Children's Motivation to Study Music

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When Paul first asked me to speak at this conference, I was honored at the invitation and looked forward eagerly to getting into the literature on motivation for learning music. But soon after I began my search, I began to fear that I would have very little to say to you. Very little empirical work has been done on motivation and music; and of what had been done, even less was useful for developing musical educational programs.

So I decided to gather some new data. I interviewed friends, colleagues, and their children about their experiences with music education. As I was gathering this information, I regained my enthusiasm and decided I would have some things to say to you today that would be useful. Over the last 4 years, my colleagues and I have been doing a large scale study of motivation to study mathematics. We have gathered extensive quantitative and qualitative data. We have asked approximately 1,000 students why they are taking math, what they like about math, what they do not like about it, whether they plan to continue taking math, and why or why not. Based on these data, and on our own theoretical orientation, we developed a model of achievement motivation that outlined the set of variables influencing students' decisions to study or not to study mathematics. It soon became clear from my music interviews that this model also captured the critical mediators of motivation to study music. Today I would like to share this model with you. I will use the case material I have gathered to illustrate the interaction among the variables at the level of the individual. In addition because the motivational constructs are so similar across math and music I will draw upon the classroom learning literature and discuss some of the means of optimising children's motivation to study music.

To summarize then, my talk today will focus on 2 topics. First, I will summarize a model specifying the mediators of achievement choice and illus-

trate its applicability to music with case materials. Second, I will discuss the strategies for optimizing different student's motivations to study music.

In exploring children's attitudes toward achievement, one can't help but be struck with the variety of reasons children have for exchanging in or avoiding various activities. For example, some of the children I talked to said they took music because they liked it, others because they thought it was "cool," others because their parents made them. The wide range of responses children have to seemingly similar achievement outcomes is also amazing. For example, some kids love to perform in front of an audience, others are terrified; some experience great pride and joy over a good performance, others worry about the little mistakes; some respond to a difficult piece with increased effort, others give up because the piece is too hard.

Finally, the range of behavioral choices the children make is also amazing. For example, even among children with similar backgrounds, one child decides to go out for the little league team, another will choose to study piano, another will prefer drums and yet another will prefer reading; one will decide to become a doctor, another to become plumber, or an airline stewardess, or an elementary school teacher, or a singer, or a concert violinist.

Why do children with fairly similar grades in school have different opinions of their intellectual abilities? For example, why do girls develop lower estimates of their math ability and lower math achievement expectancies than boys, even though they do just as well in math as boys do throughout their school career? Why do some children invest time and energy in developing social, physical skills or musical skill?

These questions, and others like them, lie at the heart of achievement and self perception theory and have been the focus of my attention for the

past 10 years. As a result of this interest, my colleagues and I have dev-
eloped a theoretical model (see Fig. 1; for a more detailed discussion, see
Parsons et al., in press) outlining the relations among what we consider to
be the major variables influencing behavioral choice and goals, and have
tested that model with older adolescents in the academic achievement domain.
This work has demonstrated the importance of self and task beliefs in media-
ting achievement behavior. In particular, we have found that perceptions of
one's ability, expectations regarding probability of success, perceptions of
task difficulty, and perceptions of task value are especially important deter-
minants of achievement choices.

But before discussing each of these variables I'd like to make a few
general comments about our model. Like most current cognitive theories, this
model is built on the assumption that it is not reality itself (i.e., past
successes or failures) that determines children's expectancies, values, and
achievement behavior, but rather the interpretation of that reality. If chil-
dren interpret their performance history differently, then it is only reason-
able that they will draw different conclusions regarding the meaning of those
experiences. For example, if girls think success is due to effort and hard
work and boys think success is due to ability, then it is quite logical that
boys will rate their ability higher than girls even though they have both had
an equal number of successes.

The model further proposes that interpretation of achievement outcomes and
future goals are mediated by variables such as causal attributional patterns
for success and failure, the attitudes of parents and teachers, children's
perceptions of their own needs, values, and role identity, and children's
perceptions of the characteristics of various activities. Each of these
factors plays a role in determining the expectancy and value associated with

any particular task, which in turn influence a whole range of achievement-related behaviors potentially associated with that task, such as choice of the activity, intensity of the effort expended at various activities and performance levels across various activities.

The model assumes that decisions regarding various activities are made in the context of a variety of choices and are guided by core values such as achievement needs, competency needs, and sex-role values, and by more utilitarian values such as the importance of the various alternatives for the child's immediate and more long range goals. Thus, if a child feels that the amount of effort it will take to do well on any particular activity such as music lessons is not worthwhile because it decreases the time available for more preferred activities such as socializing with friends, then the child may well avoid engaging in the activity at all. Or, if a girl stereotypes drum playing as masculine and not in line with her own sex-role values, then she will be less likely to take drum lessons than if she stereotypes drum playing as feminine. Alternatively, a child who thinks being a guitar player is a "cool" activity that will make him a hit with his friends will place a very high value on mastering the guitar and will be motivated to practice. Finally, a child who thinks she has more talent for gymnastics than for piano will be less motivated to practice piano than a child who is sure she is a better musician than an athlete.

