

I Biological Influences

Bio-Medical Model

The bio-medical model views the locus of behavior problems as being within a child. The causes of these problems vary widely. A problem may have a genetic basis, as in conditions like schizophrenia and some forms of depression. The cause may have a neurological basis such as developmental lag. The resulting neurological immaturity causes greater distractibility and poorer impulse control than normally expected for a child's age. A problem may also be due to impaired biochemical functioning. Such impairments can result from toxic agents like lead, cocaine or alcohol and can result in conditions such as hyperactivity. Medication is often the treatment given to students who have conditions with biological antecedents.

Medication

Many students in public schools are taking psychoactive medications for behavioral conditions. The most frequently given psychoactive medications are stimulants and tranquilizers (see Figure 1). The most common medication is some type of stimulant prescribed for hyperactivity. Clearly, treatment by medication is outside the professional role of educators. Educators should never recommend, to parents or anyone else, medicating a student. Educators should never become involved in the administration of drug treatments except in strict compliance with official school system policies. However, educators do have a responsibility to students who are on medication. Educators should:

1. Know that a student is on medication.
2. Know what effects, positive and negative, to expect.
3. Know who to contact if a serious side effect occurs.
4. Watch students for effects.
5. Report to parents any observation of possible adverse effects.
6. Report to parents, if requested, any observation of possible helpful effects.

You should consider keeping data on file on each of your medicated students. The data needs to cover the points outlined above. A convenient way to keep this data is on a standard form (see Figure 2). An obvious source of information about a child's medication is a parent or guardian. If you do not know that a student is on medication and suspect he or she is taking medication, you should ask. Always ask about possible medications during initial parent conferences. An excellent source of information on medications is the Physicians Desk Reference. You can find this book in the reference section of any good library.

The Major Categories of Psychoactive Medication

Antipsychotic Agents

Major Use: To reduce agitation, panic, severe anxiety, and psychomotor excitement.

Common Brand Names: Thorazine, Mellaril, Trilafon, Stelazine, Prolixin, Haldol, and Navane.

Common Side Effects: Sedation, rigid shuffling walk, lack of facial expression, hand tremor or repetitive hand motions, restlessness, rocking, fidgeting, dizziness, dry mouth, nasal congestion, and constipation.

Antianxiety Agents

Major Uses: To reduce situational stress or anxiety associated with an emotional condition.

Common Brand Names: Valium, Librium, Serax, Tranxene, Vistaril, Atarax, Equanil, and Miltown.

Common Side Effects: Tolerance, physical dependence, drowsiness, uncoordinated movement, impaired emotional and intellectual functioning, and lethargy.

Antidepressants

Major Uses: To reduce depressive mood, restore activity, reduce negative expectations, and reduce selfblame.

Common Brand Names: Tofranil, Norpramin, Pertofrane, Elavil, Aventyl, Sinequan, Vivactil, Triavil, Etrafon, Marplan, Nardil, and Parnate.

Common Side Effects: Dry mouth, nasal congestion, constipation, dizziness, sedation, fine motor tremor, and muscular jerkiness.

Antimanic Agents

Major Uses: To reduce the occurrence and the frequency and intensity of manic and depressive episodes.

Common Brand Names: Eskalith, Lithane, and Lithonate.

Common Side Effects: Slight nausea, vomiting, sleepiness, thirst, dazed feeling, weakness, tiredness, muscular tremors, muscular rigidity, loss of appetite, and diarrhea.

Sedative-Hypnotics

Major Uses: Sedation, insomnia, reduction of inhibitions, and mood elevation.

Common Brand Names: Amytal, Seconal, Tuinal, Nembutal, Pentothal, Luninal, Placidyl, Doriden, Noludar, Noctec, dalmane, and Quaalude.

Common Side Effects: Slurred speech, impaired intellectual functioning, impaired motor performance, passivity, tolerance, and physical dependence.

Stimulants

Major Uses: Suppression of appetite, narcolepsy, increased alertness, decreased sense of fatigue, elevated mood, improved motor performance, and reduction of hyperactivity in some children.

Common Brand Names: Benzedrine, Dexedrine, Methedrine, Desoxyn, Dexamyl, Ritalin, and Perludin.

Common Side Effects: Loss of appetite, nervousness, restlessness, insomnia, tolerance, and psychological dependence.

