Methods of Instruction for Partner Dancing:

An Interactive Qualifying Project Report

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Abstract

Differences between authoritative and authoritarian teaching styles on Competitive Ballroom Dance students were examined. Researchers observed beginner lessons and surveyed the instructors and students to determine the perceived quality of the lesson and performance at a major dance competition. Although authoritative teaching style tended to yield better performance scores than authoritarian, this difference was not statistically significant.
Executive summary

Researchers observed several different beginner lessons and surveyed the instructors and students to determine the perceived quality of the lesson. This was done at least once per studio. The students’ progress was recorded at a major ballroom competition and analyzed afterwards. As predicted, the authoritative teaching style for competitive ballroom dance students yielded a higher performance rating at the competition. However, the results of this study were not statistically significant.

In addition, the analyzed data revealed weak positive correlations between the overall score and the amount of detail in the dance lessons perceived by the students (see Table 3). The results showed that as detail in the lesson increased so did the student score despite the absence of a significant difference between the competitions scores for each teaching style. The following report recommends additional studies to analyze the relationship between the amount of detail perceived in a lesson and the students’ performance score.

Literature Review

1 Project Background

Students interested in competitive ballroom dance (CBD) typically visit a studio with group classes, and their success depends on the students’ ability, their motivation and their determination to excel (Nurse, 2007). Their success also depends on the instructor’s proficiency as a dancer and as a teacher. The instructor’s proficiency as a teacher depends on the method of instruction, or teaching style, the instructor uses. This study examined the effects of teaching style on the students’ learning proficiency.

Each teaching style results in different learning orientations and perceived motivational climates. Previous mentioned studies explored the ways in which learning orientation and how their perceived motivational climate is affected by a teaching style. Based on those findings, the present study aims to identify which teaching style is the most beneficial to competitive students and their instructor(s).

1.1 Expenses of Competing

CBD is a very time consuming sport. On average, competitive dancers can spend up to 26 hours per week in lessons and an additional 11 hours per week practicing (Van Rossum, 2001). Instructors charge at least $50 per hour (Fred Astaire, Worcester), and some can be more expensive. With competition costs taken into consideration, the overall price of CBD increases significantly. This high cost could and has caused competitive dancers to perform poorly and even prevented them from competing (Nurse, 2007). The cost of competitions could be reduced, but that is almost always a fixed initial cost (Nurse,
2007), and lessons will still cost a tremendous amount depending on the instructor and how many lessons the dancer takes.

![Figure 1 - Need for Financial Aid based on academic merit](image)

Competitive dancers, especially collegiate dancers, need to lower the cost of competition due to their limited budget. Figure 1 shows the financial aid need for college students at private, less selective institutions. As shown in the “All students” category, more than 50 percent of all students have a low to high financial need, which reflects that they may not have much money to spend on non-essential activities, such as ballroom dancing. The only way a competitive dancer can lower his or her overall cost is by attending fewer private lessons. However, attending fewer lessons would lower the competitor’s chance of winning, unless the few lessons he or she attended were of the highest quality and beneficial to the students’ learning in the sense of stress, motivational climate and learning orientation. Then students could take fewer lessons, allowing the teacher to expand their clientele making their income less dependent on any one specific student.

**1.2 The Competitions**

Before aspiring students can become a champion level dancer, they must first learn how a ballroom competition works. Based on the observations of Nurse (2007), all of the competitions occurred on weekends and began with twenty-five couples per group or heats.
Each heat performed for about two or three minutes, during which each couple is judged. If a couple did not receive a score or callback from enough judges, the couple is eliminated. Once each heat has had a chance dance, another round starts and the elimination process repeated until only the last six couples remain to dance in the final heat where they will each be placed.

The dances they perform fall in four major styles of ballroom dance: American Smooth, American Rhythm, International Standard, and International Latin. The International Standard is considered the oldest of the ballroom competition dances (Dancesport UK). It is characterized by its lack of a basic step for all of the dances, unlike the other ballroom dance styles. In addition, International Standard never leaves closed frame; this means that the leader and the follower hold each other’s arms during the entire dance. American Smooth, as the name suggests, was first introduced in America. American Smooth adapts many moves and has similar styling to the International Standard style. However, the American Smooth dances allow for the dancers to break the closed frame and add turns, double handholds, and breaking apart from the partner altogether (Dancesport UK).

