Factors Influencing College Students’ Self-Perceptions of Competence in Beginning Physical Education Classes

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This study examined how college-age students in beginning activity classes construct their self-perceptions of physical competence. Each class was videotaped, one class per week. During the last week of class, a perceived competence instrument was administered to the students (N = 50) and the teachers. Results indicated 50% of the students’ perceptions of their competence were congruent with the teachers’; 50% were incongruent (32% higher, 18% lower). The Revised Causal Dimension Scale, also administered at the end of the semester, indicated the predominant attribution was effort. Interviews revealed group characteristics regarding attribution for success, interpretation of feedback, and use of social comparison. Videotape analysis using the Dyadic Adaptation of CAFIANS indicated some differential treatment occurred; students whose perceptions of competence were lower than their instructor’s received more corrective feedback. It was concluded that the students interpreted themselves in the instructional context which accounted for their self-perceptions of competence; the teacher expectation effect played a role as well.

In a previous article in the Journal of Teaching in Physical Education, the author addressed college students’ perceptions of their competence in dance technique classes (Bibik, 1993). The present work continued the earlier research by examining college students’ perceptions of their competence in a more traditional physical education activity setting.

It has been said that positive experiences in physical education activities during childhood and adolescence may increase the likelihood of engaging in an active lifestyle as an adult (Haywood, 1991). To address this concept, college and university physical education programs offer a wide variety of lifetime activity classes for students with the expectation that they will continue participating in physical activity. Research on perceptions of competence provides further evidence for the complexities surrounding why college students continue to participate in physical education classes. Individuals’ perceptions of their competence often influence their choice of activity and their willingness to continue participating in the activity (McAuley, Wraith, & Duncan, 1991; Rudolph & McAuley, 1996; Weiss & Ebbeck, 1996; Williams & Gill, 1995). In addition, Pintrich and Schunk (1996) indicated that there is a relationship between individuals’ self-perceptions

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of their abilities and their motivation. Those individuals who have higher perceptions of their abilities are more likely to expend effort to learn and to persist at difficult tasks. It can be seen that the construct of self-perceptions of competence is complex. Therefore, it is important to continue to try to understand how students’ experiences in beginning level lifetime activity classes affect their self-perceptions of their ability.

In the past, research studies often focused on the perceived competence of athletes. Today, with advances in pedagogical research, a body of information has developed that asks physical education students (rather than athletes) to explain their self-perceptions. This investigation is designed to add to the more recent studies involving students’ perceptions of their abilities in physical activities. However, it is fundamentally different from other studies in several ways. First, it examines college students’ perceptions of their competence in lifetime activity courses, which involve partners or opponents. Traditionally, research on self-perceptions of competence has examined individual activities. Secondly, the activity courses examined were traditional racquet sports as well as a ballroom dance course. Finally, in previous research attributions for success were inferred through in-depth interviews. This study extends previous research by using the Causal Dimension Scale II to assess the participants’ attributions for success in the activity. This assessment tool allows triangulation with interview data to strengthen the trustworthiness of the findings.

By focusing on how beginning students construct their perceptions of competence based on their experience on the court or in the dance studio, we extend our knowledge of pedagogical issues. Practical and theoretical foundations in pedagogy are necessary for teachers to provide quality instruction. One reason for studying perceptions of competence is to better understand students’ misperceptions of their competence. These misperceptions may be either higher or lower than the teacher’s perception of the student’s competence, resulting in such classroom interactions as disagreements in grades, especially in sport and dance activities which, by their nature, necessitate more subjective assessment practices.

In Bibik (1993) it was found that the students interpreted themselves based on the instructional environment of a dance class using unique personality characteristics. In dance and sport skill activity classes of an individual nature, the classroom context has elements in their environments that are generic to all classes. However, many activity classes are of a team or dual nature. In these cases, an additional influence on the students’ interpretation of themselves in the instructional context involves having either a partner or an opponent. It is possible that the addition of another individual with whom the student must interact may influence the students’ self-perception of his or her competence.

**Influences on Self-Perceptions of Competence**

Teaching may be considered a complex act in which many variables influence the content taught and the method of presentation. In the traditional concept of education, the teacher presented the information in a way that stimulated student thinking, which in turn influenced student achievement. However, as a result of research, teaching has been reconceptualized as more complex, with teachers and students affecting each other in reciprocal ways that are not always easy to predict (Goldenberg, 1992). One of the many variables influencing the quality of
instruction is teachers’ and students’ perceptions of the students’ competence. Brophy (1985), Graham (1990), Jussim (1991), and Schunk (1994) have reported that teachers’ instructional decisions and behaviors are influenced by their perceptions of their students’ abilities. Similarly, the way students respond to the instruction is influenced by their self-perceptions of their ability.

The Teacher Expectation Effect

The connection of teacher expectations to student performance, known as the teacher expectation effect, has been accepted as a possible explanation for a relationship between students’ and their teachers’ perceptions of the students’ abilities (Cooper & Tom, 1984; Good & Brophy, 1987; Jussim, 1989; Martinek & Karper, 1986). This relationship can occur when teachers’ expectations are communicated to the students in a variety of ways which may cause the students to produce that behavior. Teachers’ instructional decisions and behaviors can influence a students’ self-perceptions in either a positive or a negative direction. For example, Brophy (1985) found that teachers planned more independent projects, introduced more high level concepts, praised more, and reinforced high quality performance when working with high ability students. Conversely, when working with low ability students, teachers stressed more structured assignments that dealt with basic facts and skills, were less likely to ask high level comprehension questions, and waited less time for an answer to a question. However, Goldenberg (1992) indicates that teacher expectation effects are complex and may be the result rather than the cause of student performance and achievement. Expectations may even function differently for different teachers and under different circumstances, and the effects may be limited. Jussim (1991) indicates that the effects of teacher expectations on student performance are weak because teacher expectations reflect actual student behaviors. Goldenberg (1992) believes that it is the teacher’s behavior that matters, and what a teacher expects matters less. More importantly, expectation effects do not always occur (Pintrich & Schunk, 1996). Therefore, because of the complex nature of the educational milieu, the teacher expectation effect appears to offer a limited number of sources of information for students to make judgments about their competence.

