

Hindu and Christian Children's Concepts of Life, Death, and Afterwards

Suzanne Nellie Bryce

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Abstract

Children's understanding of death is likely to mediate how effectively they cope with the experience of the death of loved ones, or in the case of severely ill children, their own impending deaths. In order to develop the most appropriate forms of death education and counseling, developmental differences between children in the formation of a coherent concept of death must be understood. Research to date has mainly been focused on theoretical concepts instead of empirical research and indicates that mature concepts of death typically include four components: irreversibility, nonfunctionality, inevitability, and causality.

This study found systematic differences in beliefs about death and afterlife both between ages and religious groups. However, much variation existed within each group. Overall, it appears that Hindus generally have more uniform beliefs than Christians. Also, Hindu beliefs are less varied among adults than among the two groups of children, while Christian beliefs actually seem to be more diverse among adults than children, perhaps because of the way adults interpret questions about spirituality.

Statement of Problem

Because death is not a subject that many people care to discuss, many children learn nothing about death (outside of television and movies) until they experience the death of a loved one or pet. Some children are educated about death through their religious upbringing. Other children have parents who openly converse about the topic starting early in the child's formative years. Some children may not have to deal with the death of anyone close to them until adulthood, while others tragically experience the death of a parent or a sibling early on in life. Terminally ill children have to deal with their own mortality and impending death. How do children from such strikingly different backgrounds acquire knowledge about death that can culminate in an understanding of several universal aspects of death by adulthood?

The paths to this central understanding about death seem varied and divergent. Important to a child's development of a death concept include experience, representations, and education about the topic. Since a clear understanding of death can assist children through the grieving process following the loss of loved ones, it is imperative that children develop a full and healthy comprehension of death during their development to adulthood.

If the development of representations of death concepts in children can be explored and better understood, education can be expanded to aid in anticipating the age appropriate needs that are essential to caring for and comforting the bereaved child. If a child fails to understand death and fears it, the loss of a loved one will have a different and likely more negative effect on that child than on a child with a developmentally

complete perception of death. By educating psychologists, counselors, religious leaders, educators, and parents about developmentally-based differences in children's understanding of death, improved care and comfort of the bereaved child can result. It is crucial to explore all facets contributing to the development of a clear, age appropriate comprehension of death.

Method of Locating Resources

In order to find relevant resources, I used PsychInfo, a database of literature on a variety of psychological topics. I entered the keywords ALIVE, DEATH, AFTER-LIFE, REINCARNATION, and CHILDREN. I limited the research to empirical research in peer-reviewed journals. While about two hundred articles appeared from these keywords, more than half were inappropriate due to several factors. For instance, I did not want articles on bereavement but instead on actual religious beliefs. Additionally, some of the articles were not true studies despite my specification in the search requirements. I managed to narrow down the pool to about forty relevant articles, which I read through. From those, I selected roughly fifteen interesting and varying articles, which are discussed in the Literature Review.

Literature Review

The research on children's death concepts up until this point diverges into two categories: general studies about concepts of death and domain specific studies on certain aspects relating to the development of these concepts. Interestingly, the majority of the

older studies (prior to 1990) are focused on broadly studying and describing death concepts, while the more recent research is dedicated to domain-specific investigations.

Early research on children's concepts of death indicates a general age-related developmental pattern (Childers & Wimmer, 1971; Kane, 1979). Seemingly obvious results were experimentally explored, such as the conclusion that children's understanding of death develops from absence to incomplete to complete (Kane, 1979.) It was also noted that experience with death produced earlier understanding of death concepts in children (Kane, 1979.) Koocher (1981) determined that children's concepts of death are determined by their "experience, feelings, and cognitive capability" (pp. 85). His research showed that the development of death concepts parallels development in other realms of cognitive understanding. A Piagetian connection was made between the stages of cognitive development and the understanding of death (Kane, 1979).

Research shifts to focus on more domain-specific aspects of the development of death concepts starting in the late sixties. These early studies were generally speculative. Grollman (1967) took an anthropological stance in his book, claiming that society and religion impacted a child's understanding of the subject. Mitchell (1967) agreed, suggesting that a variety of social and psychological factors interact to produce a complete understanding of death. Social factors she cited include a child's scientific understanding, religious background, rituals, and experience with death. Psychological factors include fear of death and separation from the parent, and beliefs about immortality (Mitchell, 1967). Although Grollman and Mitchell's ideas were comprehensive and somewhat revolutionary for their time, their empirical evidence was sparse. The

literature documenting their studies consists mainly of descriptions of ideas and case studies involving single subjects.

The investigation of the psychological aspects about children's understanding of death is advanced in Childhood and Death, a 1984 book by Wass and Corr. This book discusses children's understanding of death from the point of view of three of the major developmental theories of the time, Freud's theory, Piaget's theory, and social learning theory. The study touches on Freud's psychoanalytic view, describing understanding of death in children as based on instincts and anxiety. Piaget's cognitive view is used to explain death concepts by the development of causal thinking during the preoperational stage. The social learning theory attributes an understanding of death as developing from television, fairy tales, and children's books that have death as a topic. Wass and Corr base their assessments purely on theoretical explanations, that while interesting, do not support any one theory over another, and support no guidelines for applying the information to the benefit of the children.

The 1984 study by Speece and Brent, which explored three components encompassed by the death concept, is the most frequently cited study in all literature regarding children's death concepts. These three components have been elaborated and expanded upon, but are still utilized in some form in nearly all of the later studies. The first component is irreversibility, which is the fact that a creature's physical body cannot come back to life following death. The second, nonfunctionality, describes the understanding that all functions defining life cease at death, including breathing, eating, and having babies. Finally, universality is defined as the fact that every living thing eventually dies. Speece and Brent determined that the majority of urban children acquire

an understanding of death as defined by these three components between ages five and seven. They suggested that this developmental achievement may be related to the Piagetian transition between preoperational and concrete-operational thinking that occurs at the same age, but cite unclear results in attempts to explore the reasoning behind this relationship. Despite earlier research in accordance with Piagetian parallels (e.g. Kane, 1979), Speece and Brent remained unconvinced that this relationship was meaningful.

