



# Effectiveness of Video Modelling in Training Students with Intellectual Disabilities to Greet People When They Meet\*

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## Abstract

This practice aims to teach students who have intellectual disabilities how to greet people when they meet them. The purpose of this research is to see the effects of video modelling practice over the mental retarded students, when they meet people. In this research, teaching the social skills to the students with mental retardations were evaluated with the effectiveness of teaching with video modelling, model of multiple probe design between subjects from research models of single subject design. In this research four students, whose ages ranged from ten to eleven attending a special education class at a primary school in Ankara and who had intellectual disabilities were participated. The peers group consisted of 3 girls and 2 boys who studied at the same elementary school with the target students (all of them were 11 years old and continue their studied at 5th grade class). Research findings showed that using the video modelling in teaching students with intellectual disabilities help them to acquire the skill of greeting people and after gaining those skills they continued to use the skills and have shown that they continue to use in different situation and to different people. After the interviews done with the mothers and the teachers of the students about the results of teaching the skill of "greeting when meet people" through video modelling, it was seen that they were satisfied with these skills to have been taught to the students. They also expressed that the students had more interaction with their friends around them in much earlier time.

## Key Words

Video Modelling, Social Skills, Skill of Greeting People and Intellectual Disabilities.

Social skills are important elements of behaviour for individuals to start and continue effective interaction. Social skills are defined as the ability to perform proper behaviour in social environments

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and play an important role in the establishment of interpersonal relations and realization of social objectives. Social skills make it easier for an individual to explain his positive or negative feelings in a proper way, defend his personal rights, ask for help from others when it is needed, and refuse inappropriate demands (Westwood, 1993).

It is possible to define social skills as the ability to interact with others in a specific social context. Social skills are learned behaviours that avoid negative reactions in interactions with other people and allow the possibility to receive positive reactions. But some individuals have problems gaining these behaviours (Cartledge and Milburn, 1983). These individuals cannot interact well with the people around them because they lack these social skills (Avcioğlu, 2005). As a result of this, the lack of social skills cause communication problems and

also the individuals are not accepted by their peers (Karakuş, 2006).

Many social skills are generally learned unconsciously and in non-systematic way within peer groups and family. Individuals learn social skills by observing their families, other adults and their peers as a model. This is an unconscious and non-systematic learning method. But for the handicapped individual, this method is usually not valid. In other words, an individual with a disability cannot learn social skills by observing peers without a handicap. That is why social skills for handicapped individuals are taught systematically and they need to be supported to use this ability (Thorkildsen, 1985). Thus, early intervention is required for the development of social skills which are needed for social interaction. If early intervention does not occur, the individuals without social skills could be behind their peers in their social development (LeGreca and Mesibov, 1979).

While teaching social skills to individuals, the observer must take care to define the necessary performance for their development and it is necessary to talk about these subjects (development characteristics of the individual, specifying the performance required for development) inside the programme. The first step in teaching social skills is to choose where to start according to the student's individual performance, and to choose what the priorities are for this individual. After deciding the priorities for the individual, an education programme must be developed (Westwood, 1993).

Many correction methods and educational programs prepared in this direction are used in teaching a social skill to an individual who has intellectual disabilities (Rustin and Kuhr, 1989). For example, Guralnik and Neville (1997) stated that for individuals in the pre-school period, using games to teach social skills can be effective. While Sargent (1991) suggests direct instruction, collaborative teaching, peer teaching, and cognitive processes method for all individuals, Wilson (2002) suggests verbal prompting, natural teaching and role playing games for teaching social skills. To develop social skills, while Pavlicevic and Ansdell (2006) recommend music therapy, Freeman, Sullivan and Fulton (2003) recommend the drama method.

When social skills are taught using different methods, visual support is often used (Genç, 2010). The application of video modelling is the most widespread format in studies on the use of visual support (LeBlanc et al., 2003). Teaching with video modelling is done by observing individuals

who play a role in the video and take it as a model (Odom et al., 2003).

Nikopoulos and Keenan (2003) define video modelling as the occurrence of behaviour by an observer that is similar to the behaviour shown by a model on a videotape. Video modelling is the individual's target behaviours. It contains the observation of the video record of the model that illustrates the individual's target behaviours and contains the repetition of these behaviours (Charlop-Christy, Le and Freeman, 2000). The application of video modelling can be performed by anyone who participates in video recording (peer or adult) or observers as models (Nikopoulos and Keenan, 2006).