Figure One

Allergies

Both children and adults can have allergic reactions. Allergic reactions can cause such symptoms as: Hives, swollen eyes, nasal discharge, sneezing, coughing and wheezing. However, according to Doris Rapp, it is less widely recognized that allergies can cause behavioral reactions. Some of these symptoms include: Restlessness, irritability, emotional lability, tenseness, sullenness, fatigue, lethargy and hyperactivity. These symptoms may occur along with complaints about aches, pains or general discomfort. Some of the common allergens reported by Doris Rapp include but are not limited to:

1. **Foods:** Milk, corn, wheat, egg, cocoa, sugar, coffee, food coloring, additives, preservatives, orange, grape, apple, tomato, pork, peanuts and cinnamon.
2. **Chemical Agents:** Tobacco smoke, perfume, phenol, natural gas, gasoline, chlorine, synthetic household fibers such as polyester or polyurethane, insecticides, aerosols and auto exhaust gases.
3. **Biological Agents:** Pollens, molds, mildew, dust mites, yeasts and pet or animal fur.

Treatment of student known to have allergies may include various medications, nutritional supplements, restricted diets or environmental restrictions. You should also follow data collection procedures, like those outlined above for psychoactive medications, for students being treated for allergies.

Temperament

One biological antecedent that probably affects everyone's behavior is temperament. Stella Chess and Alexander Thomas, among others, have studied the relationship of temperament to behavior problems. Temperament is an inherited response tendency or style. The response dimensions studied by Chess and Thomas include:

1. **Activity level.**
2. **Biological rhythmicity.**
3. **Tendency to approach or withdraw from novel stimuli.**
4. **Ease of adaptability to changing circumstances.**
5. **Intensity of responding.**
6. **Threshold of responsiveness.**
7. **General quality of mood.**
8. **Degree of distractibility.**
9. **Length of attention span and degree of persistence at tasks.**

Each of these responses has a normal range of variability. A given individual's typical response can be anywhere within the range of variability. The typical response can differ for each of the response types.

These dimensions have many possible combinations or patterns. No doubt, these temperament patterns represent one of the reasons for the considerable differences in normal behavior or individuality. Temperament is probably one of the reasons that you can't expect equal results from similar treatment of different students. Research has identified several temperament patterns. These include the Easy Child pattern, the Difficult Child pattern, the Slow-to-Warm-up Child pattern and Mixed. The patterns reflect various combinations of the response dimensions. The following are some typical descriptors for seven of the nine dimensions found useful in identifying patterns. Two dimensions, biological rhythmicity and threshold of responsiveness to sensory stimuli, will not be covered since there is little or no evidence that they have a significant impact on school functioning.

1. Activity Level:

High: Restless, energetic, active
Low: Relaxed, lethargic, passive

2. Quality of Mood:

Positive: Enjoyable, helpful, playful
Negative: Distressing, oppositional, serious

3. Approach Tendency to Novel Stimuli:

High: Assertive, decisive, curious
Low: Shy, hesitant, withdrawn

4. Persistence at Tasks:

High: Tenacious, involved, diligent
Low: Fickle, indifferent, impatient

5. Intensity of Response to Stimuli:

High: Enthusiastic, loud, hyperactive
Low: Calm, quiet, hypoactive

6. Adaptability to Change:

High: Compliant, sociable, flexible
Low: Reticent, anxious, rigid

7. Distractibility by Intrusive Stimuli:

High: Distractible, impulsive, confused
Low: Attentive, reflective, purposeful

Each of the above dimensions of temperament appear to have a biological basis. However, they only represent response tendencies or predispositions. A predisposition does not absolutely determine behavior. Predispositions are changed by experience. Some appear more easily modifiable than others. The predispositions that are most resistant to change are Activity and Approach to novel stimuli. It is particularly important not to confuse high activity level in this model with hyperactivity. Low to high on any of these dimensions alone is reflective only of a normal range of variation that can be expected in children.

Stella Chess and Alexander Thomas have discussed the effects of temperament on both school adaptation and social development. They point out that for a difficult child school entry can be a very stressful event and may be marked by loud and prolonged crying or other indications of distress. Such distress may be misinterpreted as an indication of immaturity. They found that a patient, sympathetic and consistent response from such a child's teacher usually leads to an acceptable adaptation to school. However, there appears to be a greater risk of poor adaptation and continuing difficulties if such a child is not handled properly.