International Latin and American Rhythm styles are also considered ballroom dancing. Unlike the International Standard and American Smooth styles, most of the Latin and Rhythm styles are considered “spot dances” in which the dances are for the most part danced in one spot on the floor. As the name suggests, International Latin dances originate from Latin America (Dancesport Emotions). Because of the age of this style, it has developed into a strict style with sharp leg movements, specific South American hip motions, and a very detailed syllabus to follow for competition dancing. American Rhythm is a somewhat newer style with some of the dances developing as late as the 1940’s, so the syllabus is not as strict as Latin (America’s Ballroom Challenge). It even allows for some open interpretation as far as leg movements and foot position as opposed to the strict International Latin style.
Table 1- The 19 Competitive Ballroom Dances as organized by the 4 major categories

<table>
<thead>
<tr>
<th>Smooth</th>
<th>Standard</th>
<th>Latin</th>
<th>Rhythm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waltz</td>
<td>Waltz</td>
<td>Cha Cha Cha</td>
<td>Cha Cha</td>
</tr>
<tr>
<td>Tango</td>
<td>Tango</td>
<td>Rumba</td>
<td>Rumba</td>
</tr>
<tr>
<td>Foxtrot</td>
<td>Foxtrot</td>
<td>Jive</td>
<td>Swing</td>
</tr>
<tr>
<td>Viennese Waltz</td>
<td>Viennese Waltz</td>
<td>Samba</td>
<td>Bolero</td>
</tr>
<tr>
<td>Quickstep</td>
<td>Paso Doble</td>
<td>Mambo</td>
<td></td>
</tr>
</tbody>
</table>

Ultimately, portraying the characters in each dance is costly once you take into account the cost for registration fees, transportation, costumes and makeup for both men and women, each of them being crucial equipment. Thus, financial limitations can and have resulted in dancers losing (Nurse, 2007).

In summary, students need to learn and practice an extensive amount of material, making CBD very time consuming. In addition to that, judges expect dancers to portray the different historically accurate characters that are associated with each dance by dressing appropriately. For instance, females wear Latin style costumes and both partners sometimes tan themselves to portray Latin American culture. As for the traditional ballroom styles, women would put their hair in pinned up French braids and do their makeup to coordinate with the historical aspect of the dance, put themselves into the character and the theatrical aspect of the dance (Nurse, 2007). This contributes to the cost of competition which also includes the price of shoes, shoe brushes to maintain them, and the occasional dry cleaning bill to maintain the costumes.

According to Lyall Bradshaw (2007), a judge for the commonwealth Classic Ballroom competition of 2011, judges usually default to a few criteria when it comes to choosing who gets moves on to the next round. Due to the time limit and large number of dancers on the dance floor, judges have to assess multiple couples at a time and usually assess them based on technique. The factors of technique include posture and poise, timing, movements, lines, foot movement, foot positioning, hold and consistency across all of these.
aspects. Posture, poise, movements and hold vary between dances given the dances’ different background and characters. However, timing, lines, foot movement and positioning remain the same.

The different factors sum up to nine per dance making CBD cognitively tasking, as well as time consuming. Should couples slip and dance on the wrong beat of the music, they would not even make it past the first round (Nurse, 2007). Given what is expected of a competitive dancer at a competition, it is very important that their technique is consistent and accurate. Without consistency, a couple would not receive enough callbacks, and without accuracy, judges would not call back the couple for another round.

However, judges also focus on styling which is characterized by the couple’s togetherness, interpretation (i.e. individuality), and presentation. For example, a judge might ask themselves if the couple is performing or just dancing. Does the couple dance outwardly or display enthusiasm and confidence in their performance and joy? Or do they show introversion and discomfort (Bradshaw, 2007)? Without style, all dancers who are technically correct look the same and do not stand out. In order to be judged in CBD, dancers must first catch the judges’ attention. Thus adding individuality, attitude and emotion is crucial to being noticed and judged in a ballroom competition.

Given the multiple criteria that judges can use to assess couples, they focus on key aspects of their choice which can be summed up as technique and its consistency throughout the performance. Each dance portrays different characteristics and emotions, and being able to convey them is also vital for a performance. Couples who do not portray the characteristics associated with the dance and have no attitude will fail to attract and maintain the judges’ attention and would not be judged, thus resulting in elimination.

