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Incongruity Theory and its Application to Childhood

Incongruity Theory requires that one utilize schemas to find the element in humor that is inconsistent. Given that children are still developing and refining schemas, how can Incongruity Theory apply to those early stages of cognitive development? Understanding how these are associated within children can assist in understanding how children cognitively interact with their environment – divulging how best to instruct them academically, as well as revealing how children with exceptionalities develop cognitively, and what those distinctions mean in regard to their sense of humor.

In order to understand how schemas interact in respect to humor, one must look to differing disciplines. This inquiry serves to help us better understand the life-stage of childhood, which our society idealizes and covets. For the purposes of this study, I have implemented concepts from psychology, history, humor, and education (with relation to children with exceptionalities) – without which this question could not be answered conclusively. The disciplines of psychology and history will aid in explaining cognitive development - particularly how schemas are developed, as well as provide a brief history of the birth of “childhood.” Humor and education on the other hand, will serve to demonstrate how the interaction of differing schemas can explain what children find funny, as well as how they learn.

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History and Child Development

The 19th century has been characterized as “the century of the child” (Divine, 2011, p. 287), as it was in this time that childhood, as we know it today, was born. Prior to the 19th century, children were considered in a more casual manner – often being sent away for schooling or apprenticeship in distant cities. In particularly wealthy families, children were not sent away but instead spent the majority of their waking hours with servants and tutors rather than their parents or other family members. For the first time, childhood was seen as a “distinct stage of life requiring the special and sustained attention of adults” (Divine, 2011, p. 287). Children were no longer simply additional bodies to support the family through work, but were “unique and irreplaceable individuals” (Divine, 2011, p. 287). From this time period, we see the emergence of literature aimed specifically toward children and their education as well as entertainment.

Indeed the 19th century marks a distinct transformation in children’s schema development, as children were exposed to new information and experiences that had not previously. As much as “childhood” came into existence, so did “parenthood.” With the emergence of children’s literature, the development of literature pertaining directly to parenting best practices and how parents could implement these within their own homes (Divine, 2011). Parents were considering the not only the health, but the physical and cognitive wellbeing and development of their children for the first time.

This new culture established a dramatic shift in the development of schemas in children. With the exposure to new experiences, the safe and nurturing environment of the home in which to learn about the world, as well as the ceaseless possibilities afforded by the new realm of fantasy, schemas were more refined in earlier years of life.

Cognition and Schemas

In the science of cognitive development and psychology, schemas are described as an arrangement of thoughts or behaviors that organize categories of information within the brain. Organizing new information into these categories puts us into what Piaget calls “equilibration” (Yongue, 1998). To reach equilibration, we undergo two processes: accommodation and assimilation (Yongue, 1998). In accommodation, our brain works to alter the schemas that we already have in order to categorize the new information coming in. In assimilation, the brain works to alter the information to fit our existing schemas.

Schemas can be thought of like internal filing cabinets within the brain. Children create these filing cabinets based on their experiences and learned knowledge. As we develop, we are constantly working to refine these schemas – create more files within a specific cabinet, or create new cabinets altogether. A classic example of this process of refinement is as follows:

A child is in the car with her parents. As they drive past a field of cows, the child points and exclaims “dogs!” Her mother explains to her, “No, those are cows in the field, not dogs.”

The child has just refined her proto-schema of “dog,” as well as created a new schema for “cow.” This is an example of both assimilation and accommodation. The child has cultivated her schema for “dog” from being any animal that has four legs, and walks outside, and has created a new schema that is “cow” which involves animals with spots, four legs, and make a distinct “moo” sound. Each of these schemas will continue to evolve as the child develops and encounters more information, such as seeing many different breeds of dogs (think St. Bernard vs. a Chihuahua) and categorizing them correctly, as well as seeing cows that do not look like her original schema for a cow. These could include a brown or black cow, a dairy cow or a bull, or calves of different

ages and sizes, etc. Our schemas constantly change as we mature and encounter new information, and our brain works diligently to find connections between this information to complete classification.

A representation of this refinement can be seen in the developmental milestone of “categorization ability.” Categorization ability, which is achieved by age 7 in a typically-developing child (Piaget), illustrates the brain’s ability to make an inter-schematic connection – to bridge from one schema to another in order to find similarities or differences, and make classifications accordingly. A child who has not yet mastered categorization ability will find exercises like finding objects that don’t belong in a group very frustrating.

A child with categorization inability has not refined his/her proto-schemas to a point that the brain can identify affinities between objects. For instance, a child with categorization inability is unable to separate a card with a kite on it from a group of cards with food items. When asked which card is different, the child indicates that *all* of the cards are different – and they are. Each food item is different. However, even with coaching and utilizing a verb-association method (i.e. what do you do with these three, what do you do with the kite, etc.), the child is unable to put the food into a blanket category separate from the kite.

Incongruity Theory

This continual connection seeking is what Incongruity Theory depends upon. Incongruity Theory states that laughter is caused by “the perception of something incongruous” (Morreall, 2009, p. 10). In other words, our brains expect a certain outcome, and when that outcome does not occur, our brains find pleasure in discovering how the actual outcome and the expected outcome relate to one another, producing humor. Morreall provides several examples of incongruities in his book “Comic Relief.”

