Researchers have recently attempted to identify the characteristic behaviors of effective problem solvers. To assist those psychologists who work with teachers to improve student levels of persistence on academic tasks, this paper reviews the current literature on persistence. Persistence, or the amount of effort and time a student is willing to devote to a task, has long been considered an important component of ability and achievement because it can demonstrate the individual's commitment to an assignment. Considering that student success can hinge upon an understanding of the student's motivation to meet, challenge, and deal with failure, it would seem that school psychologists need to consider persistence as a component not only of test behavior but also as one upon which further educational recommendations might be based. Practical suggestions are offered to practitioners for enhancing persistence which can then be shared with teachers. The suggestions are divided into four variables: (1) skill-related variables; (2) personality variables; (3) adult-related variables; and (4) perception variables. Different criteria such as achievement, self-efficacy beliefs, motivation, locus of control, reflective feedback, type of goal setting, interpretation of past performance, and presentation of task are highlighted as ways to motivate students. (RJM)
The ABC’s of Persistence: Suggestions for Teachers to Improve Students’ Effort on Academic Tasks

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ABSTRACT

The purpose of this presentation is to review current literature on persistence for psychologists working with teachers to improve student level of persistence on academic tasks. Persistence, or the amount of effort and time a student is willing to devote to a task, has long been considered an important component of ability and achievement because it can indicate behaviorally the individual’s commitment to an assignment. Indeed, a measure of persistence is often included as one of the key observations during testing. Considering that student success can hinge upon an understanding of the student’s motivation to meet challenge and deal with failure, it would seem that school psychologists need to consider persistence as a component not only of test behavior but one upon which further educational recommendations might be based. This session will offer the practitioner practical suggestions for enhancing persistence that can be shared with teachers.
SUMMARY

The ABC's of Persistence: Suggestions for Teachers to Improve Students' Effort on Academic Tasks

Contemporary researchers, such as Feuerstein (1980), Sternberg (1985), Perkins (1983), and Ennis (1985) have attempted to identify the characteristic behaviors of effective problem solvers. Atkinson (1964) has termed one of the more integral of these behaviors as persistence. Although measures of academic achievement and cognitive ability are highly dependent upon the conceptual ability the student brings to the task, they are also subject to a range of personal variables which determine a student's commitment to persevere even when discovering the solution to a problem is difficult (Wechsler, 1981). Indeed, persistence would seem a critical component of the learning process, since individuals who do not believe in their ability to succeed may not allow adequate time for learning or task completion to occur. This presentation will review the concept of persistence as it relates to academic achievement and ability and discuss how it can be facilitated in the classroom.

Neuman, Finaly and Reichel (1988) defined persistence as the individual's skills for overcoming obstacles and persevering in seeking solutions to problems despite adverse circumstances. Unfortunately, there has been little agreement upon the best way of measuring persistence. Some researchers have attempted to measure it by providing individuals with unsolvable or difficult tasks (Campbell & Henry, 1981; Craske, 1985; Kroll, 1991), while others have utilized test-session observations to measure persistence (Glutting, Oakland & McDermott, 1989). Otherwise, measures of ability, such as the Stanford-Binet Intelligence Scale: Fourth Edition (Thorndike, Hagen & Sattler, 1986), often have sections on the protocol from which the evaluator can rate students' persistent
test behavior. Additionally, teacher rating scales have attempted to factor out the persistence construct (Martin & Holbrook, 1985; Mevarech, 1985).

The common thread in these diverse attempts to measure persistence is that it is an observable behavior, witnessed in students who give up easily or continue efforts when tasks become difficult. Since persistence is a behavior, then it is assumed that it can be modified. However, one may not be able to modify particular behaviors unless one understands where these behaviors originated. Therefore, teachers and school psychologists, who wish to improve their students' persistence, must become familiar with the origins of persistent behavior. With a more thorough understanding of the origins of persistence, teachers and school psychologists may be better qualified to affect positive change in their students.

Persistence has been studied as an element of achievement motivation and self-efficacy (Craske, 1985). Research dating from the 1970's and 80's implied that the reasons for which students attribute their success or failure can make a difference in the effort they devote to later, similar tasks (Stipek, 1984; Weiner, 1980). For example, individuals who attribute failure to lack of ability may see persistence on future assignments as futile. This is akin to a form of learned helplessness. In contrast, individuals who judge that unsustained effort accounted for failure may regard continued perseverance as essential in changing the results in their favor. Analogously, students who perceived themselves as competent will be more likely to accept challenging assignments than those who doubt their ability to perform. A lack of confidence may in fact blunt ability to learn by limiting students in their willingness to risk failure.

Dweck (1986) asserted an alternative hypothesis for the origins of persistent behavior. She claimed that children who are motivated toward acquiring new information or skills are working toward learning goals. These children will seek challenge, persist in spite of obstacles, and exert substantial effort towards mastery. In contrast, children who are motivated to obtain favorable judgments from others are
working towards performance goals and demonstrate avoidance of challenge and limited persistence. It was Dweck's notion that the child's perception of the concept of intelligence affects whether they will be motivated towards learning or performance goals. Children who feel that intelligence is a stable trait will want to be reinforced regarding their ability level, but children who see that intelligence is fluid will seek to develop it. These beliefs affect persistent behavior in contrasting ways. If children are motivated towards learning, increases in the difficulty of problems will not pose a threat to their self-valued concept of intelligence and effort levels likely will not decrease. On the other hand, children concerned with appearing to be intelligent will be fearful of situations where failure may arise and thus will not persist in their efforts or may not even make attempts.

