A Cross-Cultural study

of the Relations between Kindergarteners' Skills

And the Teachers' Directional Language

by

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Abstract

The possible correlations between students' academic skills are examined using a cross-cultural sample from the American and the Chinese kindergartens. The sample showed that there are significantly higher academic skills in Chinese students than American students. Regardless of the differences, the academic skills of the students are negatively correlated to the frequency of the teachers' use of behavioral discouragement, whereas there is not a correlation between the skills and behavioral encouragement. Moreover, the magnitudes of the correlations are generally larger in the Chinese sample.

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The average American child spends up to 33 hours per week in school yielding a potentially huge role of schooling in terms of the children's development (Horfferth & Sandberg, 2001). Over the extensive time period, there are numerous communications between teachers and children. It is important for teachers to provide the appropriate interactions, so that students are in the best environment possible to nourish their development. It is also important to know what kinds of responses teachers provide for different students' behaviors. Sameroff and MacKenzie (2003) showed that there are deviation reducing and deviation amplifying systems that modify a child's behavior. For example, adults use negative feedback strategies to reduce the deviation of the child's present behavior from the starting point (Sameroff & MacKenzie, 2003). This is similar to teachers using punishment to discourage students from committing undesirable behaviors. On the other hand, under the deviation amplifying system, adults use positive feedback strategies to increase the deviation of the child's present behavior from the starting point (Sameroff & MacKenzie, 2003). This is similar to teachers using punishment to discourage students from committing undesirable behaviors. On the other hand, under the deviation amplifying system, adults use positive feedback strategies to increase the deviation of the child's present behavior from the starting point (Sameroff & MacKenzie, 2003). This is similar to teachers using reinforcement to encourage students to engage in desirable behaviors.

In kindergartens, there have been standards for how the classrooms ought to be structured. In the study by La Paro, Rimm-Kaufman and Pianta (2006), they pointed out that most of the learning time (in 60 minutes classroom observations) is structured and teacher-directed (42%) including 17% of seatwork and 18% of center work. Also, almost half (44%) of the time is spent in whole group settings. Therefore, the quality of teacher-child interaction should have significant influence on children's development. Curby, Rimm-Kaufman, and Ponitz (2009) found a positive correlation between teachers' emotional support and students' growth in sound awareness. Emotional support (measured by teachers' overcontrol, negative climate and positive climate) is one of the dimensions being measured while assessing classroom quality together with teacher's sensitivity (measured by teacher's responsivity, intrusiveness, and detachment) and instructional support (measured by evaluative feedback, instructional conversation of the teacher and child responsibility).

Classroom interactions could be initiated by teachers or by students. The teachers are more likely to direct a child's behaviors, maintain discipline or take care of a child's need (Jingbo & Elicker, 2005). As Adams and Cohen (1974) suspected that the children's interpersonal skills affect the teachers' expectancy for the children over a long period of time. These teacher-child interactions should affect the way the teachers treat and perceive the children because the teachers will know more about the children through the interactions. We should also consider the atmosphere of the interactions, especially the emotions of the teachers. Jingbo and Elicker (2005) found that emotional tone in teacher-child interactions in China were mostly neutral or negative (40% and 48% of the observed period respectively) after spending three entire school days in six Chinese kindergarten classrooms and analyzing their complete descriptive data of the teacher-child interactions. The relatively high percentage of negative emotional tone was resulted from the majority of behaviors associated with it (i.e. disciplining, directing, or taking care of children's needs). Similarly, the neutral tone was associated with teachers' behavior of asking questions, asking for help and playing with children. While looking at the expressed feeling to the children, about 58% of time was positive emotional tone and 42% was negative. More interestingly, the teachers responded in a negative tone almost 80% of the time when a child was expressing his/her ideas (Jingbo & Elicker, 2005). Despite the teachers were most likely portraying a negative tone to the students, the achievement (in terms of mathematics) scores for Chinese students have been higher than American students (Geary, Bow-Thomas, Fan, & Siegler, 1993). There is a possible link between the emotional tone of the teacher-child interaction together with the content and the likelihood for the students to perform better in

academics. For American teachers, they are supposed to be very loving and expressing a lot of positive tones during the interactions as West (1996) said that they cared and loved so much. When coming to administering reinforcement and punishment, there are differences between how the teachers perceived the effectiveness and the frequency of using them. Ramaswamy and Bergin (2009) found that awarding stars-stickers coupled with an explanation of the reward was very effective in encouraging the students to initiate desirable prosocial behavior. Regardless of the finding, recently, Ding, Li, Li and Kulm (2010) have found that Chinese teachers' administration of reinforcement and punishment did not align with their perception of the effectiveness of the strategies. Besides the relatively higher consistency between the percentage of teachers viewed praising good students is effective and actually practiced it, only a minimal number of teachers who viewed talking to the misbehaved students after class and helping him/her to reflect on his/her behavior is effective, and practiced this strategy. This suggested that the teachers are not interacting with the students in the way they wanted.