1.3 Physical consequences of competing

In addition to the multiple goals that dancers must achieve, they must also control and manage their stress. People undergo stress when they are in psychological situations that involve performances related to an important goal and are under conditions of social evaluation, which results in elements of uncontrollability (Beulen, Chen, Kirschbaum, Rohleder, & Wolf, 2007). Thus, with all of the aforementioned intense requirements and expectations, it is no surprise that CBD also comes with a rise in the stress chemical cortisol in addition to being a very intense physical exercise.

Beulen and colleagues (2007) observed a team of dancers during their formation dancing competition in Germany and measured their cortisol levels, and concluded that cortisol can positively or negatively affect dancers’ performance. The dance team observed as a whole and the dance team members’ individual cortisol levels were significantly higher while performing than when at rest (2007). This is noteworthy because having high cortisol level can result in Cushing’s syndrome whose symptoms are fatigue, anxiety,
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depression, high blood sugar and blood pressure, and irritability. High cortisol levels may also increase irregularity in women’s menstrual cycles and facial hair, decrease fertility and reduce the sex drive for men (medicinenet.com, Source: Government). In addition, being unable to control and maintain stress results in learned helplessness as well as other psychological behavioral difficulties (Kim & Duda, 2011).

Given the stress and its consequences, Nurse noted that competitive students learn to dance because of a myriad of reasons and a mix in motivation types (2007). When she started a dance class for the first time, she met several other new dancers with some fairly common reasons for learning to dance. Students that started dancing for the most part were preparing for their wedding’s first dance or they were trying to stay fit without going to the gym. This is an example of an extrinsic motivation (Malone & Lepper, 1987). However, some students stopped attending the lessons after a period of time, while some other dancers continued to progress faster than those who eventually left. She noted that usually people underestimated the difficulty of learning how to dance and they are often surprised by it. Those who were successful at learning how to dance were the students who had a goal in mind and were intrinsically motivated to learn in the first place (Nurse, 2007). Thus, there is an observed positive correlation between dancers who were personally self-determined and their success.

Though the competitive dancers’ success was not necessarily caused by their intrinsic motivation, their motivation and persistence did affect their learning and influenced their success. Based on Nurse’s observations, students who were intrinsically motivated were successful and students who were extrinsically motivated were not. Thus, a teaching style that is unparalleled encourages students to be cooperative and gritty. This is characterized by learning on your own, at home or through imitation and practice in the dance-hall or outside of lessons. This way, learning is being initialized by the student who will be more likely to seek instruction and enroll in classes since they take competing seriously (Oakley 1994, as cited in Nurse, 2007). Consequentially, it is important that the teaching style used does not increase the students’ stress level and in turn discourages them from taking lessons.

1.4 Teaching style: motivational climate and learning orientation

Dever & Karabenick (2011) examined two major teaching styles that are most commonly used especially for competitive ballroom dancing: Authoritarian and Authoritative. Both authoritarian and authoritative styles have strengths and weaknesses. Both of these teaching styles yield the most notable results for CBD, and that is why they are the styles analyzed for this study.

By definition, teachers of an authoritarian teaching style set and maintain extremely high standards for the students and do not respond to the students’ feedback (Steinberg, 2010). Namely, this style is completely based on the teacher’s perception and leaves no
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room for input or feedback from the student. The instructor can also be very intrusive (Nurse, 2007) in the sense that the instructor interrupts the student in the middle of their practice frequently. Due to self-fulfilling prophecy, students who are expected to master complicated technique and remember complex long routines do so (Quested & Duda, 2009). This facilitates teaching, drilling and learning proper technique, which is very good for competitive dancers. The lessons are based on memorizing a set of moves in a specific sequence, or a routine. The names of the moves and the routines are the main focus of the lessons, thus resulting in procedural knowledge and a learning orientation in which “individuals seek to maintain positive judgments of their ability and avoid negative judgments [as well as constructive criticism] by seeking to prove, validate, or document their ability and not discredit it [which potentially results in] learned helplessness…despite high confidence in ability to learn” (Dweck, 1986, 1988; Dweck & Elliott, 1984). Thus without a conceptual understanding of the basic movements as a foundation, procedural knowledge can oppose the development of deep meaningful knowledge (Brown, Seidelmann & Zimmermann, n.d.).