What distinguishes this model from other models of achievement behavior is this attention to the issue of choice. Whether done consciously or not, children (and later adults) are making choices among a variety of activities all of the time. For example, they decide whether to work hard at school or just get by; they decide which musical skills to develop or whether to develop any at all; they decide how much time to spend practicing music; and they decide whether to practice or play with their friends, etc. We have tried to

address this issue of choice directly and to develop a model that allows us to predict the type of choices being made. Furthermore, we have tried to specify the kinds of socialization experiences that shape individual differences on the proposed mediators of these choices especially in the academic achievement domain.

Having made these general comments let me return to a discussion of the major components of our model. Building on a long heritage of work in the achievement motivation, we have postulated that achievement choice is influenced most directly by two major cognitive constructs: 1) expectations regarding the probability of success and 2) perceived importance or incentive value of the activity which, in turn are influenced by a wide variety of variables. I will discuss each of these now.

Expectation for Success

The concept of expectancy or probability of success has long been recognized by decision and achievement theorists as an important variable in determining behavioral choice (Atkinson, 1964; Edwards, 1954; Lewin, 1938). Numerous studies have demonstrated the importance of expectancies for a variety of achievement behaviors including academic performance, task persistence, and task choice (e.g., Covington & Omelich, 1979b; Crandall, 1969; Diggory, 1966; Feather, 1966; Veroff, 1969). Developmental studies indicate that the influence of expectancy on performance increases with age and may emerge earlier and more strongly for males than females (Crandall, 1969; Parsons & Ruble, 1977; Stein, 1971). By adolescence, however, expectancies are clearly related to both general achievement performance (cf. Stein & Bailey, 1973) and math achievement and course enrollment in particular (Battle, 1966; Fennema & Sherman, 1978; Sherman & Fennema, 1977). Not surprisingly, these studies have shown that students are more likely to enroll in advanced mathematics courses when they are confident of their performance.

Since achievement expectancies play a significant role in students' academic choices, it is important to identify the factors shaping these expectancies. We propose that expectancies are influenced most directly by self-concept of ability and estimates of task difficulty. Historical events, past experiences of success and failure, and cultural factors are proposed to have indirect effects which are mediated through the individual's interpretations of these past events, perceptions of the expectancies of others, and identification with the goals and values of existing cultural role structures. I will discuss each of these influences briefly.

Self-Concept of Ability.

The importance of individuals' conceptions of their ability for their achievement behaviors has been discussed by several researchers (e.g., Brookover & Erickson, 1975; Covington & Beery, 1976; Covington & Omelich, 1979a, 1979b; Kukla, 1972, 1978; Meyer, Folkes, & Weiner, 1976; Nicholls, 1976; Purkey, 1970). Formed through a process of observing and interpreting one's own behaviors and the behaviors of others, self-concepts of ability are defined as assessments of one's own competency to perform specific tasks or carry out role-appropriate behaviors. In the view of most authors, self-concepts of ability are key causal determinants of a variety of achievement behaviors.

Research assessing this view has yielded somewhat mixed results. Although several studies have demonstrated that those with higher estimates of their ability to master a task in fact do better on the task, few have actually tested the causal direction of the relations. In a recent field study, Calsyn and Kenny (1977) found that academic achievement determines self-concept of ability rather than the reverse. In contrast, intervention

procedures designed to raise children's confidence in their abilities in particular subject areas have been shown to induce gains in the children's subsequent achievement behaviors (e.g., deCharms, 1976; Dweck, 1975). These intervention studies suggest that for some children, at least, increases in self confidence can produce increases in achievement.

Research specific to math achievement has yielded a consistent and positive relation between perception of mathematical ability and plans to enroll in advanced mathematics courses. For example, we have found that students' ratings of their mathematical ability predicted the amount of math they planned to take in high school. (Parsons, Adler et al., in press).

It is reasonable to suspect that a similar effect would hold for music. Children or adults who are confident of their musical ability should be more motivated to study music. Intra-individual comparisons should yield even a stronger pattern. We know that children are pretty good at estimating their ability level in academic subjects by third grade. They may also have a fairly accurate sense of their musical talent by that age. If so, the 8 and 9 year old children should be able to assess their relative abilities across several domains including music. Our math data suggest that children who see musical ability as one of their strengths and math as one of their weaknesses will be more intrinsically motivated to study music than to study math, and vice versa. In support of this suggestion, one of the people I interviewed specifically mentioned relative strength in music as one of the major influences on his decision to attend a performing arts high school rather than an academically oriented high school.