The Speece and Brent's research initiated several studies focusing on the extension of their theory of the three components of a death concept to other domains. A study based on four concepts of death including irreversibility, nonfunctionality, universality, and a fourth concept, causality (understanding the causes of death) was based on the differences between plants and animals. Nguyen and Gelman (2002) showed that children as young as four years old understood that all four concepts applied to living beings, such as plants and animals, but not to artifacts. However, many children between ages four and six had difficulty applying the four concepts appropriately to plants in all situations, possibly indicating knowledge base as a factor in assessing information pertinent to death. Poling and Evans (2004) also explored the understanding of death in terms of irreversibility, nonfunctionality, universality, and causality in different populations. The populations included children, parents, scientific experts, and medical practitioners. Questioning these individuals about their beliefs regarding each concept in terms of individual and species death, Poling and Evans discovered that all four concepts were better understood in individual creatures than in terms of entire species of animals. Additionally, the understanding of the concepts was increased not only by age, e.g.

between children and adults, but also by knowledge base e.g. between laypersons and those with scientific experience.

From these studies, it appears that children have a basic understanding of the four defining features of death identified by Speece and Bent by age six. However, it is likely that a more comprehensive understanding (e.g. one that includes mechanistic understanding of different causes and understanding that death applies universally to plants and other species instead of simply animals, is slower to develop).

Silverman (1987) describes the stages of development of death concepts and uses these to stress the importance of death education. An interesting statistic in her article is that three-year-old terminally ill children were as knowledgeable about the concepts of death as healthy eight-year-old children. This emphasizes the impact of life experience on the development of a death concept. She claims that death education can be helpful for children of any age, useful for clearing up confusion, misinformation, and fear about the topic.

Despite the large number of studies on the general development of a death concept and some research regarding domain-specific applications of knowledge about death, few empirical studies exist exploring the impact of culture or religion on its development. While some early researchers (e.g. Grollman, 1967) cite the importance of cultural and religious influences on children's understanding of death, research on those influences is minimal.

One relevant empirical study relevant to the impact of religion on the development of death concepts is Rubenstein's 1987 research on the Protestant religion and death concepts. She distributed a questionnaire to eighty-five children ranging in age

from kindergarten to ninth grade regarding their concepts of death. She found that the older children had a greater understanding of the teachings of the Protestant church about death. Older children were more likely to believe in life after death than younger children. While her study was relevant to the topic, the results would be more useful if she had also used a control group of non-Protestant children to determine if it was age, religious training, or both that influenced the participants' responses.

The most recent is also the most impressive study regarding cultural influences on children's concepts of death. Completed in Taiwan (Yang and Chen, 2002), the researchers had 239 children draw depictions of death, and then they categorized the drawings. The categories they used indicated which view of death the researchers interpreted the children as holding from their drawings: biological (ceasing physical being), or spiritual (going to heaven or becoming another creature.) Interestingly, statistical analyses showed no significant differences according to gender, health, religion, funeral attendance, or previous deaths of loved ones. This is contrary to American studies citing the importance of such cultural factors. Was there an underlying cultural bias in the Yang and Chen research? Is it possible that the U.S. research has been too limited in scope to identify such universal death concepts, do the cultural discrepancies between Chinese and American children account for the differences, or might their method of interpreting drawings result in the disparities?

The majority of literature on the development of death concepts in children up to this point has been theoretical and speculative. While some empirical studies have been completed in recent years, the participants were limited to extremely narrow social categories. There are few studies comparing the death concepts of children in different

cultural groups, even within America where multiple cultures can be studied concurrently. The few cultural studies that have been completed focused on one culture or religious group at a time. Because of those self imposed limits, the existing research is unsatisfactory and incomplete. To increase the validity and usefulness of studies of the development of death concepts in children, research must be expanded to include the effects of culture, religion, and scientific education, as well as age and developmental information. In order to better facilitate death education in children of America, we must understand and measure as many of these factors as possible.

Research Approaches

Differences in research approaches are significant and must be considered in determining research methods in future studies. The method used by Yang and Chen (2002) is especially interesting; it allowed children to freely express their beliefs and knowledge through drawing and then they systematically scored each child's artwork using a quantitative scale in order to perform statistical analyses on the data. However, the researchers assume that their interpretations of the children's drawings give them insight into the children's beliefs while this may not in fact be true. While questionnaires are simple and easy to score, Piagetian-type questioning may more effectively determine what children know about the beliefs of their religion or culture and what they individually think about those beliefs. A combination of both questionnaire and open-response research methods is ideal, especially if it encompasses indicators of age, culture and religious upbringing, and understanding of basic scientific concepts. Selection of the test group to include a broad range of children would contribute to its usefulness. In

addition to assuring representations from the major religions present in the U.S., it may be necessary to determine the type of Christianity espoused since some Fundamentalist Christian groups espouse theories that are not in line with current scientific knowledge.

Unresolved Issues

Myriad unexplored and unresolved issues exist in the spectrum of children's development of death theories. Studies in the future should focus on a specific aspect of cultural identity in order to determine that facet's influence on this developmental pattern. For instance, children with varying levels of experience with death should be compared to determine the impact of life experience on their understanding of death. Additionally, different cultural groups and their burial customs should be studied with the intent of determining their influence on the child's understanding of death. Finally, different religions and their teachings must be explored to determine how or if religious doctrine influences the development of children's death concepts. It is not enough to simply compare children within one religion; various religious and spiritual stances, such as the aforementioned sub groups of Christianity must be included, along with a control group of non-religious children. If, as Yang and Chen's study showed, none of these factors contribute to developmental differences, then a simple and universal death education program can be produced. However, if significant cultural differences and religious differences are found between various groups, death education must be individualized to best suit each group of children. By making death education most appropriate to children's developmental, religious, and cultural paths, culmination in the

form of a full understanding of death will result. This will serve to help children to better cope with death when it affects their lives.