Likewise, the slow-to-warm-up child may also have difficulty in adapting to school entry and find the experience distressing. Such a child will usually react to this stressful event by withdrawing. This response can be misinterpreted by such a child's teacher leading to referral of the child for emotional problems. However, if positive and supportive guidance is given, there is a very good chance that a successful adaptation will be made. If a slow-to-warm-up child is mis-perceived as having emotional problems and the child is treated as such, there exists the possibility of the mis-perception becoming a self-fulfilling prophecy. That is, the child's behavior may come to reflect the teacher's expectations.

Both the difficult and the slow-to-warm-up child may experience particular difficulty with social relations in middle childhood. Social relationships during this period begin to become considerably more complex and are often distressing and confusing to children in both of these temperament patterns. This is most likely when such children have failed to develop the necessary social skills and coping behaviors needed to handle a more complex set of social situations. Behavior problems may occur or previously existing behavior problems can intensify and possibly become more numerous. The difficult child's peer relations may become very conflicted resulting in social rejection and isolation. The slow-to-warm-up child will usually withdraw from and avoid social situations resulting in the child being viewed by peers as either a snob or as strange.

Chess and Thomas also discuss the special role of activity level in school adaptation, particularly after the initial adjustment period is past. A child with a normal but high activity level runs the risk of being labeled as hyperactive. A child with a normal but low activity level may be regarded as a slow learner or even as retarded. Such judgments often become self-fulfilling prophecies because of the expectations that are set and the influence those expectations have upon teacher/student interactions.

Further, a child with low persistence and high distractibility represents a troublesome combination. When these two traits occur together, the child's frequent failure to complete tasks may be interpreted as a lack of motivation or even willful resistance to instruction. This may lead to either giving up on the child or confrontation and conflict. Neither response to this combination of traits will be helpful. Finally, in social situations, a child with high persistence and low distractibility may be mis-perceived as too demanding or even as aggressive, particularly when his or her peers want to drop something and move to a new activity.

Roy Martin, a school psychologist, has been particularly interested in the role of temperament in school problems. He, like Chess and Thomas, has emphasized the importance of how teachers interpret a child's behavior. Attributing problem behavior to incorrect causes can lead not only to inadequate responses to the behavior but can make the problem worse. He further thinks that it is equally important that teachers recognize that behavior is not just the result of temperamental predispositions but rather the interaction of those predispositions with the environment. Knowing this can lead to designing appropriate environments, for children at risk, that minimize problems and facilitate appropriate development. An illustration of this approach is a study by Lauren Orth and Roy Martin, two school psychologists, who have found a pattern in students with a particularly low task orientation to school work. I would call this the difficult child pattern II. In an evaluation of standard teacher-directed instruction versus computer-directed instruction, they found that students with this pattern had significantly less off-task behavior with computer-directed instruction. If a temperamentally troublesome child is to make a successful adaptation to school, it is very important that teachers correctly identify the basis for the child's behavior and then make appropriate accommodations to it.

Teachers might find it useful to try to evaluate each of their students' response predispositions, for seven of the response dimensions related to temperament, to see if any of their response styles fit one of the identified temperament patterns. The Informal Temperament Scale (ITS), presented later in this chapter, illustrates one approach to assessing temperament. The ITS is not a standardized instrument but rather is more like a teacher made test. Its results are merely suggestive, not diagnostic in nature. The results can be useful for either forming a working hypothesis to be tested through your use of it during planning for and interacting with a student or as a screening instrument to indicate a possible need for further assessment.

Appraisal of a student's response tendencies can provide a teacher with useful information for planning activities. With this knowledge activities can be planned to take advantage of some response tendencies and to avoid potential problems associated with others. Knowledge of response predispositions can also help in efforts to modify troublesome tendencies. Knowledge of response tendencies can also help a teacher select his or her responses to a student. This is important because teacher responses can influence emission of either desirable or undesirable responses in a student.

Another approach to temperament is illustrated by the work of the British psychologist Hans Eysenck. Eysenck's work has focused on the biological basis for personality. Both he and Chess and Thomas are concerned with biologically based behavioral styles. Whether the term temperament or personality is used, biological factors in behavior are the focus of their work. Eysenck has developed a personality test for three major personality dimensions, with a biological basis, that affect behavioral style. Eysenck's test is available in two forms. One form is for children (Junior version) and the other is for adults. This test is available from EDITS Publishers; Box 7234; San Diego, CA 92107.