Attributions

Beliefs regarding both the causes of success and failure and the nature of ability and talent itself are another set of important influences on expectations. Attribution theorists have explored the impact of these beliefs on

both expectancies for future success, and individuals' perceptions of both their own abilities and the difficulty of the various tasks (Frieze et al., 1978; Heider, 1958, 1958; Weiner, 1974). According to these theorists, it is not success or failure per se, but the causal attributions made for these outcomes that influence future expectancies. For example, if people attribute success to a stable factor such as ability, then they should expect continued success. If, on the other hand, they attribute their successes to an unstable factor such as effort or good luck, they should be uncertain about future outcomes. Similarly, attributing failure to stable factors should produce expectations of continued failure, while attributing failure to unstable factors should not. Consequently, individuals who attribute their successes to unstable factors such as task ease and their failures to stable factors such as lack of ability, should have lower expectancies than individuals exhibiting the reverse attributional pattern even if their performance histories have been identical.

Several studies have provided indirect support for this general hypothesis (e.g., Dweck, 1975; Dweck & Reppucci, 1973). Furthermore, extending the argument originally advanced by Weiner et al. (1971) into a developmental time frame, we hypothesize that attributions, particularly attributions to ability also play a critical role in the formation of self-concept of ability. In support of this hypothesis, we have found that the attributions of success and failure to one's math ability have a direct effect on both self-concept of math ability and expectations. Individuals who attribute their success to high ability developed greater confidence in their math ability. Similarly, people who do not attribute their failures to lack of ability also develop greater confidence in their math ability.

An interesting sex difference has emerged in studies of math attributions (e.g., Wolleat, Pedro, Becker, & Fennema, 1980; Parsons, Adler, Futterman et al., in press; Parsons, Meece et al., in press) which has some intriguing implications for motivations. Girls rank skill, diligence, and/or effort as more important causes of math success than do boys and are less likely to continue studying math. It is possible that attributions of success to high effort rather than ability can have an adverse affect on students' motivation to continuing studying music. For example, students who view consistent effort (or skill and knowledge generally acquired through consistent effort) as the major determinant of their current success and who are not confident of their musical talent may be discouraged about the level of effort they think will be necessary for continued success. The amount of effort a student can or is willing to expend has limits and if a student already thinks she is working very hard to do well in music she may conclude that her performance will not continue to improve without additional efforts and that the amount of effort necessary to continue performing well is just not worth it.

One of the people I interviewed typified this dilemma. He had taken up music at age 10 because he admired a friend who played the trumpet very well. He began lessons with great confidence in his ability but found the going more difficult than he had expected. But desiring to master the instrument, he increased his practice time and did improve. He continued to practice and to attribute his improvement to practice. He reached what several individuals referred to as the plateau in performance level. Rate of improvement slowed; he assessed his ability level and decided that the amount of effort necessary to continue improving was just not worth it to him; he quit.

Stereotypes of Ability

This example points up the importance of a related set of issues that have important motivational implications; namely, how people stereotype the

nature of ability or talent, how they assess their talents or level of music ability, and to what extent they think that music competence is limited by talent or natural ability. I have already pointed out the importance of self-concept of ability and suggested that attributions may play an important role in the shaping of self-concept of ability. If an individual assumes that music competence is limited by natural talent (that is, if they assume that they can only progress to a certain level of competence), then their motivation to continue practicing may be influenced by their estimate of their ability level, at least to the extent that their practicing is motivated by the desire to improve their competence level. One piece of information individuals may use in assessing their level of talent is how much effort they think they are having to put out in order to improve their skills. If they think they are having to put out more effort than others, or if they think they are having to put out more effort to master music than they have to put out mastering some other skill, then they may conclude that they have relatively less musical talent, that continued improvement will take a lot of effort, and that they would be better off investing their time in some other activity. Unfortunately, estimates of effort are very subjective and are often based on incorrect information especially with regard to other people's efforts. Good performers make music look easy. Consequently, novices or beginners may be biased to conclude that it takes relatively little effort to learn music, after all, for example, singing is not all that hard. If this is true, then novices may be easily discouraged as they discover how much time it takes to learn to play an instrument and may conclude too soon that they have limited musical talent. More accurate information regarding the difficulty of the task and the amount of effort needed to master an instrument might help inoculate novices against this effect.

Let me give you one other example of the impact of stereotypes regarding the nature of musical talent on motivation. When I was 5 years old my parents started me in piano lessons. After 6 weeks of lessons, the piano teacher told my parents to stop wasting money because I would never be any good. She reached this conclusion based on the fact that I learned the pieces she gave me by memorizing her hand movements rather than by learning to read the printed music. She felt if I wasn't going to learn to read music I could never be any good at the piano. This belief reflects a stereotype of what constitutes "appropriate" music learning. We all hold such stereotypes -- maybe not this one -- but stereotypes nonetheless that influence the way we interpret our own and other people's musical experiences. These interpretations, in turn, influence our own motivation and the messages we convey to others about their performance potential.

The achievement literature documents the importance of parents' and teachers' expectations and attitudes in shaping children's self-concepts and general expectancies of success (Brookover & Erickson, 1975; Brophy & Good, 1974; Parsons, Frieze, & Ruble, 1976; Rosenthal & Jacobson, 1968; Webster & Sobicozek, 1974). Studies investigating this relationship have yielded consistent results. Children for whom teachers and parents have high expectations also have high expectations for themselves and in fact do better in their course work. There is no reason to suspect the same is not true in music instruction. Therefore in our role as teachers and parents, the stereotypes we have about the nature of musical talent, the major determinants of the growth of musical skill, and the causal attributions we make for our children's performance can have an especially important impact on the children's motivation to study and practice music.