One of these examples being: a chipmunk is running toward a character in a movie, and we expect that the chipmunk will avoid the character, but instead it leaps up and bites his/her jugular, effectively killing him/her (p. 10). Our brain has a particular expectation of the chipmunk, based on our schema for chipmunks (they are timid, quick-footed, rodents, etc.) and then the scenario violates that schema. If “the point of humor is disruption of context and meaning” (Mayo, 2010, p. 520), then Incongruity Theory makes perfect sense as an explanation of humor and laughter. We understand that there is something wrong within the situation as given, and we experience this “gap” as “comical (Hark, 2010, p. 15). Once our brain searches for a way to connect the scenario to our schema, and discovers how the scenario interacts with the schema, we find pleasure in making this connection. Knowing that our brain engages in this way with new information, it would seem that utilizing incongruities with children in the classroom could increase and support their learning.

Education

When it comes to the classroom, teachers are invariably searching for new and inventive ways to engage students with the material. In order to do this effectively, one must understand “which triggers for interest are likely to be effective and which features of the environment enable a triggered interest to be sustained” (Renninger and Bachrach, p. 58). This is a perfect opportunity to utilize incongruities with students in the classroom. We’ve already determined that the brain utilizes a filing system called “schemas” to organize information, and that our brains enjoy making connections between incoming information and our schemas. Knowing this, it is feasible to propose that instructors find a way to create and deliver incongruities to their students to insure retaining of required material.

In order to achieve this, the instructor could present the students with information that they should already know, followed by a piece of false or incongruous information, and ask the students why it is incorrect or does not work in the situation. For instance, if the students have been studying the solar system, the instructor could make a series of statements that present incongruous material to the students, and the students would need to explain to the instructor *why* said material does not make sense. The students' ability to do so would indicate to the instructor that their schemas are refined in respect to this subject matter – at least to the point in which they have been instructed. This sort of activity, as well as “a responsive educator and an appropriate environment can enable a person to become more engaged” (Renninger and Bachrach, p. 61), an education best practice. Engagement is crucial in regards to learning, but not every child learns in the same way.

Incongruities can also be used in the classroom through the study of literature – particularly satire. The whole premise of satire is, arguably, an incongruous layer of opinion or voice over a particular idea or concept. In order to understand satire, the students must be able to understand the underlying idea, as well as the layer of satire that has been laid over it. Separating the two, and understanding how the satire takes liberties with the underlying idea (the incongruity of the material) is how humor is produced from satire.

Exceptional Children

Children with exceptionalities process information in different ways than children who are developing typically – “exceptionalities” here describes children with cognitive delays, children on the Autism Spectrum, gifted children, and children who have been victims of abuse or neglect. Children in each of these categories will develop schemas in different ways, or have manipulated or false schemas, than typically-developing children. Children with Down syndrome

for instance, “have a distinctive cognitive phenotype characterized by a particular pattern of deficits, as well as a pattern of relative strengths, when compared to children developing typically and children with other types of cognitive impairment” (Patterson, Rapsey, Glue, 2013, p. 307). The way these children develop cognitive schemas will be disparate from the typically-developing child.

In addition, a child with high-functioning autism, who experiences extreme sensory input throughout his/her waking hours will have atypical schemas. For instance, his/her schema for “classroom” will be vastly different from that of a child who does not have to deal with this input overload. For a child with high-functioning autism, the classroom can be an extremely bright, loud place with colors everywhere that cause extreme headaches and distraction, as well as a plethora of competing textures from the flooring to the walls, doors, board, desks, everything. This schema is a product of the child’s experience, but it is manipulated by the child’s exceptionality.

Gifted children are different in that they do not have a deficiency regarding their schemas, but rather a rapid and advanced refinement. Due to this, incongruous situations will not stimulate these children in the same way they might in other children within their age group. The rate at which these schemas develop, and their state of refinement are what gifted children’s exceptionality stems from.

Finally, children who have been victims of abuse will likely be the polar opposite of children who are “gifted.” Not to say that a child who has been abused cannot be “gifted,” only that these children have a much different schematic view of the world than a typically-developing child. For instance, a typically-developing child’s schema for “mother” may look something like: nurturing, warm, supportive; a child who has been neglected or abused by their

mother may have a schema that looks like: absent, cold, bitter. In this way, children who have had these damaging life experiences will also have impaired or flawed schemas.

Conclusion

It stands to reason that Incongruity Theory is *not* applicable to children with DS and with other exceptionalities due to schematic constraints. Most notably is the “reduced working memory capacity” (Patterson, Rapsey, Glue, 2013, p. 307) in children with cognitive delays. The receptors that allow for the continual shift between schemas are related to the same receptors that contribute to memorization in the brain. If the proper receptors are not firing to allow the child to switch quickly and continually to different schemas, the child’s ability to understand incongruities will be vastly reduced. This does not go to say that children with exceptionalities will never understand incongruities or derive humor from them, only that those incongruities will typically be marked by simplicity and ease of the schematic transition.

As children are continually developing and gaining new and more complex cognitive function, it stands to reason that Incongruity Theory can indeed be applied to typically-developing children who have gained the ability to categorize information. Children who have categorization inability (typically aged younger than 7 years) will have less developed, proto-schemas. If a child cannot identify the category in which the scenario within the incongruity lies, they will be unable to make the connection between the incongruous information and the schema activated by the scenario. Following approximately age 7, children have mastered categorization, and incongruities will not only be applicable to their sense of humor, but also can be used as an educational practice to help increase engagement.

Without the implementation of an interdisciplinary approach, any answer to this question would have heavily reflected disciplinary bias. An interdisciplinary approach allowed me to gain

deeper understanding of each of the individual components that contributed to the science behind this question, without the obscurity of personal bias from my own discipline, or any other discipline I studied. The interdisciplinary approach can, and should, be used beyond the walls of the classroom. Synthesizing information and ideas from several disciplines in order to form your own ideas or solutions to problems is the most effective way to reach a plausible and accurate solution without the polluted ideas that disciplines can often lean toward, as their explanations often derive only from their own internal understanding.

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