Method

Participants for the study were obtained from local Christian churches and Hindu temples. There were three groups: young children (6-8), older children (10-12), and adults. There is one Hindu congregation in middle Tennessee, and a graduate student in the psychology department is of the Hindu faith and assisted in finding participants. The study consists of 8 participants per 3 age groups, for a total of 24 participants in the experiment.

Initially, a pilot study was be run on 2-3 participants per age group. This study was performed to ensure that the questioning system was effective and to determine whether any more questions needed to be asked in order to obtain interesting results. While the questions must be detailed enough to get answers that correctly gauge each participant's knowledge of life and death, the questions cannot be so specific that they plant ideas in the participants' minds about the correct answers. The pilot study served to ensure that this was not a problem.

In both the pilot study and the actual experiment, participants were asked about 6 objects. While what I truly wish to discover from this study is children's level of understanding about human life, growth, death, and after-death, creatures from all spectra must be included to determine whether any systematic differences exist. The first object being questioned about to the subjects is the human. This object serves the main purpose of the experiment, to determine whether any differences exist between children of

different age groups and different religions in their understanding of the life, death, and after-life of people. The next object chosen for the study is a monkey. Monkeys are seen as similar to humans, at least in the eyes of Westerners, but they don't have all of the culture and intelligence that humans do. It will be interesting to see how the various groups in the study rate monkeys as compared to humans. The next creature is a dog. Dogs are familiar to most children, and while seen as a great companion, are not very human-like in their features or behavior. Additionally, an ant was used as one of the objects. Ants are strikingly different from humans, while at the same time are quite familiar to most young children. For the category of plants, a tree was used as an object. While a flower may have been a good choice, most children would likely say that a flower is alive since it grows so quickly. A tree will serve as an interesting object because many young children are completely unaware that a tree is alive. Finally, to serve as an inanimate but still naturally-occurring object, a rock was used. Instead of using a human-made artifact such as a chair, a rock was selected because it occurs in nature like animals. These 6 objects cover the range of relevant creatures in nature. First, there is one inanimate object to serve as a control. Then, in the animate category, there is one non-animal life form, the tree. Within animals, there is one non-mammalian animal, the ant. Finally, there are three mammals. One is the human, the direct focus of this research, while the other two mammals have varying degrees of similarity to the human. Higher and lower forms of animals are used.

The actual questioning was relatively simple. There was a basic set of questions for each object, based on the four concepts of death explained by Speece and Brent. These questions were presented in random order for each object, so that carryover effects

were not a problem for within-subjects factors. All of these basic questions were in the form of yes/no. Each was followed by an open-ended question, probing for an explanation of the participant's reasoning. The yes/no questions were the primary interests of the study, with the follow-up questions used to clarify the subject's understanding of the question and reasoning behind their response if necessary. The questioning followed a structure such as this:

(show picture of tree)

Is this tree alive?

Why?

Does this tree have to die someday?

How come?

When the tree dies, can it still grow?

Why not?

After the tree dies, can it go to heaven?

Why?

Can the tree come back as something else after it dies?

Why/What?

Obviously, each yes/no question was followed up with an open-ended question relevant to the participant's answer to the initial question. The questioning was repeated for each of the six objects, with randomized order of both object and question within object categories.

The study was completed in the form of oral questioning. The researcher wrote down responses to the questions, and a tape recorder was used to record the interview. The surveys were completed at the local temple and churches. The children were questioned with their parents' permission, and in their presence to ensure the children were comfortable enough to answer questions from a stranger.

Design of the Study

The design of the study includes two types of dependent variables and four independent variables. The two dependent variables are the frequencies of yes/no answers to the yes/no questions and the results of the open-ended responses. The rest of this discussion is focused mainly on the yes/no questions, since the frequency data was drawn from those questions.

The four independent variables are age group, religion, question, and object. Religious group and age group are between subject variables, while the five question types and the six object types are within subject variables.

The table outlining the design of the study shows all of the different factors to be explored (see Table 1). As shown in the table, all subjects were asked all five questions about all six objects.

Results

The data from each participant in each group was tallied according to a numerical system. "Yes" answers were coded with a 1, and "No" answers were coded with a 0. Then, all participants' scores were summed to find a total number of yes/no responses for

each question for each age group and for each religion. These sums were then compared to find systematic differences. The data was analyzed using a binomial. According to the binomial probability, the chance that all eight of the subjects in a group would answer the same way is less than 0.01, and the chance of seven of the eight Subjects responding the same is less than 0.05.

I anticipated strength in understanding of religious beliefs to increase linearly with age. That is, I expected the younger children to score worse than the older children, who in turn were expected to score worse than the adults on the measures of religious strength (that is, in the number of “yes” responses to each question.) I expected there to exist systematic differences between the two religious affiliations as well.

For the first question, for example (Is it alive?), I expected all participants from all age and religious groups to claim that a person, monkey, dog, and ant are alive. I expected all participants to say that a rock is not alive. However, I believed that some of the participants from the group of young children will not realize that a tree is alive. Thus, the only differences I expected in the first row are in the tree category. This was anticipated mainly to be a difference between age groups and not religious affiliation.

An example of question that I expected to exhibit religious differences is question number 5, When the object dies can it come back as something else? I anticipated some age differences and many religious disparities. I believed that Judeo-Christian adults would say that none of the objects can come back to life. I anticipated Hindu adults to say that all of the living things can be reincarnated, but not the rock. The youngest group of children from each age group was expected to be confused about the concept of reincarnation, so their responses were anticipated to be mixed and off-topic. However, it

is informative to see whether the 9 to 12 year olds exhibit responses more similar to the adults from their religious group or the younger children. I planned to explore the developmental pattern of these religious concepts.