The issue of persistence seems critical now for two major reasons: first, because of the changing structure of schools and classrooms and second, because of the increased levels of attention-related referrals. The moves to include more handicapped students in general education settings and a more "learner-centered" curriculum will present teachers with greater challenges in working with students for whom success in a general education context has seldom occurred. For example, some students with learning disabilities may have convinced themselves that they cannot achieve and that no amount of effort will change the negative outcome. For these students, simply telling them to try harder will not begin to address their underlying belief system or dare them to develop different problem-solving strategies.

The increasing percentage of attention-related referrals presents school psychologists with greater challenges in assessment. Inconsistent scoring patterns may be related to varying persistence levels, rather than to the wavering levels of attention. Indeed, Wechsler (1981) concluded that there were other factors, such as persistence, motivation, and goal orientation whose impact significantly affected test performance. More recently, Kamphaus (1993) noted that the relationship between ability and
persistence is in need of greater study. Likewise, teachers and school psychologists need to be keenly aware of the nature of the individual's fluctuating test results and academic performances to best serve their needs.

Since school psychologists may be in a unique position to consider motivating factors in performance, it is anticipated that the information presented here may encourage school practitioners to consider academic effort in a new way and provide teachers with practical methods to promote behavioral change.
Suggestions for Improving Students' Persistence

1. **Skill-Related Variables**

   A. **Achievement**
      - Evaluate students based on their individual academic progress rather than relative to the group (e.g., "I'm seeing much improvement in your work since the beginning of the year.")
      - Keep a record/chart of a student's growth in order that the student may see his/her progress over time
      - Create opportunities for students to tutor other students, as tutoring others may solidify knowledge, build self-esteem and coincidentally increase persistence

2. **Personality Variables**

   A. **Self-Efficacy Beliefs**
      - Praise effort; indicate how effort accounted for academic improvements (increments of improvement must be judged relative to the individual's past academic performances)
      - Create a safe, risk-taking environment by attending to, clarifying, and encouraging the students' novel ideas (e.g., "That is an excellent idea for a project; tell me more;" or "You seem to be heading in the right direction with that...how do you plan do build on that idea?")
      - Discuss students' areas of interest, and be sure to acknowledge that you have learned from them
      - Teach to the students' instructional levels as much as possible

   B. **Motivation**
      - Use a variety of instructional methods to maximize learning potential (e.g., try out teaching aids and alternative classroom configurations to find engaging learning situations)
      - Be aware of cultural norms for appropriate teacher-student interactions (e.g., for white middle-class students, establishing good eye-contact and using head nods to acknowledge students' effort may increase persistence)
      - Indicate how topics relate to the students' personal experiences (e.g., for rural areas, "This lesson may be helpful for you in understanding how a farm functions"; for urban areas, "This unit relates to the Vietnam Memorial downtown. Many people from your neighborhood died serving our country in that conflict.")
      - Be accepting of lulls in effort as long as overall persistence appears stable
C. **Locus of Control**
- Remind students that their efforts directly influence their academic improvement/performance (e.g., "Your effort was really important...")
- Note the uniqueness of the student's work to him/her (e.g., "Glenda, that is a very interesting way of solving the problem.")
- If student encounters failure, do not avoid the issue. Instead acknowledge it and point out the positives aspects of the situation (e.g., "I realize that you are upset that you are having some difficulty but don't neglect the fact that you did get several answers correct," or "What do you think...do you need to learn this material even better?")

3. **Adult Related Variables**

   A. **Reflective Feedback**
   - Try to be aware of potential gender bias in reinforcement. Upon successful completion of academic tasks, boys are labelled as having high ability, whereas girls are told they are hard workers. The majority of students seem to demonstrate higher achievement when both high ability and effort are attributed to them.
   - Allow student to vent frustrations appropriately and then point out previous accomplishments when the student demonstrated academic persistence in the face of adversity.
   - Explore Gardner's (1993) application of the concept of multiple intelligences ("smartness" to younger students) and discuss the multiple areas one can be able/good at (e.g., Linguistic, Logical-Mathematical, Musical, Bodily-Kinesthetic, Spatial, Interpersonal, and Intrapersonal).

   B. **Type of Goal Setting**
   - Set realistic goals based on the student's past performance.
   - Incorporate students and/or parents in the goal setting process if possible (perhaps through parent-teacher conferences).
   - Challenge the student to improve upon his/her own past performance and be supportive and firm (e.g., "Johnny, what can you do to improve on what you have already learned?...What options are there?")

4. **Perception Variables**

   A. **Interpretation of Past Performance**
   - Discuss the value of persistence and encourage the students not to give up when they say that "this is too hard"
   - Provide examples of achievers who encountered failures or difficulties (e.g., Helen Keller, Abraham Lincoln, Albert Einstein, Jackie Robinson etc.)
- Avoid criticizing the student's product, instead, deal positively with improvement of effort
- Try to sit the student next to students who model persistent behaviors. Students who have skills tend to bring lower achievers up through example

B. Presentation of Task
- Break tasks into small component parts but emphasize how they build into larger ideas and concepts
- Present tasks that are of moderate difficulty so that students attain a sense of accomplishment. Assignments that are too easy or too challenging do not promote persistence
- Give frequent feedback and ask students how they judge their performance
- Make sure that the students understand what they are required to do before beginning new assignments (e.g., Does everybody understand the directions?)
Selected References