The three behavior traits that Eysenck's work and tests focus on are represented by bi-polar scales (labeled the E, N and P Scales). An Easy Child temperament would be a child who is near average on all three Eysenck scales. High N and low E Scale scores are analogous to the Slow-to-Warm-up Child temperament. High P and high E Scale scores are analogous to the Difficult Child temperament. As you will see later, Eysenck's three personality traits can be combined to produce a number of patterns other than the three patterns identified by Chess and Thomas in their work. The three bi-polar scales can be represented below. Beneath each pole of the dimensions is a somewhat more descriptive label in ().

1. Low Extroversion <-----> High Extroversion
(Introverted) (Extraverted)
2. Low Neuroticism <-----> High Neuroticism
(Rational) (Emotional)
3. Low Psychoticism <-----> High Psychoticism
(Sensitive) (Aggressive)

Extreme positions on these three dimensions predispose a person to certain types of behavioral styles and disorders. The following illustrates the styles and disorders associated with each dimension. The descriptive labels appear in (), style labels appear in [] and disorder labels appear in { }:

1. Low Extroversion <-----> High Extroversion
(Introverted) (Extraverted)
[Shy] [Gregarious]
{Phobia} {Hyperactivity}
2. Low Neuroticism <-----> High Neuroticism
(Rational) (Emotional)
[Deliberate] [Spontaneous]
{Obsessive/compulsive} {Schizophrenic}

3. Low Psychoticism <----->	----->	High Psychoticism
(Sensitive)	Descriptive	(Aggressive)
[Cautious]	Style	[Exploratory]
{Depressive}	Disorder	{Psychopathic}

James Wakefield discusses these dimension and their educational implications in his book Using Personality to Individualize Instruction (available from EDITS). In the discussion of the dimensions, he covers each relative to behavior, central nervous system (CNS) arousal, learning, discipline and achievement. The details of that discussion are too involved to cover here but are well worth reading. A summary of his recommendations for each dimension will be presented. A fuller discussion of these recommendations can be found in his book. Further, Wakefield has worked out twelve of the possible combination scores that a student might get on the Eysenck and offers suggestions for working with students having these personality (temperament) patterns. These patterns are:

Personality Patterns Based on Eysenck's Model

1.	(E,N,P)	Typical
2.	(E+,N,P)	Socially Uninhibited
3.	(E-,N,P)	Shy and Inhibited
4.	(E,N+,P)	Emotionally Over-reactive
5.	(E+,N+,P)	Hyperactive
6.	(E-,N+,P)	Anxious
7.	(E,N,P+)	Disruptive
8.	(E+,N,P+)	Impulsive
9.	(E-,N,P+)	Withdrawn and Hostile
10.	(E,N+,P+)	Agitated
11.	(E+,N+,P+)	Highly Disruptive
12.	(E-,N+,P+)	Anxious and Agitated

No + or - sign beside a trait letter indicates the trait is within one standard deviation of the mean for the trait.

A + sign beside a trait letter indicates the trait is one or more standard deviations above the mean for the trait.

A - sign beside a trait letter indicates the trait is one or more standard deviations below the mean for the trait.

Here are some general suggestions from Wakefield. The suggestions are for each of the three trait scales and are sub-divided along several dimensions of concern.

Behavior

E Scale: Students who are low E tend to work slowly and make few errors. Students who are high E tend to work quickly and make careless errors. A low E student will appear to be very motivated and attentive on most tasks and will persist at them. A high E student will appear under-motivated and easily distractible and will get easily bored with most tasks.

N Scale: Students who are low N tend to have very mild or no reaction to emotional stimuli. They are unlikely to become upset and if they do will quickly recover. High N students are very sensitive to emotional stimuli, have strong reactions to them, get upset easily and are slow to calm down. High N students will often attempt to avoid situations that are apt to be emotionally charged.

P Scale: Students who are high P are often solitary and viewed as unsocialized. Such students frequently like odd and unusual things and have a marked disregard for danger. They also tend to be defiant and aggressive. Low P students are usually very sociable, friendly and seldom exhibit hostility or aggression. Unlike the high P student, low P students are not very susceptible to serious psychological disorders.

Arousal

E Scale: Students who are low E perform more poorly under external stress, while students who are high E improve their performance when under external stress (e.g., time limits). Arousal from stress relative to the E Scale is primarily related to external stimulation, e.g., noise and cognitive challenge, e.g., problem-solving. The optimal level of arousal for these two types of students is also influenced by task difficulty. The optimal level of arousal for each goes up for easy tasks and down for difficult tasks. However, the relative difference will remain the same. That is, on an easy task a high E student's optimal level of arousal will be higher than on a difficult task but will be higher in both cases than for a low E student.