The defining features of life and death, as dictated from my literary research, are directed towards the typical Judeo-Christian beliefs of many Americans. These defining features, therefore, may not accurately describe the beliefs of Hindus. For instance, irreversibility is a defining feature of death. This means that, according to Christianity, beings cannot return from heaven or hell after death. This feature also applies to the biological definition of death: something's body cannot come back to life after death. However, Hindus believe in reincarnation, which directly opposes the feature of irreversibility. Thus, while Hindu children may not show great religious maturity according to a Judeo-Christian set of defining features, they may in fact have deep knowledge of their own religion.

Significance

Children take time to develop full understandings of life and death. These complex, and at times upsetting, areas of knowledge require years to culminate in a mature comprehension of the topic. Much of an individual's beliefs about death is dictated by their religious background. While research exists on the development of death concepts in Judeo-Christian children, this likely does not extend to Hindu children living in America due to the disparities between beliefs in those two religious categories. Thus, death education and bereavement counseling directed at American children may not be well-suited to children of other religious backgrounds, whose concepts of life and

death may differ substantially from Judeo-Christian beliefs. This study will contribute to existing literature on death concepts by determining whether systematic differences exist in the development of concepts of death in Judeo-Christian versus Hindu children living in the United States. While the study will be somewhat limited by number of participants, it will bring awareness to the fact that studies and counseling must emphasize the differences between children from different religious backgrounds in order to best facilitate their development. While Hindu children may not fit Speece and Brent's Judeo-Christian model of the development of death concepts, they in fact may prove to be quite mature in understanding their own cultural beliefs about death.

Data

Question 1a: Is it alive?

For this question, all of the subjects from each of the three age groups (6-8, 10-12, and adult) and from both religions appropriately said that humans, monkeys, dogs, and ants are all alive. The binomial $p < 0.01$. All six-to-eight and ten-to-twelve year olds from both religions correctly said that rocks are not alive. All of the Hindu adults agreed that rocks are not alive, as did seven of the eight Christian adults. The one Christian adult who claimed that rocks are alive justified this statement by saying that this is true because a rock is "filled with elements of all of the earth experience surrounding it." Apparently, this adult interpreted the question differently than the researchers had intended. It appears that her personal philosophy is that anything natural, that is,

anything that comes from the earth, is alive. The binomial p for seven correct responses is <0.05 .

The youngest group of children seemed more confused about whether or not trees are alive. While all of the adults and ten-to-twelve year olds from both religious affiliations appropriately said that a tree is alive, the younger children varied in their responses. Seven of the eight Christian children said that a tree is alive (The binomial $p < 0.01$, while only four of the eight Hindu children claimed this. It appears that young children had the most difficulty determining whether or not a tree is alive compared to the other experimental entities, and also that Hindu six-to-eight year olds struggled with this more than Christian children of the same age.

Question 2a: Does it have to die someday?

For this question, all of the ten-to-twelve year olds and adults from both religions correctly responded that humans, monkeys, dogs, ants, and trees all must die someday, but that rocks do not have to die since they are never alive to begin with. The binomial $p < 0.01$. The youngest age group appeared to have more difficulty finding the correct answer to this question. While most of the Christian children answered this question correctly for each entity, one child incorrectly said that monkeys, dogs, and ants do not ever have to die because they do not have “age numbers,” – that is, they do not possess birthdays so they cannot grow old and die. Binomial, $p < 0.05$. Interestingly, this child did correctly report that human and trees must die, and that rocks do not die. This child appears to believe that since animals other than humans do not have birthdays, they do

not have to die. They also must distinguish between trees and animals in their mind, because they stated that trees must die.

All of the Hindu six-to-eight year olds correctly reported that humans, monkeys, dogs, and ants must someday die, and that rocks do not die. Binomial $p < 0.01$. Again, these children struggled with the definition of a tree as alive. Four of the eight Hindu children in this age group claimed that trees do not ever have to die. Interestingly, these were not the same four children who reported that trees are not alive. Some of these children seem to think that trees can die (even while they believed that trees were not alive.) This shows that the Hindu children were generally confused about the properties of trees in the sense of what it means to be alive.

Question 3a: When it dies, can it still grow?

The responses were more varied among age, religious group, and entities for this question. Everyone from all of the religious groups and age categories reported that rocks do not grow after death, since they do not grow at all and cannot die, making to point moot. All of the Hindu adults reported that all of the entities can no longer grow after death. Binomial $p < 0.01$ This group reported the most unified answers. The Christian adults answered much more diversely. Four of the eight Christian adults reported that humans can still grow after death. Three of the eight reported that trees can continue to grow. Also, two adults reported that monkeys, dogs, and ants can grow after death. Christian adults cited two main reasons in their claims that entities can continue to grow after death. The first is a common belief that is not in fact true: several subjects

said that hair and fingernails continue to grow after death. In fact, the water in the body dries up, shrinking the skin, which makes the hair and nails appear to grow. In actuality, they do not. However, this belief is relatively widespread in popular American culture. Two Christian adults in this study cited this reason as evidence that people can grow after death. The second reason that Christian adults cited for the continuation of growth after death was in terms of spiritual growth. Two of the adults who reported that humans can continue to grow after death gave spiritual reasons. These subjects interpreted the question to include metaphysical growth, when the experimenter had intended to question to inquire about physical growth. Most responses claiming that trees can grow after death cited things such as hibernation, moss growth, seed growth, and leave development as reasoning behind this idea.

The ten-to-twelve year old Hindus also have relatively consistent answers, with all subjects in this group reporting that humans, monkeys, dogs, ants, and monkeys cannot grow after death. Binomial $p < 0.01$. Six of the eight subjects reported that trees cannot grow after death, one did not know the answer to this question for trees, and one reported that trees can grow after death.