Subjective Task Value

Let me now turn to the second cluster of variables my colleagues have found to be major mediators of achievement behavior; namely that set of variables linked to the individual's assessment of the value or importance of the activity. Research on academic achievement has clearly identified students' perceptions of the usefulness of a subject as an important determinant of students' enrollment decisions. Building upon this research and the work of other achievement theorists, our model proposes that the value or importance of engaging in a specific achievement task is determined both by the characteristics of the task and by the needs, goals, and values of the person. The degree to which the task is able to fulfill needs, to facilitate reaching goals, or to affirm personal values determines the value a person attaches to engaging in that task.

The broader domain of value can be divided into three components: attainment value, intrinsic value or interest, and utility value. Attainment value can be defined as the importance of doing well in a task. In its broader form, this component can include a variety of dimensions, including perceptions of the task's ability to confirm salient and valued characteristics of the self (e.g., masculinity, femininity, competence), to provide a challenge, and to offer a forum for fulfilling achievement, power, and social needs. We assume that the perceived qualities of the task interact with an individual's needs and self-perceptions in determining a task's attainment value. Consider, for example, a child who thinks of herself as talented and thinks that competence at a musical instrument is one characteristic of talented people. She would undoubtedly place great value on music lessons since taking music lessons and doing well would affirm a critical component of her self-concept.

Intrinsic or interest value, the second component of task value, is the inherent enjoyment one gets from engaging in an activity. Some people just enjoy playing an instrument. They gain great satisfaction from mastering a new piece or a new instrument. They find music calming or aesthetically pleasing. For such people the value of the music and related activities should be very high. In some ways music is unique on this dimension. Unlike mathematics, there are very few people who don't enjoy and get intrinsic satisfaction from some aspect of music. To the extent that music teachers can identify the source of an individual's intrinsic interest in music and incorporate that aspect of music into their instructional plan for that individual, the teachers will undoubtedly increase the individual's intrinsic motivation. And with increased intrinsic motivation come increases in both commitment to practice and involvement with the process of learning music. Several of the people I talked with specifically mentioned a teacher they had had some where along the way who used this strategy -- a teacher who built on their interest in music rather than imposing his or her goals and tastes on them. It really doesn't take much to use this strategy. Simply giving the student some choice over the pieces they will be learning may be enough in some cases.

Utility value is the third component of value I'd like to discuss today. Tasks can have value quite apart from any feelings of interest or enjoyment. For example, imagine a junior high school student who wants to play in the high school marching band. In preparation for this goal she will need to learn to play some instrument. The student knows that there

are never enough tuba players for the band. Consequently she may decide

to take up tuba playing even though it is not her favorite instrument. In

this case, the desirability of the goal and the potential role of tuba play-

ing in helping her achieve that goal outweighs her otherwise neutral attitude

toward tubas. The value of tuba playing is increased because it is perceived

as instrumental for reaching an important goal. Utility value is the value

attached to an activity because it helps you to meet a related goal. It

is influenced most by salient long range goals such as education plans,

career aspirations, and other social goals.

In sum, we are proposing that task value is a function of both per-

ceived qualities of the task and the individual's needs, goals, and self

perceptions. Individual differences on these factors are created by the

experiences individuals have had with similar tasks in the past, by social

stereotypes (e.g., blacks have rhythm), by the kinds of information provided

by parents, teachers or peers about the importance of or the difficulty

involved in doing well. We have been most interested in 3 particular

influences on perceived task value: sex-role stereotypes, cost of success

and failure, and previous or anticipated affective experiences. Let me

say a few words about each of these.

Sex-role stereotypes

A sizable portion of the literature related to the processes of

socialization suggests that a variety of needs and values influence achieve-

ment behavior (Mortimer & Simmons, 1978; Parsons & Goff, 1980; Spenner &

Featherman, 1978; Stein & Bailey, 1973; Veroff, 1969, 1977). For example,

Parsons and Goff (1980) argue that individuals develop an image of who and

what they are as they grow up. This image is made up of many component

parts including (a) conceptions of one's personality, (b) long range goals

and plans related to anticipated adult roles, (c) schema regarding the proper roles of mothers and fathers, (d) instrumental and terminal values (Rokeach, 1973), (e) motivational sets, and (f) social scripts regarding proper behavior in a variety of situations.

Some parts of an individual's image are very central or critical to his/her self-definition. According to Markus (1980) these are the parts of one's self image that exert the most influence on behavior. For example, if being a good dancer is a central part of an individual's self image, then it is to be expected that this individual will work at continuing to be a good dancer and at projecting an image to others of being a good dancer. The degree of influence wielded by the values and needs is determined by their centrality to an individual's self-definition. Specifically, personal needs and values operate in ways which both reduce the probability of engaging in those roles or activities that are perceived as being inconsistent with one's central values and increase the probability of engaging in roles or activities perceived as being consistent with one's definition of self.