N Scale: Students high on the N Scale tend to be more easily aroused by emotional stimuli and often perform poorly on tasks because they are overly aroused or motivated. On the other hand, a student who is low on the N Scale often performs poorly on tasks, as well, but for the opposite reason. That is, they are insufficiently aroused or under-motivated. Students high or low on the N Scale respond to external stress in about the same way as do students high or low on the E Scale. That is, external pressure can be used to enhance performance in low N students, but will further erode the performance of high N students. Task difficulty also interacts with the N Scale. Relatively high arousal level is best for easy tasks and relatively low arousal is best for difficult tasks. High N students are particularly susceptible to "test anxiety" and the importance of tests should be down played with them.

P Scale: High P students find high levels of stimulation enjoyable and are prone to engage in exciting and dangerous activities without regard for the potential consequences. Such a student may seek confrontations and even punishment simply for the stimulation value

such situations hold. Students low on the P Scale do not find high levels of stimulation particularly enjoyable and therefore will tend to less stimulating kinds of activities and will have greater regard for the potential consequences of their behavior.

Learning and Achievement

E Scale: High E students tend to learn major points that are emphasized better than minor points, while low E students will learn both types of material. High E students learn best with continuous reinforcement or feedback, while low E students perform best under conditions of intermittent reinforcement or feedback. Recall of learned material also varies for these two types of students. High E students recall material better after a short delay between learning and testing, while low E students recall material better immediately following learning or after a long delay. Typically, high E students do better in elementary school, while low E students do better in high school.

N Scale: Low N students tend to approach learning in an exploratory style while high N students approach learning in a more rigid and compulsive manner. High N students can study for long periods on a regular basis, while low N students study best for shorter periods broken up by other activities. Low N students do better in elementary school and high N students in high school.

P Scale: Students high on the P Scale do not learn as easily from experience as low P students and may be characterized at times as being "hard headed." High P students also have more difficulty maintaining attention and concentrating in learning situations and tend to respond impulsively. These students appear to be more original in their thinking and may be labelled creative. When this is coupled with above average intelligence it tends to incline the student toward productive endeavors, while coupled with average to below average intelligence may incline the student toward destructive activities. Low P students do better in school at all levels than high P students. Teachers find low P students more "teachable" and less troublesome than high P students even when the high P student is more intelligent and original than his or her low P counterparts.

Discipline

E Scale: Students at both extremes on the E scale respond to reward and punishment. However, low E students are more sensitive to punishment and threats of punishment, while high E students are more sensitive to rewards and reminders about potential rewards that are available. One should not adopt one strategy or the other with students who are at different ends of the E scale. Rather, one should use both approaches but shift the emphasis a bit depending of the type of student.

N Scale: High N students tend to be more responsive to punishment and low N students to reinforcement. Both reward and punishment should be low key for the high N student. Both need to be somewhat more intense to affect low N students. Differential levels of both

reward and punishment need to be used with students at both ends of this dimension. Failure to differentiate may lead to some students being over-controlled and some who are unruly.

P Scale: Punishment and emotional displays are often counterproductive with high P students. That is, not only may such responses fail to inhibit their behavior, it may actually stimulate the misbehavior. Unlike their low P counterparts these students tend to be both disruptive and difficult to discipline. Highly structured environments employing both mild reward and punishments have the best chance of managing the behavior of high P students.

While the above generally applies to students high (1+ standard deviation above the mean) and low (-1 standard deviation below the mean) along a single dimension, one must consider interaction effects when a student is extreme on more than one of the three dimensions.

Informal Temperament Scale

Student: _____

Date: _____

Based on your experience with the above student, rate the student on each of the following scales by circling the label that is most typical of the student. Be sure you understand the meaning of each word before making a choice. For summary purposes, each circled word on the left has a weight value of one (-1). The center column has a value of zero (0). The words on the right have a value of (+1). The weight value for each item should be written in the space provided beside the item number. Scores can range from -21 to +21 on the instrument and from -3 to +3 on each of the seven dimensions.