In addition to the resulting performance oriented learning, this teaching style creates a dependency on lessons. The teaching style does not allow room for input from the students by definition, and because the students just do as they are told and they know very little about what they are trying to achieve. This renders them unable to figure out what they are doing wrong on their own. Students then continue to take lessons during which they often feel that they are constantly being judged which result in a very stressful ego-involving climate (Quested & Duda, 2009), and are often interrupted during practice due to the instructor’s intrusiveness. The stress that results from this and the high standards can have a negative impact on the student’s performance.

Dance students’ stress levels are directly affected by the teaching style that is used (Beulen et. al, 2007). Based on Quested & Duda’s study (2009) on how hip hop dancers perceive their learning environment, the perceived motivational climate and the learning environment’s features of the climate were created and controlled by the teacher. The first of two climates was the task-involving in which students were cooperative, and they successfully evaluated the group in a self-referent manner by judging themselves before pointing fingers. This made everyone feel like they had a purpose within the group and that they encouraged individual progress (Ames, 1992). The other was the ego-involving climates, in which dancers were encouraged to outperform each other, and success as well as failure were publically recognized which resulted in psychological difficulties, learned helplessness which is characterized by mental and behavioral denial, performance avoidance, venting of emotions, wishful thinking, and reactive as opposed to proactive thinking. These consequences of ego-involving climates rendered dancers unable to properly cope with stress which continued to increase and negatively affected their performance (Kim & Duda, 2011)
As mentioned before, qualifying for the next round in a competition depends on dancers standing out. However, because competitors instructed with authoritarian routine based teaching style may not be able to manage their stress, the stress could negatively affect their performance. Being judged would alleviate their stress and the combination of high stress levels and the ego-involving motivational climate would cause a learned conditioned responses mentioned earlier which in turn would result in elimination.

In an authoritative teaching style, the teacher will also set and maintain extremely high standards for the students. Conversely, the teacher will also seek out the student’s input in order to respond accordingly to the student’s needs (Steinberg, 2010). The teacher is both demanding and responsive while encouraging the student’s autonomy and independence (Baumrind, 1971). This teaching style is mostly used for social dancers. It is not recommended for competitive dancers because it focuses on how to lead and when to signal different moves so that the follower may react slightly after the leader has moved, while remaining in sync with the music (Skippy Blair, 1994).

This action-reaction relationship or Lead-Follow is a very complex skill to master. In order to lead effectively and maintain the relaxed stress-free environment that social dancing is associated with (Skippy Blair, 1994), a significant conceptual understanding of why a move is executed the way it is, and how to lead is essential. Consequently, the lesson is taught through iteration and imitation. Because of this, technique which is essential to competitive dancers is often addressed last if not addressed throughout the lesson (Powers, 2010). Thus, the authoritative teaching style is impractical for competitive dancers as far as technique is concerned.

However, when it comes to maximizing attitude, authoritative is ideal. By definition, should dancers want to focus on how to add style, emotion and presence to their moves, the teacher would respond by teaching the moves associated with emotions the students are attempting to portray. In addition, independent growth and learning is severely encouraged just like in a perceived task-involving motivational climate. Thus, students can learn in the home as well as within a studio. This independence allows students to take fewer lessons and still improve on their dancing. The combination of deep conceptual understanding and independence facilitates grasping the relatively complex relationships between the central concepts of a dance for the sake of executing the moves correctly, or deep understanding (Elgezawy, 2008) which is usually achieved through mastery-oriented learning. By definition, this should result in the student learning proper technique be it with a different teacher or on their own.

1.5 Present Study & Prediction

Dancers could learn both style and technique if they learn from both an authoritative instructor and an authoritarian instructor. Style would attract the judges’ attention so that dancers could demonstrate their technique. Ideally, authoritative and
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authoritarian teaching styles would be balanced in such a way that students are encouraged to learn more and master what they learn while welcoming constructive criticism. Consequentially, said competitors would be independent and knowledgeable enough to learn both inside and outside of a lesson. This would mean the competitors would need fewer lessons, and they would get better by spending less money. This independence would result in a relaxing environment in which standards are high and concrete allowing students to meet them as they would from an authoritarian teacher. The instructors would increase their clientele, making their business more stable and profitable.