The impact of sex-role on behavior is a good example of this process. Like mathematics and many other achievement activities, females are under-represented in the music profession. In addition, as with the fields of medicine and teaching, even among those who enter the field of music, males and females tend to be drawn to different sub-areas within the field of music. Females are more represented among singers and dancers than among instrumentalists, and even among instrumentalists, females are more likely to play violins and pianos than percussion instruments. Why is this true?

My colleagues and I (see Parsons, Adler, Futterman et al., in press) have suggested that sex roles influence behavior primarily through their impact on perceived task value. The extent to which tasks are either compatible or incompatible with one's sex role definition will influence the subjective value and attractiveness of the tasks for the individual. For example, if a young lady thinks that playing bass violins or drums is unfeminine then it is unlikely she will choose to learn to play bass violin. One of the women I talked to gave just such a reason for her reluctance to take up bass violin despite her mother's urging. By the way, she did succeed in dissuading her mother and took up the clarinet instead.

Cost of Participation

A second variable that will influence the value of engaging in an activity is the perceived cost of participation. In other words, what will be lost by participating. Estimates of the amount of effort necessary to succeed is one of the variables that will influence perceived cost. First let us assume that individuals have a sense of how much effort they think is worthwhile for various activities. If this is true then it seems likely that, as the anticipated amount of effort increases in relation to the amount of effort considered worthwhile, the value of the task to the individual will decrease. That is, as the cost/benefit ratio in terms of amount of effort needed to do well increases, the value of the task to the individual should decrease. The example I gave earlier of the boy who quit music lessons once he doubted the worth of continued effort illustrates this point quite well.

Close related conceptually to the cost in terms of effort is the cost of a task in terms of the time lost from other valued activities. Students have limited time and energy. If they spend one hour on task A, they have one hour

less available for task B. They must make choices between various activities. For example, imagine a girl who likes piano, knows it's hard, knows that practice is important, but also wants a boyfriend. If she wants to perform as well in music as she feels she should, she knows she'll have to practice every day. She also believes that she can optimize her chance of getting a boyfriend by staying after school to watch the boy-of-her-dreams play basketball. Her parents, however, will not allow her to watch basketball practice unless she has practiced the piano. Despite its high incentive value, music poses an obstacle to success in her social goal. Consequently, the value of success at piano for this girl will be decreased by its high cost in terms of the satisfaction of other important goals.

This analysis highlights the necessity of thinking about various achievement-related behaviors within the broad social array of behavioral options available to people. For example, the decisions to try hard at piano or strive to become a professional dancer are not made in isolation of other very salient life decisions that directly affect the perceived value of all of the available options. We should not underestimate the importance of these other goals.

Previous and Anticipated Affective Experiences

Motivation is also influenced by both previous and anticipated affective experiences. Achievement activities elicit a wide range of emotional responses. Past affect-laden experiences can influence one's responses to similar tasks in the present or future. For example, if one has had bad experiences with a music teacher in the past, one may be less positive in general towards music and music teachers. To understand the value of various achievement activities, then, it is important to consider variations in the affective experiences children have had with different achievement activities.

Past successes and failures themselves have been shown to elicit characteristic affective responses (e.g., Weiner, Russell, & Lerman, 1978); success, especially on challenging tasks, leads to positive feelings, and failure, especially on easy tasks, leads to negative feelings (Harter, 1980; Ruble, Parsons, & Ross, 1976). Other things being equal, these affective responses should influence the enjoyment or intrinsic value of subsequent related activities (Bandura, 1977). One should like activities which have been associated with positive feelings in the past more than activities which have been associated with negative feelings.

Both affect-laden behaviors of teachers and parents (e.g., praise, criticism, public ostracism, rejection) and more general experiences (e.g., test taking procedures, performance recitals, curriculum variations) can have similar effects. Furthermore, these effects will vary across different individuals, especially the effects of negative experiences.

There has been a long tradition in the achievement literature of a concern with the effects of negative affective states on achievement-related behaviors, beginning with Atkinson's inclusion of a motive to avoid failure in his original model of need achievement (Atkinson, 1964) and the related work on test anxiety (e.g., Sarason, 1972), and extending to the more recent work on mastery orientation versus learned helplessness by Harter (1980) and Diener and Dweck (1978). Research in these areas indicates that children classified as either high test anxious or learned helpless are more likely to label a given outcome as failure (Diener & Dweck, 1978). to blame themselves for their "failures" (Diener & Dweck, 1978; Doris & Sarason, 1955), to experience more negative affect in general in testing situations which include both successes and failures (Mandler

& Sarason, 1952; Diener & Dweck, 1978), to suffer greater losses in their self-esteem when confronted with evaluative situations, (Wine, 1971; Diener & Dweck, 1978) to gain less in their self-evaluation from success (Diener & Dweck, 1978) and to exhibit a range of debilitating behaviors reflecting anxiety in evaluative settings (e.g., Ruble & Boggiano, 1980; Diener & Dweck, 1978). This set of characteristics certainly would lead one to conclude that evaluative situations are particularly painful for some students.