Interpretation of the Environment

Teacher messages, whether verbal or nonverbal, have to be perceived by the students, interpreted, and analyzed in order to have an impact on a students’ self-perceptions of competence. An alternate explanation is that students’ perceptions of their competence are influenced by how they perceive their environment and what happens to them as they move through it (Pintrich & Schunk, 1996). That environment has many sources of information, internal and external to the students, that are interpreted by the students in developing their self-perceptions of competence. For example, Weiss, Ebbeck, and Horn (1997), in a study of children in a summer sport camp setting, identified several sources of self-perception information, relevant to any teaching setting. These included interactions with the teacher and other students, past performance, amount of effort exerted, ease of learning new skills, and winning or losing. In regard to past performance, Bandura (1977) felt that prior success with an activity leads to higher levels of self-efficacy for similar tasks. Weiner’s (1976) attribution theory suggests that the cause to which
an individual attributes his or her successes or failures influences self-perceptions of competence.

Purpose

Bibik (1993) studied students' self-perceptions of their competence in beginning jazz and modern dance classes. In addition, she examined the teacher’s perceptions of the students’ dance abilities. This research indicated that approximately 50% of the students agreed with the teacher’s perception of their ability. The remaining 50% of the students’ perceptions of their competence were incongruent with the teacher’s perception of their competence. It was concluded that the students’ perceptions of their dance competence was a function of how the students interpreted themselves and their experiences in the classroom. The students differentially interpreted their experiences in the class based on their unique personality characteristics that, in turn, reinforced their perceptions of their competence.

Krathwohl (1985) stated that research in the behavioral sciences that is judged as valid often becomes the basis for new work, which extends or builds on the original work. In this way it tests the original work. Applying the research to a variety of situations integrates the results into a larger body of knowledge that can influence practice in a given field.

The purpose of this study was to extend the scope of the earlier study to an examination of students’ self perceptions in beginning lifetime activity classes. The study focused on activities requiring a partner or an opponent: racquet sports and social dance. Specifically, the purpose of the study was to address the following question: How do college age students develop their self-perceptions of their racquet sport or social dance competence? In order to address various aspects of the research question, the three sub-questions asked in the previous study were used to frame the current study:

1. How do college age students and their teachers perceive abilities in a beginning physical education activity class?
2. What is the relationship between the students’ and their teachers’ perceptions of the students’ abilities?
3. Is there a relationship between the instructional interactions in the class and the students’ perceptions of their abilities?

As in the original study, the terms ability and competence will be used interchangeably to indicate that the students are able to do the skills that are presented in class. Therefore, the students’ and teachers’ perceptions of the students’ abilities refer to judgments that the students and teachers make to indicate that the students are capable of performing the skills (Bibik, 1993).

Method

Using the design of the previous study, data were collected in the naturalistic setting of the gymnasium. Qualitative and quantitative methods were employed to understand the gymnasium context as it was experienced by the students and the teacher. The study was conducted in two phases. Phase One analyzed the perceptions of beginning students’ racquet sport and ballroom dance competence from
the perspectives of the students as well as the teachers. Phase Two analyzed the factors influencing the instructional interactions between the students and the teacher in each of the gymnasium settings.

Participants

The participants for this study were students enrolled in beginning tennis, badminton, or ballroom dance classes taught at a northeastern university. These classes were chosen because of their availability to the investigator’s schedule; research assistants were not available to assist with data collection on this project. These classes were part of the department’s lifetime activity program. The teachers of the classes were graduate teaching assistants with at least 3 years prior teaching experience with the activity they were teaching; they were also considered as subjects. The badminton and tennis classes were taught by the same teacher, a female, and were half semester (7-week) courses; these classes met 3 days a week for 50 minutes. The ballroom dance class met 2 days a week for 1 hour and 15 minutes for the entire semester of 14 weeks and was taught by a second, male instructor. All of the courses were observed to their completion, and the differing lengths of time was not considered to be a factor in the results of the study.

Prior to the beginning of the semester the teachers agreed to be participants and to allow their classes to be studied. A total of 50 students (14 males and 36 females) completed all phases of data collection. Of those 50 participants, 17 were in the tennis class (5 men, 12 women), 17 were in the badminton class (6 men, 11 women) and 16 were in the ballroom dance class (4 men, 12 women). Each student was registered for only one of the three classes. The students ranged in age from 17 to 34 years (M = 20.2). Informed consent was obtained from the students at their first class meeting.

During the first class meeting, a questionnaire was administered to determine each student’s prior experience in each specific physical education activity class. An analysis of the questionnaires and subsequent interviews indicated that the experience of the participants was at a beginning level. Fourteen percent of the students stated they had prior experience with the class in which they were registered. Those students who had previous experience with the activity gained that experience prior to enrolling at the university. Each student was enrolled in the class for one academic credit. In addition, none of the participants in the study was auditing or repeating the course. It is an institutional policy that students may not enroll in a lifetime activity class for credit more than one time.

Even though some students stated they had previous experience with the activity, all participants were considered beginners. A beginning level of ability was defined in two ways. In the simplest way, a student who had no previous experience with the activity was considered a beginner. Beginning level was also defined to include other conditions such as those students who could execute the skills but without coordination, control, consistency, or proper timing. A student’s skill level was verified through the researcher’s observations and was noted in the field notes. A variety of beginning skill levels were identified, but these levels were not sufficient to categorize the students beyond the beginning level. For example, one student indicated that he had been playing tennis for a long time, but he had not received formal instruction in the skills. Therefore, having previous experience does not necessarily suggest that the student is beyond the beginning level.
In addition to prior experience with the specific activity class, the students were also asked about prior athletic experience. Of the 50 students, only 12 did not have any prior organized athletic or dance experience; 7 of those 12 were from the ballroom dance class.