Between the two contrasting teaching styles, the authoritative teaching style was predicted to be more effective for competitive ballroom dancers. Since authoritative teaching style establishes a task-involving motivational climate while encouraging mastery-oriented learning, students would be more competent when it comes to managing their stress and in turn reducing the probability of stress negatively affecting their performance during a competition. The drawback of technique possibly being neglected is probable, but not factual. The mastery-oriented learning associated with authoritative teaching style, would encourage the students to drill proper technique on their own, in an environment of little to no stress associated with it.

Methodology

2 Overview

To examine the effects of the two teaching styles on student dancers’ performance, an observational study was conducted using five ballroom dance studios/colleges. The first part of the study involved observing each instructor to identify the teaching style, surveying the instructors to assess their perceptions on their lesson and surveying the students to assess their perceived quality of the lesson. The second part involved observing the students from the lessons at a ballroom dance competition that strictly enforced dance rules. A dance competition that enforces dance rules is important so that dancers may be judged for their ability to dance basic figures. If a competition allows figures that are not normally taught to dancers of a certain level, it would be difficult to obtain impartial performance data.

The dancers from the participating studios/colleges confirmed that they were planning to compete at a major ballroom dance competition, and their participation in this study was approved by the studio owners and the Institutional Review Boards of the respective colleges.

2.1 Participants

Participants were 34 ballroom dance students (aged 17-21, $M = 18.54$, $SD = 0.98$) from five Massachusetts dance studios and colleges. The students were not compensated
for this observation because the study was conducted during their normal group lessons and a dance competition.

2.2 Data collection

Information was collected on the researchers’ overall observations of the lesson, how the instructor viewed his or her lesson, how the students viewed the lesson, and how well the students performed. To obtain this information, four different data sheets were used. The first data sheet was the Instructor Observation Sheet. This sheet, found in Appendix A, was used to track instructor behavior and lesson plan and was completed during each observation. Using this, each the instructor’s teaching style was determined. To ensure anonymity for this report, studios and colleges were assigned a number (i.e. Studio 1, Studio 2, etc.) in place of their studio name or college. Also, because the instructors’ self-perceptions of how they taught could affect their teaching style, each of them completed the Instructors’ Teaching Style Survey found in Appendix A after the second observation.

The third data sheet used for this study is the Dance students’ surveys. This survey was used to understand student’s perceptions of the lesson since it could affect their learning proficiency. Students were surveyed at the end of the first and last class on their attitudes toward the class, their instructors’ teaching style, and their feelings about the quality of the lesson using the Dance Student Survey in Appendix A. To keep students anonymous yet identifiable, participants indicated the following information: zip code, street number, year of birth, but could alternatively generate an identification code of their choice.

The fourth and final data sheet for collecting raw data was the Dance Student Observation sheet in Appendix A. This sheet was used to record the students’ performance scores at the 2011 Brown Comp, Brown University’s ballroom dance competition. Their scores were equivalent to how many rounds they participated in a given dance and how many rounds there were in each corresponding dance.

2.3 Variables

The observational study is based around two variables: the instructor’s teaching style, the student’s performance. The independent variable was the teaching style. For the purpose of this study, authoritative style was labeled teaching style 1, while the authoritarian style was labeled teaching style 0. The dependent variable was the student overall performance score. This was determined by the students’ progress at the ballroom competition. In addition, the perceived lesson quality for each student was assessed using the surveys and used to weigh the students’ performance score.
2.4 Procedure

Dance studios and classes were visited over the course of three weeks. Within that time, instructors and students were observed before the day of the dance competition. Three studios were surveyed once and two studios were surveyed twice. The students were always surveyed at the end of each lesson. The instructors were observed during each lesson, and were each surveyed once at the end of their respective observation periods.

At the end of the month, each couples’ performance at the Brown Comp was recorded. The number of rounds changed for each dance. Because of this, each couple’s performance score for each dance was the ratio of how many rounds the couple participated in and how many rounds there were in each respective dance. After the competition, studio coaches and captains were asked to match up their dancers’ demographics with their competition identification numbers assigned by Brown University. This was to prevent the researchers from jeopardizing any individual’s guaranteed anonymity.