For these students we could expect experiences like competitive, public recitals to have a relatively high risk of producing negative affect. For other students, the confident mastery oriented students, competitive, public recitals will be just the thing to inspire increased motivation. Music teachers need to assess their students' orientation and to try to structure positive experiences for each student. These will not be the same for all students. But therein lies the challenge to music educators.

Where does all of this leave us. My goal was to point out the multitude of factors that might impinge on children's motivation to study music. There are many types of students. At one extreme, you have those gems that every music teacher dreams of -- the students who love their instrument and are intrinsically motivated to work hard at mastering it. I found one such individual, a man who loved the violin so much that he continued to practice secretly after his parents stopped his lessons and tried to stop his playing because it was a "foolish waste of time" that would never "put food on the table." At the other extreme, you find those equally rare individuals who hate music. But in between these two extremes is a vast middle group of children who take music for a variety of reasons and who are more or less interested in practicing if it is neither too hard nor too boring. These children must be treated as individuals. The music teacher needs to assess each one's motivation and goals, and to adapt the teaching strategy accordingly.

My suggestions derive from the model I have presented to you and from the classroom literature on effective teaching. The key to effective music teaching lies, as I said earlier, in designing a program for each child that takes advantage of his or her goals, interests, and self perceptions. The fact that behavior and motivation are affected by so many variables is the trump card of a creative teacher. It provides the teacher with multiple access points for stimulating children's motivation to learn and study music.

But let's get more specific. The first thing to consider is the extreme importance of social interaction to children. Children want to be with other children, they want to play with their friends. Except for the rare, highly motivated child, most children would rather play with their friends than practice music alone. So why not teach them in groups and let them practice in groups. Make music learning a social event. There is ample evidence from the classroom literature that the co-operative-learning-teams approach is as effective, if not more effective, in terms of both motivation and actual performance, than either competitive or individualized instruction. Why shouldn't it work for music? School music programs in fact use this model but not always as effectively as they could. To use it effectively you have to encourage co-operation, use peer tutoring, involve parents, set up group practice sessions that are enjoyable social events, for both parents and kids, and encourage the children to work together on their own. Programs which use such an approach, like the Suzuki programs, have been very successful in getting children through that initial period when learning is slow and often tedious.

The second approach I'd recommend is based on the importance of choice and intrinsic interest. Give the children some choice over the materials

to be learned. As I discussed earlier, almost everyone likes some aspect of music. Find out what a child likes and allow him or her the choice of including these preferences. You can use their preferences to help children build their sense of mastery and confidence in their own talents. As their confidence grows, you can introduce new materials that are closer to what you think they need to master in order to progress. But even when new materials are introduced try to give the children choice and try to build on their strengths. Let them listen to the music first and become familiar with it. We know that people come to like what they are familiar with (Zajonc, 1968). Consequently anything you can do to increase children's familiarity with a piece of music before they actually begin learning it will help to increase the children's intrinsic interest in the piece and, hopefully, their motivation to learn it.

The third approach I'd recommend is based on the importance of the beliefs we have regarding the nature of musical talent. In 1969 Suzuki stated "Talent is no accident of birth. In today's society a good many people seem to have the idea that if one is born without talent, there is nothing one can do about it...That is man's greatest tragedy....That is why I wrote this book....Using examples, I explain how to change a person lacking ability into a talented one, a mediocre person into an exceptional one." (Pg. 7-8). Whether he is right or not is not as important as is the belief that he is correct. Continued motivation depends on the belief that you can improve. Teachers need to communicate this message to their students. It is important to point out the role effort has played in the development of all great performers, lest children conclude that they have no ability because it is hard for them. Focus their attention on their own

improvements using tape recordings of their performance across time.
Point out examples of improvement in other children through continued
practice. These messages will orient the children towards the belief that
they will get better and that the means of improvement is under their
control.

The fourth approach relates to the use of praise and criticism. Praise
and criticism can be used effectively but it must be done with care.
Excessive praise, insincere praise and non-contingent praise have all been
found to undermine intrinsic motivation (see Ruble & Baggiano, 1980). But
praise that is contingent on very good performance or that communicates a
sincere acknowledgement of a job well done is effective and can help make
music lessons a more pleasant experience. Criticism can also be used to
convey a positive message. When a typically motivated student, who is
doing very well, performs below the expected level, teacher criticism can
convey a strong message of confidence in the student's potential. But
such criticism should be used very sparingly.

The fifth approach I'd recommend is aimed primarily at highly anxious
children. Performing in public, especially solo, is an anxiety-provoking
experience for everyone. For some children it is especially negative.
Teachers should be sensitive to these children. There are things we can
do to reduce this anxiety. For one thing you can let such students perform
as part of a group. You can also provide less threatening situations in
which students can gradually become accustomed to public performance.
Have small group recitals, let the children practice performing in front
of each other, encourage parents to be an audience while their children

practice, etc. Because these types of activities also increase the enjoyment of practicing, they will have a doubly positive effect.