The ten-to-twelve year old Christian children were more varied in their responses than the Hindu children of the same age group, but less varied than the Christian adults. All of the children in this group reported that monkeys, dogs, and ants cannot grow after death. Binomial $p < 0.01$. Two of the eight suggested that humans can continue to grow after death due to spirituality, and four of the eight claimed that trees can grow after death due to leaves and seeds sprouting from the dead tree, and thus continuing life.

The six-to-eight year old Christian children were actually the least varied in their answers of all three Christian groups. All eight of these subjects claimed that humans, monkeys, dogs, and ants cannot grow after death. Binomial $p < 0.01$. Only two of the eight subjects said that trees can grow after death.

The six-to-eight year old Hindus were even more uniform: they all reported that monkeys, ants, dogs, and trees cannot grow after death. Binomial $p < 0.01$. Only one child in this group claimed that people can grow after death. Binomial $p < 0.05$.

Question 4a: After it dies, can it go to heaven?

Overall, the responses to this question were diverse for all age groups, religions, and entities. Hindu adults were again the most consistent in their responses: all eight claimed that humans, monkeys, dogs, and ants can go to heaven, and rocks cannot. Binomial $p < 0.01$. Five of the eight stated that trees can go to heaven. Hindu six-to-eight year olds and ten-to-twelve year olds also agreed that rocks cannot go to heaven, but their responses about the other entities varied. Six of the eight younger Hindu children (six-to-eight year olds) reported that humans can go to heaven, while seven of the eight older Hindu children (ten-to-twelve year olds) made this claim. Binomial $p < 0.05$. Four of the younger Hindu children claimed that monkeys and dogs can go to heaven, while 6 of the older Hindu children claimed that monkeys can go to heaven, and 7 of the eight claimed that dogs can. Binomial $p < 0.05$. Only one of the younger Hindu children said that ants can go to heaven, while five of the older children said that ants

can. Two of the younger Hindu children said that trees can go to heaven, while three of the older ones claimed that trees can, and one was unsure. Interestingly, the Hindu data shows a developmental progression with the beliefs of the older children intermediate between those of the younger children and the adults.

Christian's responses were all across the board. While all Christian subjects from all three age groups reported that humans can go the heaven and rocks cannot, (binomial $p < 0.01$), the rest of the answers varied a great deal. For the monkey, three younger Christian children, two older children, and five adults claimed that it can go to heaven. Five of the eight younger children (aged six-to-eight years old) reported that dogs can go to heaven. Three older children (aged ten-to-twelve years old) claimed that dogs can go to heaven, and one was unsure. Six adults believed that dogs can go to heaven, and one claimed that they did not know. Two younger Christian children, one older Christian child, and three Christian adults believed that ants can go to heaven. Finally, two younger Christian children and one Christian adult reported that trees can go to heaven. Binomial $p < 0.05$. The beliefs of the Christians were uniform regarding the fate of humans and rocks, but displayed great variation for the other four entities.

Question #5a: After it dies, can it come back to life?

The responses to this question were again extremely variable for both religions and across all three age groups. All eight Hindu adults claim that humans, monkeys, dogs, and ants can come back to life. Binomial $p < 0.01$. Six of the eight Hindu adults

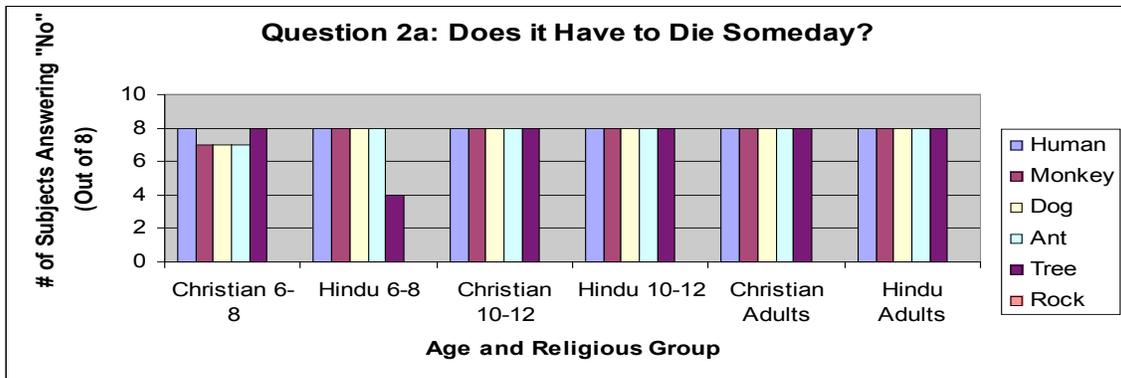
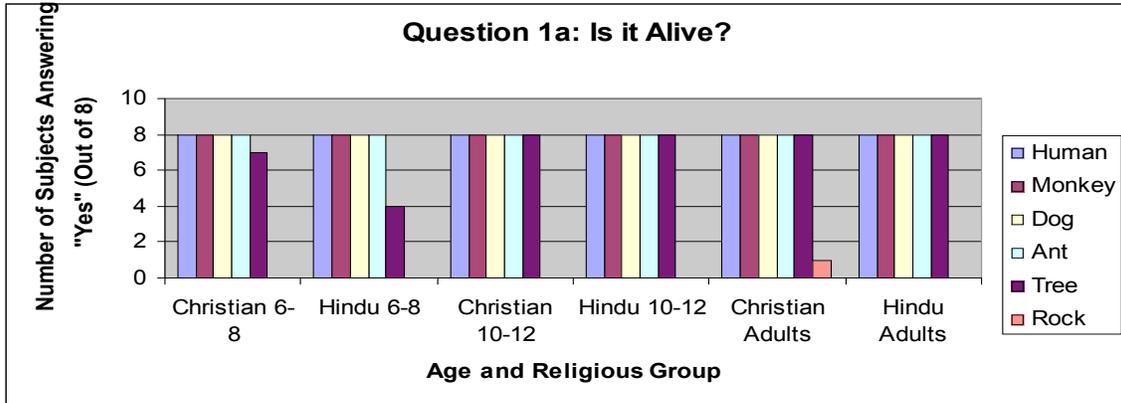
reported that trees can be reincarnated, and none believe that rocks can be. Seven of the older Hindu children (ten-to-twelve year olds) and five of the younger Hindu children reported that humans can come back to life, compared to only two of the younger Christian children and one of the older Christian children believing this. Three of the Christian adults believe that humans can be reincarnated.