The current study attempts to investigate differences between American and Chinese kindergarten classroom interactions and also the possible relations between teachers' management language, especially focusing on behavioral encouragement and discouragement in teachers' utterances, and the students' academic skills. I hypothesize the following:

- There is a positive correlation between the teachers' expression of behavioral encouragement (i.e. good behavior identifications, reinforcement and future reinforcement) and the students' academic achievement scores in both cultures;
- Behavioral encouragement will have stronger correlation with American students' academic achievement scores and behavioral discouragement (i.e. bad behavior identification, punishment and future punishment) will have stronger correlation with Chinese students' academic achievement scores.

Method

Participants

The participants in the study are 410 kindergarteners and their teachers in 14 classrooms in Beijing and 21 classrooms in the United States. In order to obtain a representative data set, all of the schools selected are public schools and are from a wide range of socioeconomic backgrounds. The mean age of the Chinese sample is 5.51 years old with the range of 4.53 years old to 6.83 years old, 51.8% of them are female and 48.2% are male. The mean annual household income is around RMB 122355 (USD 18658.77) with the range of RMB 3000 (USD 457.49) to RMB 560000 (USD 85398.32). 90.5% of Chinese participants are the only child in the family, 8.9% have one sibling, and 0.6% have 2 siblings. The mean age of the American sample is 5.45 years old with the range of 4.5 years old to 6.42 years old, 52% of them are female and 48% are male.

Observation

The classrooms were videotaped for around 60 minutes at the beginning of the school year by trained researchers. Two cameras are used for the observation, one capturing the teacher and the other capturing the group of the students. The observations are always the first 60 minutes of the school day with a few minutes before and after to ensure the continuity of the class activities. The children's and also the teachers' behavior are analyzed using Noldus Observer XT software.

Assessment

Trained researchers assess each child individually for literacy and math skills in a 30-minute session in a quiet area with occasional noise noted from other students walking to and from classes. If the participants appear to be distracted by the noise, the researcher will wait until the noise is over to recapture the participants' attention and carry on with the assessment. The order of the tests is randomized to avoid any confounds due to the ease and the time of the test taken. Literacy is assessed in the U.S. using Letter-Word Identification (LW) subtests of the

Woodcock-Johnson III Test of Achievement (Mather & Woodcock, 2001). The tests measure the early literacy of the children by asking them to name letters and words and to match words with corresponding pictures. In China, a 61-item character recognition task (CR) is used for assessing literacy skills (Chow, McBride-Chang, Cheung, & Chow, 2008). The children are asked to read aloud Mandarin characters of increasing difficulty. Mathematics comprehension is measured with the Applied Problems subtest of the Woodcock-Johnson III Test of Achievement (AP), whereas the basic mathematics skills are measured with Enumeration, Problem, additions/subtractions from the Zareki-KP task (Z) (Mather & Woodcock, 2001; von Aster, 2001). Both of the tests are translated to mandarin for the Chinese participants appropriately for their culture (Liu, 2007).

Coding

After collecting the videos from our observations, they are being coded by trained researchers. The researchers code each utterance that falls under our coding categories using Noldus Observer XT software (each utterance is defined as a complete thought). The frequency of the utterances is coded under the categories of directions, behavior identifications and consequences. Direction is subdivided into direction to persist, direction to repeat, routine and competition. Direction to persist is any directions which asks the students to continue their current activities, and it is used when the utterance consist of phrases that have similar meaning to "keep", "finish" and "stay". Direction to repeat is any directions which asks the students to repeat what they have done because they have not done it correctly. It is used when the utterances consist of phrases with similar meaning to "go back and do it right this time", "louder" and "do that again". Routine is used when the teacher uses a standard statement or action that the students have learned already and knew a specific response. Examples would be the teacher says "five" and all the students raise their hands and stop their work immediately. Competition is used when the teacher uses statements that consist of comparative or superlative