2.5 Analysis Strategy

The teaching style was determined through the researcher’s perceptions of the lesson, which was acquired using the Dance Instructor Observation Sheet. Based on the observations, in an authoritarian teaching style students learned a sequence of moves as a group, practiced multiple drills conducted by the instructor repeatedly, and received intrusive instructions from the instructor. In contrast, students in an authoritative teaching style learned and practiced a set of moves individually or as a group. They also learned how to lead each move without a routine. Another characteristic of authoritative teaching was that instructors encouraged their students to express their creativity and individuality.

Performance scores were weighted by the students’ perceived lesson quality in order to account for its effects on their scores. The lesson quality was determined using the students’ evaluated perceptions from the Dance Student Survey. It was determined by averaging the percentage of the maximum positive responses from Dance Student Survey 1 and 2.

The methods used to analyze the data were an independent samples T-tests and correlations between student overall score and many of the factors in the data. The t-test compared the means of the overall score grouped by teaching style. The bivariate correlations were run that looked at the relationships between students overall score and every survey question listed in the data.
3 T-test

To examine the effect of teaching style on the student’s overall performance, a t-test was performed. The performance scores from the authoritative teaching style (labeled in Figure 2, $M = .37, SD = .27$) were higher than the performance scores from the authoritarian teaching style (labeled in Figure 2, $M = .29, SD = .18$). However, this difference was not statistically significant, $t(32) = 1.03, p = .31$.

4 Correlations

In addition, we examined the relationship between the perceived amount of detail in a dance lesson and their performance score. The results revealed that there was a weak, but positive correlations, $r = .39, p = .003$, see Table 3)
Table 3 – Correlation results for Authoritative teaching style:

<table>
<thead>
<tr>
<th>Weighted overall score</th>
<th>Clear explanation: body</th>
<th>Clear explanation: hip motions</th>
<th>Easy to follow instructor demos</th>
<th>Hear instructor while music is playing</th>
<th>Instructor contradicts self often</th>
<th>Instructor is clear with learning goals</th>
<th>Class inattentive to the instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.395**</td>
<td>.396**</td>
<td>.397**</td>
<td>.397**</td>
<td>.394**</td>
<td>.391**</td>
<td>.396**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.003</td>
<td>0.003</td>
<td>0.003</td>
<td>0.003</td>
<td>0.003</td>
<td>0.003</td>
<td>0.003</td>
</tr>
<tr>
<td>Fast learning speed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fast learning speed vs. other classes</td>
<td>.395**</td>
<td>.398**</td>
<td>.398**</td>
<td>.397**</td>
<td>.399**</td>
<td>.398**</td>
<td>.391**</td>
</tr>
<tr>
<td>Understand Material</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learned more than in other classes</td>
<td>.398**</td>
<td>.398**</td>
<td>.398**</td>
<td>.397**</td>
<td>.399**</td>
<td>.398**</td>
<td>.391**</td>
</tr>
<tr>
<td>Understand of moves taught</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understand concepts based off of other dances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feel that learning in class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.003</td>
<td>0.003</td>
<td>0.003</td>
<td>0.003</td>
<td>0.003</td>
<td>0.003</td>
<td>0.003</td>
</tr>
</tbody>
</table>

**Discussion**

A great amount of detail on every move was representative of the Authoritative teaching style. If the dance lesson was highly detailed about movements and technicality, it is possible that the extensive amount of detail helped the dancers achieve muscle memory for basic moves and would increase performance score by extension. It is also possible that being told what to do with less feedback in the Authoritarian style, negatively affected putting this detail into muscle memory. This is likely because authoritative teaches more through iteration which allows dancers to turn the detail given into muscle memory.

As previously mentioned, the student’s performance and success depends on their determination to excel; their grit. This observational study did not take grit into account. Grit is the best predictor of success (Duckworth, Peterson, Matthews, Kelly, 2007) and in the context of CBD, it can be quantized by the amount of time students spend practicing. Thus another approach to predicting the probability of a couple placing in a given dance is through the relationship between how much time each person practices and the teaching style they were exposed to.

Grit is a possible lurking variable in the study. This particular characteristic could have accounted for jumps in the data, such as the great success of some students at a studio versus other students in the same studio. A high grit could influence a student’s practice outside of group lessons. This high amount of practice time would then have a significant effect on the student’s.
Whereas high grit could positively affect a student’s performance, high stress could also affect the student’s performance. Students were evaluated at the competition, and Beulen et al. had stated that public evaluations add to student’s stress (2007). How much stress each participant experienced during the competition could have been significantly high for any given participants. In addition, a high level of stress could be associated with a poor performance, regardless of the teaching style. Because stress was not measured in the Student Performance and neither was each students’ level controllability, it is also possible that stress was a lurking variable that affected the Student Overall scores.

