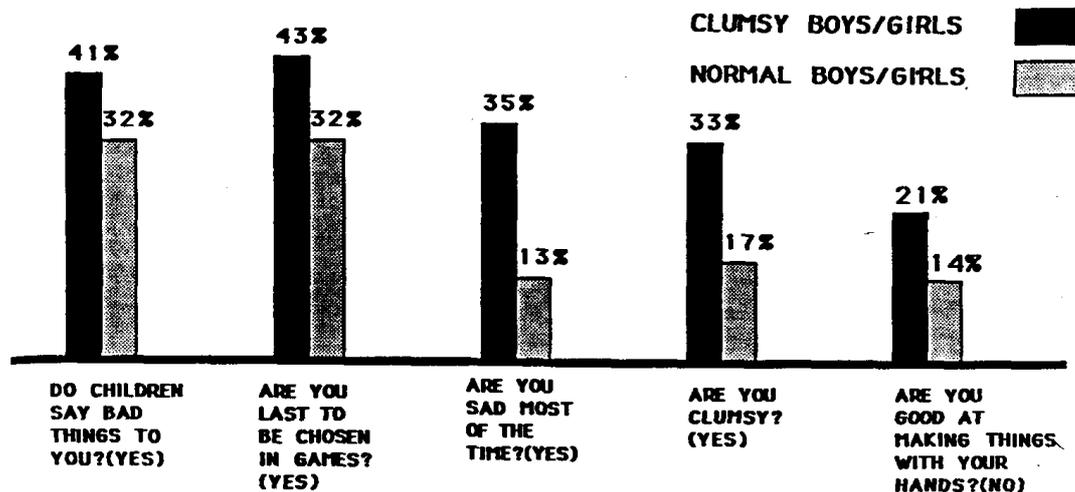
It is interesting to note that, in the same study, contrasting the responses of awkward girls, to those with average physical coordination, no significant differences were found between the percentages offering 'low self-concept responses' to the various questions. This lack of difference may have occurred because at the time the study was conducted (1972) the self-concept of females was not as predicated upon physical prowess as was true among young boys. A student and I recently followed up this 1972 investigation with another, using a

highly similar questionnaire. (Dalrahim & Cratty 1990). Eighty-three awkward boys, averaging 6.3 years of age, were polled relative to the feelings they had about themselves, and how they felt about their physical appearance and ability! These were children, whom we had evaluated during the past thirty-six months at our clinic and averaged delays of from 1 to 1.5 years in physical coordination. The scores of 17 awkward girls were used in the same study, using the same questionnaire. They averaged 6.5 years of age, and also were delayed physically from one to two years.

Of the twenty questions there were marked differences in the percent of low-self-concept responses on the questions indicated in Figure 10-1 below. Contrasted are responses of normal subjects in the 1972 study (Cratty et al) to the responses of awkward populations polled in the 1990 study.

In this second study, the questionnaire contained a query about whether they tired easily in games. It was interesting to note that 41% of the awkward boys and 65% of the awkward girls reported that they experienced high levels of fatigue when confronted with vigorous physical activity. (Dalrahim & Cratty 1990).