**Perceived Competence Instrument**

During the 5th week of the tennis and badminton classes and the 11th week of the ballroom dance class a Perceived Competence Instrument was administered. Using Bibik’s (1993) instrument, the participants were asked to indicate on a rating sheet how confident they were that they could successfully perform a specific skill in badminton or tennis or a dance sequence in ballroom dance at a specified grade level (A, B, or C). The students indicated their degree of confidence by means of a percentage score between 0 and 100. The badminton and tennis instruments each contained five items based on the strokes taught during the class. The ballroom dance instrument contained 10 choreographed sequences, specific to the styles taught in the class. This instrument was necessarily longer in order to address as much of the semester’s material as possible.

Each item on the Perceived Competence Instrument was presented by the teacher. This method was in keeping with Bibik’s (1993) design but also followed the teaching styles used by the teachers. Both teachers utilized the command style of teaching and served as the model for the performance of all skills taught in the class. When completing the instrument, the students did not actually try to learn each of these skills or sequences; rather, they observed the teacher’s demonstration and made judgments based on what they saw. The items on all of the instruments were of varying difficulty. The teacher also completed the instrument for each student.

**The Causal Dimension Scale (CDSII)**

Bibik’s earlier study inferred the subjects’ attributions for their success from interview data. In the current study, the revised Causal Dimension Scale was used to obtain a more objective measure of the participants’ perceived cause for their success (McAuley, Duncan, & Russell, 1992). McAuley, Duncan, and Russell (1992) reported adequate levels of internal consistency for the subscales measuring each dimension on the instrument, with coefficient alphas ranging from .67 to .92. Coefficient alphas ranging from .72 to .85 were calculated for the instrument as used in this study. This scale was administered earlier in the same week that the Perceived Competence Instrument was given. The participants were presented with an achievement situation, related to the course they were enrolled in, that indicated a successful or failure outcome for the student. The following is an example of one of the situations for successful achievement:

Imagine that you are playing tennis with someone in your class who has the same level of playing ability as you. You win the game. What caused you to win the game? (Please write in your reason for winning in the space provided.)

The CDSII allows the student to imagine himself or herself in the situation, then to decide on an open-ended attribution for the achievement or failure outcome. Examples of open-ended attributions for the above situation included references to
ability ("My serve was good"); "Strategy and staying in key court positions") and effort ("I concentrated more"); "I warmed-up well"). Next, that attribution was classified by the student along the causal dimensions of stability, causality, and controllability, using a series of 12 semantic differential scales. However, the CDSII differs from the original scale in that the controllability dimension is delineated as controllable or uncontrollable by the individual and controllable or uncontrollable by other people. Therefore, there are actually four dimensions being measured: locus of causality, stability, external control, and personal control. These causal dimensions are measured by three of the semantic differential scales, which are presented in random order. All of the scales presented the student with phrases that denoted the anchors of each dimension. An example of one of the items that assessed the dimension of causality was: "Is the cause(s) something that is outside of you—inside of you?" Students rated the extent they felt the cause was internal or external on this scale by circling a number from one to nine, with one being closer to the external anchor and nine being closer to the internal anchor.

Gymnasium Observations

The Dyadic Adaptation of Cheffers’ Adaptation of the Flanders’ Interaction Analysis System (DAC) (Martinek & Mancini, 1989) was used to collect data on the instructional interactions occurring between the students and the teacher. Cheffers and Mancini (1989) reported the reliability of CAFIAS was determined using Kendall’s coefficient of concordance. Two comparisons were made, which resulted in a W ranging from .60 to .81 for the total matrices and a W ranging from .44 to .87 for the 10 main cells. Since DAC is essentially the same observation system as CAFIAS, it is assumed that the reliability is comparable.

Each class was videotaped one period per week for 6 weeks for the tennis and badminton classes and 12 weeks for the ballroom dance class. On the days when videotaping was not occurring, the investigator observed the class and recorded field notes. Following the methodology of the previous study, classes were systematically (rather than randomly) chosen to ensure that both class meeting days were equally represented.

DAC is comprised of 10 categories that allow for the assessment of both verbal and nonverbal behaviors. Bibik (1993) further sensitized the instrument by the use of a subscript M within the category “giving facts” to indicate when the teacher touched a student in his or her instruction and feedback. Videotapes were independently coded by two trained individuals. Intercoder reliability was determined by ranking the top 10 most frequently occurring cells for the tennis class, the badminton class, and the ballroom dance class and applying the Spearman rank order correlation (Cheffers, Mancini, & Martinek, 1980). The correlations for the tennis and badminton classes were .83 and .89, respectively, and .91 for the ballroom dance class.

The first step in data reduction of the DAC data was to record the frequency of each of the teacher behaviors directed toward an individual student on a tally sheet. While students can initiate interactions with the teacher (asking a question), the greatest percentage of student behavior in a college level class is predictable; that is, they are generally following the teacher’s directions and are engaged in skill practice. Thus, the emphasis here, as in Bibik (1993), was on the teacher’s behavior toward individual students rather than on the students’ responses to the teacher’s instruction.
Interviews of Students

Interviews were conducted with students after the Perceived Competence Instrument was completed and analyzed. Half of the students in each class who completed the Perceived Competence Instrument were randomly chosen to be interviewed based on the criteria used by Bibik (1993). A representative sample of students whose perceptions agreed and disagreed with the teacher’s perceptions were chosen. In addition, only those students with a perceived competence score that was centrally located in the range of scores for each competence level were interviewed.

Following these criteria, nine students from the ballroom dance class, nine students from the tennis class, and seven students from the badminton class were interviewed. The interviews were structured so that 11 specific questions were asked of all the students. The questions were the same questions used by Bibik (1993). All interviews were tape-recorded and transcribed. The interviews were used to provide additional insight into the differences in perceptions of the students’ abilities.

Data Analysis

Phase One

Data analysis of Phase One focused on the responses to the Perceived Competence Instrument, the CDSII, and the student interviews. Following Bibik’s (1993) procedures, the students’ perceived competence scores were created by averaging their reported confidence levels across the five racquet sport skills and the 10 demonstrated ballroom dance sequences (x/15 and x/30 respectively). The students were designated as having high, middle, or low levels of competence. These competence levels were established by creating cut points that were a half standard deviation below and above the mean. These cut points were 76.65 and 92.00, below and above the mean, respectively, for the tennis class, 77.09 and 91.61 for the badminton class, and 61.56 and 80.56 for the ballroom dance class. The Perceived Competence Instrument was administered only one time, as in the previous study, in order to be least disruptive of the normal functioning of the class, especially in the classes that were held for half a semester. Reliability of the instrument was determined by employing the Spearman-Brown prophecy formula with a split-half procedure. The reliability of the instrument was calculated as $R = .87$ for the students’ responses and $R = .99$ for the teachers’ responses.

The scores for each of the attributional dimensions of locus of causality, stability, and controllability from the CDSII were determined by summing the scores for the appropriate items. High scores on each of the subscales indicated the cause was perceived as internal, stable, and either personally controllable or under external control.

The interviews with the students were analyzed using both a theory driven and an inductive analytic approach (Bogdan & Biklen, 1992). This analysis was performed independently by the researcher and a colleague who then compared their analyses with 93% agreement in coding categories. Consensus was then reached about coding categories that were not in initial agreement. Literature related to attribution theory, the teacher expectation effect, and perceptions of self in the environment provided the theoretical basis to identify potentially useful coding categories. In addition to using the theory-driven approach to coding the data, the transcripts were read several times to identify themes and patterns based on the researcher’s classroom observations. The researcher’s field notes were utilized to
verify information in the transcripts. The transcripts were also examined to identify any new themes that had not emerged in the Bibik (1993) study.

**Phase Two**

Data analysis of Phase Two concentrated on the classroom interactions by examining the videotapes of the lessons. Following Bibik's (1993) procedure, the frequency of occurrence of the teachers’ behavior toward each student for each of the 14 verbal and nonverbal DAC teacher categories was tallied and transformed into a percentage. These percentages were calculated by dividing the frequency of occurrence of each category for each student by the total number of dyadic behaviors that occurred during the class. An average percentage of occurrence of each category for each student was then calculated by dividing the total percentage by the number of videotaped classes the student attended. These data were factor analyzed using principal components with VARIMAX rotation. Six factors resulted, which represent aggregate data for both teachers (see Table 1). The factors were calculated by multiplying the standard scores for each of the 14 original variables by the factor score coefficient. Only factor loadings at .60 and above were considered. The students’ individual factor scores became the six outcome variables in this study.

Of the 14 teacher behaviors coded using DAC, the factor analysis values for 11 of those behaviors constituted the resulting six factors. Factor 1 showed both teachers engaged in giving verbal and non-verbal directions as well as non-verbal information. The factor was labeled **performance information**. Factor 2 was labeled **support** based on the high loadings on the teacher behaviors of showing empathy, such as when students’ have difficulty with a skill, and accepting the students’ behavior. Factor 3 consisted of two teacher behaviors, providing information and non-verbal criticism. An example of these two behaviors would be a teacher shaking his or her head and telling a student he was performing incorrectly or had not followed directions. Therefore, this factor was labeled **sarcasm. Manual manipulation**, Factor 4, was so labeled because of the cluster of non-verbal praise with manual manipulation. Factor 5’s loading consisted of the teacher praising a student and was simply labeled as **praise**. Finally, Factor 6 was labeled **questions** to indicate the teacher was using questioning techniques.

A series of six two-way ANOVAs were conducted, one for each of the above six factors of the teacher’s behavior. One of the independent variables in these six ANOVAs represented the type of activity class being taught: tennis, badminton, or ballroom dance. The second independent variable represented the perceived competence category: congruent, incongruent-low, or incongruent-high. In order to further examine whether differential treatment to the classes as a whole occurred, a series of **t**-tests were conducted. The dependent variable in these **t**-tests represented those factors that reached statistical significance in the ANOVAs, and the independent variable represented pairs of activity classes.

**Results**

**Phase One**

The perceived competence instrument, the CDSII, and the interviews were designed to address the first two research sub-questions: How do college age stu-
Table 1  Factor Analysis of DAC Coding Categories: Teacher Behaviors for Both Teachers

<table>
<thead>
<tr>
<th>DAC coding categories</th>
<th>Performance Information</th>
<th>Support</th>
<th>Sarcasm</th>
<th>Manual Manipulation</th>
<th>Praise</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>.07</td>
<td>.88</td>
<td>.01</td>
<td>.06</td>
<td>-.07</td>
<td>-.07</td>
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<tr>
<td>Praise</td>
<td>.14</td>
<td>-.01</td>
<td>-.01</td>
<td>-.09</td>
<td>.89</td>
<td>.02</td>
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<td>Praise (nonverbal)</td>
<td>-.18</td>
<td>.14</td>
<td>-.18</td>
<td>.71</td>
<td>.10</td>
<td>-.22</td>
</tr>
<tr>
<td>Acceptance</td>
<td>.02</td>
<td>.77</td>
<td>.12</td>
<td>.02</td>
<td>.04</td>
<td>.27</td>
</tr>
<tr>
<td>Acceptance (nonverbal)</td>
<td>-.53</td>
<td>.17</td>
<td>-.19</td>
<td>-.33</td>
<td>.48</td>
<td>.30</td>
</tr>
<tr>
<td>Questions</td>
<td>.06</td>
<td>.11</td>
<td>-.05</td>
<td>-.04</td>
<td>.04</td>
<td>.93</td>
</tr>
<tr>
<td>Questions (nonverbal)</td>
<td>.13</td>
<td>.17</td>
<td>.91</td>
<td>-.03</td>
<td>.10</td>
<td>.06</td>
</tr>
<tr>
<td>Gives facts</td>
<td>.81</td>
<td>.13</td>
<td>.13</td>
<td>.15</td>
<td>-.03</td>
<td>.18</td>
</tr>
<tr>
<td>Gives facts (nonverbal)</td>
<td>.72</td>
<td>.46</td>
<td>-.04</td>
<td>-.09</td>
<td>.16</td>
<td>-.07</td>
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<tr>
<td>Gives directions</td>
<td>.63</td>
<td>-.30</td>
<td>-.18</td>
<td>-.09</td>
<td>.23</td>
<td>.01</td>
</tr>
<tr>
<td>Gives directions (nonverbal)</td>
<td>.26</td>
<td>-.36</td>
<td>.34</td>
<td>.42</td>
<td>.45</td>
<td>-.02</td>
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<tr>
<td>Criticizes</td>
<td>-.13</td>
<td>-.04</td>
<td>.86</td>
<td>-.11</td>
<td>-.11</td>
<td>-.12</td>
</tr>
<tr>
<td>Criticizes (nonverbal)</td>
<td>.23</td>
<td>-.01</td>
<td>-.03</td>
<td>.81</td>
<td>-.30</td>
<td>.18</td>
</tr>
<tr>
<td>Proportion of variance explained</td>
<td>2.07</td>
<td>1.91</td>
<td>1.81</td>
<td>1.50</td>
<td>1.44</td>
<td>1.16</td>
</tr>
</tbody>
</table>

Note. Only factor loadings at .60 and above were considered in defining the variables.

dents and their teachers perceive abilities in a beginning physical education activity class? What is the relationship between the students’ and their teachers’ perceptions of the students’ abilities?