Video modelling is also defined as a process to change existing behaviour, or teach new behaviour with a non-living model and samples which are recorded on video (Dowrick, 1999). Consequently, video modelling includes watching a model in the video which helps the individual to change his behaviour or imitate the behaviour. In this process, first a skill is performed by a normal peer or adult and recorded to a video. Later in every teaching session this video is watched by the individual and later they are asked to imitate the same skill they watched (Le Grice and Blampied, 1994). During the application of this method, generally individual are asked to pay attention to the video shown on the monitor in front of them. At the same time, the individual's behaviour while seated is rewarded (Corbett, 2003).

Video modelling, by decreasing educational tasks, reduces the needs for social interaction between the practitioner and individual. So it can be used easily not only by different practitioners but also by individuals with intellectual disabilities by themselves (Charlop-Christy et al., 2000). Additionally, another advantage of the method is it can be repeated as requested in the future to provide continuity of the skill taught and it can be used easily (Le Grice and Blampied, 1994). Because of this situation, it is possible to teach target behaviour and skills in an effective way to an individual with intellectual disabilities. This method can also be used in many environments, including in class or at home. It also contributes to learning the requested target skills and behaviour, facilitating the repetition of instant academic studies, providing feedback (Branham, Collins, Schuster and Kleinert, 1999), and providing an advantage in term of time (Rehfeldt, Dahman, Young, Cherry and Davis, 2003).

After reviewing the field, it has been understood that video modelling is an effective way of learning

motor behaviours, social behaviours, mathematic abilities, daily life skills and job skills for different types of disabilities (Nikopoulos and Keenan, 2006). After reviewing these studies in the literature: it has been understood that different types of disabilities are taught Rehfeldt et al. (2003), MacDonald, Clark, Garrigan and Vangala (2005), Sanders and Parr (1989) meal preparation skill; (Charlop-Christy et al., 2000), Palechka and MacDonald (2010) and Sancho, Sidener, Reeve and Sidener (2010) play skills; (Charlop-Christy et al., 2000), Maione and Miranda (2006) language skills; (Charlop-Christy et al., 2000), Murzynski and Bourret (2007) daily living skills; Norman, Collins and Schuster (2001), self-help skills; Embregts (2000), Kroeger, Schultz and Newsom (2007) social skills; Ayres and Langone (2002), purchasing skills; Gena, Couloura and Kymissis (2005) affective behavior; Sherer et al. (2001) conversation skills; Marcus and Wilder (2009) textual responses skills; Graetz, Mastropieri and Scruggs (2006), Schreibman, Whalen and Stahmer (2000) inappropriate behaviour. Although video modelling is a very well known and widely used practice, it is not common in Turkey. In these studies, individuals with intellectual disabilities are taught pastry cooking skills Halisküçük (2007), services to the hotel floor (Değirmenci, 2010), teaching daily living skills (Öncül & Özkan Yücesoy, 2010), the people who have autism problem are taught to be aware of bad people who may try to kidnap them (Akmanoğlu, 2008), and teaching role playing skills (Sani Bozkurt, 2011). In addition to these studies, teaching social skills individuals with deficiency in Turkey in recent years several studies have tested the effectiveness of different methods. However, individuals with intellectual disabilities to become a model method based on the video that made the teaching of social skills have been encountered in any study. In this study answers to the questions below are being searched: (a) is the teaching packet an effective way for students to gain, continue and generalize the skills of “greeting people” to different people in different environments? (b) What are the opinions of the mothers and teachers in the school the students attend about the teaching of “greeting people”?

### Method

In this section, the research model, dependent variables, independent variables, participants, environment and equipment, study process, collection of data, and data analysis are given.

### Research Model

In this research, the effectiveness of teaching social skills to students with intellectual disabilities through video modelling using multiple probe design between subjects from research models of single subject design. The experimental control of the research was provided with an increased occurrence with the implementation of training package based on video modelling at the starting level observed in the target students' interaction with their peers showed the target skills.

### Independent Variable

The independent variable of the research is an education package prepared for the training of the target students “to greet people” skills with the implementation of video modelling.

### Dependent Variable

The dependent variable of this research is the learning level of the target students to greet people they are familiar with. The target skills are defined as follows and their learning level is accordingly evaluated: (1) to be aware of the familiar person when they encounter each other; (2) to approach the familiar person when they encounter each other; (3) to look at the familiar person's face; (4) to say words like “Good Morning/Hello/Hi”; and, (5) to wait for the answer from the familiar person.

### Participants

The research consists of target students, peers, practitioners and observers.

**Target Students:** The participants in this research were four students aged between ten and eleven attending a special education class at a primary school in Ankara and having intellectual disabilities. Written permission documentation was taken from the parents for the students to be able to join the study including the following four items. (1) The students have never taken part in systematic learning related to the target skills that is the dependent variable of the research. (2) It is understood from the interviews conducted with the families and the teachers of the students that all four students need to learn the target skills. (3) It is expected for the students participating in this research have some preconditioned abilities. (4) These abilities are listed below; (a) to have the visual ability to watch a video, (b) to have a basic reading ability, (c) to be able to join an activity

for at least 20 minutes, (d) to be able to focus on visual attractors for at least 15 minutes, (e) to have receiving and expressing language abilities, (f) to have minor and major muscular abilities which make the students able to show the target skills that they learned from the video they watched. The teachers helped the researchers to select students who have the preconditioned skills as described above. Interviews were made with the teachers of the special education class where the students continue their study. By the end of the interview, three students having the preconditioned skills were chosen. One reserve participant was also chosen in case the target student could not complete the research. The information about the students who participated in the research are described below. The target students' names used in this study are not their real names.

The students (Orhan, Efe, Nurten and Ali), studying in a special education class for intellectual disabilities students at an elementary school, are at the age of 11 and 12 with a light level of intellectual disabilities. They have the ability to perform self-care and daily living skills independently at a desired level. They have major and minor muscular skills that help them to perform the target skills independently at a level that is mentioned in previous research. They follow verbal instruction independently. They have reading and writing abilities. They can focus their attention on an event for a long period (20 minutes), and also work together with others and also in a group. They can take responsibility and fulfil this responsibility independently. Orhan and Nurten can express themselves with 4-5 sentences and they can answer the questions that are asked to them. Also, Efe and Ali can express themselves with 7-8 sentences and they can answer the questions that are asked to them.

**Peers:** The peer group consisted of 3 girls and 2 boys studying at the same elementary school as the target students (all of the peer group members were 11 years old and in the 5<sup>th</sup> grade). Two of these peers took a role in arranging the intervention sessions for the teaching video modelling. Three of the volunteer peers played the role of the peer's model to the target student in the research in the video the target student will watch. The peer and the target students have never known each other before. The peers were carefully chosen and had similar features with the target student in terms of age and gender. The teacher provided input on the selection of the peers. The peers were never diagnosed. The peers were selected based on their possession of the target skills and ability to participate as volunteer

in this study. The peers who participated in the research were not informed about the applications process and target skills.

**Practitioner:** The implementation of the target skills was performed by the special education teachers working at the educational institution where the students were studying. The practitioner, having graduated from intellectual disabilities teaching programs, has been working for 5 years in the institution. They have experience working on social skills education. The person who would perform the application was informed by the researcher, especially about the purpose of the research, dependent and independent variables, probe sessions (beginning level, daily probe, collective probe, generalization, and monitoring sessions) and how intervention sessions would be performed, behaviours of target student and how the practitioner would evaluate these behaviours, and how the practitioner would use the video which would be used in the intervention sessions.

**Observers:** In the research, reliability data related to the dependent and independent variables were collected. Reliability among observers and reliability of the data in the application were collected by two special education teachers who graduated from intellectual disabilities teaching programs and completed their master degree in their field. Information on the following items were given to the observers of the research before they collected the reliability data: (a) the purpose of the research, (b) target skills and behaviours belonging to the target skills, (c) the strategy of education with video modelling, (d) intervention sessions, (e) probe sessions, (f) generalization sessions, (g) correct or incorrect presentation of the behaviour belonging to the target student skills, (h) the expected reactions from practitioners in the situation of correct or incorrect presentation of the behaviour belonging to target student skills.

### Environment and Equipment

The research was conducted in an individual training class which was permitted to be used by the institution where the target students were studying. The individual training class was a place where distracting stimuli were reduced and the students could sit and lay down comfortably as all places were covered by carpets. Data were collected for the beginning, probing, application and watching sessions of the students in the same environment. Data related to generalization were collected in the classes where the students were studying.

The following equipment were used during the research process: video clips where target skills were performed and peer modelling took place, external memory where the video clips were recorded, laptop, video camera, tripod, 82 inch TV, and a control list including the target skills. Additionally, to reinforce the target students and peers who played in the video for the training of target skills, various toys and types of food were used.

The camera shots were taken with three peer models related to target skills before the study began and recorded onto a CD. The peer model was told that they would perform the skills of greeting people when they met them, this event would be recorded, and later the events they performed would be watched by other peers for skill training. The peers were told their role and the tasks to model (what would they would do during the shooting) beforehand and they were recorded using the camera during the session. The video created was watched by three experts and their opinions were taken. All the experts expressed that the video images were prepared properly for the purpose of the training.

### Study Process

In this section, pilot study and study process were described.

**Pilot Study:** Before starting the research, a pilot study was completed for the purpose of obtaining information about whether the educational package using the video modelling prepared earlier was applicable or not. The educational package developed and the pilot study of the data collection instruments were applied to a student who has similar characteristics to the target students. The pilot study was performed in the same individual training class where the study would be performed. At the end of the study, it was noted that the video clips that the peers are played role model in the video, which would be used in the training of social skills and the events are understandable, so the students could watch the video clips easily and they could join the events.

**Baseline Sessions:** Baseline sessions were recorded using a video camera. The practitioners collected data for the baseline sessions by watching this video for the target behaviours inside the group (the target skills which were stated as the dependent and independent variables). The target behaviours were evaluated during the free game events between the target students and peers by observing the behaviours of interaction. In this stage, a video on the CD

was not watched and no training was done. In this session, reinforcement was verbally done until the students' performance was at an acceptable level. In cases where the skills were not performed, or were not performed to an acceptable level, the situation was ignored. The practitioner asked the target students and peers to play a game about what they do when they meet people and the students were told "Come on kids, let's play together" presenting the target warning and the students were asked to interact with their peers by playing the game. After the target stimulus was presented, the behaviours that occurred during the interaction between students and peers over 30 minutes were observed. Until stable data were obtained over 3 consecutive sessions for every single student, baseline data were collected. The probe sessions were conducted in a manner similar to the baseline sessions.

**Intervention Sessions:** The teacher's ideas were selected as the references for choosing the skills to be taught. To do this, first the teachers were asked to define which social skills the students needed and they had to order these skills according to the degree of importance. According to the skill "greeting when meeting people" was defined as the priority skill that they needed. Because the research was done for students who were mentally retarded, the observer was aware that the students had never taken part in social skill education before the practice related with the target skill was performed. For this purpose, the mothers and the teachers were asked not to give any education related to these skills. The teaching of the target skill begun simultaneously and it continued as a teaching session for 30 minutes per day and 4 days per week. Intervention sessions have been maintained during the teaching process up to %100 level in three sessions.

The videos were watched in the game room in the school the students attended. In the video model which was shown, there were three types of peer models. The sample activity related to the target skill was prepared by using the model peers. The model peers were instructed to perform the behaviours which took place inside the target skill and it was also indicated that they would be the model in this way. Before beginning the intervention sessions the practitioners introduced him/herself and the devices like TV and Video CD which would be used during the practice. And also a short explanation has been made about the target social skill. The students were told that they would first watch the video images about the target skill and then they will perform the behaviours which they saw on the video.

They were also told that the video images were a kind of game that was being played by their peers and after they watched that game they would also play this game, too. The practitioner also told the students that while playing the game both their peers and they had their tasks and they had to change these tasks in a specific order. Subsequently, explanations about the tasks inside the activities were given and questions were asked to understand if these tasks were understood in the correct way or not. The students were asked if they understood what they had to do while playing the game. In case the student did not understand what he had to do for a task a new explanation was made. The student was also told that if he/she completed the task in the correct way he/she would be awarded at the end of every session.

After being sure that the target student was fully concentrated on the practice and when he/she was ready, the practice began. The practitioner then told the students "First, let's watch what we need to do when we meet people" and then they watched the video related with this subject. While watching the video explanations about the images were given to the student. For example: "Look. In the images we are watching now, there are students who are at the same age with you. Let's see what they are doing." After watching the video, the video was stopped and the students were told "Let's do what you have seen in the video, together" After that the students and peers were encouraged to do the processes defined in the activity together. The students and peers were made to tell the story (greeting when the class entering) which they had seen in the video to each other and then the activity related with the target skill began. After the tasks were completed in an ordered way, the activity was finished. Afterwards, the students were asked to summarize what was done in the activity and talked about where and how to use the skill inside the activity. The practitioner evaluated the ability of the students to perform the tasks during the practice and then provided feedback to them. The students were thanked for everything they did during the practice and the session was ended. This process was applied to all 3 students.

When the student performed the behaviour related to the target skills in the right way, the student's behaviour was reinforced verbally like "Bravo! You did what you saw on the video. Really good". When the student could not perform the behaviour, they made the student watch the skill's steps again. The practitioners asked them to repeat the behaviour of the target skills again after the student had finished

the watching process. After watching the video again, if they performed the behaviour skill in the right way, the student's behaviour was reinforced verbally with the sentence "Bravo! You did what you see on the video really well", and (+) sign was put into the form in the column where "student can perform the skills at an acceptable level" was written. When a student could not perform any of the behaviour skills even after they watched the video twice, or even if they performed the skills required but not at an acceptable level, a (-) sign was put into the column where "could not perform proper behaviour, after they performed the behaviour skills with the practitioner correctly" was written, and they continue to watch the CD. This process was repeated until they could perform all the desired behaviours at an acceptable level.

**Monitoring Sessions:** Monitoring sessions were organized like the baseline sessions one, three and four weeks after the teaching session.

**Generalization Sessions:** To evaluate if the target skill was being generalized to different people and different environments for the target students, generalization sessions took place. Generalization data were collected five days after all the students fulfilled the standard requirements for 3 consecutive sessions. The teacher was informed about the practice in the generalization sessions. The video images were not shown to the students like it was in the intervention sessions. In the class environment the student was asked orally "what we say when we meet people? You tell them now in class when you come up against your friends" and the student was requested to perform the target skill. The target student's performed skills were recorded at that time and the average points of these data were taken as the target skill's generalization data. The practitioner reinforced the target students with the reinforcements for the target skills which they performed.

#### Collection of Data

In the research three kinds of data were collected in order: (a) effectiveness (b) reliability and (c) social validity.

**Collection of Effectiveness Data:** All the sessions were recorded by using video cameras and the research data were collected by the practitioner by watching these records. In this research during the period of collecting efficiency data on the target skill, the correct and incorrect behaviours of the target students were recorded and the percentage of the correct behaviour rate was calculated. Dur-

ing the evaluation period of the target skill, data related to five different types of behaviours were collected. (a) Recognizing people when the students meet them (posture, gestures and facial expressions), (b) Getting closer to the people when the students meet them, (c) Looking at the face of people, (d) Saying at least one of “Good Morning or Hello or Hi” and (e) Waiting for the reply from the familiar person. In every session during the learning period, the ability to demonstrate the target skills was evaluated at every stated level. In every case, student behaviours were classified as one of three types: (a) the student could not demonstrate the skill; (b) The student could show the skill but not at an acceptable rate; or, (c) The student could demonstrate the skill at an acceptable rate. The percentage of the behaviours was calculated and the result data was processed graphically by putting “+” on the data collection form when the student demonstrated the skill at an acceptable rate or putting “-” on the data collection form for other cases.

**Collection of the Reliability Data:** (a) Reliability among the observers and (b) Practice reliability data were collected as the reliability data in this research.

The inter-observer reliability data of the research was collected by two special education specialists who were granted master degrees from the division of intellectual disabilities education and special education. The observers of the research were educated as observers. The inter-observer reliability data were collected by the observers watching the video records of at least 30% of the sessions related to the start, practice, probe, generalization and permanence stages. The calculation of reliability among observers was done by using the formula  $[(\text{consensus}) / (\text{consensus} + \text{dissent})] \times 100$ . For the target skill all three experimenter’s reliability percentage related to the start, probe, generalization, practice and permanency level sessions was found as 100%.

The practice reliability data were collected with the form “greeting ability when meeting people-education packet’s practice reliability data collection”. Practice reliability data; (a) the practitioner introduced himself and the tools like TV, video cd that would be used during the practice, (b) the practitioner explained the instructional goal and the target skill to the students, (c) the practitioner explained what kind of tasks the students would have during the practice and how they would officiate their tasks, (d) the students practice where to focus on the video, (e) the practitioner provided the video on the cd for the students to watch, (f) the

practitioner explained the images to the student while they were watching, (g) presentation of the skill directly, (h) providing the students to do the activities which are defined at the practice inside the video, (i) providing all the students to try the various roles inside the activity, (j) asking questions about the group practice at the end of the activity, (k) providing the students to summarize the things they watched inside the video and the things they learned at the activity which they practiced and providing them to understand where they could use this knowledge. (l) Giving appropriate reaction for the behaviours that the target students showed (the behaviour to be reinforced while it was shown at the acceptable rate, in case of the behaviour to be shown in a false way: repeating the period of learning by presenting video feedback) and (m) the student’s reinforcement behaviour of the participation behaviour was observed and according to these observations; the practiser’s true behaviours were signed as “+” and false behaviours are signed as “-” to the form. Subsequently, the number of correct behaviours was defined and processed on the form by calculating the percentage. The practice reliability data was collected in all of the experimental sessions. In 30% of all sessions, practice reliability data were obtained by the observer (Tekin-İftar and Kırcaali-İftar, 2001). The results of the practice reliability data was detected as 100% in every teaching packet that was related with the skill which was to be taught to a student.

**The Collection of the Social Validity Data:** In this research interviews were done with the mothers of the students and the teachers at the school they attended to communicate the importance of being able to greet familiar person when they meet. After the research was completed, images from the beginning and final periods of the research were shown to the mothers and teachers separately. The mothers and teachers were then asked to evaluate the appropriateness of the obtained results.

#### Data Analysis

The data obtained by the social skill practice which was performed in this research were graphically resolved. Linear graphic technique is one of the graphical analysis techniques used to resolve the data. The points of the students related to their ability to perform the skill were shown in equal intervals between 0 and 100 on the y axis. Start, Teaching, Probe, Watch, and Generalization data were numbered over the x axis and shown in equal intervals. The social validity data which were ob-

tained by semi-structured interviews done with the mothers and teachers were resolved with the descriptive analysis technique.

### Results

In this section, the continuation results of the students to gain the target skill were integrated with results related with the generalization to different persons and environment. The point of views of students' mothers and their teachers about social validity of the study is introduces in this section. During the practice period the change from one stage to another stage was defined based on 100% measured fulfilment of the target skill.

#### Results Related with Levels of Gaining the Ability of Greeting Someone, Continuation and Generalization

The results related with the levels of every single student who joined the research to gain the target skill to continue and generalize are shown in Figure 1.

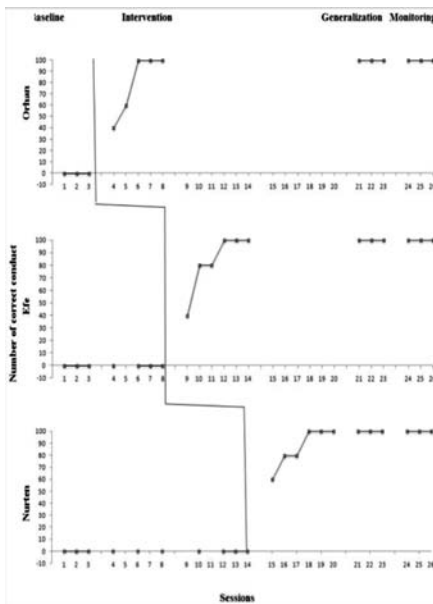


Figure 1.

*Baseline, Intervention, Generalization and Monitoring Data Sessions Which are Related to the Student's Target Skill.*

As shown in the figure, at the beginning phase, the first student Orhan did not have the target skill. Because stable data were obtained in three start level

sessions, the observer moved into the teaching phase of the target skill. The percentage of correct response for the target skill changes between 40% and 100%. Orhan performed the target skill which was organized at the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> practice sessions at the acceptable level of 100%. The defined criterion was fulfilled and the skill's teaching phase was finalized because this level was performed at an acceptable level.

It is observed that the second student Efe did not have the target skill at the start level phase. The observer started teaching the target skill after stable data were obtained in three start level sessions. The correct response percentage changes between 40% and 100% for the target skill during the teaching phase. Efe performed the target skill at the practice phase's 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> sessions at the acceptable level of 100%. Because this performance is an acceptable performance, the defined criterion was fulfilled and the skill's teaching phase was finalized.

As is observed from the Figure, at the start level phase the third student Nurten did not have the target skill. Nurten's correct response percentage of the target skill in the teaching phase changes between 60% and 100%. Nurten performed 100% acceptable range of the target skill in the 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> sessions of the practice phase. Because this is a level of performance which is acceptable, it fulfilled the defined criterion and the skill's teaching phase is finalized. After the teaching related with the three students Orhan, Efe and Nurten is ended, it is observed that they have performed the target social skill at 100% level, which is the acceptable level.

As is seen in Figure 1, for all three students who have joined the research, it has been found out that all of their correct responses to the target skills in the generalization sessions to different people and different environment were 100%. It is observed that the teaching final data and the generalization data are at the same level for all of the target students.

#### The Reviews of Mothers and Teachers about the Social Validity of the Practice

In the research the practice's social validity is observed by asking the opinions of the students' mothers and teachers about the subject which generates the research's target skills teaching that is described as "greeting when meeting people" and the subject that is defined as "teaching this strategy using a video model." According to these opinions, all the mothers and teachers of the stu-



dents who joined the research were satisfied with the target skills being taught and the teaching to be done by an expert. Once again, they expressed that these skills having been taught to the students were very important for them. They also expressed that it made the students more social when they greeted their friends and made it easier for them to have more social interaction, and again these interactions helped them to be more social. And the mothers and teachers also expressed that "Beyond their familiar friends, they have more new friends compared to the past." The parents and teachers also said that the students used this skill that was taught to them in their daily life, at home, at school and on the street.

### Discussion

In this research the effectiveness of the subject "video modelling to teach the skill of greeting people when they meet to mentally deficient students" is observed. The observer tried to understand the views of the students' mothers' and teachers' about the subject of the target skill's teaching studies conducted by video modelling and they obtained discoveries. At the end of the discoveries obtained from the research, it is understood that teaching using video modelling is effective for the target skill to be taught for the students. Additionally, at the end of the research it is understood that the students can generalize this skill to different environments and people and they can continue this skill after the practice ends also. The social validity data which was collected from the mothers and fathers of the students shows that, their opinion about the target skill's being taught to the students who are mentally retarded, is positive. These results show similar specialities with other researches that are "skills of understanding emotions with the skills prepared of teaching studies with conducted video modelling" (Bernard-Ripoll, 2007), communication and speaking skills (Allison and Dorothea, 2010; Sansosti and Powell-Smith, 2008; Scattone, 2008; Sherer et al., 2001), the skill of starting communication (Nikopoulos and Keenan, 2003), the skills of playing games (D'Ateno, Mangiapanello and Taylor, 2003; Paterson and Arco, 2007), social interaction skills (Bellini, Akullian and Hopf, 2007; Bidwell and Rehfeldt, 2004; Kroeger et al., 2007; Maione and Mirenda, 2006) decreasing and increasing inappropriate behaviours (Cihak, Fahrenkrog, Ayres and Smith, 2010; Graetz et al., 2006) over the subject of teaching studies with conducted video modelling.

Because of video modelling is an effective way of teaching oral and motor behaviours, social behaviours, mathematical skill, daily life skills, job skills, skills related with safeness, attention disorder and coping with problem behaviours in different groups of disabilities, it takes place in the offered methods (Nikopoulos and Keenan, 2006). The teaching done with video modelling is a kind of visual teaching, it causes the target behaviour to be described clearly so it provides more advantages relative to the traditional methods and it gives the possibility for the practice to be more useful and effective. This makes things easier especially for the students who have disabilities. Teaching studies with video modelling also causes the care times for the subject that is studied to be longer and increases the care and interest. By this way it is understood that distraction is minimized (Pierce and Schreibman, 1994). This state increases the motivation of the students and causes it to be a method that the students like (Schreibman et al., 2000). An advantage of this method is that it costs less than the method of using live models. The teachers can use these videos not only for the target students, but also for the students who have similar disabilities. Video clips give the possibility of presenting the critical steps of the skills again to the teachers. So the teachers can prepare a time period by using the videos that they can use again for being able to describe many functional skills. Because of this advantage video modelling method is an appropriate teaching strategy for mothers and fathers (Ayres and Langone, 2002; Banda, Matuszynyn and Turkan, 2007; Corbett, 2003; Graetz et al., 2006). In this practice the number of intervention sessions can be reduced, which is one of the method's advantages. The state which causes this result is one of the strengths of the research.

The observer must evaluate the special characteristics of a student before he decides what to teach. The observer must decide which social skill to be taught and if the social skill to be taught is necessary or not for the student, according to the realization of the inadequate skills and the skills which the student already has. To define where to start the teaching of the skill must begin for the students and to define which skills have more priority just to observe what the student does or what the student does not do is not enough, it is also necessary to define what kind of social skills the student needs first (Cartledge and Milburn, 1986; Rustin and Kuhr, 1989). It could be said that one of the most important steps for the teaching practice done in this research to be effective is for the observer to

define the inadequate and prior social skills and select the target skill according to this definition. The target skill which is “greeting when they meet people” is one of the social skills that gives positive results for the students at school, home and also in other environments.

Another result of the research shows that, the students who have intellectual disabilities still continue to perform the target skill after the first time they obtained it, in the first, third and fourth weeks, at 100% level. Also in the generalization results, it is defined that the students could generalize this target skill for the different environment and different people at 100% level. The possibility of using video modelling which is thought to be used effectively and efficiently while educating the students who have special needs in recent years, presents the opportunity of different examples for the practitioner and the student and gives many benefits like high control, the ability to use the same models repeatedly and to be able to be use the videos personally during the period of being model. It is proposed that these benefits make it easier for the taught skills to be continuous and generalized (Rehfeldt et al., 2003). The results obtained from this research which is about permanence and generalization are consistent with this knowledge. Based on these, it can be thought that the results of the research which are about the permanency and the generalization, can contribute to the literature of the effective teaching.

After the interviews were completed with the mothers and the teachers of the students about the results of teaching the skill of “greeting when meet people” by video modelling, the knowledge obtained is that they are satisfied with these skills to be taught to the students. They also expressed that the students have more interaction with their friends around them than previously. This knowledge presents the importance of the social skill which is greeting ability that was mentioned by LeGreca and Mesibov (1979), which is necessary for successful peer communication. In the same way, Knapczyk and Rodes (1996) and Westwood (1993) also mentioned about the importance of greeting and they emphasized it is a very important skill to be able to reach an average level of social adequacy and to have a successful social interaction. It is possible to say this practice’s social validity is high based on these data. So it is also possible to say that the greeting ability which was taught in this practice is an important social skill and it benefits peer communication also.

According to the results, the following conclusions can be offered: Both special education class teachers and general education class teachers can try video modelling for the teaching of different discipline subjects in the class environment for the appropriate behaviours to be increased and decreased. Seminars about how to do teaching by video modelling can be done for the teachers. The effectiveness can be researched by applying it over the development of the mental retarded students in different fields, and decreasing the inappropriate behaviours. For the purpose of increasing the generalizability of the research results, the research can be repeated in different environments by different researchers and by teaching different skills. In this research the results can be compared to each other by applying the teaching packet which was prepared for the mental retarded students, according to the video modelling method over different groups of retarded students. It can be observed if it differs or not during the phases of teaching social skills by video modelling to the students who are mentally retarded. Those phases are modelling, modelling acquisition, monitoring and generalization. It can be observed if it differs or not during the monitoring and generalization phases of video modelling related with the adult model and peer model and see if the effectiveness changes or not during these phases. Research can be done about the study of certain behaviours to be increased or decreased by the teacher centred traditional teaching methods and also about comparing this video model method in terms of effectiveness and efficiency. In addition to observing the effectiveness of the social skill teaching packet, qualitative analysis can be added and qualitative data can be collected. Finally in this research the social validity data are collected from the teachers and the mothers. In the advanced research it can be offered to collect social validity data from the students’ themselves, their brothers and sisters, their friends and their fathers. This research has been limited to 3 students and their ability of “greeting when meet people”. In advanced researches this practice should be repeated by using different skills.

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