	(-1)	(0)	(+1)
___ 1.	Relaxed	Balanced	Restless
___ 2.	Distressing	Balanced	Enjoyable
___ 3.	Shy	Balanced	Assertive
___ 4.	Fickle	Balanced	Tenacious
___ 5.	Calm	Balanced	Enthusiastic
___ 6.	Reticent	Balanced	Compliant
___ 7.	Attentive	Balanced	Distractible
___ 8.	Lethargic	Balanced	Energetic
___ 9.	Resistant	Balanced	Helpful
___ 10.	Hesitant	Balanced	Decisive
___ 11.	Indifferent	Balanced	Involved
___ 12.	Quiet	Balanced	Loud
___ 13.	Anxious	Balanced	Sociable
___ 14.	Reflective	Balanced	Impulsive
___ 15.	Passive	Balanced	Active
___ 16.	Serious	Balanced	Playful
___ 17.	Withdrawn	Balanced	Curious
___ 18.	Impatient	Balanced	Diligent
___ 19.	Hypoactive	Balanced	Hyperactive
___ 20.	Rigid	Balanced	Flexible
___ 21.	Purposeful	Balanced	Confused

Summary

1. The **ACTIVITY** trait equals the sum of the values for items: 1, 8 & 15. Write the sum in the blank and circle as appropriate low, balanced or high to the right of the blank.

_____ Low = -2 or -3 Balanced = -1 to 1 High = 2 or 3

2. The quality of **MOOD** trait equals the sum of the values for items: 2, 9 & 16. Write the sum in the blank and circle as appropriate low, balanced or high to the right of the blank.

_____ Low = -2 or -3 Balanced = -1 to 1 High = 2 or 3

3. The **APPROACH** trait equals the sum of the values for items: 3, 10 & 17. Write the sum in the blank and circle as appropriate low, balanced or high to the right of the blank.

_____ Low = -2 or -3 Balanced = -1 to 1 High = 2 or 3

4. The **PERSISTENCE** trait equals the sum of the values for items: 4, 11 & 18. Write the sum in the blank and circle as appropriate low, balanced or high to the right of the blank.

_____ Low = -2 or -3 Balanced = -1 to 1 High = 2 or 3

5. The **INTENSITY** trait equals the sum of the values for items: 5, 12 & 19. Write the sum in the blank and circle as appropriate low, balanced or high to the right of the blank.

_____ Low = -2 or -3 Balanced = -1 to 1 High = 2 or 3

6. The **ADAPTABILITY** trait equals the sum of the values for items: 6, 13 & 20. Write the sum in the blank and circle as appropriate low, balanced or high to the right of the blank.

_____ Low = -2 or -3 Balanced = -1 to 1 High = 2 or 3

7. The **DISTRACTIBILITY** trait equals the sum of the values for items: 7, 14 & 21. Write the sum in the blank and circle as appropriate low, balanced or high to the right of the blank.

_____ Low = -2 or -3 Balanced = -1 to 1 High = 2 or 3

If a majority of the traits (3+) for one of the below temperaments fit a student's profile, consider the student to have that temperament. The better the match the more likely the classification is to be correct. A student who doesn't fit one of the three patterns should be considered to have a Mixed pattern.

	EASY	DIFFICULT-1	DIFFICULT-2	SLOW-TO-WARM-UP
Activity:	Variable	Variable	High	Low
Mood Quality:	High	Low	Variable	Low
Approach:	High	Low	Variable	Low
Persistence:	Variable	Variable	Low	Variable
Intensity:	Low	High	Variable	Low
Adaptability:	High	Low	Variable	Low
Distractibility:	Variable	Variable	High	Variable

NOTE: The Difficult2 pattern (my label) is a pattern identified by Lauren Orth and Roy Martin, two school psychologists, who have found this pattern in students with a particularly low task orientation to school work.

1
Activities

1. Select a psychoactive medication that you have, have had or might have a student taking while in your class. Write a brief review of this medication based on the description for it in the Physician's Desk Reference.
2. Complete a Medication Data form or modify this form for Allergy Data and complete it on a real or hypothetical child.
3. Select a student that you have or have had in your class (or a child that you know well if you haven't taught) and complete the Informal Temperament Scale on the student or child.
 - a. Which response tendencies or traits are high and which are low?
 - b. Does the student fit any of the patterns?
 - c. Which response tendencies are potentially useful? How can they be used?
 - d. Which response tendencies are potentially troublesome? How might they be troublesome? What could you do to minimize these potential problems?
4. Which of Wakefield's suggestions for Eysenck's traits might be applied to Chess and Thomas' temperament patterns?
5. Select one of the personality dimension combinations from Wakefield that have extreme scores on two different dimensions. Using the guidelines provided for each dimension, work out what you think the combined implications are for the profile selected.