Limitations

The authoritative teaching style did yield higher performance score as predicted; however, this conclusion was insignificant because it was only valid for a confidence interval slightly better than chance. This was most likely due to the small sample size of this study. The date of the Brown Comp and the start date for the study were very close to each other, so the researchers had limited time to observe the studios and collegiate teams. Given more time or a larger research team, the collected data would be from a larger sample size. Another unaccounted factor outside of the researchers’ control was irregular attendance. Students that did not attend any of the observed lessons and then competed at the Brown Comp could not be included in the data because they did not have any lesson data to compare.

Despite the small sample size, the research from the study showed promising future research. This could result in more significant studies involving strong correlations between the methods of instruction and a student’s dance performance. Given a controlled environment and controlled variables, the relationship between these could be qualitatively explained.
References


Methods of Instruction for Partner Dancing


Appendix A: Materials

Date (e.g., 10/7/2011):___________
Zip code: ________________  Street number: _____________  Year of Birth (e.g., 1970): ______

DANCE STUDENT SURVEY

Position you took in today’s lesson:  □ Lead  □ Follow

Instructions: You will be asked a series of questions about your lesson today. Please circle a number on the scale indicating your beliefs.

1) The instructor explained foot movement clearly.
   1 2 3 4 5 6 7
   Strongly Disagree  Strongly Agree

2) The instructor explained body movements clearly.
   1 2 3 4 5 6 7
   Strongly Disagree  Strongly Agree

3) The instructor explained hip motions clearly.
   1 2 3 4 5 6 7
   Strongly Disagree  Strongly Agree

4) In general, I found the instructor’s demonstrations for each move easy to follow.
   1 2 3 4 5 6 7
   Strongly Disagree  Strongly Agree

5) I was able to hear the instructor while the music was playing.
   1 2 3 4 5 6 7
   Strongly Disagree  Strongly Agree

6) The instructor contradicted himself/herself often.
   1 2 3 4 5 6 7
   Strongly Disagree  Strongly Agree

7) Overall, the instructor gave a clear goal in learning the dance moves.
   1 2 3 4 5 6 7
   Strongly Disagree  Strongly Agree

8) I felt my classmates did not listen to the instructor.
   1 2 3 4 5 6 7
   Strongly Disagree  Strongly Agree

9) Overall, I feel that I am learning in this class.
   1 2 3 4 5 6 7
   Strongly Disagree  Strongly Agree
10) The rate at which I learned the material was faster than average.

1 Strongly Disagree 2 3 4 5 6 7 Strongly Agree

11) I feel that I am learning more quickly than in other classes.

1 Strongly Disagree 2 3 4 5 6 7 Strongly Agree

12) Overall, I understood the material taught.

1 Strongly Disagree 2 3 4 5 6 7 Strongly Agree

13) On average, I feel I learned more than in other classes

1 Strongly Disagree 2 3 4 5 6 7 Strongly Agree

14) I have a good understanding of the dance moves taught.

1 Strongly Disagree 2 3 4 5 6 7 Strongly Agree

15) I can make connections from one dance concept I learned to others.

1 Strongly Disagree 2 3 4 5 6 7 Strongly Agree

Demographics

Age: _____ years  Gender: Male  Female  Race/Ethnicity:

Have you attended dance classes here before?  Y  N

How long have you been dancing?

□ 0-6 months  □ 6-12 months  □ 2-5 years  □ 5 or more years

Please circle one of the following to indicate why do you compete in ballroom dancing?

□ I enjoy dressing up in competitions  □ I want to boost my confidence
□ I enjoy dancing  □ Health Benefits (i.e., exercise)
□ I want to learn a new skill  □ I don’t compete
□ Other: ________________________________  □ I’m preparing for a future performance (e.g., Wedding)
Methods of Instruction

What other dances have you done? (i.e. Ballet, Lyrical, Salsa, etc.)
___________________________________________________________________
___________________________________________________________________

Any other thoughts, concerns, and/or feelings:

Dance Instructor Observation Sheet.
Date (e.g., 11/07/2011): ________________
Zip code: ________________ Street number: ________________ Year of Birth (e.g., 1970): ______
Studio_____________________

Instruction: This sheet is for our purposes only. We will record observations using the questions below. Using these records, we will be able to determine if the instructor is teaching lead-follow, routines, or both.