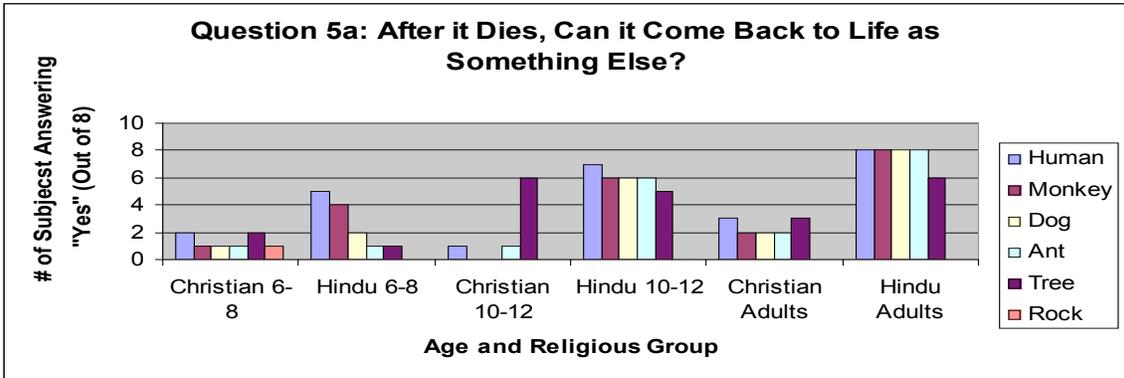
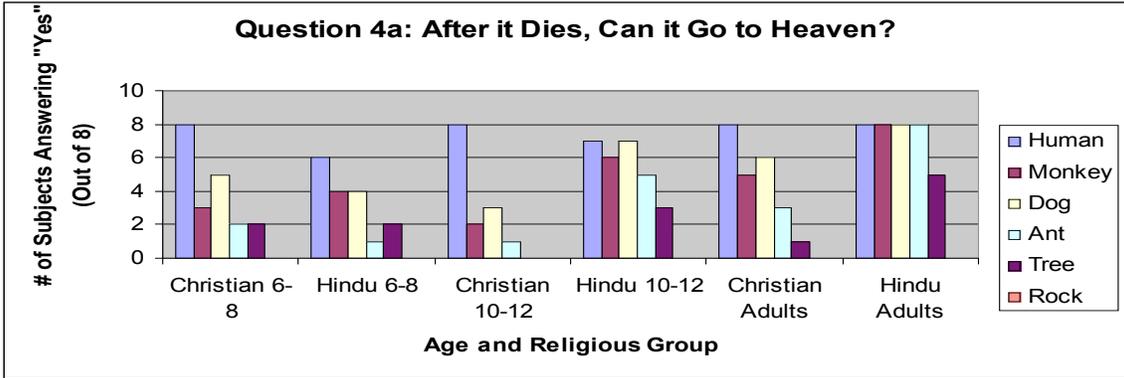
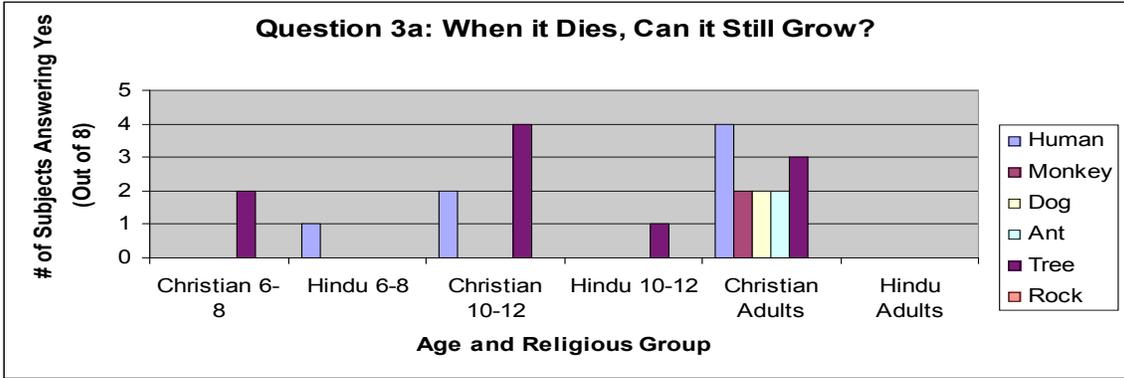
For the younger Hindu children, four of the eight believe that monkeys can come back to life. Two believe that dogs can be reincarnated, and one believes that ants and trees can come back to life. Of the older Hindu children, six of the eight believe that monkeys, dogs, and ants can come back to life. The same six believe this about all three entities. Five of the older Hindu children believe that trees can come back to life as something else, with two more unsure.

Of the younger Christian children, one reported that every entity except for the rock can come back to life as something else. This was the only of the eight subjects who reported that monkeys, dogs, and ants can become reincarnated. Binomial $p < 0.05$. A total of two younger Christian children report that a tree can come back to life, and one child reported that a rock can. It appears that the younger Christian children were confused about the meaning of coming back to life.

None of the older Christian children claimed that monkeys or dogs can come back to life. Binomial $p < 0.01$. One child from this group said that ants can become reincarnated, and six claimed that trees can come back to life (mainly due to seeds and leaves). Two of the Christian adults claimed that monkeys and dogs can come back to life, two claimed that ants can come back to life, and three believed that trees can be reincarnated.

Frequency Graphs





Summary

Overall, the responses to the first two questions (“Is it alive?” and “Does it have to die someday?”) were quite uniform among both religions. The youngest group of children (ages 6 to 8) reported more varied answers, especially showing confusion about whether trees are alive and required to die. The youngest group of Hindu children reported more incorrect answers to the questions about the tree (7 of the youngest Christian children reported that a tree is alive and 8 reported that it must die, as opposed to four different children reporting that the tree either is not alive or does not have to die). Thus, it appears that children, especially those from a Hindu background, develop an understanding of a tree as alive around the age of 6-8. It appears that most subjects from all age groups understand correctly whether or not the other five entities are alive.

The results became more complicated for the three later questions. The Hindu subjects were extremely consistent in their response to the question “After it is alive, can it still grow?” Only one younger Hindu child answered incorrectly about a human, and one older Hindu child answered incorrectly about a tree. All of the Hindu adults answered the question about all of the entities correctly.

The Christians were a bit more confused, mainly in their interpretations of the question. The youngest Christian children were the most uniform, with only two saying that an entity can grow after death (a tree, in both cases). Four older Christian children reported that trees can grow after death, and two reported that humans can. The reasoning behind human growth after death was spiritual for both subjects, revealing an intermediate stance between that of the younger children and the adults. The Christian

adults answered in various numbers that each entity could grow after death (except the rock, which never dies) due to spirituality and inaccurate beliefs about biological growth.

All Christians from all three age groups reported that humans can go to heaven. However, all of the Christian subjects had extremely mixed opinions on whether the other entities can. 6 of the youngest Hindus, 7 of the older children, and all 8 of the adult subjects reported that humans can go to heaven, showing a progression in religious beliefs with age. Both the older and younger Hindu children showed confusion about the other entities, while the Hindu adults were rather consistent: all eight said that humans, monkeys, dogs, and ants can go to heaven, while rocks cannot. Five of the eight adults reported that trees can go to heaven.

The responses of the Christians to the question “After it dies, can it come back to life?” were extremely varied among all three age groups. Apparently, there are no common beliefs among these people about reincarnation despite Christian teaching that it does not exist. The Hindu adults were very consistent in their responses to this question, with all eight reporting that humans, monkeys, dogs, and ants can come back to life, and rocks cannot. Six of the eight reported that trees can be reincarnated.

Overall, a progression between age groups can certainly be seen, especially among the Hindus. The Hindu adults were remarkably steady in their responses, particularly about heaven and reincarnation. Christians of all ages agreed that humans can go to heaven, a main teaching in the Christian church. However, the Christians showed much confusion about the fate of the other entities, and even about the possibility of reincarnation of humans.

Conclusion

By realizing that children's understandings of an afterlife are still developing for younger (6 to 8) and even older (10 to 12) children, bereavement counseling and death education can be formulated to better meet the needs of these people during this transitional period of comprehension. Religious institution-based programs can focus better on defining the religion's beliefs for children (and even adults), who appear to be confused about afterlife. This appears particularly true among Christians. Secular programs can maintain an open context, allowing children to question and discuss their beliefs, since they can be so variable.

As expected, subjects from all age groups typically were the most accurate in their responses about human life, death, and afterlife. This is important, since death education typically focuses on humans. However, confusion exists about other entities, which can be upsetting to children. For instance, no consensus existed among either the Hindus or Christians about the fate of a dog after death. Because pets can be beloved to children, it can be quite upsetting to be unsure about the fate of a dead pet according to religious doctrine. Trees were especially confusing for adults and children alike, although this is likely unproblematic in terms of bereavement since people typically do not become personally distraught at the death of a tree.

Systematic differences exist between both Hindu and Christian subjects, and between subjects from the three age groups regarding beliefs about life, death, and afterlife. It is critical to be aware of religious and developmental differences when relating to all people about the sometimes distressing topic of death.

Table 1

Questions	Object Religion/Age	Person			Monkey			Dog			5 to 7
		5 to 7	9 to 12	Adult	5 to 7	9 to 12	Adult	5 to 7	9 to 12	Adult	
Is the object alive?	Judeo-Christian										
	Hindu										
Does the object have to die someday?	Judeo-Christian										
	Hindu										
When it dies, can it still grow?	Judeo-Christian										
	Hindu										
After it dies, will it go to heaven?	Judeo-Christian										
	Hindu										
Can it come back to life as something else?	Judeo-Christian										
	Hindu										
Ant	Tree				Rock						
9 to 12	Adult	5 to 7	9 to 12	Adult	5 to 7	9 to 12	Adult				

Frequency Tables- Response frequencies across different ages and religions.

Question 1a: Is it alive?															
				CH	RIS	TIAN						HIN	DU		
	Subject	Human	Monkey	Dog	Ant	Tree	Rock		Subject	Human	Monkey	Dog	Ant	Tree	Rock
	1	1	1	1	1	1	0		9	1	1	1	1	0	0
	2	1	1	1	1	1	0		10	1	1	1	1	0	0
Six	3	1	1	1	1	1	0		11	1	1	1	1	1	0
to	4	1	1	1	1	0	0		12	1	1	1	1	1	0
Eight	5	1	1	1	1	1	0		13	1	1	1	1	0	0
Year	6	1	1	1	1	1	0		14	1	1	1	1	1	0
Olds	7	1	1	1	1	1	0		15	1	1	1	1	0	0
	8	1	1	1	1	1	0		16	1	1	1	1	1	0
	sum	8	8	8	8	7	0		sum	8	8	8	8	4	0
	1	1	1	1	1	1	0		9	1	1	1	1	1	0
Ten	2	1	1	1	1	1	0		10	1	1	1	1	1	0
to	3	1	1	1	1	1	0		11	1	1	1	1	1	0
Twelve	4	1	1	1	1	1	0		12	1	1	1	1	1	0
Year	5	1	1	1	1	1	0		13	1	1	1	1	1	0
Olds	6	1	1	1	1	1	0		14	1	1	1	1	1	0
	7	1	1	1	1	1	0		15	1	1	1	1	1	0
	8	1	1	1	1	1	0		16	1	1	1	1	1	0
	sum	8	8	8	8	8	0		sum	8	8	8	8	8	0
	1	1	1	1	1	1	0		9	1	1	1	1	1	0
	2	1	1	1	1	1	0		10	1	1	1	1	1	0
Adults	3	1	1	1	1	1	0		11	1	1	1	1	1	0
	4	1	1	1	1	1	0		12	1	1	1	1	1	0
	5	1	1	1	1	1	0		13	1	1	1	1	1	0
	6	1	1	1	1	1	0		14	1	1	1	1	1	0
	7	1	1	1	1	1	0		15	1	1	1	1	1	0
	8	1	1	1	1	1	1		16	1	1	1	1	1	0
	sum	8	8	8	8	8	1		sum	8	8	8	8	8	0