phrases which create a competitive environment for the students to work in. An example is that the teacher says "let's see who is the fastest to sit down nicely". Under behavior identification, either good behavior identification or bad behavior identification is used for teachers' utterances. Good behavior entails that the behaviors that are desired by the teachers at most of the times; and bad behaviors are those undesired ones. An example of good behavior identification would be the teacher saying "it is nice how you are reading quietly", whereas a bad behavior identification would be the teacher saying "you are chatting too loudly". For consequences, there are 6 subcategories, including reinforcement, future reinforcement, punishment, future punishment, social comparison and time out. Reinforcement refers to any verbal affirmation, positive physical contact or clapping, etc. that is in respond to the students' good behaviors without identifying the behaviors. Examples of verbal reinforcement are "good job", "great", and "thank you". Punishment refers to verbal criticism, removal of rewards, or negative physical contact, etc. This is also specified into social comparison when the teacher is telling a student that he or she is not as smart as or working as fast as others, etc. Behavioral identification and consequences could be coded for the same incident since the teacher could either tell the student why they are being punished or not tell them why (e.g. "You're not paying attention. Stand up for five minutes." These two utterances do not necessarily go together.) Time out is also singled out as another category to capture the number of times that teachers use removal of privileges as punishment. Reinforcement and punishment are being coded as future reinforcement and future punishment respectively when the teacher refers to future consequences. The utterances are coded solely based on the phrases that the teachers used. Tone is not considered to be an indicator for the intention of the utterances.

Due to the large number of observations, multiple researchers are coding the videos. Three native (close to native) speakers of English and Mandarin Chinese are on the coding team for American and Chinese videos respectively. The manager of each team first coded two

American videos for the most accurate master codes with the interrater reliability over 80% as training videos for the rest of the team. The team members code those two training videos, and they check it against the master codes. Once they agree on 80% of the master codes, they code another test video from the American classroom, which also has master codes. If they reach 80% agreement on the codes at the first time for the test video, they are deemed reliable to start coding independently. The same procedure is done for the Chinese videos, except that only one master coder, manager of the Chinese coding team who is 80% reliable with the American coding manager on the training and testing videos, is coding the training videos and the testing video.

Analyses

The analyses presented in this paper are based on the subsample of our pilot data, which includes 17 classrooms, 8 American and 9 Chinese classrooms. Within this subsample, 51.6% of the sample are male, and 48.4% are females. The mean age of this subsample is 5.44 years old with the range of 4.50 years old to 6.83 years old. T-tests were used to compare the frequency of the utterance of behavioral encouragement, discouragement and a variety of academic skills between American and Chinese teachers and students respectively. Bivariate correlation model is used to analyze the association between a variety of academic skills and the numbers of behavioral encouragement and discouragement used by the teachers.

Results

As our sample is gathered from two different cultures, American and Chinese, the first section of the results is a summary of the students' incoming academic skills. For academic skills (see Table 1), the mean scores in Applied Problems subtest of the Woodcock-Johnson III Test of Achievement (Chinese: m = 22.09 & American: m = 15.46, t (14.455) = 7.740, p < .000) and Zareki-KP task (Chinese: m = 22.84/30 & American: m = 7.90/30) for Chinese students are significantly higher than those of their American peers. The Chinese students' mean score for

the Applied Problems subtest of the Woodcock-Johnson III Test of Achievement is even higher than the average scores of the grade-level estimates (14-19 for kindergarteners) based on American sample.

The results in Table 2 also show that there are some differences in terms of the teachers' language used between the American and Chinese classrooms. Although the difference is not significant, the average number of the use of behavioral discouragement is higher in the American classrooms (American: 23.52 utterance(s)/hour & Chinese: 16.13 utterance(s)/hour, t (14.197) = .766. p < .50), whereas the number of behavioral encouragement is similar between the two cultures.