How many moves were taught in this lesson? _______

**Technicallty**
How much detail did the instructor give while teaching the following components in the lesson?

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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>7</th>
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</thead>
<tbody>
<tr>
<td>Footwork and positioning:</td>
<td>None</td>
<td>Some detail</td>
<td>Very detailed</td>
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<td>Body position:</td>
<td>None</td>
<td>Some detail</td>
<td>Very detailed</td>
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<tr>
<td>Hip movement and position:</td>
<td>None</td>
<td>Some detail</td>
<td>Very detailed</td>
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</table>

Did the instructor teach Lead-Follow techniques (i.e., did the instructor explain how to dance through improvisation by having one partner suggest moves through body language?)  
Y  N

Did the instructor use analogies to explain certain moves (i.e., “equal and opposite forces” for the pushing and pulling connection between partners)?       Y   N

**Goal Oriented Instructions**
Did the instructor present any goals? If so, what were they?
___________________________________________________________________
___________________________________________________________________

Did the instructor give pointers on what not to do and why not to do them?  
Y  N

Any other thoughts, concerns, and/or feelings:
DANCE INSTRUCTOR SURVEY

Date (e.g., 11/07/2011): __________________
Zip code: ________________  Street number: ____________  Year of Birth (e.g., 1970): ______
Studio __________________

Instruction: Please answer the following questions about the lesson you taught today.

1. How many moves did you teach in this lesson? _________

2. How much detail do you believe you gave while teaching the following components in the lesson?

   Footwork and positioning:
   1  2  3  4  5  6  7
   None  Some detail  Very detailed

   Body position:
   1  2  3  4  5  6  7
   None  Some detail  Very detailed

   Hip movement and position:
   1  2  3  4  5  6  7
   None  Some detail  Very detailed

3. Did you teach Lead-Follow techniques?  Y   N

4. Did you explain how to dance through improvisation by having one partner suggest moves through body language?  Y   N

5. Did you use analogies to explain certain moves (i.e. “equal and opposite forces” for the pushing and pulling connection between partners)?  Y   N

6. Did you present any goals in today’s lesson? If so, what were they?

7. Overall, I feel that the students in this class learned the material.
   1  2  3  4  5  6  7
   Strongly Disagree  Strongly Agree

8. I feel that the students are learning more quickly than in other classes I have taught.
   1  2  3  4  5  6  7
   Strongly Disagree  Strongly Agree

9. Overall, I think the students have a deep understanding of the material.
   1  2  3  4  5  6  7
   Strongly Disagree  Strongly Agree

10. I think the students have a good understanding of the dance moves taught.
    1  2  3  4  5  6  7
    Strongly Disagree  Strongly Agree
11. The students relate to the material through other dance concepts they have previously learned.

Strongly Disagree    Strongly Agree

12. I explained foot movement clearly.

Strongly Disagree    Strongly Agree

13. I explained body movements clearly.

Strongly Disagree    Strongly Agree


Strongly Disagree    Strongly Agree

15. In general, I thought it was easy to follow my demonstrations for each move.

Strongly Disagree    Strongly Agree

Demographics

Age: _____ years  Gender: Male  Female  Race/Ethnicity:

How long have you been teaching?

☐ 0-6 months  ☐ 6-12 months  ☐ 2-5 years  ☐ 5 or more years

How long have you been dancing?

☐ 0-6 months  ☐ 6-12 months  ☐ 2-5 years  ☐ 5 or more years

What other dances have you taught? (i.e. Ballet, Lyrical, Salsa, etc.)

_____________________________________________________________________

Any other thoughts, concerns, and/or feelings:
Student performance sheet at the Brown Comp

Instructions: This data sheet is for record purposes. Please record any and all data relating to performance at the Brown Comp.
Student Codes: (Zip code, street number, year of birth)

Rhythm: American Cha cha

<table>
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<tr>
<th>Student code</th>
<th>Studio</th>
<th>Comp tag</th>
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Table was repeated for the following dances: