

CHAPTER - II

REVIEW OF RELATED LITERATURE

2.1 Introduction

To develop clarity and comprehension in any study, it is necessary first to review the various concepts, research methodologies and analytical tool used by researchers in each study. Such an attempt would help the researcher to have a better and precise understanding of the perspectives of the research problem and would also facilitate the researcher to modify and improve the present analytical framework in the right direction to suit the problem selected. The findings of earlier studies would guide the researcher in setting the hypotheses and objectives enabling to evaluate the validity of the findings.

An essential aspect of a research is the survey of related literature. “Study of related literature” implies locating, reading and evaluating reports of research as well as reports of casual observation and opinion related to the individual planned research project by analyzing the previous research findings. The researcher gains further insight into the study topic (Sukia, 2002).

The studies quoted in the review of literature of this investigation are quite dated as no studies have been done in the recent past in this area or related area. That is one of the key factors that have prodded the investigator to take up this topic.

The literature pertaining to study on **“Effect of Visual Prompting Technique on Self Protection Skills among Female with Mild Intellectual Disability”** is reviewed and presented in this chapter under the following headings.

1. Abuse against women with disabilities
2. Sexual abuse among female with disabilities
3. Physical abuse among the female with disabilities
4. Sex education for adults with intellectual disability
5. Decision making and safety awareness programme
6. Teaching Self protection skills for female with intellectual disability
7. Impact of visual prompting technique in training the intellectually disabled
8. Impact of Picture prompting techniques in training intellectually disabled
9. Impact of Video modeling and video prompting in training the intellectually disabled

2.1 Abuse against the disabled women

Ballan, Freyer, Marti, Perkel, Webb and Romanelli (2014) investigated a study on “Survivors of Intimate Partner Violence with Disabilities”. The retrospective case study reviews of 886 clients were used covering an 8-year service period in a non-residential domestic violence disability program. The results indicated that disabled women need best practices in the area of prevention. In addition it also provided crucial information for service providers who need to understand the multifaceted and unique needs of survivors.

Emersone and Roulstone(2014) carried out a study on “Disabled people’s exposure to violent crime and hate crime”, he examined the self-reported rates of exposure over the preceding 12 months to violent crime, hate crime, disablist hate crime using survey method. The Information was collected from a sample of 37,513 British adults at the age of 16 and above. Results showed that disabled adults were significantly more likely to have been exposed to violence (hate crime, violent crime) than their non disabled peers.

Powers, Hughes, and Lund (2009) investigated the interpersonal violence and women with disabilities analysis of safety promoting behaviors. Three hundred and five disabled and deaf women participated. Audio computer assisted self-interview was used to collect the data on women's use of safety promoting behaviors. Exploratory factor analysis revealed factors related to in quest of abuse-related safety information, building abuse-related safety promoting skills, using relationship support, planning for relationships significant relationships to women's experience of different forms of abuse and their perpetrator's characteristics.

McFarlane, Hughes, Nosek, Groff, Swedlend and Mullen (2004) carried out a study on "Abuse Assessment Screen-Disability (AAS-D): measuring frequency, type, and perpetrator of abuse toward women with physical disabilities. Multiethnic sample of five hundred and eleven women aged 18-64 years were interviewed using a questionnaire, at public and private specialty clinics to detect the prevalence of abuse for the past one year. The findings showed that perpetrator of physical or sexual abuse was most likely to be an intimate partner. Disability-related abuse was recognized equally to an intimate partner or a care provider, or a health professional.

Saxton, Curry and Powers (2001) investigated the perceptions and experiences of women with physical and cognitive disabilities related to the abuse by familiar and unfamiliar personal assistance providers. Focus groups and individual interviews were conducted with 72 women to investigate how women define personal assistance abuse, the barriers they face in managing the abuse and strategies they recommend to prevent or stop abuse. Findings revealed that with experience, support, and appropriate resources, women with disabilities can effectively handle this challenge.

Young, Nosek, Howland, Chanpong and Rintala(1997)conducted a study on prevalence of abuse among women with physical disabilities. The study was carried out with 860 women.Among the sample 439 were women with physical disabilities and 421 were without disabilities.

The samples were reported to be the respondents of national sexuality survey. Case-comparison was done using written survey. Data were analyzed using χ^2 analyses and the Mann-Whitney U Wilcoxon rank sum W tests. The result revealed that in both groups' women had experienced some type of abuse at some point in their lives but women with physical disabilities were more likely to be abused by health care providers physically and sexually.

2.2 Sexual abuse among female with disabilities

(<http://timesofindia.indiatimes.com>)

Rikshawala's wife who is hearing impaired was raped by a person at 10 P.M. in the Ram Nivas Bagh of Jaipur. The accused was a 19 year old young student.

On the night of May 9th, 1981, Laxmi, Arjun's wife is a hearing impaired woman was returning to her house at about 11.00 p.m. Three accused vigorously abused her sexually. The prosecutrix narrated the story to the husband in the night at about 1.00, and both of them went to the police station and produced the clothes having semen before the police and lodged the report. She was examined.

On Feb 29, 2012, a young totally deaf girl was raped by a duty doctor at the medical college in Bankura Sammilani, her parents complained about that their daughter had been sexually assaulted. For forensic test she was admitted in the Kolkata hospital. A three member committee had been set up to look into the complaint. Pranab Kumar, Superintendent of Police appointed an interpreter to investigate the case.

On Feb 2, 2014, in Cossipore, physically challenged girl of 16 years was supposedly lured, then abducted and locked in a house before being raped. The victim was tied up in a bed and was partially undressed condition at the time of rescue. The accused Sk Ashfar Ali, was an auto driver of 26 year old, was arrested. The victim was already known to the accused

earlier and had lured her to follow him; however, he has deprived of the offence of rape and admitted that he had molested her.

August 15, 2013, in Mukund Vihar, Delhi intellectually challenged girl aged 12 years was allegedly raped by a physically disabled neighbour of 43 years. When the victim was playing, the accused made her to follow him to the shops godown. He then sexually assaulted the girl.

January 12, 2013, a physically handicapped woman was sexually abused at Jharkhand. Ajit Kumar was the accused who abused the woman in the evening hour when the victim was returning home from bank.

15th November 2013, in Nagpur, mentally unstable and physically challenged woman aged 40 years was allegedly by a 35-year-old Ramsingh Gopisingh Mehtoin Damman and Nagar locality in the city. The accused was arrested under relevant sections of the IPC.

November 21, 2013, a five-year-old physically challenged girl was reported as a rape victim. She was raped by Sanjay Verma who is 24-year-old residing in Beldara Seoni village in Chattisgarh. The accused was arrested immediately after the event. The girl was living with her grandparents. When her grandparents went for work, the accused sexually abused her. The neighbours rescued her with the screaming sound.

On Jan 1, 2013 in Noida, A case was registered In Dadri police station .The victim reported in her complaint that she was abused. On December 29, 2012 her father gave her some sedatives and sexually abused her when she was unconscious.

October 31, 2013, Tuesday night a physically challenged girl of 16 years old was sexually abused by group of persons at Baduria in Bengal. They took her to an isolated place and sexually abused. Four persons have been arrested in connection with the case.

2.3 Physical abuse among women with disabilities

Casteel , Martin, Smith, Gurka and Kupper (2007) conducted a study on “National study of physical and sexual assault among women with disabilities”. A retrospective longitudinal study was carried out with 6273 non-institutionalized women aged 18 years who participated in (NVAW) Survey. This survey examined the association between the level of disability and the type of abuse. The experiences of sexual assault before the interview were examined. The findings showed that women with disabilities who were dependent for daily living were at increased risk of sexual abuse.

Nosek, Hughes,Taylor and Taylor (2006) carried out a research on dsability, psychosocial, and demographic characteristics of abused women with physical disabilities. 415 women with physical disabilities were recruited from private and public specialty outpatient clinics and examined for different types of abuse they faced. Logistic regression analyses were used. The findings showed that women with disabilities who were younger, more educated, less mobile, more socially isolated, had experienced higher levels of abuse in the past.

Nosek and Hughes et al (2003) carried out a study on “women with disabilities experience specific vulnerabilities to abuse”. 504 women with disabilities participated in the study. Questionnaires were used to assess the sexuality and relationship. Qualitative techniques were used to analyze the specific types of abuse such as emotional, physical, and sexual. The result revealed that the disability is not a protective factor against abuse; indeed, it often serves to reduce a woman's emotional and physical defenses. It also indicated that there is a need for the development of disability-sensitive abuse screening instruments, and a tool for women with disabilities in recognizing abuse.

2.4 Sex education for adults with intellectual disability

Hughes, Whelen, Pepper, Gabrielli, Lund and Legerski et al (2010); found out the knowledge of women with developmental disabilities on skills related to safety. Seven women with diverse disabilities participated. Baseline and post intervention questionnaires were administered to a sample of women who completed a safety awareness program. Eight interactive sessions were designed to increase protective factors in Community site for persons with disabilities. The major outcome of the study showed that there was an increase in safety skills, social support/isolation, and safety promoting behaviors. The result revealed that there was a significant increase from baseline to post intervention on the measures of self-efficacy and safety skills.

Hickson, Khemka and Golden (2008) carried out a study to find out the measures related to protection for people with disabilities. Thirty six women with intellectual disability were investigated for abuse, and no history in the previous five years. The study was done in the areas of decision-making in response to simulated situations of different forms of abuse, including sexual, physical, and verbal abuse. Findings showed that there was a significant difference between the two groups in response to abuse situation.

Caspar and Glidden (2001) examined a sexuality education program developed newly for 12 adults with developmental disabilities (DD) to find out whether the sexual awareness and knowledge could be increased, and their attitudes regarding sexuality could be changed. Experimental design was used. The results revealed that the knowledge increased and attitudes had changed among the adults with developmental disability.

Garwood and McCabe (2000), conducted a rationale study on to examined the effectiveness of the Sexual knowledge, experiences and feelings of six adolescent and adult men before and after intervention using

the Sexuality Knowledge, Experience, Feelings and Needs Scale for People with Intellectual Disability (Sex Ken-ID). The results revealed that there were an increase in the sexual knowledge of the participants at the end of the program and suggested the need for parental education regarding the sexuality of their children.

[McDermott](#), Martin, Weinrich and Kelly (1999) evaluated the effectiveness of a sexual education and health promotion program for 252 women with mental retardation was analyzed using an evaluation model. Hygiene, social interaction, and sexual experience were the three factors which affected sexual knowledge directly. An increase in sexual knowledge was directly associated with a greater number of instructional contacts. The analysis indicates that the program was effective for adults with mental retardation.

[Lee](#) and [Tang](#) (1998) evaluated 72 female Chinese adolescents with mild mental retardation for the effectiveness of the behavioral skills training program in the primary prevention of sexual abuse. Experimental study was used for the study. The experimental group demonstrated greater knowledge regarding sexual abuse and self-protection skills in the posttest, which was maintained after 2-month follow-up. The result suggested that a modified behavior skill training program was more effective among Chinese adolescents with mental retardation.

[McCabe and Cummins \(1996\)](#) evaluated the mild intellectual disabled people for sexual knowledge, experience, feelings and needs. Thirty samples of 18 females, 12 males with mild intellectual disability residing in community houses and a contrast group of 50 first year psychology students (32 females, 18 males) were involved in the study. Knowledge on sexuality was assessed using Sex Ken scale through interview method. As a result it was found out that people with intellectual disability had lower levels of

knowledge in all areas except menstruation and body part identification. There was no difference between the two groups in sexual abuse.

[Huntley](#) and Benner (1993) examined the barriers experienced by the professionals on imparting sex education for adults with mental retardation. Professional from 10 agencies participated and gave their opinions in a structured interview. At the end of the interviews it was observed that the staff agencies serving adults or adolescents with mental retardation would facilitate them to provide and counseling and systematic sex education.

[Lindsay](#), Bellshaw, Curlross, Staines and Miche (1992) investigated the increase in knowledge among people with intellectual disabilities followed by a course of sex education. Parts of the body, masturbation, male puberty, female puberty, intercourse, pregnancy childbirth, birth control and venereal disease are the eight areas were assessed on their level of sexual knowledge for forty six samples. Retest was conducted after 9-months of sex education program and followup was done after 3 months. A control group of 14 subjects were tested on two occasions, after 4 months. The result revealed that there was a significant and substantial increase in sexual knowledge on all areas among the experimental group than the control group.

Gary, Fisher, Bancroft and Jenkins (1985) conducted a study on teaching the mentally handicapped to avoid sexual exploitation sample of mildly, moderately and severely mentally handicapped participated. A separate curriculum was designed in special education curriculum on sexual exploitation for mildly handicapped and self protection for the moderately and severely retarded. Every day for 24 weeks 30-45 minutes sessions were conducted using materials adapted to meet the needs of the students were provided. The findings revealed that the experimental group performed significantly better than the control group.

2.5 Decision making and safety awareness programme

Whelen, Hughes, Gabrielli, Lund, Wendie and Bramson(2014)evaluated the effectiveness of safety awareness program for women with different disabilitiesbefore and after intervention. Ten subjects were selected from centers for independent living (CILs), were randomly assigned to either a personal safety awareness program or usual care for duration of eight weeks. The program focused on safety awareness, abuse and safety knowledge, safety skills, self-efficacy, social support, and safety promoting behaviors. All participants completed pre, post and 6 month follow-up.the program showed a significant impact on the acquisition of the skills related to safety.

[Khemka](#),Hickson and Reynolds (2005) examined the curriculum on decision making designed to empower women with mental retardation to resist abuse. Thirty six women with mental retardation were randomly assigned to either an intervention or a control group. Results indicated that the performance of the women in the intervention group was superior to that of the women in the control group on the measures of knowledge, decision-making, and empowerment but not on a measure of stress management.

[Miltenberger](#) · Roberts, Ellingson, Galensky, Rapp and Long (1999) carried out a study amongwomen with mental retardation in order to find out the effectiveness on generalization of sexual abuse prevention skills.In this investigation they evaluated the procedures for enhancing generalization following training. Five women with mental retardation were given training on 10 behavioral skills followed by in situ training. As a result skill acquisitionwas noted through behavior skill training and in situ training during naturalistic assessments.

McCabe (1999) compared thesexual knowledge, experience and feelings among people with disability with general population. Sixty people with mild intellectual disability with 28 males and 32 females of 27 years and

60 people with physical disability of 33 males and 27 females of 28 years and 100 people from the general population with 40 males and 60 females of 30 years were selected for the study. Sex Ken scale was used in this study. It was noted that people with intellectual disability experienced lower levels of sexual knowledge and experience, more negative sex attitudes and stronger sexual needs than people with physical disability. People with physical disability demonstrated these same trends when they were compared to people from the general population.

2.6 Teaching Self Protection Skills to Female with Intellectual Disability

Haseltine and Miltenberger(1990) carried out a study on teaching Self Protection skills to persons with mental retardation. Eight adults with mild mental retardation were evaluated using a curriculum for teaching self-protection skills. The curriculum was presented in a small-group format across nine sessions for about 25 to 30 minute including instructions, modeling, rehearsal, feedback, and praise to teach skills related to discrimination and safely response to abduction and sexual abuse situations. Self protection skills were assessed in situ simulations involving solicitations from adults. As a result it was noted that one subject learned the criterion skills and maintained them after 6 month followup.

Poche, Yoder and Miltenberger (1988) compared the other methods of teaching self protection with a videotape training program to prevent child abduction. The two types of samples were kindergarten and first grade students. The strategies used for the experimental group is videotape only, a standard safety program, videotape with behavior rehearsal, and no training. Post training and followup was done for self protective behaviors. Results revealed that the videotape program with behavior rehearsal was highly effective in teaching children safe responses to potential abductors.

2.7 Impact of Visual Prompting Technique in Training the Intellectually Disabled

[Perilli](#), Lancioni, Hoogeveen, Caffo, Singh and O'Reilly (2014) assessed the effectiveness on video prompting versus other instructional strategies for persons with Alzheimer's disease. The two studies assessed the effectiveness of video prompting as a strategy to support persons with mild and moderate Alzheimer's disease in performing daily activities. In study I, video prompting was compared to an existing strategy relying on verbal instructions. In study II, video prompting was compared to another existing strategy relying on static pictorial cues. Video prompting and the other strategies were counterbalanced across tasks and participants were compared within alternating treatment designs. Result revealed that video prompting was effective in all participants.

[Burke](#), Allen, Howard, Downey, Matz and Bowen (2013) carried out a study on tablet based video modeling and prompting in the workplace for autism individuals. A multiple baseline design was used to assess changes. Video modeling and prompting with 13 minute video depicting an individual completing job responsibilities that entailed checking to make sure materials were in working order, replacing defective items, packing materials in a container, entering information into a computer, and attaching a label to a container. Results suggested that video modeling and prompting were effective for all the samples with autism.

Cullen (2013) conducted a study with three male participants with intellectual and developmental disabilities to see the effects of self directed video prompting on iPods. To determine the effects before and after the intervention on the accuracy of vocational task acquisition in integrated employment settings multiple probe design. The result demonstrated that all the three samples acquired the knowledge of device usage in two to five trials.

Chan, Michael, Lambdin, Lindsay, Larhoven and Toni (2013) conducted a study on thirty five year old caucasian man with down syndrome for teaching leisure skills using a video prompting intervention package the sample. Task analysis was done for each leisure skill along with brief videos depicting the completion of individual steps. Multiple probe design was used across behaviors. The video prompting intervention was introduced for painting a picture, listening to music, and taking a digital picture. Results indicated that the participant successfully completed steps of the leisure skills with the aid of video and instructional prompt.

Cannella-Malone, Wheaton, Wu, Tullis and Juhee (2012) compared the skill acquisition for students with intellectual disability to see the effects of video prompting with and without error correction with three moderate to profound intellectually disabled students with extremely limited daily living skills participated. I pod touch was used in comparison. An adapted alternating treatment design within a multiple probe design across participants was used to demonstrate the skills. Result indicated that the inclusion of error correction from the outset of intervention increased the efficiency of skill acquisition for at least one task for two students and skill acquisition was observed using video prompting both with and without error correction for another student. More stable response was seen using vivo instruction.

[Rayner](#) (2011) evaluated the effects of video prompting and backward chaining for teaching students with autism to tie a shoelace knot. Videos featuring an adult and a peer or sibling model were used as a part of the video prompting procedures to teach three boys with autism to tie a shoelace knot. A backward chaining procedure involving live modeling and verbal instruction was introduced following the video prompting phases. The result indicated that backward chaining procedure was more effective.

O'Rourke (2011) compared the effects of using video prompting with or without error correction delivered via an Apple iPod Touch on the acquisition of vocational tasks for three individuals with intellectual disabilities. The participants were selected through teacher nomination and the two targeted vocational tasks were determined based upon equivalence of difficulty and teacher suggestion. The tasks selected were dust mopping and wet mopping. A multiple probe combined with an adapted alternating treatment design was used to assess the level of skill acquisition for each of the two tasks. Results showed that for two participants, the acquisition of skills was equal under both conditions and was slightly better in the absence of the error correction procedure for the remaining participants.

[Malone](#), Flemming, Chung, Wheeler, Basbagill and Singh (2011) compared the effects of video prompting to video modeling for teaching seven students with severe disabilities to do laundry and wash dishes. The video prompting and video modeling procedures were counterbalanced across tasks and participants were compared in an alternating treatments design within a multiple probe design across participants. For six participants, video prompting was more effective than video modeling, which was generally ineffective. For one participant, neither video modeling nor video prompting was effective, but in vivo instruction led to skill acquisition. One participant who was deaf was also able to learn both skills using video prompting, even though he could not hear the voice-over instructions. These data suggest that the duration of the video may influence its effectiveness as a teaching tool and that the voice-over instructions may not be necessary.

Mechling, Gast and Seid (2009) compared the static photographs and video prompting on the on cooking related tasks with six young adults who have moderate intellectual disabilities. An adapted alternating treatment design was used to measure the percentage of tasks completed by each student across treatments. Results indicated that both procedures were effective in increasing correct performance of tasks.

Mechling, Gast, and Seid (2009) evaluated the effectiveness of a personal digital assistant (PDA) with picture, auditory, and video prompts with voice over, as a portable self-prompting device for students with autism spectrum disorder (ASD). Multiple probe design across three cooking recipes was used and replicated with three students with ASD, using multiple step tasks. Results revealed that the students with ASD were able to adjust the prompt levels used on the PDA and to maintain their ability to use the device independently to complete the recipes over time.

Laarhoven, Toni, Johnson, Myers, Grider and Grider (2009) evaluated the effectiveness of video iPod as a prompting device for teaching three job-related tasks to a young man with developmental disabilities in a community-based employment setting. The effectiveness of the prompting device was evaluated using a multiple probe design across behaviors. Results indicated that the introduction of the video iPod decreased the number of prompts given from a job coach.

Mechling, Gast and Fields (2008) evaluated three young adults with moderate intellectual disabilities to identify the effectiveness of a portable DVD player and the system of least prompts (SLP) for DVD player used as a self prompting device to teach cooking tasks. The design used was multiple probe design across cooking tasks for three students. Results showed that the self prompting and portable DVD player with the SLP was effective in teaching multistep cooking tasks that were maintained over time.

Rai (2008) investigated the effectiveness of a treatment package that contained video technology such as video modeling and video prompting to teach three self help skills (e.g., cleaning sunglasses, putting on a wrist watch, and zipping a jacket) to three elementary school students with mental disabilities in a small group setting. Using a constant time delay (CTD) procedure, observers measured the percentage of steps of the task analyses performed correctly before and after a video model prompt. A multiple probe

design was used across participants. The results indicated that an instructional package which includes video technology was an effective method for teaching self-help skills to students with mental disabilities.

Horn, Julie, Miltenberger, Raymond, Weil and Timothy (2008) conducted a study on teaching laundry skills to individuals with developmental disabilities through video prompting. The procedure was used to teach a complex behavior by task analysis through steps in video. Three individuals with mental retardation were participated. Samples viewed the entire task on video and then gradually shorter segments until they performed all task. Multiple baselines across subjects design was used to evaluate. The results revealed that samples learned task with 2 and 3 video segments.

Mechling and Gustafson (2008) compared the static photographs and video prompts effectiveness on the independent task performance of six young men with autism. An adapted alternating treatment design with baseline, comparison, withdrawal, and final treatment conditions was used to measure the percentage of cooking related tasks. The result revealed that both the procedures were effective in increasing correct task performance for all participants from baseline levels.

Goodson, Sigafos, O'Reilly and Lancioni (2007) carried out a study among individuals with developmental disabilities, video based error correction procedure was used to teach domestic skill. Four individuals belonging to the age group of 34-36 yrs with autism and mental retardation were selected for the study. The target behavior is Setting table in the Dining area of vocational center. Multiple baselines design was used, the result revealed that one subject reached criterion with Video Prompting alone. But the others reached criterion with video prompting with error correction.

Sigafos, O'Reilly, Canella, Edrisinha, Cruz and Upadhyaya (2007) conducted a study with three adults with developmental disabilities a video

prompting and fading procedure was used to teach dish washing. Video prompting involved video clips depicting each step of the task. All three adults acquired the skills with accuracy, when video prompting was implemented. Performance decreased at the 3 month follow up, when prompting was removed, but stabilized with 80- 90% accuracy when the third step in the fading sequence was reinstated. The result indicated a promising approach for fading video prompts

[Malone](#), Helen, Sigafos, O'Reilly, Mark and Cruz et al (2006) compared the effect of video prompting to video modeling in for six adults with developmental disabilities in teaching daily living skills to set a table and put away groceries. Video prompting consisted of ten separate video clips, each showing one step of the task analysis. Video modeling involved a single video showing all ten steps from beginning to end. After watching the respective video clips, participants were given the opportunity to complete the task. Video prompting and video modeling procedures were counter-balanced across tasks and participants were compared in an alternating treatments design. Video prompting was effective in promoting rapid acquisition across both tasks in all.

Laarhoven and Myers (2006) compared the effectiveness of three different video-based instructional sequences .All were used in conjunction with the system of least prompts, for teaching three different daily living skills to three adults with developmental disabilities. The video-based instructional sequences (i.e., video rehearsal, video rehearsal plus photos, and video-rehearsal plus in-vivo video prompting) were evaluated using an adapted alternating treatments design. Results suggested that all of the procedures were effective in increasing independent responding. The video-rehearsal video prompting (Video/In photo (Video/Photo) conditions were more efficient in terms of reaching the criterion.

Graves, Tara, Collins, Belva, Schuster and John (2005) conducted a study to see the on effectiveness of video prompting among three secondary students with moderate disabilities in teaching cooking skills. The samples acquired cooking skills through a constant time delay procedure used with video prompting. A multiple probe design was used to evaluate the effectiveness of the procedure to teach preparation of a food item (a) on a stove, (b) in a microwave, and (c) on a counter top. The result revealed that the procedure was effective.

Sigafoos, O'Reilly, Canella, Megha, Chautri and Guilio(2005) evaluated the use of a video prompting procedure for teaching three adults with developmental disabilities to make popcorn using a microwave oven. Ten step task analysis was conducted in the kitchen for the participants in the vocational training program. During baseline, participants were instructed to make popcorn, but were given no further instructions or prompts. Video prompting consisted of video clip of a step. Then the samples were allowed to imitate that step. Delayed multiple-probe design across subjects was used. The result showed that video prompting was an effective instructional strategy for teaching daily living skills to adults with developmental disabilities.

Norman, Jacqueline, Collins Belva and John (2001) investigated the effectiveness of a video-based self-help skills intervention for elementary school students with mental disabilities. Three moderate intellectually disabled in the age group of 8-12 years participated in the videotaped intervention, which presented oral and visual directions to perform three self-help skills such as (1) cleaning sunglasses, (2) putting on a wristwatch, and (3) zipping a jacket. The researchers measured the percentage of steps of the task analyses performed correctly before and after a video model prompt. Results revealed that similar interventions have the potential in teaching self help skills to students with mental disabilities.

Tiong, Neville, Blampied and Grice (1992) conducted a study on Training community-living, for intellectually handicapped people in fire safety using video prompting. Four moderate intellectually handicapped adults belonging to the age group of 21-35 yrs were trained. Baseline levels of competence were less than 20% for steps. Training was introduced to each step following a multiple-probe, across-singlesubject design. Failures to complete a step were followed by video prompting in which the subjects were given a video model (an intellectually handicapped male). The result revealed that video prompting was effective.

2.8 Impact of Picture prompting techniques in teaching intellectually disabled

Ai, Shu and Li (2014) conducted a study on initiating functional vocabulary learning for students with mental retardation using “Educational Technology Approach”. Three moderate mentally retarded students enrolled in special education classes participated in the learning system. An alternative treatment design and the single subject experiment design was adopted to evaluate the effectiveness of the learning system. The teaching strategy adopted photos of physical goods as cues combined with the fading strategy within a stimulus control process. The result indicated that, fading strategies can assist functional vocabulary learning in moderate mentally retarded students enrolled in special education classes.

[Einar](#) and Duy (2011) evaluated Four boys with autism were compared in prompting tactics to establish intra verbal responding. Vocal and picture prompts were compared with three participants, whereas textual, vocal, and picture prompts with another participant. The result revealed that all the prompting procedures were effective in establishing intra verbal responding but verbal prompts were found to be more effective than other prompting procedures.

Chihak (2011) compared the pictorial and video modeling activity schedules during transitions for students with autism spectrum disorders. In the context of an alternating treatments design, static-picture schedules were compared to video based activity. Three middle school aged students with autism were the participants. The differential effects of two different visual schedule strategies were evaluated. The result showed that static picture schedule was more effective than video based schedule.

Laarhoven, Kraus, Karpman, Nizzi and Valentino (2010) compared the effectiveness of video prompting and picture prompting for teaching daily living skills to two adolescents with autism. Samples were taught two different skills, and the effects of the instructional conditions were compared and evaluated using an adapted alternating treatment design. The result concluded that video prompting was considerably more effective than picture prompting.

Cihak, Rachel, Ayers (2010) investigated the use of self modeling static picture prompts via a handheld computer to facilitate self monitoring in the general education classroom. Three students with autism served in general education classrooms were involved in the study. The percentage of intervals engaged academically and the number of teacher prompts was analyzed in the context of a multiple probe design across settings with an embedded A-B-A-B. Results indicated that all students benefitted from the use of the handheld computer depicting self model static-picture prompts. Students also were able to self monitor and regulate their behavior in multiple settings successfully.

Betz, Higbee, and Reagon (2008) used picture activity schedules to increase peer engagement during interactive games for three days of preschoolers with autism. Picture activity schedule book was presented to the participants at the beginning of each session. A script was read by the participant to initiate play. Then the script was systematically faded out.

During training, the schedules were presented in the same order. Generalization probes were later done by re-sequencing the order of the trained activities, and incorporating four novel games into the schedule. The Results indicated that activity schedules increased the completion of number of games and their engagement.

Spriggs, Gast, and Ayres (2007) evaluated the effectiveness of picture activity books to teach schedule following and on-task behaviors to children with moderate intellectual disabilities. Results showed that the targeted behaviors increased and generalized for novel activities.

Lancioni, Klasse and Goosens (2006) assessed the effectiveness of pictorial and auditory prompt systems for promoting independent task performance in two adolescents with multiple handicaps". The results indicated that the two systems were comparably effective in promoting independent performance. The subjects as well as the staff differed with regard to the system they preferred.

Cihak, Alberto, Terressa, Robert and Gama (2006) compared the static picture prompting with video prompting simulation using group instructional procedures to three students with moderate mental retardation in two groups. Through group procedures, instructions were given to compare static picture and video prompting strategies. To compare task acquisition and maintenance in individual student an alternate treatment design was used which involves purchasing and banking skills. The results indicated that these two strategies were equally effective.

[Alberto](#), Cihak, and Gama (2004) compared the static picture prompts and video modeling as classroom simulation strategies in combination with in vivo community instruction. Students with moderate intellectual disabilities were instructed to purchase items using debit cards by withdrawing money from an [ATM](#). The findings showed that both the techniques were effective and efficient.

Jo, Michael, Philip and Martin (1985) examined teaching job independence and flexibility to mentally retarded students through the use of a self-control package. Four severely to moderately retarded high school students participating in a vocational training program were trained to use a picture-cue system. The system consisted of photographs of vocational tasks that were inserted in the assigned order in a photoalbum sheet; self management was accomplished after its corresponding task was completed. Students acquired the skills effectively using picture cue system.

Wacker and Berg (1983) evaluated five moderately and severely mentally retarded adolescents to evaluate the acquisition of complex vocational tasks using picture prompts. Who were first trained to use picture prompts to guide their performance on one or more complex tasks. Generalization was assessed with three of the students provided with novel tasks (with and without picture prompts) and without training. Results indicated that picture prompts had successfully promoted both acquisition and generalization of skills.

2.9 Video modeling and videoprompting in training the intellectually disabled

Keith, Dustin and Ray (2014) examined the benefits of video modeling to teach a unique vocational skill among two young adults with autism spectrum disorders. Video modeling was used to teach skills necessary to entertain customers and promote products in a retail setting. The three participants were observed before and after watching a video model performing the skills. The result interpreted that all participants have acquired the knowledge to use the skills in combination and in sequence after watching the video model.

Teresa, Bridget, Wiles and Benjamin (2013) examined the self operated video models on the skill acquisition of a series of novel tasks taught in community based settings. Multiple baseline design across settings

was used. The results indicated that all students showed a significant increase in independent task performance and task transitions.

Helen, Mizrahi, Sabienly and Jimenez (2012) examined three adolescents with significant disabilities for the effectiveness of video modeling on teaching physical activities. Multiple baselines across six physical activities (three per student) were implemented. The results revealed that all the three students made progress in learning the physical activities. Thus it proves video modeling was an effective tool for teaching students with significant disabilities.

Mason, Ganz, Parker, Burke and Camargo (2012) conducted a study on moderating factors of video-modeling with other as model: a meta-analysis of single-case studies of students with autism spectrum disorder and developmental disabilities was used. This study meta-analytically evaluated the evidence base of VMO with individuals with disabilities to determine if participant characteristics and targeted outcomes moderate the effectiveness of the intervention. Findings indicated that VMO is highly effective for participants with autism spectrum disorder and moderately effective for participants with developmental disabilities.

Zisimopoulos, Dimitrios, Sigafos, Koutromanos and George (2011) evaluated a video prompting and a constant time delay procedure for teaching three primary school students with moderate intellectual disabilities to access the Internet and download pictures related to participation in a classroom History project. Video clips were used as an antecedent prompt and as an error correction technique within a constant time delay (CTD) procedure. Training was given using 29-step task analysis special education classrooms. The prompting procedure was introduced in a multiple baseline across subjects design. Findings revealed that video prompting was effective in promoting rapid acquisition of the task.

[Chang](#) and Wang (2010) compared the effect of picture and video prompting in autonomous indoor way finding for 20 individuals with cognitive impairments recall routines, and travel in unfamiliar areas in a way relying on limited cognitive capacity. The experimental results showed that the computer human interface is friendly and the capabilities of way finding are reliable. Video prompts performed better than picture prompts.

Oncul and Ozkanty (2010) examined the effectiveness of video modeling on teaching daily living skills to three women aged between 23 and 37 with moderate and severe intellectual disabilities using three different questionnaires. (a) the effectiveness of video modeling on teaching daily living skills to adults with intellectual disabilities, (b) the maintenance effects of video modeling a year after the instruction was over, (c) the effects of generalization across different materials. Multiple probe design with across subjects was used to assess the effects of video modeling. The findings showed that participants learned the daily living skills, maintained the acquired skills to a certain extent, and generalized the acquired skills across different materials.

Laarhoven, Kraus, Karpman, Nizzi, Valentino (2010) compared the effectiveness of video prompting and picture prompting in teaching daily living skills to two adolescents with autism. Participants were taught two different skills, and the effects of the instructional conditions were compared and evaluated using an adapted alternating-treatments design. The results revealed that video prompting was more effective than picture prompting.

Kevin (2009) evaluated the effect of video instruction that targeted functional life skills with three elementary aged autism students. The effects of the software were analyzed in the context of a multiple probe design. All instructions took place on the computer and student's performance in vivo was the primary dependent measure. The result showed that all the

participants mastered all the skills that were taught via computer and generalized this to the natural environment.