As in the earlier study, the focal question in this study was the question of the degree of agreement between the students’ and their teacher’s perception of the students’ racquet sport or ballroom dance competence. Figure 1 illustrates the results of the teachers’ perceptions and the students’ perceptions of the students’ abilities for the tennis, badminton, and ballroom dance classes. The shaded areas represent those students whose perceptions were in agreement with the teachers’ perceptions.

The results of the perceived competence instrument indicated that 50% of the students’ perceptions of their racquet sport or ballroom dance abilities agreed with the teachers’ perceptions. Bibik’s (1993) categories were adopted, and these students were labeled congruent. The remaining 50% of the students’ perceptions were not in agreement with the teacher’s perceptions and these students were labeled incongruent. The Incongruent students were further categorized by whether they perceived themselves as lower in ability than the teacher perceived them to be
Teachers' Perceptions of the Students' Abilities

<table>
<thead>
<tr>
<th>Students' Perceptions of Their Abilities</th>
<th>High</th>
<th>Middle</th>
<th>Low</th>
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</thead>
<tbody>
<tr>
<td>Low</td>
<td></td>
<td></td>
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<tr>
<td>B2 B7 B10</td>
<td>B13 B16</td>
<td>BD2</td>
<td></td>
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<tr>
<td>T10 T14 T18</td>
<td>T2 T9 T11 T15</td>
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<td></td>
</tr>
<tr>
<td>BD1 BD4 BD8</td>
<td>BD11 BD16</td>
<td></td>
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<tr>
<td>Middle</td>
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<td>B12</td>
<td>B17 B8</td>
<td></td>
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<tr>
<td>T19</td>
<td>T19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BD5 BD6 BD7</td>
<td>BD5 BD6 BD7</td>
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<tr>
<td>BD14</td>
<td>BD14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B5</td>
<td>B1 B6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T5</td>
<td>T16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BD9 BD10 BD13</td>
<td>BD9 BD10 BD13</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B = Student in Badminton Class</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>T = Student in Tennis Class</strong></td>
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</tr>
<tr>
<td><strong>BD = Student in Ballroom Dance Class</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 1 — Students' and teachers' perceptions of students' abilities.

(Incongruent-Low, 18%, located in the three cells below the shaded area in Figure 1) or whether they perceived themselves as higher in ability than the teacher perceived them to be (Incongruent-High, 32%, located in the three cells above the shaded area in Figure 1).

**Causal Attributions.** The semantic differential scales of the CDSII were examined to provide a reliable measure of the students' perceptions for the cause of their achievement. Attributions occurred for ability, stable effort, unstable effort, other's unstable effort, other's stable effort, mood, and luck. Table 2 provides the frequency of occurrence for each attribution by student group, and Table 3 provides the attribution frequencies by activity class. Attributions to internal causes occurred most frequently, with effort being the predominant causal explanation.

**Characteristics of the Student Groups**

Based on the interview data analyzed in Phase One, each of the three groups of students (Incongruent-Low, Incongruent-High, and Congruent) demonstrated distinctive characteristics. The major categories that were identified were the students' attitudes toward learning, comparison to other students, and interpretation of the teacher's feedback.

**Students' Attitudes Toward Learning.** The Incongruent-Low group of students appeared to concentrate very hard on learning the skills. For them, learning
Table 2  Frequency of Attributional Responses on the CDSII by Student Group

<table>
<thead>
<tr>
<th>Attribution</th>
<th>Congruent (n = 25)</th>
<th>Incongruent-high (n = 16)</th>
<th>Incongruent-low (n = 9)</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability</td>
<td>—</td>
<td>1</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>Stable effort</td>
<td>6</td>
<td>10</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Unstable effort</td>
<td>13</td>
<td>4</td>
<td>6</td>
<td>23</td>
</tr>
<tr>
<td>Mood</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>Luck</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>Other’s stable effort</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
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<td>3</td>
<td>1</td>
<td>—</td>
<td>4</td>
</tr>
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</table>

Table 3  Frequency of Attributional Responses on the CDSII by Activity Class

<table>
<thead>
<tr>
<th>Attribution</th>
<th>Tennis (n = 17)</th>
<th>Badminton (n = 17)</th>
<th>Ballroom dance (n = 16)</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>Stable effort</td>
<td>7</td>
<td>9</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Unstable effort</td>
<td>7</td>
<td>7</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>Mood</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Luck</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>Other’s stable effort</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>Other’s unstable effort</td>
<td>2</td>
<td>—</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

was a function of time, and the skills should be learned right away. They did not appear to understand that time was needed to assimilate new material, and when they practiced new skills they felt they “lost them.” In addition, the act of thinking seemed to confuse the ability to perform a skill. For example, Student BD 9 stated:

I think I need to work on like finding the beat in the music. Cuz I don’t think I get the steps right away at all. Like I think I lose them while I’m dancing.

Student BD10 explained:

When the music comes on I think about what dance it is and what the steps are, but once you start dancing, if you know what dance it is and you don’t think about it, its easier. If you try and think about it, it gets confusing.