Relations between students' academic skills and Teachers' language

Table 3 shows the correlations between students' academic skills and the number of teachers' managing languages in the American and Chinese classrooms. Overall, only behavioral discouragement used by the teachers has significant correlations with the students' academic skills. The strength of the correlations between students' academic skills and the number of behavioral encouragement by both American and Chinese teachers are not significant with an exception of a slightly stronger negative correlation between American students' basic mathematics skills and the teachers' behavioral encouragement. On the other hand, the table shows that the number of behavioral encouragement does not have a significantly stronger negative correlation with American students' academic skills in terms of mathematics nor a positive correlation with literacy skills, but the number of behavioral discouragement has a significantly stronger negative correlation with Chinese students' academic skills, measured by Applied Problems subtest of the Woodcock-Johnson III Test of Achievement (AP: Chinese: r = -0.700, p < .05 & American: r = -0.542, p < .20).

Discussion

In general, Chinese students are performing better than their American peers in all of our

assessments of their academic skills. The teachers are also managing the classrooms differently in terms of their language used. Although there is not a significant difference between the number of behavioral encouragement used by American and Chinese teachers, the number of behavioral discouragement is indeed different between the two cultures. The American teachers are using more behavioral discouragement than the Chinese teachers. When the students' skills and the teachers' managing languages are linked together, there are some interesting correlations between them. Only behavioral discouragement, but not behavioral encouragement, has negative correlations with the students' academic skills. The magnitude of such correlation is larger in the Chinese sample.

The frequency of teachers' classroom managing languages

Table 2 shows that there are similar numbers of behavioral encouragement used by the teachers in both cultures. Although the numbers are not statistically significant due to our small sampling size from our pilot data, it could still shed some light on how often behavioral encouragement is used by teachers. This could mean that the teachers in both cultures are promoting behaviors that they desired for about the same number of times. However, as we have seen in the results for the Chinese students academic skills, they should have better performance than their American peers in the classrooms (at least not misbehaving as much as their American peers with their higher academic skills). We might be able to gain some insight from the difference in the number of behavioral discouragement used by the American and Chinese teachers. Again, due to our small sampling size from our pilot data, the difference here is not statistically significant (t (14.197) = .766, p < .50). The magnitude of the difference seems to be practically significant (American: m = 23.52 utterances/hour & Chinese: m = 16.13 utterances/hour). The American teachers are using 7.39 more behavioral discouraging utterances per hour. This could be due to the fact that the American students are not performing as well already with their lower academic skills compared to their Chinese peers. Then the

teachers may spend more time on them to minimize the occurrence of undesired behaviors. For the Chinese teachers, they may spend more time in other areas when they do not have to ask the students disengaging in undesired behaviors. The instructions given this time may contribute to the higher academic skills if the same case is true for the previous year. This could also be a good example of the transactional model since the behavior of the students could have influenced the languages that teachers used. Similarly, the languages that the teachers used could be influencing how the students behave as well.

Correlations between students' skills and teachers' classroom managing languages

Our results have shown that there is a negative correlation between the students' academic skills and the numbers of behavioral discouragement used by the teachers in both cultures. In contrast, there is not a significant correlation between the students' academic skills and the number of behavioral encouragement used by the teachers.

The correlation reveals that students with higher academic skills receive less behavioral discouragement. This means that the students with high academic skills, who are more likely to behave in a desirable way, are getting less behavioral discouragement in both cultures, and vice versa. However, when considering the times when the students with higher academic skills are misbehaving, those behaviors are less likely to be discouraged, as shown by the lower number of behavioral discouragement. Although this could also be true that since there are less misbehaviors, less behavioral discouragement is needed. If we were to use the first interpretation that the students with higher academic skills are receiving less behavioral discouragement, their misbehaviors are less likely to be discouraged by their teachers. It will also be true that students with lower academic skills are receiving more behavioral discouragement. With this imbalance of teachers' attention, the influence could differ between the students with higher and lower academic skills. The students at the higher end may be developing slower since they are less likely to be discouraged for their misbehaviors. They

would have to spend more time to figure out that they are not doing the right thing and correct themselves. In contrast, the students with lower academic skills are more likely to be discouraged for their misbehaviors. As a result, the students with lower academic skills may be able to spend more time on the desirable behaviors, and the students with higher academic skills may be spending less time on the desirable behaviors. This difference in the time spent to know what is right could contribute to a slower development of the academic skills for the students with higher skills, and a faster development for the students with lower skills.

Even though the direction of the correlations between the students' academic skills and teachers' managing languages are the same in both cultures, the magnitudes of the correlations between the American and Chinese classrooms are different. In general, almost all of the magnitudes of the correlations in the Chinese classroom are larger than those in the American classrooms. This implies that the situation is more extreme in the Chinese classrooms. For the Chinese students with higher academic skills, they are not only getting less behavior discouragement from the teachers, they are getting even less when comparing to their American peers with the same level of skills. This could, again, be interpreted in two ways. One is that the Chinese students are already with higher academic skills to start with which allows the teachers to spend less time in discouraging their undesirable behaviors, because they are not happening that often. Another interpretation is that with the same level of academic skills compared to their American peers, they are spending more time to figure out the desirable behaviors by themselves because the magnitude of the correlation is larger for the Chinese classrooms. In this case, with the same level of skills in both cultures, they American students could spend more time on the desirable behavior, whereas the Chinese students are spending less time. In addition to the possible overall trend that the students with higher academic skills would develop slower, the Chinese students may be influenced by this effect even more since they are receiving even less behavioral discouragement when compared to their American peers

with the same level of skills. Maybe this is not that big of a deal if they are starting with higher academic skills already. However, it is still important to find out whether the students with higher skills are actually developing slower than those with lower skills.

Limitations

Due to practicality, the observations were not done all at the beginning of the school year. Some of them were done when school started about two months. The teachers' instructions could already be making a difference in terms of the students' performances and behaviors. The relations between the teachers' directions and the students' performances and behaviors are more likely to interact with each other as shown in the transactional model (Sameroff & MacKenzie, 2003). Therefore, the possible sole influences by the students' academic skills to the teachers' classroom managing language might not be significant anymore.

During observations, the researchers were present in the classrooms to operate the video recorders. This could elicit reactivity from both the teachers and the students due to the mere presence of the researchers. As we record the classroom activities for an hour, the reactivity ought to drop once the teachers and the students are more comfortable with the researchers and the video recorders in the room. In addition, we use the average number of the different types of utterances for the analyses to avoid focusing too much on a particular time frame within the observations.

Another limitation from the coding procedures is that researchers are only categorizing the utterances base on the phrase used regardless of the tone and the facial expressions of the teachers. Sometimes, the teachers may use different tones and facial expressions to indicate a slightly different meaning than the phrases they used. This might lead us to misinterpret the real meaning of the utterances to the students.

Considering the assessments used, they may not be able to reflect the full abilities of the students. For the American testing environment, they are not likely to be a quiet place. The

assessments are usually carried out in an open area, where classes and teachers will pass by from time to time. The participating students could be distracted by the surroundings and not exerting their full effort to respond to the assessment. In terms of cross-cultural comparisons, we could not compare the literacy skills between the two cultures directly because the syllables of the translation between English and Mandarin are not the same. We are only able to use words that have the same number of syllables to carry out the comparison.

In terms of the statistical models used for the analyses, t-tests are used as we assumed normality of the data distribution. However, Poisson Regression or a nonparametric method could be used instead because the data are counts within a time period, which is a Poisson's distribution. Also, we are only allowed to interpret the data at the class level instead of the individual level due to the structure of the data collection.

Future Directions

This study only shows how the skills of the students at the class level could possibly influence the respond of the teachers. Later researches could find out whether the individual skills of the students will influence how the teachers respond to them in an experimental setting. Such research could be done within culture or cross-culturally to find out whether the same skills will elicit similar or different responses from the teachers of different cultures. On the other hand, further researches could investigate on how different types of directions other than behavioral encouragement and discouragement could influence the development of the academic and/or executive functioning skills, and vice versa. Again, it will be intriguing to see whether the same effects will hold true for different cultures. Last but not least, researchers could investigate the patterns of changes in the direction types of the teachers from different cultures over time which could be influenced by the teacher-child interaction, as shown by the transactional model or the mere maturation of the teacher classroom managing techniques.

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Table 1

Assessment	Culture			
	American	Chinese		
	(<i>N</i> = 8)	(N = 9)	t	df
Applied Problems	15.4647	22.0908	7.740***	14.455
(AP)	(1.81757)	(1.69673)		
Character	-	28.2526 ^a	-	-
Recognition (CR)	-	(7.81175)		
Letter Word	13.2362 ^a	-	-	-
Recognition (LW)	(2.46073)	-		
Zareki-KP (Z)	7.9021	22.8370	9.962***	12.614
	(2.11903)	(3.89586)		

Assessment Mean Scores for American and Chinese Students

Note. ^a. *t* cannot be computed because the assessment is only administered to students in either culture. * = p < .05, ** = p < .01, *** = p < .000.

Standard Deviations appear in parentheses below means.

Table 2

Frequency (utterance(s)/hour) Means for Types of Direction used by

American and Chinese Teachers

Types of Direction	Culture			
	American	Chinese		
	(<i>N</i> = 8)	(<i>N</i> = 9)	t	df
Behavioral	49.1299	48.3078	.053	14.958
Encouragement	(30.65254)	(32.95493)		
Behavioral	23.5232	16.1309	.766 [#]	14.197
Discouragement	(16.10994)	(23.38641)		

Note. # = p < .50. Standard Deviations appear in parentheses below

means.

Table 3

Pearson's Product Moment Correlations for Frequency (utterance(s)/hour) of Teachers'

Types of Direction	Assessment				
	AP	CR	LW	Z	
Combined Sample ($N = 17$)					
Behavioral Encouragement	.000	_a	_a	027	
Behavioral Discouragement	443###	_a	_a	450###	
American Sample $(N = 8)$					
Behavioral Encouragement	-0.145	_a	0.038	-0.305#	
Behavioral Discouragement	-0.542##	_a	-0.342#	764*	
Chinese Sample $(N = 9)$					
Behavioral Encouragement	0.178	0.237	_a	0.079	
Behavioral Discouragement	700*	-0.576##	_ ^a	745*	

Note. ^a. Cannot be computed because the assessment is only administered to students in either culture. # = p < .50, ## = p < .20, ### = p < .10, * = p < .05. AP = Applied Problems, CR = Character Recognition, LW = Letter-Word Recognition, Z = Zareki-KP.

Appendix Kindergarten AIMS Classroom Management Coding Manual March 16th, 2011

Teacher statements that are used to manage children's behavior or administer positive or negative consequences for behavior will be coded as point codes (each behavior will be counted, not timed). Statements are coded separately for each utterance. An utterance is defined by a complete thought (a phrase that could be a complete sentence).

Note: If a teacher does not complete the thought or interrupts herself, do not code the statement, (i.e., "When we do readers' workshop....no, I don't need that.") If a teacher asks a question that is a request for information with a factual answer, DON'T code it; if the statement is a direction delivered in question form ("Should you be standing right now?"), DO code it.

Examples:

- "Sit down right now" is one utterance.
- "Sit down and take out your books" is two utterances, because "sit down" is one complete thought, and "take out your books" is another.

Mutual Exclusivity:

Almost all of the categories are mutually exclusive (a statement can only be coded in one category). Exceptions:

- Directions that administer consequences can be coded both as a direction and as a consequence.

If you double code a consequence, write "double code" in the comments field next to the consequence, and make a tally mark in the double code column on the spreadsheet.

Modifier:

- 1. Target of statement
 - Class: the teacher is speaking to the majority of the class
 - Group: the teacher is speaking to a group of students or an individual
 - Class is the default target, unless you can tell that the teacher is speaking only to a group of students or an individual.
 - Note: The target of the statement is the group that the teacher is talking to, not the subject of the statement. For example, if the teacher says to the class, "I like how

quietly Sara is reading," the target is the class, not a group. The target is the group that the information is intended for, regardless of who else can hear the statement. If a teacher gives a direction in response to a child's question, even if the rest of the class can hear the answer, the target is group.

Direction Types

- 1. Direction to persist
 - a. The teacher directs a child to persist in the current activity.
 - b. Examples:
 - i. Keep...
 - ii. Finish...
 - iii. Stay...
 - c. Note: "Focus on..." is not a direction to persist, but "Stay focused on..." is.
- 2. Direction to repeat
 - a. The teacher tells a child to repeat an action in the correct way. The direction must include language that tells the child that he is repeating an action.
 - b. Repeat language:
 - i. Go back and ...
 - ii. Do that again.
 - iii. _____ this time.
 - c. Example: "Go back and walk this time."
- 3. Routine
 - a. The teacher uses a standard statement, gesture, or physical behavior to facilitate transitions between activities. The behavior requires a previously learned response from children. You can only code something as a routine if it is clear that the teacher has already taught them how to respond.
 - b. Example: Teacher says, "Give me five," and students raise their hands and stop talking.
 - c. Note: coding for a routine doesn't follow the utterance rule. Only code for routine use once, even if there are multiple utterances (unless the teacher deliberately repeats the statement because children don't respond correctly the first time).
- 4. Competition
 - a. The teacher uses competition to manage children's behavior.
 - b. Example: "Let's see who can stand the straightest."
 - c. The teacher must use comparative (more, better, -er) or superlative (most, best, -est) language in order to code for competition.
 - d. In order to code for competition, the teacher must be telling children to compete against each other ("Let's see who can stand up straight" is not competition this is a command).
- 5. Behavior Identifications

Behavior identifications occur when the teacher identifies a good or bad behavior that the class, a group, or a child is engaging in or has engaged in. The identification can come in question form.

- a. Good behavior identification
 - i. The teacher points out that a child, group, or the class is (or was) behaving correctly.
 - ii. Good behavior identification should only be coded when the teacher identifies a behavior (though it can be vague), not when she reinforces children for good performance (code that as reinforcement).
 - iii. Examples:
 - 1. "I like how Sam is sitting quietly and looking at the board."
 - 2. "You're being such a good listener."
 - 3. "Is that a good thing to do?"
 - 4. "Thank you for"
 - iv. Non-example: "Sam has been doing such a good job spelling his name!" this is not good behavior ID because the teacher doesn't identify the behavior that the child has engaged in that enabled this good performance. If you remove the phrase "doing a good job," and the statement still makes sense as a good behavior identification, then it can be coded as such (i.e., "You've been doing such a good job listening" could become "You've been listening," and still be a good behavior ID).
- b. Bad behavior identification
 - i. Teacher identifies an undesired behavior (present or past).
 - ii. Examples:
 - 1. "There were some whispers over here, so I couldn't hear."
 - 2. "You're not being helpful."
 - 3. The teacher points out that other kids aren't behaving that way, i.e., "No one else is..."
 - a. Note: this is also a social comparison (see 8e).
 - 4. "Did that help her?"
 - 5. "If you'd been listening..."
 - 6. "Should you be...?"

6. Consequences

Consequences are teacher behaviors that are intended to encourage or discourage children's behaviors, but don't give them information about what to do or not do. Note: Coding consequences follows the utterance rule if the consequences are

themselves verbal (praise, criticism, threats, social comparisons). If the consequence itself is not verbal (i.e., time out, tangible reward, removal of reward, physical punishment), code once for each instance of a consequence occurring, not for the teacher's utterances. For example, if the teacher sends a child to a time out by saying, "You need to take a break. Go sit in the orange chair," this is coded as one time out, even though the teacher used 2 utterances to administer it. If a child is punished by the teacher hitting his desk, code once for the occurrence of the punishment, not for each time the teacher hits the desk.

- a. Reinforcement
 - i. Verbal affirmation, positive physical contact (hugs, high fives), clapping, tangible rewards, etc.
 - ii. Only code a behavior as a reinforcement if it is in response to children's good behavior.
 - iii. Reinforcement is different from good behavior ID in that it does not specify the behavior that the child is being praised for. "Thank you" on its own is a reinforcement; "Thank you for being a good helper" is a good behavior ID.
 - iv. Verbal affirmation examples:
 - 1. Good job!
 - 2. Great!
 - 3. Thank you.
 - 4. Great idea!
 - 5. That's a good plan.
 - 6. That's right.
 - 7. Well done!
- b. Future Reinforcement
 - i. Rewards are promised for a future time point (i.e., granting children extra playtime later in the day.)
 - ii. Example: "You earned a ticket toward our prize."
- c. Punishment
 - i. Verbal criticism of the child (not the behavior if criticizing the behavior, code as bad behavior identification), removal of rewards, negative physical contact, etc.
- d. Future Punishment
 - i. Teacher states that children will be punished or will lose a reward as a result of their actions.

- e. Social comparison
 - i. Tells a child that he/she is not as good, smart, etc. as another child or is not behaving as well as another child.
 - 1. Examples:
 - a. "You are not as fast as Sam."
 - b. "You are not working as fast as Sam."
 - ii. Social comparison can be double coded as a bad behavior identification if the teacher is comparing the child's behavior to someone else's or to the rest of the class.
 - 1. Example: "No one else is getting up right now" is both a bad behavior identification and a social comparison.
- f. Time out
 - i. Gives a child a time out or sends child to "the safe place."