A. LOW SELF-CONCEPT RESPONSES OF 147 NORMAL VS. 83 CLUMSY BOYS COMPARED.



B. LOW SELF-CONCEPT RESPONSES OF 17 CLUMSY GIRLS, CONTRASTED TO RESPONSES OF 141 NORMAL GIRLS.

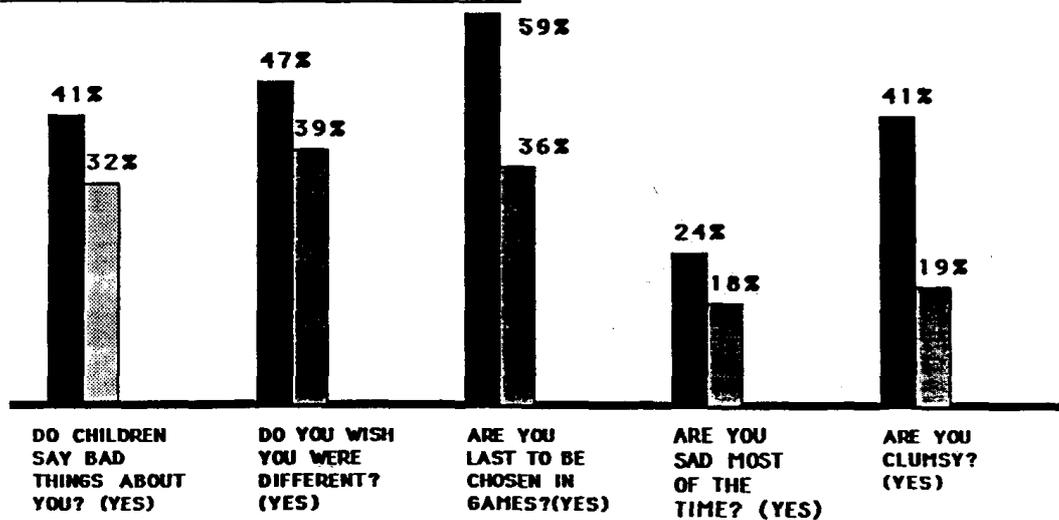


Table 10-1. Comparisons of selected responses on a self-concept test, administered to clumsy children (1990 study) and to normal controls (1972 study)

In' second type of investigation, comparisons are made of the motor competencies of children within various atypical groups. Including in these have been groups of children labeled learning disabled, the mildly and moderately retarded, and the emotionally disturbed. Two of these studies are located in administrative manuals accompanying tests for physical awkwardness in children. (Bruininks 1978) (Stott and Henderson 1972).

Data D.H. Stott and his colleagues obtained data from children labeled "emotionally unstable" (1972). One of the purposes Stott stated for his motor test battery was to provide an "independent means of measuring subtle neurological impairments such as could affect behavioral adjustment". To determine if his battery accomplished this goal, comparisons were made of children evidencing varying degrees of emotional mal-adjustment based upon their scores from *The Bristol Social Adjustment Guide* (Stott and Marston 1971). The criteria for mal-adjustment in this study (Stott and Marston 1971) were those scoring in the lower 10%, within six categories of disturbances.

Stott found that emotionally disturbed population identified was over represented among awkward children. Hostility score were found to be closely associated with motor impairment, as were scores reflecting the tendencies to both over-react to the environment, and to under-react and behave in overly passive ways in social situations. Stott found that 'inconsequence' (failure to inhibit impulses) was the quality most highly associated with motor impairment. The scores Stott obtained from the Bristol Social Adjustment Guide also correlated with mean scores from the tests of motor impairment administered.

Summarizing this work, Stott pointed out that three times as many mal-adjusted children, compared to well adjusted youngsters, were motorically impaired: and likewise three and a half times as many motorically impaired youngster, as compared to motorically normal children, were maladjusted. (Stott et al 1976).

The data from other, more contemporary, studies by Hulme and his colleagues (Hulme et al 1982) (Abbie et al 1978) and Henderson and Hall (1982) also indicate motor ability tests can statistically discriminate between groups of emotionally normal youngsters and groups of youngsters evidencing various psychiatric syndromes. Data from additional investigations, including those by van Rossum and Vermeer (1990) and Kalyergboer and his colleagues (199) and others (Henderson et al (1989) also indicate that there are strong links between physical awkwardness, low self-esteem, and social problems.

Factor analyses have also been conducted containing tests reflecting both emotional qualities and movement qualities, including tests of coordination and motor 'soft signs.' The data from these also point to associations between social-psychological stability and movement competencies. For example in a study by Nichols (1987) tests of hyperactivity, emotional stability, and attention span loaded in a factor containing scores from two drawing tests. Thus the overall picture from this and similar studies is that motor ineptitude likely causes various symptoms reflecting emotional upset.

The relationships between emotional instability and motor impairment may be circular. Stott, for example, suggested that the inter-active relationships he found were due to the presence of general types of neurological impairments that may influenced *both* motor and emotional qualities in the youngsters he evaluated. The correlations found in the studies that have been reviewed, thus require close scrutiny in order to determine possible causal relationships present, and the direction of the causation.

Some believe, therefore, that valid data demonstrating possible causal relationships between motor ineptitude and emotional health is lacking (Duele & Robinson 1987). For example, general neurological problems and emotional instability may, in some children underlie

both hyperactivity (usually viewed as a sign of poor emotional health) and motor incoordination. Hyperactivity, coupled with a tendency not to remain long at various motor tasks, may result simply because a child does not wish to be exposed to the sustained scorn and ridicule of teachers and peers in situations requiring physical performance. Finally hyperactivity and inattention, qualities common both to groups of emotionally disturbed and motorically inept children, also may impede the execution of motor skills when they are presented in a test battery requiring prolonged periods of time to complete. For example, both Henderson and Hall (1982) Hulme and his colleagues (1982) pointed out that emotionally disturbed children they assessed often took longer, than did normal children, to accomplish most tasks. This tendency is typically found among emotionally disturbed youngsters whether confronting physical challenges classrooms, or in competitive and recreational sports.

Data from a few studies are now beginning to illuminate the possibility of modifying emotional states by exposing awkward children to remedial program. In recent work by Laszlo and her colleagues, for example direct evidence was obtained of 'dramatic' changes in social-emotional behaviors occurring among children exposed to a program that also produced parallel and positive changes in their physical skills. (Laszlo et al 1988).

Most encouraging, however, are the recent appearance of longitudinal studies. Investigators are beginning to survey, not only motor characteristics, but also the emotional states of youngsters assessed during several testing sessions taking place throughout the formative years of life. These studies are obtaining evidence obtained during significant time periods within the lives of the young subjects studied. In one of the first of these it was found that, while some awkward children improve over time, many continue to have difficulties, of several types, well into their teens (Gillberg & Gillberg 1989).

A comprehensive, longitudinal study was -published recently by Anne Losse and her colleagues. They compared measures of emotional health and physical coordination, obtained from thirty-two youngsters at both their sixth and sixteenth years of life. *They*-found strong evidence that the youngsters surveyed continued to have motor problems, attracting the attention of those attempting to teach them motor skills during this entire decade of their lives. During the several testing sessions necessary to complete this study, it was also observed that many displayed 'intense personal feelings of failure' throughout this ten-year period.

It was concluded by Losse and her helpers, that clumsiness is not a benign disorder confined to childhood, but rather awkwardness continues into the teens. Their data also made it clear that persistent and measurable evidence of motor ineptitude during the years the study took place, was accompanied by feelings among most of the youngsters taking part in the study. However they also observed that among some subjects who had been extended continuous and effective parental support, symptoms of poor emotional health were significantly reduced, and in some cases apparently eliminated (Losse et al 1991).

The available data from both correlative and longitudinal investigations thus strongly suggest that motor ineptitude both causes, and is accompanied by, low self-esteem and associated social adjustment problems in many children and adolescents for significant time periods during their formative years. Motor task performances constitute concrete, and observable, measures of competency, or of incompetency. A youngster who cannot perform well thus sees vivid evidence of his or her failings, and concurrently receives negative social feedback from observing peers, parents, and teachers. Thus both self-perceptions and the social judgments of others combine to Tower the self-esteem of many awkward children and adolescents. The values in various school-play settings, and at home, likely influence the amount of social punishment incurred by awkward children. In a home setting in which physical competence is highly valued, for example, the awkward child's self-concept is likely to suffer more than if he or she is being reared in a home environment in which physical prowess is not as important as performance in other arenas. However it is becoming increasingly clear that

continued and sustained negative reinforcement from those surrounding the child, will likely result in the youngster's poor emotional health coupled with symptoms reflecting a low self-concept. Moreover the youngster will likely engage in various compensations and avoidance behaviors that are likely to be viewed as signs of less-than-adequate emotional health. In the following section the nature and meaning of some of these compensations are explored.

CLINICAL OBSERVATIONS OF COMPENSATION AND AVOIDANCE STRATEGIES

A number of compensatory behaviors reflecting inadequate social-emotional adjustment are likely to be exhibited by awkward children. Parents, professions in clinics, and teachers are among those whose best efforts are often thwarted by these, often abrasive, ways in which awkward children act. These compensations and avoidance strategies are at times subtle, and at other times obvious. In either case, how these behaviors are expressed, and the forms they take are both important to consider, when assessing and providing programs for children with coordination problems.

Engaging in these strategies serve several important needs on the part of a clumsy youngster:

- (1) A compensation sometimes reflects the child's attempts to totally avoid situations in which physical performance will be required;
- (2) Another group of behaviors that are seen within performance situations the child has not been successful in avoiding. Thus while on the playground the child finds ways of not actually participating.
- (3) Still a third type involves ways clumsy children have of modifying both their own performance and performance demands so that they have a chance to succeed, but on their own terms.

Often an awkward child will engage in several of these avoidances-compensations, in quick succession, or at different times throughout a single day. Compensation or compensations may be selectively used when an awkward child is confronted with specific demands made by adults, children and by various situations encountered. That is many youngsters will learn to carefully match a specific compensations to various demands and stresses. It is typically found that _each child favors one or more of these compensations, and consistently relies upon them. Some of the more common of these compensations are discussed in the following paragraphs.

School Phobias and Similar Problems

Some poorly coordinated children may attempt to avoid school attendance completely. They may do this for various reasons, including the knowledge that they must take a fitness test in their physical education class that day. Upon arising in the morning their effort to avoid school may range from claiming illness, to 'throwing' temper tantrums. Their protestations may even be accompanied by measurable medical symptoms. They may become nauseous when contemplating their school day, and accompany these feelings with pleas to remain at home. These, and other symptoms may be exhibited by poorly coordinated children who believe that their school day will reveal physical incompetence, either in unstructured play situations, or when confronting specific tasks within structured physical education settings.

School phobic reactions may occur intermittently, or be seen every morning, or be expressed in anxious talk at the end of a school day. Their causes may transcend needs to avoid physical activity, and may include important medical and/or psychological symptoms that should not be

ignored. The frequent occurrence of these avoidance symptoms is often indications that something is indeed wrong, and that an emotional health specialist should be consulted. School personnel also should be contacted, to determine what components of the school program may be triggering the phobic reactions displayed.

Similar avoidance reactions may be displayed in other settings. For example, when an awkward child returns home from school and believes that it is likely play with neighborhood children may be required, he or she may plead illness, fatigue, and spend the afternoon by the television set or at the computer. Birthday parties, when games are about to be engaged in, may constitute another place in which avoidance compensations are exhibited. In this setting, poorly coordinated children may cling to their parents, to avoid game participation.

The classroom are still another setting in which avoidance reactions may be displayed. At school the awkward child often voices the wish to remain in the classroom at recess, and help the teacher. Thus many seemingly amenable "teacher's' helpers" are, in reality, poorly coordinated youngsters, evidencing the avoidance of physical activities at recess.

Avoidance reactions, reflected in anxious talk by an awkward, have been reported to us by some parents as occurring just prior to entering our clinic program. During the program, the child may often function well and participate fully. Afterward, however, these parents also report that their offspring's avoidance reactions quickly resume. Thus avoidance reactions and phobias, including negative feelings about both clinic and school situations, may be heard and observed both prior to or after potentially stressful performance situations are likely to be encountered.

Learned Helplessness and Infantilization

One of the most pervasive, and potentially harmful, compensations involves the display of learned helplessness. Infantilization may be partly the reflection of inappropriate caretaker behaviors, including the tendency of some mothers and father to unknowingly reward "babyish" behaviors. Infantile behaviors arise from the fact that developmentally delayed children often are subtly rewarded for their incompetence and inability to perform physical tasks well.

The problem can also stem from an attitude, adopted by the clumsy child, that most of what he or she attempts will likely be unsuccessful. Thus they give up trying when confronted with physical performance situations. If not encouraged by caretakers to try to accomplish various motor tasks, over time helpless feelings become more pronounced.

Symptoms within this general pattern of helpless include displaying immature play patterns, and a disinclination to attempt or to persist at motor tasks. These symptoms may even include delays of speech and language. Infantile speech patterns are common among children who have learned to be physically helpless. Signs of social and emotional immaturity displayed by an infantilized child may include frequent temper tantrums, thumb sucking and similar behaviors that are not age appropriate.

The three year old, who simply points and yells for objects, rather than asking for them, is displaying another type of infantile behavior. The six year old who requires the maid to dress him/her every morning is also exhibiting a sign of learned helplessness. This syndrome also may be exhibited by a child of eight or nine years, who remains in a sandbox playing in isolation or with one playmate, rather than participating in group games with complex rules and requirements that are expected of youngsters in middle childhood.

This pattern of behavior, if continually reinforced, will persist into adolescence. Parents who

continue to refuse to demand mature behavior and performance will likely produce psychologically and physically helpless teenagers. It is striking to observe these symptoms evidenced by some adolescent learning disabled adolescents, for example.

This pattern of behavior is often seen when evaluating children in our clinical program. For example, when asked to draw a simple geometric figure the child evidencing infantile helplessness may make light marks that are barely discernable on paper, while failing to form the diagram correctly. The pencil marks made may consist of light swipings that are difficult to see, executed as the pencil is held in a limp-fisted grip. The helpless syndrome is also discussed within the chapter 7 dealing with Dysgraphia.

Other signs may appear when a helpless child is confronted with motor tasks. For example, a ball may be passively dropped at his or her feet when a child, who has learned to be helpless, is asked to "throw the ball as hard as you can." If these symptoms of learned helplessness persist during the application of a remedial program, clinicians' best efforts are likely to be sabotaged. On the other hand if the youngster is made to feel adequate and effective during initial remedial sessions, progress in skill acquisition is often the result. Thus often we have such children learn to tackle a dummy, and in other ways engage in vigorous and sometimes aggressive behaviors, so that they learn that they can have an effect on something (knocking down the dummy) rather than being a passive and helpless person.

Learned helplessness is likely to be engendered by parent reactions, and also by the responses of others with whom the child comes in contact. Some caretakers may have needs to keep their child dependent on them, and to exercise their parenting and caretakers' roles in distorted and exaggerated ways. Essentially often caretakers reward their offspring for signs of incompetence, and for immature babyish behaviors.

These rewards may be extended to the child in a variety of subtle ways. For example, increased parental concern is engendered when the child evidences delays, a concern which the child observes, and may enjoy. Thus if possible, parents should correct infantile behaviors they observe, in a non-judgmental and unemotional manner. Frequent parental arguments about how to 'handle' the child's problems are often rewarding to the observing offspring. Thus parents should try to set goals for mature behavior that both are able to agree upon, while their child is not in attendance.

Visits to numerous professionals in efforts to evaluate and to remediate the problem may also serve to sustain infantile and inappropriate behaviors. Thus care should be taken not to over-evaluate such children. Observing the often dramatic effects upon powerful adults with which they are surrounded, motorically delayed children may persist and evidence less-than-mature performance delays in a variety of tasks required of them in both social and in educational situations.

Perhaps most vexing to clinicians are some parents who have somehow send their awkward children the message that it is cute or otherwise desirable that they are clumsy. This type of parental reaction at times accompanies reluctance to enter their child in a remedial program. This same parent may suddenly withdraw their immature offspring from such interventions when it is seen that progress is being made! This remarkable behavior is engaged in when the helplessness that both child and parent somehow value, and the latter has nurtured, seems to be in danger of being overcome by the appearance of positive changes!

It has been our experience over the past thirty years, that the appearance of symptoms signaling learned helplessness are more the rule than the exception among young, motorically delayed children. Typically a five-year-old, will display the motor development of a four year old, and then may be further delayed socially, emotionally, and linguistically, still another year by social forces promoting Infantilization.

Generally the caretakers of these youngsters are observed to 'operate' at two levels when approaching those who purportedly may help their child. At the conscious level, they seek out professional advice, evaluation and remedial programs; while at a second level, of which they may not be aware, they undermine the professional advice, and the best efforts of clinicians in remedial programs. For decades the appearance of this kind of helpless behavior by young children has proved highly frustrating to both teachers and to clinicians who come in contact with developmentally delayed children, including the physically awkward.

The answer to this problem is usually intensive family therapy, so that the mother and other caretakers are provided a mirror, in which they may view the ways they are rewarding, and thus maintaining, their offspring's helpless and ineffectual behaviors. After gaining an awareness of how their parenting practices influence their children, attempts should then be made to modify these behaviors. However, often 'selling' the need for such therapy is a task that professionals contacting parents are not always able to accomplish.