The Incongruent-High students, on the other hand, projected the impression that learning was a very casual process. The class was fun and relaxing and learn-
ing came naturally. For example, Student BD 11 remarked, “I guess the people there, I mean, it makes the class easy because everyone’s friendly, and it makes it easier to do the dances cuz I don’t feel stupid or anything.” They found success with minimal effort. The skills were easy to learn because they had athletic experience in their backgrounds and, consequently, they were confident in their ability to perform. Student T 9 related, “Well, I’d have to say that I’m definitely one of the better tennis players, and that’s been maybe from past experience. Uh, I compete. I’m here to compete. I don’t care who I’m playing. I want to win.”

In contrast to the two Incongruent groups of students, the Congruent group of students appeared to be active participants in the learning process. This group of students appeared to understand how much work was required in acquiring a skill. Because of this, they did not concentrate so hard that it blocked their performance, nor did they appear overconfident and casual. For example, Student BD 3 commented, “I need more practice with every step I do.” And Student BD 1 reported:

I guess in a group, effort is working on dealing with the different people and the levels everyone is at and adjusting to everyone’s levels. That’s something I’ve been trying to do all of class.

Comparison to Other Students. The Incongruent-Low group of students compared themselves to the other students in the class. The tendency to engage in this behavior was to validate whether or not they were performing as well as others were performing. Student BD 9 said, “I guess I compare myself to see if I’m picking it up right, like, picking up the same steps as they are and getting the same steps they are.” Student T 5 reported, “There are some people who are better [tennis players], and I’m just like, ‘Oh, they’re better players,’ just naturally about it.”

The Incongruent-High group of students felt they were more skilled than most of their classmates and didn’t feel the need to actively validate their perceptions of their competence by making comparisons to other students. Student BD 2 commented, “I don’t compare myself, but I watch the other people and try and help myself figure out what I’m doing.” Student B 13 said, “I think I’m more skilled then some of the others in class.”

The Congruent group of students were aware of other students’ ability levels, but they did not compare themselves to their classmates. They used the information to push themselves to work harder, as in choosing a tennis partner with better skills, or they modified their performance to accommodate another student’s skill, as in playing with a less skilled player and not trying to win every point. For example, Student T 14 said, “And, not everybody is real good already. If everybody was really good already then I wouldn’t really, like, want to come.” Student B 17 stated:

I think I’m ... like when I’m playing with someone, like in badminton with DA or someone that I think is kind of good like KH, I think about beating them, like what I can do. I even talk to myself. ... I mean, if I’m playing with someone that’s not good I don’t think about strategy. If I play with someone that I have to work against, then I think strategy.

Student T 19 related:

I feel that for the class that I’m in, I think everyone’s pretty equal in everything. I mean, granted the guys are going to have more strength, and there
are some girls who have more experience, but other than that, I don’t feel uncomfortable showing my skills in front of other people.

Interpretation of the Teacher’s Feedback. The way in which the students in each group interpreted the teacher’s feedback was considered to be an important characteristic to examine in light of the earlier study. Feedback from the teacher is important to students in assessing their ability (Schunk, 1989). The intention of feedback is to provide information to correct errors or to provide reinforcement. These students appeared to view the teacher’s use of feedback in ways that reinforced their perceptions of their ability.

The Incongruent-Low group of students valued feedback because they appraised themselves as having low ability and, therefore, needed help. However, these students were inclined to over interpret the teacher’s feedback. As in Bibik’s (1993) study, they appeared to hold the teacher in a position of high regard. Receiving feedback expressed to them their value in the teacher’s eyes. Student BD 9 declared:

Well, like when you don’t know how to do it and he [the teacher] comes over and explains to you and shows you how to do it and if you don’t get it right away, he’ll stick with you. And be like, “Well, this is what you’re doing wrong,” and he’ll show you again. And then, he’ll even dance with you if you’re doing it wrong to show you.

These students felt nervous in receiving this attention, especially feedback that utilized manual manipulation. Student BD 10 expressed this view:

Well, a few times when I danced with him [the teacher] I was like, he made me nervous, because like, “Oh, no, he’s going to know that I don’t know what I’m doing!” But, um, he was like, “That’s good,” and if I made a mistake he was like, “Well, you know, don’t worry all that much because you ended up all right,” and went on with the dance.

However, this group of students felt they had been noticed by the teacher and often commented on how much time the teacher spent helping them. It can be hypothesized that because of the significance placed on feedback, the students did not solicit assistance. Rather, feedback was always initiated by the teacher. Student T 5 remarked, “I had a, not tennis coach, but my boss this summer, he helped, and that’s what he said [about my serve], and she [the teacher] noticed it too.”

The Incongruent-High students appeared to consider feedback to be a normal occurrence in class, necessary to convert weaknesses into strengths. Initially, feedback was perceived as being difficult to accept, but the students eventually put it into practice. Student B 15 declared:

I like it [feedback] cuz you know, like, when you’re doing something, you don’t realize you’re doing it wrong; she’ll [the teacher] tell you, you know, you’ve got to do this. Like, at first it might be awful, but it does help.

In addition, they often indicated that they were being slighted in the amount of feedback they received because the teacher was helping other students; yet, these students did not approach the teacher for assistance. Student BD 11 explained:
I definitely think it [feedback] is good. You, like, even need like more [teachers] to help out a lot of times. Like a lot of times he's not there to tell you know, because he's helping other people out.

Finally, these students indicated they always understood the teacher's feedback, thus minimizing the amount of interaction with the teacher by asking for clarification.

The Congruent group of students appeared to value feedback for the opportunity to learn the skills correctly and to improve. Student BD 12 said, "You have to [get feedback] if you're going to improve. I mean, you can't see what you're doing, so someone else has to tell you what you're doing." These students related to the teacher and asked for clarification as often as necessary when they did not understand the feedback. They also sought help from the teacher if they were having difficulty with a skill. This group of students often asked to see a demonstration in order to understand the feedback. Finally, feedback was not always received directly from the teacher. These students appeared to attend to feedback given to other students, and they often received help from another student. Student BD 1 reported:

Oh, I think they're very good, constructive criticism. I think that that's needed. If I kept on doing something, and I was doing it wrong, and he [the teacher] didn't tell me, then I wouldn't learn it right. I think that's, like, one of the most important things about the class.

