

## THE EFFECT OF ANIMATED SUPERHERO VIDEO CLIP ON THE DEGREE OF COOPERATION AMONG FEMALE PRESCHOOLERS DURING ORAL MEDICATION ADMINISTRATION

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*Preschoolers, superhero, oral medication, degree of cooperation, observational learning, evidence-based, animated video clip, social learning theory.*

### Abstract

Hospitalization is one event that triggers anxiety because of the unfamiliar setting, new faces, and different procedures. Administration of oral medication is one of the most common procedures children face in the hospital which may stimulate anxiety. Because of this, the administration of medications for preschoolers has been a relatively difficult task for healthcare providers. The intake of prescribed oral medication plays an important role on the recovery of patients, especially among children such as preschoolers. This quantitative pre-experimental research of pre-test posttest one group design aims to determine the degree of cooperativeness of a 5-minute animated superhero video clip among female preschoolers during oral medication administration. Purposive sampling was utilized in gathering a total of 30 female preschoolers, aged 3-6 years old, admitted in pediatric wards of 2 public hospitals, with prescribed oral medication. The data was analyzed using IBM© Statistical Package for the Social Sciences (SPSS) version 21. The paired t-test was utilized to analyze the data. Analysis showed a significant difference between the pretest and posttest mean scores which proves that the animated superhero video clip is effective in eliciting a more positive reaction in preschoolers during oral medication administration. The implementation of an animated superhero video clip may be used in not only the pediatric ward but also other settings in the hospital such as the operating room or emergency room where preschoolers may experience high levels of anxiety.

## INTRODUCTION

Anxiety is defined as a state of apprehension, uncertainty, and fear resulting from the anticipation of a realistic or fantasized threatening event or situation, often impairing physical and psychological functioning (Barlow, 1990). Children are no exception when it comes to the sensation of anxiety. Hospitalization is one event that triggers anxiety because of the unfamiliar setting, new faces, and different procedures (Festini, 2008). Administration of oral medication is one of the most common procedures children face in the hospital and it is the nurse's responsibility in making sure that the pediatric client adheres to the therapy in order to ensure optimum wellness.

Over the years, researchers have come up with different studies that establish various strategies that aim to improve the behavior of pediatric patients towards medications. One research study utilized a medical clown during IV insertion in an emergency room setup. According to the study, the medical clown proved to be useful in diminishing pain and anxiety during painful procedures being performed on children (Wolyniez, Rimon, Scolnik, Gruber, Tavor, Haviv, Glatstein 2013). In line with the current innovations and interventions being performed, this research study will look more closely into the perspective of children and utilize something that is pleasing to them in order to make administration of oral medication successful.

This research study incorporated children's common view of superheroes in a clinical setup by showing an animated superhero video clip to measure the effectiveness in behavioral impact to preschoolers with prescribed oral medications in a hospital setting.

One of the reasons why children idolize superheroes is because of their great power that can conquer anything and their sense of control. It can help them act out and process any inner turmoil and sense of powerlessness that they have deep inside, and allows them to resolve or reduce fears and anxiety they are feeling. (Jiwani, 2013).

## LITERATURE REVIEW

### *Preschoolers' Perception on Hospitalization*

Fear differs among age groups; children experience it more frequently and more severely. However, there are more factors that influence children's fear of hospitalization, but one contributing factor is the child's magical thinking. Their fantasies and imaginations greatly contribute to their perceptions of fear (Forsner, Jansson, & Söderberg, 2009), especially for preschool-aged children, due to difficulty separating fantasies from reality (Salmela, 2010). Also, in this stage, separation anxiety is observable. Fear of being left alone in the care of unfamiliar people is a concern among these children (James, Birch, & Curtis, n.d.). Hospitalized children deal with unfamiliar faces every day during the entire course of hospitalization, such as that of the nurses, doctors, and other healthcare team members. Unfamiliarity to the environment may lead to feeling of abandonment (Wilson, Megel, Enenbach, & Carlson, 2010). Preschoolers, according to Erik Erikson's stages of development, "create their own adventure" and "desire to have power and control over their environment." Their initiative to achieve goals provides a sense of purpose, "preschoolers given age-appropriate responsibility to take ownership of their actions, experience a reduced level of anxiety" (Lerwick, 2013). Restriction in activity and freedom may result to feeling of being punished, anxiety due to unmet goals, and loss of sense of control and purpose.

### *Common Reactions of Preschoolers to Medications*

Many factors affect the cooperation of preschoolers towards oral medication administration. These include formulation, palatability, appearance, ease of administration (Tidy, 2011). A study was conducted to 148 young children regarding the acceptability of four different oral formulations. The results showed that the small, 4mm tablet was better accepted and more often fully swallowed over the suspension, powder, or syrup (Riet-Nales, Neef, Schobben, Ferreira, Egberts, Rademaker, 2013). Unpleasant palatability may decrease the medication acceptance of the child as palatability is one of the main elements of acceptance (European Medicines Agency, 2013). Acceptability of the medication is crucial in developing compliance or adherence to treatment (Tuleu, 2011). Duration, schedule, formulation, palatability, cost, and adverse effects of medication all are factors that contribute to compliance (Winnick, 2005). Medication compliance is critical for all aspects of pediatrics, specifically in successful treatment, disease prevention, and health promotion.

### *Superheroes as Models*

Idolizing heroes is a natural part of growing up. Children choose aspects of a hero that they can relate to in some way. Some identify with traits of the hero that they wish to possess, while others find affinity with those superstars that they aspire to be like (Ngueta, 2012). It also provides opportunities for children to explore moral values and dilemmas and to establish what they and others perceive as right and wrong" (Thomas, 2012). "Some researchers suggest that children are attracted to superhero play because it allows them to assume powerful roles that they, otherwise, would not experience," said Dr. Shiela Degotardi, a senior lecturer and an early childhood teacher with over 20 years experience teaching and researching in the early childhood education sector. Superhero play seems to serve a range of important functions in children's lives. It may help children to cope with frustrations, resolve feelings about power and control. Children have vivid imaginations and insatiable curiosities, useful for both play and for exploring their worlds. Along with an active imagination, a child might also gravitate toward the impressive qualities of superheroes (Hatter, 2014).

### *Utilization of Superheroes in the Hospital setting*

The use of superheroes in the hospital setting is not new concept. There are many accounts of their use in various children's hospitals. In 2007, the Shriners Children's Hospital incorporated superheroes to their recreational therapy to provide happiness and reduce their fears through encouragement at the bedside after procedures or encouraging the children to socialize in-group activities (Furey, 2007). They also served as providers of assistance in preparing the children for surgery or medical procedures. The use of superheroes was not only used for therapies but also for non-medical personnel as well in other hospitals.

### ***Research Hypothesis***

H<sub>A1</sub>: There is a significant difference between the mean pretest and posttest degree of cooperation during oral medication intake scores.

### ***Operational Definitions***

- Animated superhero video clip -- a 5-minute animated video clip depicting positive reactions of superheroes, specifically the Powerpuff Girls<sup>©\*\*</sup> which includes the characters of Blossom, Bubbles, and Buttercup, on the intake of oral medications during times of illness.
- Degree of cooperation during oral medication intake -- degree of acceptability expressed through the preschooler patients' behavioral reaction, which may be hesitant, aggressive, indifferent or pleasant, through the influence of the researchers' use of animated superhero video clip before and after administration of oral medication.

Preschoolers – female Filipino children, aging from 3 to 6 years of age, admitted at a public hospital in Metro Manila and Pampanga, who are currently on prescribed oral medication treatment and not in acute medical health condition.

## **THEORETICAL FRAMEWORK**

This study was conceptualized in the light of the Symbolic model under the Social Learning Theory of Observational learning by Albert Bandura which is grounded on substantial experimental data. Bandura's theory abides by the behaviorism position and accepts the research findings and methods of modern cognitive psychology. Bandura's Social Learning Theory throws light on human behavior in terms of continuous reciprocal interaction between cognitive, behavioral and environmental influences. (Zhongzhi, 2012) It draws heavily on the concept of modeling, or learning by observing a behavior, emphasizing that modeling is an indispensable aspect of learning. Among the three basic models of observational learning, namely, live model, verbal instructional, and symbolic model, the symbolic model is the one applicable in this study which is said to involve real or fictional character, displaying behaviors in books, TV programs, or online media. This study, in particular, uses animated superhero video clip where the Powerpuff Girls, as symbolic models, primarily function to convey information to the learners, specifically the preschoolers, by serving as cues to imitate similar behaviors, strengthen or weaken their existing restraints against the performance of a modeled behavior, or to demonstrate new patterns of behavior. Among the behaviors that they may display are, aggression, hesitance, indifference and pleasant reaction, depending on how they underwent the cognitive process of observational learning and modeling which include attention, retention, reproduction, and motivation.

## **METHODS**

### ***Research Design***

A pre-experimental pretest-posttest one-group design was utilized in the study to establish the effectiveness of the intervention, the presentation of an animated superhero video clip, using a pretest and posttest. The independent variable was the animated superhero video clip, while the dependent variable was the degree of cooperation of preschooler patients during oral medication administration. This was evaluated based on a tool that was answered by the staff nurse after each interaction process.

### ***Subjects and Setting***

A non-probability purposive sampling was utilized in the study in which a total of 30 respondents were gathered and met the following pre-set eligibility criteria. Inclusion sampling criteria consist of: (a) female preschoolers within 3-6 years of age; (b) who understand Filipino and/or English; (c) taking oral medications within the range of 1-3 days with a frequency of once a day; (d) admitted in the public hospitals where the researchers are going to conduct the study; (e) familiar with superheroes; and (f) assessed to have no known allergies or any adverse reactions to medications. While, the exclusion sampling criteria were: (a) males, since the superheroes portrayed in the video favor the interest of females more, thus would influence the female preschoolers' behavior more significantly than of males; (b) taking oral medications for more than 3 days, since they get more used to the oral medications being administered to them, making them more compliant; (c) in acute medical health condition (e.g. in pain, in distress, restless, lethargic, etc); (d) with mental and/or psychological conditions which would greatly affect their behavior and manner of interaction, thus can cause inaccurate measurement of the level of impact on the preschoolers' behavior in oral medication administration; (e) those who are for discharge on the following day since the researchers would possibly return the next day to conduct the intervention; and (f) those assessed to have allergic/adverse reactions to medications. The study was conducted in Pediatric wards of two different public hospitals situated within Metro Manila and Pampanga, Philippines.

### Research Instrument

The study utilized a self-structured questionnaire based from the related literatures. This served as a pre and post evaluation tool that compared the behavioral reactions among preschoolers based on the perspective of the staff nurse who administered the oral medication.

This test uses a 4-point Likert-type scale that included 8 items. All reactions that correspond to number 1, include behavior such as yelling, thrashing and loud crying. Number 2, shows shyness and hesitation to participate while number 3 entails reaction that is neither aggressive nor interested in participating. Last choice, number 4, sees cooperative behavior/response from the child. The instrument was evaluated and validated by experts (a pediatrician, pediatric nurse, and a psychiatric nurse) to ensure validity, and pilot testing was done to ensure the reliability of the tool before the actual implementation. Cronbach's alpha of the overall scale was 0.92. In this study, the higher the overall score indicate a positive and improved degree of cooperation.

	Mean	SD	Critical value	t	p value	Decision
Pretest Mean Score	26.17	3.51	2.045	-6.45	0.00	Reject the null, accept the alternative hypothesis
Posttest Mean Score	30.10	3.06				

### Data Collection Procedure

Approval was sought from the two public hospitals' administration to gain entry to the Pediatric wards. The staff nurses on duty were asked to participate in the study and discussed their roles such as administering of medication, presenting of video clip, and completing the assessment tool. Once they willingly accept, they were asked to sign the consent forms and were given a 20-minute orientation on the study, intervention protocol, ethical considerations, and explained the Assessment of Preschoolers' Behavior in Oral Medication Administration tool.

Eligible subjects were chosen by the staff nurses according to the inclusion criteria set by the researchers. These subjects were invited to join the study and were informed on the nature of the study and intervention involved. Parents/guardians of the subjects were asked to sign the consent.

The staff nurses were given 15 minutes, each subject, for introduction, identification of patient, administration of medication and observation of behaviors toward the medication administration. The pretest assessment tool was completed upon return to nurse's station. Within the same shift, 15 minutes prior to the next oral medication due, the staff nurses presented the superhero video clip once, through a tablet, and then, exited the ward. The due medication was, then, administered while noting for changes in behavior. The posttest assessment tool was completed based on the observed behavior changes.

SCORE	REACTION
8-15	aggressive
16-20	hesitant
21-27	indifferent
28-32	pleasant

### Data Analysis

Paired t-test analysis was utilized to determine if there was a significant change in the mean scores of the group before and after viewing the animated superhero video clip and its effect on the degree of cooperation among preschoolers during oral medication administration. It was used for the reason that these scores to be analyzed was gathered from the same set of subjects, comparing the scores before and after introducing the intervention.

### Ethical Considerations

The study was approved by Ethics review board of University of Santo Tomas-College of Nursing. All eligible subjects and the staff nurses were fully informed of the study, its risks and benefits using terms that are understood, and written consent was obtained. They were informed of their right to refuse or withdraw from the study anytime, without negative consequences. Confidentiality and privacy of the subjects were assured by leaving out names and utilizing the data collected for research purposes only. The staff nurses were asked to observe the 10 R's of medication administration during preparation and administration of medication to prevent medication error. May any harm come to the subjects from the intervention, the researchers would take responsibility and refer the subject to proper authority and comply with requirements for resolution.

## RESULTS

The study recruited 30 female preschoolers aged 3-6 with prescribed oral medication. Table 1 displays the pretest and posttest mean scores while table 2 contains its interpretation. The pretest mean score obtained was 26.17 (SD=3.51). This was interpreted as an indifferent reaction which indicated that the subjects did not show any aggression or interest during oral medication administration. After the viewing of the animated superhero video clip, the staff nurses obtained a posttest mean score of 30.10 (SD=3.06). Overall, the subjects showed a pleasant reaction towards medication. The paired t-test was utilized to analyze the data. Analysis revealed a significant difference between the pretest and posttest mean scores from 26.17 to 30.10 ( $p < 0.05$ ). The results are consistent with other literatures that the utilization of cartoons to reduce not only anxiety but also pain among preschoolers (Weiss, Dahlquist, & Wohlheiter, 2011; Lobo & Umarani, 2013; James, Ghai, & Sharma, 2012; Greco, 2013). The nurses reported cases where some of the preschoolers exhibited the same behavior even after viewing the animated superhero video clip. However, none of the subjects manifested aggressive behavior during the study.

## DISCUSSION

The study demonstrates the effectiveness of the animated superhero video clip on the degree of cooperation among female preschoolers during oral medication administration. Children generally have rich imaginations which can be used to suggest fantasies to reduce negative perception of the procedure (Braen, Basior, Jenkins, Cloud, DeFazio, 2011). However, this could also place the preschooler at risk for developing imaginary fears (Hockenberry & Wilson, 2007) which makes them susceptible to fear and anxiety. Since most medical procedures cause anxiety and distress, it is the responsibility of nurses in providing a comfort for all patients, especially young children. This anxiety may be manifested in withdrawal or aggressive behaviors including crying, kicking, screaming, physically resisting procedures, biting, hitting, or ignoring requests (Bowden & Greenberg, 2008). These literatures support the indifferent reaction obtained from the subjects prior to the viewing of the animated superhero video clip. Oral medication administration can be a source of anxiety for young children which may decrease their cooperativeness which may contribute to non-compliance. This marks the need for non-pharmacologic interventions for nurses to use as care is individualized to suit the patient's needs. Several studies have proven to show effectiveness of cartoons within the hospital (Ahmed, Farrell, Parrish, Karla, 2011; Lee, J., Lee, J., Lim, Son, Lee, JR., Kim, Ko, 2012). In line with these literatures, the posttest mean score showed consistency with previous studies. The animated superhero video clip not only provided anxiety relief but also contributed to improved cooperativeness during oral medication administration as observed in the study. There were also verbal reports from the nurses stating that

overall, the subjects were greatly amused which facilitated marked cooperation during their oral medication administration. The results of the study suggest the animated superhero video clip is well suited to the preschooler. The reduction in anxiety may have been caused by if not familiarity but of the idea of a role model which may influence their behavior since hospitalization may cause the child to experience feelings of loss of control (Hockenberry & Wilson, 2013) However, due to multiple influences on cooperation during oral medication administration (e.g. fear, taste, appearance, form of medication, and ease of administration) (Hockenberry & Wilson, 2013; Tidy, 2011; Toshihiko, 2004; Riet-Nales et al, 2014; Thomson, Tuleu, Wong, Keady, Pitt, Sutcliffe, 2009), the results can only suggest that the animated superhero video clip had an influence and cannot take complete responsibility for the improved cooperativeness.

## CONCLUSION

The use of animated superhero video clip was proven to be an effective tool in eliciting a more pleasant reaction in preschoolers during oral medication administration. The implementation of this evidenced-based use of the animated superhero video clip has the potential to improve the cooperation to oral medication administration among preschoolers in the hospital setting. The intervention may be implemented in pediatric clients in different settings in the hospital which causes high levels of anxiety such as the operating room or emergency room. Future researches may use the same intervention during painful procedures or that can cause heightened anxiety, like IV insertion and blood extractions Future studies may consider utilizing the same intervention on preschooler boys, using male superheroes in the video clip. Future researches should also evaluate the impact of the intervention on the behavior of the clients on a longitudinal basis wherein their cooperation is measured with the tool in week to month interval to conclude its effectiveness especially on the medication compliance of preschoolers using the intervention.

## LIMITATIONS

The study had a limited sample size of 30 subjects, all of which were female since the cartoons depicted in the animated superhero video clip were females. Their preferred superhero was not considered. The study site was limited to the area within Metro Manila and Pampanga only. The duration time in which the researchers conducted the experiment was one and a half months (August to September 2014). Another limitation of the study was that only the immediate degree of cooperation during oral medications was established in the study. The form, taste, and frequency of the prescribed oral medication were also not considered.

## REFERENCES

1. Bandura, A., Ribes-Inesta, Emilio.(1976). *Analysis of Delinquency and Aggression*. Lawrence Erlbaum Associates, INC: New Jersey.
2. Barlow. (1990). *Anxiety in hospitalized children. the pediatric journal* , 257-263.
3. Cherry,K. (2014). *Bobo doll experiment: Bandura's famous experiment on aggression*. Retrieved February 20, 2014, from <http://psychology.about.com/od/classicpsychologystudies/a/bobo-doll-experiment.htm>
4. *College and Association of Registered Nurses of Alberta (2014). Medication guidelines*. Retrieved March 21, 2014 from: <http://www.nurses.ab.ca/Carna-Admin/Uploads/Medication%20Guidelines%20-%20Jan%202014.pdf>.
5. *Education Portal (2003). Albert Bandura: Social-cognitive theory and vicarious learning*. Retrieved March 10, 2014, from: <http://education-portal.com/academy/lesson/albert-bandura-social-cognitive-theory-and-vicarious-learning.html#lesson> .
6. *European Medicines Agency (2014). Guideline on the acceptability of names for human medicinal products processed through the centralized procedure*. Retrieved from [http://www.ema.europa.eu/docs/en\\_GB/document\\_library/Regulatory\\_and\\_procedural\\_guideline/2014/06/WC500167844.pdf](http://www.ema.europa.eu/docs/en_GB/document_library/Regulatory_and_procedural_guideline/2014/06/WC500167844.pdf).
7. *Festini (2008). Strategies for nurse managers*. Retrieved February 10, 2014, from [http://www.strategiesfornursemanagers.com/ce\\_detail/231175.cfm](http://www.strategiesfornursemanagers.com/ce_detail/231175.cfm).
8. *Festini (2009). Science daily releases*. Retrieved February 15, 2014, from *science daily: 1*. <http://www.sciencedaily.com/releases/2009/03/090331091432.htm>Festini et al.
9. *Forsner, M., Jansson, L., &Söderberg, A. (2009). Afraid of medical care: School-aged children's narratives about medical fear. Journal of Pediatric Nursing, 24 (6), 519-528.*

10. Furey, Emmett. (2007). *A day with the super heroes at Shriners Children's Hospital*. Comicbookresources.com. Retrieved March 1, 2014, from <http://www.comicbookresources.com/?page=article&old=1&id=11071>
11. Hatter, K. (2014). *Effects of superheroes on children*. Retrieved on February 10, 2014, from <http://preschooler.thebump.com/effects-superheroes-children-8822.html>.
12. Hockenberry, M., & Wilson, D. (2007). *Wong's nursing care of infants and children*. (8th ed., Vol. 2, p. 1559). Singapore: Elsevier.
13. Han, H., (2009). *Measuring Anxiety in Children: A Methodological Review of the Literature Asian Nursing Research*, 3(2), Retrieved February 16, 2014 from [www.sciencedirect.com](http://www.sciencedirect.com).
14. James, A., Birch, J., & Curtis, P. (n.d.). *Space to Care: Children's perceptions and experiences of hospital space and space*. (N. Hammond, Ed.) Retrieved February 25, 2014, from The University of Sheffield: <http://www.sheffield.ac.uk/socstudies>.
15. Jiwani. (2013). *Looking into a child's perspective: How a child sees superheroes*. *The International Journal of Children's Psychology and Behavior*, 400-406..
16. Landier, W., Tse, A., (2010). *Use of complementary and alternative medical interventions for the management of procedure-related pain, anxiety, and distress in pediatric oncology: An Integrative Review*. *Journal of Pediatric Nursing*, 26, 566-579, doi:10.1016/j.pedn.2010.01.009.
17. Lerwick, J. L. (2013). *Psychosocial implications of pediatric surgical hospitalization*. *Seminars in Pediatric Surgery*, 22, 129-133.
18. Long, T., & Livesley, J. (2013). *Children's experiences as hospital in-patients: Voice, competence and work. Messages for nursing from a critical ethnographic study*. *International Journal of Nursing Studies*, 50, 1292-1303.
19. Ngueda, E. (2012). *The effect superheroes have on children*. Retrieved from <http://www.examiner.com/article/the-effect-superheroes-have-ochildren>.
20. Oswald and Price (2008). *Quasi-experiments (pretest-posttest design)*. Retrieved June 23, 2014, from <http://psych.csufresno.edu/psy144/Content/Design/Nonexperimental/quasi.html>.
21. Pagnucci, G. and Romagnoli, A. (N.D.). *The role superheroes play in children's learning*. Enter the Superheroes: American Values, Culture, and the Canon of Superhero (pages 125-126).
22. Poole, C., Miller, S., and Church, E. (N.D.). *Understanding how children use magical thinking to learn about and explore their world*. Retrieved February 3, 2014, from <http://www.scholastic.com/teachers/article/ages-stages-how-children-use-magical-thinking>.
23. Salmela, M. (2010, September 03). *Hospital-related fears and coping strategies in 4-6 year-old children*. Helsinki, Finland.
24. Salmela, M., Aronen, E., & Salanterä, S. (2010). *The experience of hospital-related fears of 4- to 6-year-old children*. *Child: Care, Health and Development*, 37 (5), 719-726.
25. Salmela, M., Salanterä, S., & Aronen, E. (2010). *Coping with hospital-related fears: experiences of pre-school-aged children*. *Journal of Advanced Nursing*, 66 (6), 1222-1231.
26. Smelter, S., Bare, B., Hinkle, J., & Cheever, K. (2010). *Brunner & Suddarth's textbook of medical-surgical nursing*. (12th ed., Vol. 1, p. 338-341). Philadelphia: Lippincott-Raven Publishers.
27. Thomas, M. (2012). *Superhero play should stay*. Retrieved February 3, 2014, from <http://www.essentialkids.com.au/preschoolers/preschooler-development/superhero-play-should-stay-20120612-207rn.html>.
28. Weiss, K., Dahlquist, L., Wohlheiter, K. (2011). *The effects of interactive and passive distraction on cold pressor pain in preschool-aged children*. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3146755/>.
29. Williams, T. (2010). *The influence of a superhero*. *Child space: The psychology of childhood*.
30. Wilson, M., Megel, M., Enenbach, L., & Carlson, K. (2010). *The voices of children: Stories about hospitalization*. *Journal of Pediatric Health Care*, 24 (2), 95-102.
31. Wolyniez (2013). *Ebsco*. Retrieved February 10, 2014, from Ebsco: <http://eds.b.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=318aec0d-2968-448e-8773-1708d1f54274%40sessionmgr114&v id=2&hid=107>.