Comedic Behaviors and Other Types of Compensatory Verbalization

Within play situations, the awkward child runs the risk of not being noticed. Being overlooked may appear to such children to be a form of punishment worse than receiving ridicule. Thus the uncoordinated youngster often makes an effort to make the other children know they exist. One strategy is to use an excess of verbal behaviors at play, and in other situations. These verbal behaviors may include:

- (1) A constant attempt to be funny, by engaging in excess comedic behaviors.
- (2) Compensatory bravado, consisting of statements that express an overly self-confident demeanor, "I can make the Olympic Team!"
- (3) Constantly voicing statements that have nothing to do with a play situation.
- (4) Verbal pre-occupation with the rules, acting like a 'playground attorney'.

At times this excess verbiage ('hyperverbization') may become abrasive to the uncoordinated children's playmates. However, this hyperverbial behavior may persist, serving several purposes including:

- (1) Excess words assisting the awkward child to be noticed, despite the fact that this attention is often accompanied by negative social evaluations,
- (2) Excess barrages of words may help the awkward child stave off the need for performing, to 'wall off' others who attempt to interact with them physically. This second purpose often surfaces in our clinic program both when the child is evaluated, and later during initial remedial sessions. We have found that the chatter of the poorly coordinated youngster can be shrill, voluminous and constant. Usually suppressing this extraneous verbiage is usually necessary before significant improvements occur in physical skill within remedial and educational settings.

The content of hyperverbizations varies. This excess chatter may consist of persistent attempts to joke and be funny, including making fun of the play situation and of other children. At other times this hyperverbial behavior consists of intellectualizations, about the skills required or about other aspects of the games. Still another focus of this chatter may be upon rules and their interpretation. In this latter case the awkward child may sound like a youthful attorney, while engaging in sophisticated arguments about scores, rules and the like. This type of verbal behavior thus may also effectively block requirements to exhibit physical skills in the games confronting the youngster

When working with awkward children emitting these excessively verbal compensations, several strategies may be pursued. At times the effusive statements may be ignored. At other times it may be pointed out that too many words interfere with good play. In our clinic we have had success with the initiation of rewards systems. For example we often give a colorful sticker if, the child is able to suppress excess verbal activity for increased periods of time. If these kinds of compensatory verbiage are carried to excess, the child must be directly confronted with the need to stop talking and to perform. At the same time the chattering youngster may be informed as to the reasons he or she is behaving in these ways, and that the verbiage is neither socially attractive nor performance enhancing. Often the reduction of these verbal compensations is a valid clue that real skill improvement is taking place and is often accompanied by positive changes in the child's self-confidence.

Aggression

Lacking adequate play skills, awkward children sometimes engage in excess physical and/or psychological aggression against others. Sometimes this aggression appears in the form of verbal abuse, or even of obscenities directed toward peers. At other times aggression may consist of simply chasing weaker or younger children around the playground. At still other times, direct physical aggression is engaged in. Case studies of young adults who have evidenced marked sociopathic behaviors often contain scenarios of how, as children, they lacked adequate play skills, and thus began to take out their frustrations in the form of aggressive vengeance against others.

One theory about the formation of aggressive feelings rests upon the triggering role of frustration. Most competitive sports and rules are formulated so that one person, or team wins and another loses (what social psychologists term a sum-zero condition). Losing is usually frustrating, so that it may be postulated that the frequent losing experienced by awkward children (or the potential to do so) is likely to raise levels of both frustration and thus heighten aggression.

Within a clinical setting we often encounter overly aggressive children who lack adequate play skills. Care has to be taken to introduce them to skills in which they have a chance to succeed. At the same time we have to avoid any hint of competitiveness in the situation, except with themselves, as they attempt to improve in various tasks. Furthermore, cooperative games may be played, in which two children cooperate to, for example, keep a ball in play in volleyball or handball. (Orlick 1978).

This frustration-aggression chain may be seen as awkward children attempt to place their thoughts on paper, and fail badly to adequately execute writing skills. It is critical, when working with awkward children, to first limit and then eliminate excess aggression that many emit in social-play situations. Various forms of anger may be directed at teachers, parents and/or at peers. Aggression may also be reduced by the institution of psychotherapy, for both the child and to the parents. Helping parents to understand what is likely to reward and punish these unwanted aggressive behaviors can also prove useful.

Retreat to Academia (Into the Computer!)

As is true of all of us, awkward children do not persist in tasks in which they lack skills, but instead veer toward achievement areas in which they believe success is likely. Negative self-criticism and punitive social criticism, as well as positive evaluations from others, mold the performance routes we all take in life. It is thus not unexpected, to find poorly coordinated children finding other ways to express their personalities than by participation in physically demanding games. Among the detours uncoordinated youngsters take is to engage in academic activity, and also to explore the fascinating worlds offered by their computers. Either of these two routes may be taken compulsively, or be entered into in more relaxed ways.

Awkward children thus may become super memorizers of facts. They may become avid collectors of various kinds of objects, and/or become 'experts' at early ages within a narrow or broad scientific subject-area.

It could be argued that the faculties of many major universities consist of an inordinate number of individuals who, as children, were less than adequate in play situations. Instead these future academicians began, in sensible ways, to devote their energies to expanding their intellectual strengths rather than remaining on playgrounds and athletic fields to encounter the ridicule of their peers. Youngsters growing up do not always 'buy' the concept of becoming "well-rounded", by acquiring a balance of both physical and intellectual skills. Rather they will typically enter performance realms in which they are likely to be rewarded and avoid arenas in which they are likely to encounter failure.

This type of intellectual compensation is thus one of the more socially desirable strategies a clumsy child may employ when frustrations are encountered, as they attempt to master physical skills. Proper guidance, as this type of compensation is seen, becomes easier if the child is given a complete battery of tests including those measuring academic potential and ability. In this way the intellectual pressures that may be 'handled' by the child within academic contexts may be measured and educational plans may be gauged accordingly. Practical educational judgments have to be made about just how much physical activity and what kinds of physical activities in which a highly intellectual, but awkward, child should be encouraged to engage. Often it is appropriate to interest a youngster evidencing this type of compensation in the physiological underpinnings of physical activity. They may therefore sometimes focus their intellect upon the mechanisms within their body that are activated during exercise and begin to engage in sports and exercises. These youngsters sometimes find that individual sports, and endurance activities are more attractive than those which require them to confront the prowess of physically more adequate peers. Creative and intelligent, but awkward, children may also participate in the formation of their own developmental programs and games, a subject that has been discussed elsewhere. (Cratty 1988) and in books (Cratty 1974, 1986)

OVERVIEW

Acquiring adequate emotional development by awkward children is made difficult for various reasons. They are likely to experience constant negative social evaluations from their playmates, and siblings. Their parents may react to them in ways that often confuse them. Their fathers and mothers can exhibit behaviors that may include, denial that their problem exists. Caretakers may unknowingly extend rewards for passive delayed behaviors. Parents may become angry, and/or express too much concern about imperfections their youngsters may exhibit. Moreover those in positions to help poorly coordinated youngsters, including classroom and physical education teachers, may display continual irritation at their clumsiness, and/or less-than-adequate teaching skills. (Losse et al 1991).

Family values about the importance of physical prowess differ markedly, ranging from a high emphasis upon sporting activities, to values among family members who value other forms of success, including artistic and/or academic attainment. These and other differences in family values interact with at least three components of the youngsters self-concept, components that include feelings about physical ability, social competence, and intellectual attainment. (Harter 1981).

It could be hypothesized, therefore, that the most marked feelings of inferiority are engendered in physically inept children whose family members place high values upon physical prowess and skills. In contrast, less negative feelings may be engendered by families whose members are not as enthusiastic about sports, but reward success in other types of endeavors. It also may be true that in family complexes in which physical skill is highly

valued, the most marked changes will occur in the child's self-concept when their children's physical abilities undergo improvement.

However it is difficult to find American families whose members do not value academic achievement. Thus when physical awkwardness involves exhibiting inaccurate printing and writing, most parents members take quickly heed, and begin to evidence marked concern. The dysgraphic child thus may encounter more social pressure in many homes, than does the youngster who cannot play games well.