My final note concerns the age and experience of the child. Most of my comments have really been addressed to the beginning or intermediate level student who is 8 years old or older. Some of these concerns are less relevant for younger children. Little kids are less likely to suffer from problems associated with anxiety and low confidence. They are delightful hams and cockeyed optimists. I'd take advantage of this and start them learning music while they are young.

References

Atkinson, J. W. An introduction to motivation. Princeton, N.J.: Van

   Nostrand, 1964.

Bandura, A. Self-efficacy: Toward a unifying theory of behavioral change.

   Psychological Review, 1977, 84, 191-215.

Battle, E. Motivational determinants of academic task persistence.

   Journal of Personality and Social Psychology, 1966, 634-642.

Brookover, W. B., & Erickson, E. L. Sociology of education. Illinois:

   Dorsey Press, 1975.

Brophy, J. E., & Good, T. Teacher-student relationships: Causes and

   consequences. New York: Holt, Rinehart & Winston, 1974.

Calsyn, R., & Kenny, D. Self-concept of ability and perceived evaluation

   of others: Cause or effect of academic achievement? Journal of Educational

   Psychology, 1977, 69, 136-145.

Covington, M., & Omelich, C. Are causal attributions causal? A path

   analysis of the cognitive model of achievement motivation. Journal of

   Personality and Social Psychology, 1979a, 37, 1487-1504.

Covington, M., & Beery, R. Self-worth and school learning. New York: Holt,

   Rinehart, & Winston, 1976.

Covington, M., & Omelich, C. Effort: The double-edged sword in school

   Achievement. Journal of Educational Psychology, 1979, 71, 169-182. (b)

Crandall, V. C. Sex differences in expectancy of intellectual and academic

   reinforcement. In C. P. Smith (Ed.), Achievement-related behaviors in

   children. New York: Russell Sage Foundation, 1969.

deCharms, R. Enhancing motivation. New York: Irvington Publishers, 1976.

Diener, C. I., & Dweck, C. S. An analysis of learned helplessness: Continuous change in performance, strategy, and achievement cognitions following failure. Journal of Personality and Social Psychology, 1978, 36, 451-462.

Diggory, J. Self-evaluation: Concepts and studies. New York: Wiley, 1966.

Doris, J., & Sarason, S. B. Test anxiety and blame assignment in a failure situation. Journal of Abnormal and Social Psychology, 1955, 50, 335-338.

Dweck, C. S. The role of expectations and attributions in the alleviation of learned helplessness. Journal of Personality and Social Psychology, 1975, 31, 674-685.

Dweck, C. S., & Reppucci, N. D. Learned helplessness and reinforcement responsibility in children. Journal of Personality and Social Psychology, 1973, 25, 109-116.

Edwards, W. The theory of decision making. Psychological Bulletin, 1954, 51, 380-417.

Feather, N. T. Effects of prior success and failure on expectations of success and subsequent performance. Journal of Personality and Social Psychology, 1966, 3, 287-298.

Fennema, E., & Sherman, J. Sex-related differences in mathematical achievement and related factors: A further study. Journal for Research in Mathematics Education, 1978, 9, 189-203.

Frieze, I. H., Fisher, J., Hanusa, B., McHugh, M., & Valle, V. Attributing the causes of success and failure: Internal and external barriers to achievement in women. In J. Sherman and F. Denmark (Eds.), Psychology of women: Future directions of research. New York: Psychological Dimensions, 1978.

Harter, S. A model of intrinsic mastery motivation in children: Individual differences and developmental change. Minnesota Symposium on Child Psychology, Vol. 14. Hillsdale, N.J.: Lawrence Erlbaum, 1980.

Heider, F. The psychology of interpersonal relations. New York: Wiley, 1958.

Kukla, A. Foundations of an attributional theory of performance. Psychological Review, 1972, 79, 454-470.

Kukla, A. An attributional theory of choice. In L. Berkowitz (Ed.), Advances in experimental social psychology, Vol. II. New York: Academic Press, 1978.

Lewin, K. The conceptual representation and the measurement of psychological forces. Durham, N.C.: Duke University Press, 1938.

Mandler, G., & Sarason, S. B. A study of anxiety and learning. Journal of Abnormal and Social Psychology, 1952, 47, 166-173.

Markus, H. The self in thought and memory. In D. M. Wegner & R.R. Vallacher (Eds.), The Self in Social Psychology. New York: Oxford University Press, 1980.

Meyer, W. U., Folkes, V., & Weiner, B. The perceived informational value and affective consequences of choice behavior and intermediate difficulty task selection. Journal of Research in Personality, 1976, 10, 410-423.

Mortimer, J. T., & Simmons, R. G. Adult socialization. Annual Review of Sociology. Palo Alto: Annual Reviews, Inc., 1978.

Nicholls, J. G. Effort is virtuous, but it's better to have ability: Evaluative responses to perceptions of effort and ability. Journal of Research in Personality, 1976, 10, 306-315.

Parsons, J. E., Adler, T. F., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J. L., & Midgley, C. Expectations values and academic behaviors. In J. T. Spence (Ed.), Perspective on achievement and achievement motivation. San Francisco: W. H. Freeman, in press. (a)

Parsons, J. E., Frieze, I. H., & Ruble, D. N. Introduction. Journal of Social Issues, 1976, 32, 1-5.

Parsons, J. E., & Goff, S. B. Achievement motivation: A dual modality. In L. J. Fyans (Ed.), Recent trends in achievement motivation: Theory and research. Englewood Cliffs, N.J.: Plenum, 1980.

Parsons, J. E., Meece, J. L., Adler, T. F., & Kaczala, C. M. Sex differences in attributional patterns and learned helplessness? Sex Roles, in press.

Parsons, J. E., & Ruble, D. N. The development of achievement-related expectancies. Child Development, 1977, 48, 1075-1079.

Purkey, W. W. Self-concept and school achievement. Englewood Cliffs, N.J.: Prentice-Hall, 1970.

Rosenthal, R., & Jacobson, L. Pygmalion in the classroom. New York: Holt, Rinehart and Winston, Ic., 1968.

Ruble, D., & Boggiano, A. Optimizing motivation in an achievement context. In B. Keogh (Ed.), Advances in Special Education, Vol. 1. Greenwich, Conn.: JaI Press, 1980.

Ruble, D. N., Parsons, J. E., & Ross, J. Self-evaluative response of children in an achievement setting. Child Development, 1976, 47, 990-997.

Sarason, S. B. Experimental approaches to test anxiety: Attention and the uses of information. In C. D. Spielberger (Ed.), Anxiety: Current trends in theory and research, Vol. 2. New York: Academic Press, 1972, 381-403.

Sherman, J., & Fennema, E.   The study of mathematics by high school girls

and boys: Related variables.   American Educational Research Journal,

1977, 14, 159-168.

Spenner, K., & Featherman, D. L.   Achievement ambitions.   Annual Review of

Sociology, 1978, 4, 373-420.

Stein, A. H.   The effects of sex role preferences on three determinants of

achievement motivation.   Developmental Psychology, 1971, 4, 219-231.

Stein, A. H., & Bailey, M. M.   The socialization of achievement orienta-

tion in females.   Psychological Bulletin, 1973, 80, 345-366.

Suzuki, S.   Nurtured by love.   New York: Exposition Press, 1969.

Veroff, J.   Social comparison and the development of achievement motivation.

In C. P. Smith (Ed.), Achievement-related behaviors in children.   New

York: Russell Sage Foundation, 1969.

Veroff, J.   Process vs. impact in men's and women's motivation.   Psychology

of Women Quarterly, 1977, 1, 283-292.

Webster, M., & Sobicozek, B.   Sources of self-evaluation: A formal theory

of significant others and social influence.   New York: Wiley, 1974.

Weiner, B.   Achievement motivation and attribution theory.   Morristown, N.J.:

General Learning Press, 1974.

Weiner, B., Frieze, I., Kukla, A., Reed, L., Rest, S., & Rosenbaum, R. M.

Perceiving the causes of success and failure.   New York: General

Learning Press, 1974.

Weiner, B., Russell, D., & Lerman, D.   Affective consequences of causal

ascriptions.   In J. H. Harvey, W. Ickes, & R. F. Kidd (Eds.), New

directions in attribution research, Vol. 2.   Hillsdale, N.J.:   Lawrence

Erlbaum, 1978.

Wine, J. Test anxiety and direction of attention. Psychological Bulletin,

   1971, 18, 258-262.

Wolleat, P. L., Pedro, J. D., Becker, A. D., & Fennema, E. Sex differences

   in high school students' causal attributions of performance in mathe-

   matics Education, 1980, 11, 3560366.

Zajonc, R. Attitudinal effects of mere exposure. Journal of Personality

   and Social Psychology, 1968, Monograph Supplement, 9 (2, Pt. 2), 1-27.

Figure Caption

Figure 1. General model of academic choice.

(Adapted from Parsons, J. E., Adler, T. F.

et al., in press.)

DIFFERENTIAL APTITUDES OF CHILD

CULTURAL MILIEU
1. Sex division in labor market
2. Cultural stereo-types of subject matter
3. Cultural stereo-types of competitiveness

SOCIALIZERS
1. Behaviors and self-concepts
2. Attitudes and expectations for child

PAST EVENTS
1. Grades
2. Standardized test scores
3. Related experiences

CHILD'S PERCEPTION OF SOCIALIZERS' ATTITUDES AND EXPECTATIONS

CHILD'S INTERPRETATION OF PAST EVENTS
1. Attributions

CHILD'S GOALS AND GENERAL SELF-SCHEMATA
1. Relevant self-schemata
2. Long range goals
3. Immediate goals

CHILD'S TASK SPECIFIC BELIEFS
1. Self-concept of ability
2. Perceptions of task difficulty

CHILD'S PERCEPTION OF TASK VALUE
1. Intrinsic value
2. Utility value
3. Cost
4. Attainment value

EXPECTANCIES
1. Current
2. Future

ACHIEVEMENT BEHAVIORS
1. Persistence
2. Choice
3. Performance