Student B 17 offered the following:

I think that after she (the teacher) told me something I would, not necessarily instantaneously, but you know, work on trying to improve it. And then by the end of the day or after she re-evaluated, it was better. ... I feel like you get a lot of help, not just from [the teacher], but from the other people you play with.

Phase Two

Teaching is a two-way process, thus implying a bidirectional interaction between the teacher and students. The focus of this phase of data analysis was on the instructional behaviors of the teachers toward the three groups of students. The body of literature on teacher expectations suggests that teachers' instructional behaviors differ based on their perceptions of the students' abilities. The DAC observation instrument was used to address the third research sub-question: Is there a relationship between the teacher's behavior in the class and the students' perceptions of their abilities?

The results of this analysis indicated that differential treatment did occur. The ANOVAs indicated a significant difference ($p < .05$) in the amount of Performance Information ($F = 3.38, p < .004$) and Manual Manipulation ($F = 3.47, p < .003$) that was directed to the Incongruent-Low group of students as a whole. That is, this group of students received more of these two behaviors than the other two groups did. Performance information provides knowledge about a student's performance for the purpose of correcting errors and improving performance (e.g., "You need to toss the ball higher in your serve"). This kind of information can be either verbal or nonverbal. Manual manipulation is positive performance informa-
tion in which the teacher actually positions a student’s body part or takes the student through a specific movement pattern. This kind of information may be given in conjunction with other kinds of teacher behaviors such as giving facts about skill performance.

A t-test for independent samples was used to determine if there were significant differences between the activity classes in the amount of Performance Information and Manual Manipulation given by the teacher. The results of the t-tests indicated that some classes received more of one or both of these behaviors than other classes received. Table 4 indicates the results of the t-tests for each of the pairs of classes. In general, it appears that the students in the tennis class received the greatest amount of performance information and manual manipulation followed by the ballroom dance class. By comparison, it appears that the badminton class received the least amount of these behaviors.

Discussion

The intent of this study was to extend the author’s earlier work to examine the sources of influence on students’ self-perceptions of their competence in physical activities requiring a partner or an opponent. The results provided support for the findings of the earlier study. Two main sources of influence on the students’ self-perceptions of competence were considered. One source was the teacher’s expectations of the students transmitted through the teacher’s classroom behaviors. A second source was the students’ interpretation of themselves in the instructional context.

The Teacher Expectation Effect

The results of the present study provide evidence that the teacher expectation effect had an influence on the students’ self-perceptions of their ability. This finding is different from the earlier study that found no effect on students’ perceptions of their ability from the teacher expectation effect. However, it may be argued that this effect was minor. Two results are necessary in order for the teacher expectation effect to be an influence on students’ self-perceptions of their competence: Agreement between the teacher’s and the students’ perceptions of the students’ competence should be high, and differential treatment of students with varying ability levels should transpire.

The results of the Perceived Competence Instrument indicated that there was a relatively high level of disagreement between the teacher’s and students’ perceptions of the students’ competence. While both studies had a high level of disagreement, the earlier study included slightly more students who were labeled Congruent and Incongruent-Low. The difference in the number of students in the Incongruent group may be related to the nature of the classes examined in each study. Students in the activities examined in these two studies must attend to a wide variety of movements as well as coordination problems. The students must also integrate cognitive concepts and kinesthetic awarenesses specific to the activity. While not conclusive, it is also possible that the results of the present study are a function of an individual’s perception of their partner’s or opponent’s ability thus influencing their self-perceptions of competence. One might expect an opponent with better skill to influence the individual’s self-perceptions in a negative direction. Con-
<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th>Class 2</th>
<th></th>
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<td></td>
<td></td>
<td>M</td>
<td>SD</td>
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<td>(16,16)</td>
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<td>.3205</td>
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<td>1.04</td>
<td>(15,33)</td>
</tr>
</tbody>
</table>

*p < .05.
versely, an opponent with weaker skill might influence inflated perceptions of ability. In the case of the dance class, it may be possible for a highly skilled partner to have a positive influence on a partner’s perceptions of his or her competence by making the dance seem effortless.

An analysis of the interactions between the teacher and students indicated that there was some differential treatment of the students. This finding differs from the finding of the previous research in which there was no differential treatment. Based on the teacher expectation literature one would expect differential treatment of high and low ability students, such as giving more praise and feedback to high ability students and ignoring low ability students (Brophy, 1983; Martinek, 1981, 1988). Based on the classroom observations, the teachers in this study tended to provide more corrective feedback to the Incongruent-Low group of students. Lee, Keh, and Magill (1993) indicated that teachers more often gave corrective feedback to low-skilled students and evaluative feedback to high-skilled students. Therefore, there is some indication that the teacher expectation effect may be a source of influence on the students’ perceptions of their abilities.

**Student Interpretation of Self**

Students’ perceptions of their competence are influenced by how they perceive their environment and what happens to them as they move through it (Pintrich & Schunk, 1996). That environment has many sources of information, internal and external to the student, which are interpreted by the student in developing their self-perceptions of competence. In the physical education setting, sources of information include interactions with the teacher and other students, past performance, amount of effort exerted, ease of learning new skills, and winning or losing (Weiss, Ebbeck, & Horn, 1997). In the present study, as in Bibik (1993), it can be speculated that what may have been functioning in these classes was the students’ differential interpretation of the instructional context. In other words, the students’ interpretation of the teacher’s instructional behavior and the students’ performances reinforced the students’ perceptions of their competence.

According to Pintrich and Schunk (1996) attributions are crucial to the formation of self-perceptions of competence and are part of how students perceive and interpret their environment. The results of this study indicated that the majority of students attributed their success to their effort. Based on the ability versus effort debate, one would expect that an attribution to ability would be a more salient influence on an individual’s self-perceptions of competence. However, Weiner (1990) states that in achievement settings high effort is rewarded, while low effort is punished. This appears to be a function of the instructional environment of these particular classes. For these students, no matter what their ability level, an attribution to effort was equated with goal attainment. The students interpreted the teacher’s instructional behaviors to indicate that effort was valued more than ability (e.g., “It’s not how good you do it, but if you try”). Effort rather than ability meant achieving the objectives for the course that, in turn, guaranteed a good grade. Therefore, in this situation, attributions to effort, regardless of perceived ability level, do not appear to be a robust reinforcement of the students’ perceptions of their competence.