The simple axiom that an improvement in physical skill will result in a heightened self-concept needs careful examination. Continued negative social feedback from family members directed toward an awkward child, whose skills may be improving, can serve to maintain a persistent low self-concept. Improvement of physical skill within a remedial setting needs to be accompanied by change in family members' perceptions of the awkward child, in order to produce real changes in how the awkward youngster perceives himself or herself. Losse and her colleagues emphasize the importance of good parent understanding and support, in the production of emotional health among awkward children, in her recent longitudinal study. (1991). I know of one program in which the youngster's skill changes are carefully explained and illustrated to family members, in order to stimulate positive social feedback from them. (Morris 1985).

The compensations that awkward children evidence, while irritating unusual and bizarre, constitutes what could be construed as the only rational ways to behave in situations that to them are irrational and perceived as unfair. It may be useful to first evaluate the physical coordination of various children in a large school by visiting the playground and observing avoidance behaviors. After this initial screening the children identified might be exposed to formal motor testing. For decades a principal in an elementary school year UCLA, referred children to my program, based upon her the compensations she observed among youngsters on her school's playground. The objective evidence we then obtained, after assessing these children's physical skills, invariably confirmed this principal's insightful observations.

Most important, upon consideration of the social-emotional accompaniments to physical awkwardness, are the following principles:

- (1) Those conducting program intending to improve physical skill should become aware of how the children in their charge will attempt to avoid direct tutoring efforts, and should adjust teaching behaviors program accordingly. The compensations discussed reveal the real threat that physical activities pose for physically uncoordinated children.
- (2) Program content should be carefully devised so that the difficulty level permits measures of personal success, rather than producing failure and frustration.
- (3) Children brought to a program of motor remediation may require extensive psychological or psychiatric evaluation intervention. Thus often youngsters should be referred to mental health specialists, rather than only focusing upon motor skill enhancement.

As has been pointed out earlier, there are both obvious and subtle interactions between perceived success in physical tasks, and good mental health. However, the contention that skill improvement will inevitably result in better mental health is simplistic. Enhancing physical skills may, however, make a significant contribution to the mental health of many awkward youngsters. The evidence collected by Losse and her colleagues (1991) strongly suggests that unless both good parental support is extended, and effective educational interventions are obtained, emotional stress is likely to be a persistent accompaniment of motor ineptitude for a good part of the lives of many awkward children.

QUESTIONS FOR DISCUSSION

1. What chain of events results in both acting out compensations and evidence of low self-esteem among learning disabled youngsters? Can you diagram these relationships?
2. What kinds of compensations are seen on the playground, and in other contexts by youngsters seeking to avoid physical activity in which they are likely to incur failure? Which of these seem useful, and which are not?
3. What might you do to re-direct a negative social compensation expressed by a clumsy child, into a positive behavior or attitude? Be specific, just what would you do?
4. What forms might hyper-verbalization take? As an instructor in a remedial program, how might you reduce the amount of extraneous verbiage engaged in by a poorly coordinated child?
5. What kinds of tests are explained in the chapter, with which to obtain self-concept data from youngsters? Do you know of other types used? Can you locate other kinds of assessment instruments within the literature?
6. What forms might 'school phobia' take? How and when would evidence of school phobia appear? What might be one to reduce or eliminate school phobias due to the need of the child to avoid physical activity or physical ability testing?
7. What forms might pseudo-play, as an avoidance behavior, take when an awkward child is faced with various sports situations?
8. A child's self-esteem may be differentiated into at least three components: including the social self-esteem, academic self-perceptions, and feelings about physical ability and appearance. Discuss the interaction of differing family values and these three components of the self-esteem seen among various groups of children.
9. How might reasonable goal setting help to bolster the self-esteem of an awkward child? How might re-location of an awkward child to another playground, school, or neighborhood either hinder or help his or her self-esteem.
10. Might there be sex differences in the manner in which awkward children react emotionally to limitations in their physical-coordination? What would you hypothesize these differences might consist of?
11. Discuss the possible dynamics of parent-child interactions that result in a child feeling and acting helpless in physical performance situation.