Mechling, Gast, Melissa R. and Gustafson (2009) evaluated the effectiveness of video modeling on teaching fire extinguishing behaviors among three young adults with moderate intellectual disabilities. A multiple probe design was used among the samples. Results indicate that video modeling was effective in teaching fire extinguishing skills.

Tetreault, Serra, Lerman and Dortehea(2008) investigated the use of point of view model to teach three children diagnosed with autism to initiate and maintain a conversation with a conversant. Using a multiple baseline across scripts design was used for, the three participants to engage in both eye contact and vocal behavior without the presentation of a vocal discriminative stimulus from the conversant. The treatment package included both the presentation of the target video and reinforcement of target behavior. The findings showed that it was found to be successful in increasing the social behavior.

Anna, Behrmann, Michael, Masteropieri, Pamela, and Graff (2008) investigated the effects of alternative narration, highlighted text, picture/word-based captions, and interactive video searching features for improving comprehension of non-fiction academic video clips by 11 students with intellectual disabilities. Two experiments combining multiple baselines across participants, alternating treatments, and elements of ABAC single-subject research designs across the primary and counterbalancing studies were employed to evaluate. The findings revealed that the participants showed significant improvement in comprehension and in oral responses.

[Goodson](#), Sigafoos, O'Reilly, Canella and Lancioni(2007) used a video based error correction procedure to teach four adults with developmental disabilities. The domestic skill was setting a table. Video clips were used as an antecedent prompt along with error correction procedure.

The result indicated that three adults reached 100% accuracy on the task analysis. Thus error correction procedure was useful for individuals who failed to learn with video prompting alone.

Mechling, Gast, et al (2005) conducted a study on computer-based video instruction (CBVI) to teach verbal responses to questions presented by cashiers and purchasing skills in fast food restaurants among intellectually disabled. A multiple probe design was used to evaluate the effectiveness of computer based video instruction. Instruction were provided through simulations of three fast food restaurants on the computer using video captions, still photographs, and voice recordings. Results indicated that computer based video instruction was effective to students with moderate to severe intellectual disabilities.

Birkan (2005) evaluated the effectiveness of a simultaneous prompting procedure was for students with mental retardation at different levels of schools (preschool, primary and secondary grades) using various discrete tasks. Three students with mild and moderate disabilities participated. Multiple probe design across behaviors and replicated across students. Results indicated that the procedure was successful in teaching targeted behaviors.

Tara, Collins, John and Kleinert (2005) carried out a study on students with moderate disabilities for video prompting with constant time delay and reinforcement to teach cooking skills. Multiple probe design was used to teach food item (i) on a stove (b) in a micro wave (c) on a counter top. The video clips included a 0 to 5 s time delay for students to initiate the step, and 20 s to complete the step. If the student did not initiate the step within the 5 s interval, the video was shown again with verbal and model prompts. Results showed that the procedure was effective for all of the participants in learning three different cooking tasks.

Bidwell and Rehfeldt (2004) assessed the effectiveness of teaching a domestic skill (making coffee) with an embedded social skill (serving coffee to and sitting down beside a peer) using video modeling among three adults with severe mental retardation procedures. Training was conducted in a classroom for the participants. The intervention consisted of (i) watching a video of an adult with a developmental disability making coffee and initiating a social interaction with a peer; and (ii) receiving verbal praise for each step of the task that was performed correctly. The result showed that all the three participants mastered the task.

Kimberly (2004) examined the effectiveness of hand held computer intervention versus a staff model intervention as vocational instructional tools for high school students with autism and mental retardation. ANOVA and independent t-test analyses demonstrated significance. This result indicated that the student's ability was increased in all areas. Such as ability to accurately complete tasks, exercise increased independence during task completion, and reduce problematic behavior and prompts during task completion.

Rehfeld, Dahman, Young, Cherry and Davis (2003) evaluated the simple meal preparation skills via video modeling among three adults with mental retardation in the moderate or severe range. The intervention consisted of (i) watching a video of an adult with a developmental disability making a peanut butter and jelly sandwich and (ii) receiving verbal praise for each step of the task that was performed correctly. The result revealed that all the three participants mastered the task.

[Legrice and Blampied \(1994\) conducted a study on, training pupils with intellectual disability to operate educational-technology using video prompting.](#) video prompting involves preparing a video record of a modeled exemplar of each step of a task analysis and permitting a trainee to view the exemplar each time they fail correctly to perform a step. Prompting videos

were prepared for tasks of video recorder and personal computer use and used to teach the operation of the video recorder to two moderately intellectually handicapped adolescents. Results indicated that all were successfully trained using video prompting, and they were able to transfer the same to others in another setting. In addition they were able to operate the pc even if it is in another version with additional training.

[Charlop](#) and Milstein (1989) assessed the effects of video modeling with three autistic boys on videotaped conversations consisting of two people discussing specific toys. When criterion for learning was met, generalization of conversational skills was assessed with untrained topics of conversation; new stimuli (toys); unfamiliar persons, siblings, and autistic peers; and other settings. The results indicated that the video modeling was an effective procedure for teaching complex verbal skills such as conversational speech.