Festinger (1957) hypothesized that people are inherently motivated to evaluate their abilities and that they do so by means of comparing themselves with others. In choosing people for comparison, individuals generally choose someone who is
similar to them. In fact, in academic environments social comparisons are emphasized, and information about an individual's performance is public (Harter, Whitesell, & Kowalski, 1992). For the Incongruent-Low students in this study, social comparison was a mediating factor in their perceptions of their ability. These students actively compared themselves to other students, but unlike the theoretical construct, they tended to compare themselves to students regardless of similarities in characteristics. These comparisons were used to validate whether or not they were performing as well as others were performing. By comparing themselves to other students, however, this group of students reinforced their perceptions that they were not good. The Incongruent-High students, on the other hand, did not feel that comparing themselves to their classmates was necessary. This lack of social comparison reinforced their perceptions of their ability; by not comparing themselves to others they could continue to believe that they were more skilled than most of their classmates. Finally, the Congruent group of students used social comparison, not to validate their perceptions of their abilities, but as a means of working within their ability levels to master the material. To this extent, they were aware of other students' abilities and used this information to improve their own skill.

According to Graham (1990), information provided by teachers is an important source of attributional and perceived competence information. That information can be direct, as in teacher feedback, or it can be indirect, as in information conveyed unknowingly. In this study, the students' interpretations of feedback were most influential on the Incongruent-Low and Incongruent-High students' self-perceptions of competence.

Feedback can function as a source of low ability cues, and it appears that this was the case for the Incongruent-Low group of students. The Incongruent-Low students appeared to interpret feedback in several ways. One way feedback was interpreted was as a compliment. It appears that these students needed feedback to feel their performance had any worth. Secondly, these students received a great deal of feedback from the teachers as evidenced by the results of the teacher behavior analysis. Graham (1990) indicates that teachers are more likely to help students when the need is perceived as due to low ability. It is possible that this group of students interpreted the amount of attention to indicate that they were not very good, particularly if they were aware of how much feedback other students received. Another low ability cue possibly used by these students in their interpretation of the teacher's behavior also relates to the amount of feedback these students received. Unsolicited feedback may also be seen as a signal regarding a student's low ability (Weiner, 1983). In this study, based on the classroom observations, the Incongruent-Low group of students did not actively seek attention from the teacher. Therefore, their own behavior may have been a factor in their perceptions of their ability.

The Incongruent-High group of students had a different interpretation of teacher feedback. These students did not receive a great deal of feedback, and they interpreted this lack of attention as an indication that they had high ability. In making this interpretation, they reasoned that their high skill level indicated that they did not require a great deal of information for improvement. However, these students indicated that they felt they were being slighted in the amount of feedback they received. It may be speculated that these students were seeking approval for their skill—that is, how well they were performing—but without seeking any corrective feedback. The classroom observations indicated that the Incongruent-High students did not approach the teacher for assistance. This behavior can be
interpreted as a further indication of this group of students’ beliefs about their abilities. Their lack of asking for assistance actually reinforced their perceptions of their competence, because it was another way to avoid corrective feedback.

Unlike the incongruent groups of students, the Congruent students appeared to use feedback constructively. These students seemed to realize that no matter what their prior experience with the activity, feedback was necessary in order to improve. This group of students appeared to have a balanced outlook about learning. In a multifaceted environment, they were able to attend to the pertinent cues in order to learn and were not overly focused on others’ judgments of them.

**Pedagogical Implications**

During the course of instruction of lifetime activity classes, the many kinds of interactions a teacher has with the students has an influence on the students’ achievement. The results of this study, as well as the earlier study, indicated that it was important for teachers to know that students interpreted themselves based on the context of the teaching environment. By recognizing student attitudes and behaviors, the teacher can provide more effective instruction by redirecting students’ interpretations of the instructional context. For example, students should be encouraged to take responsibility for their learning by being proactive learners. By being proactive, students should understand that they cannot rely solely on the teacher for information about their performance. Attending to feedback given to other students by trying to apply it to themselves and receiving help from other students are two ways of achieving responsibility for learning. Finally, students need to be aware of the factors influencing learning so that they accurately interpret the classroom context in making inferences regarding their abilities. In order for proactive student behavior to occur the teacher needs to instruct students on how to be students. For example, it was observed in the previous study as well as in this one that not all students attend to the feedback given to other students. Therefore, the teacher actually needs to tell students how to address feedback and how to utilize it.

Teachers’ classroom behaviors are one source of information that mediate students’ interpretations of themselves. Providing instruction is the main purpose of teaching, and teacher feedback is a major teaching function. Feedback can be an influential source of information students use to make interpretations about themselves. Feedback has the potential to influence a student’s learning, a student’s motivation, a student’s attribution for success or failure, and a student’s self-perceptions of his or her competence. Several issues about feedback warrant consideration. Feedback that provides accurate performance information is more beneficial than information solely designed to encourage the student (Pintrich & Schunk, 1996). This is necessary in order for students to develop accurate perceptions of their competence, especially in a novel skill. Other feedback cues students interpret in their construction of themselves in the instructional context include: the way in which feedback is given (a backhanded statement or very detailed); how often it is given; and to which students it is given. However, while teacher feedback can be a strong source of evidence about themselves for students, it is only one of a full range of teacher behaviors that have the potential to function as contextual cues to students.

Examining how beginning college students in lifetime activity classes construct their perceptions of competence offers significant information about the students’ perspective toward instruction. The information is important from a pedagogical perspective for several reasons. First, it is important that teachers become
aware of their instructional behaviors, and therefore, the consequences of those behaviors. Often teachers focus on the act of teaching in order to present the material in the specified amount of time. This focus is on teaching the lesson rather than on teaching. Secondly, teachers can learn to provide quality instruction by understanding students’ self-perceptions of their competence and how those self-perceptions are developed. It is here that teachers can instruct students to become proactive. By “shaping” students’ perceptions of their competence it may be possible to get improved performance and greater congruence between the teacher’s and students’ perceptions of the students’ competence.

References