Question 2a: Does it have to die someday?															
				CHR	IST	IAN						HIN	DU		
	Subject	Human	Monkey	Dog	Ant	Tree	Rock		Subject	Human	Monkey	Dog	Ant	Tree	Rock
	1	1	1	1	1	1	0		9	1	1	1	1	0	0
	2	1	1	1	1	1	0		10	1	1	1	1	1	0
Six	3	1	1	1	1	1	0		11	1	1	1	1	1	0
to	4	1	0	0	0	1	0		12	1	1	1	1	1	0
Eight	5	1	1	1	1	1	0		13	1	1	1	1	0	0
Year	6	1	1	1	1	1	0		14	1	1	1	1	1	0
Olds	7	1	1	1	1	1	0		15	1	1	1	1	0	0
	8	1	1	1	1	1	0		16	1	1	1	1	0	0
	sum	8	7	7	7	8	0		sum	8	8	8	8	4	0
	1	1	1	1	1	1	0		9	1	1	1	1	1	0
Ten	2	1	1	1	1	1	0		10	1	1	1	1	1	0
to	3	1	1	1	1	1	0		11	1	1	1	1	1	0
Twelve	4	1	1	1	1	1	0		12	1	1	1	1	1	0
Year	5	1	1	1	1	1	0		13	1	1	1	1	1	0
Olds	6	1	1	1	1	1	0		14	1	1	1	1	1	0
	7	1	1	1	1	1	0		15	1	1	1	1	1	0
	8	1	1	1	1	1	0		16	1	1	1	1	1	0
	sum	8	8	8	8	8	0		sum	8	8	8	8	8	0
	1	1	1	1	1	1	0		9	1	1	1	1	1	0
	2	1	1	1	1	1	0		10	1	1	1	1	1	0
Adults	3	1	1	1	1	1	0		11	1	1	1	1	1	0
	4	1	1	1	1	1	0		12	1	1	1	1	1	0
	5	1	1	1	1	1	0		13	1	1	1	1	1	0
	6	1	1	1	1	1	0		14	1	1	1	1	1	0
	7	1	1	1	1	1	0		15	1	1	1	1	1	0
	8	1	1	1	1	1	0		16	1	1	1	1	1	0
	sum	8	8	8	8	8	0		sum	8	8	8	8	8	0

Question 3a: When it dies, can it still grow?															
				CH	RIS	TIAN						HI	NDU		
	Subject	Human	Monkey	Dog	Ant	Tree	Rock		Subject	Human	Monkey	Dog	Ant	Tree	Rock
	1	0	0	0	0	0	0		9	0	0	0	0	0	0
	2	0	0	0	0	0	0		10	1	0	0	0	0	0
Six	3	0	0	0	0	0	0		11	0	0	0	0	0	0
to	4	0	0	0	0	1	0		12	0	0	0	0	0	0
Eight	5	0	0	0	0	0	0		13	0	0	0	0	0	0
Year	6	0	0	0	0	0	0		14	0	0	0	0	0	0
Olds	7	0	0	0	0	0	0		15	0	0	0	0	0	0
	8	0	0	0	0	1	0		16	0	0	0	0	0	0
	sum	0	0	0	0	2	0		sum	1	0	0	0	0	0
	1	0	0	0	0	1	0		9	0	0	0	0	1	0
Ten	2	0	0	0	0	0	0		10	0	0	0	0	0	0
to	3	1	0	0	0	1	0		11	0	0	0	0	0	0
Twelve	4	0	0	0	0	0	0		12	0	0	0	0	?	0
Year	5	1	0	0	0	1	0		13	0	0	0	0	0	0
Olds	6	0	0	0	0	0	0		14	0	0	0	0	0	0
	7	0	0	0	0	1	0		15	0	0	0	0	0	0
	8	0	0	0	0	0	0		16	0	0	0	0	0	0
	sum	2	0	0	0	4	0		sum	0	0	0	0	1	0
	1	0	0	0	0	0	0		9	0	0	0	0	0	0
	2	0	0	0	0	0	0		10	0	0	0	0	0	0
Adults	3	1	1	1	1	1	0		11	0	0	0	0	0	0
	4	0	0	0	0	0	0		12	0	0	0	0	0	0
	5	1	1	1	1	1	0		13	0	0	0	0	0	0
	6	1	0	0	0	0	0		14	0	0	0	0	0	0
	7	0	0	0	0	0	0		15	0	0	0	0	0	0
	8	1	0	0	0	1	0		16	0	0	0	0	0	0
	sum	4	2	2	2	3	0		sum	0	0	0	0	0	0

Question 4a: After it dies, can it go to heaven?															
				CH	RIS	TIAN						HI	NDU		
	Subject	Human	Monkey	Dog	Ant	Tree	Rock		Subject	Human	Monkey	Dog	Ant	Tree	Rock
	1	1	0	1	0	0	0		9	1	1	1	0	1	0
	2	1	1	1	0	0	0		10	0	0	0	0	0	0
Six	3	1	1	1	1	0	0		11	1	1	1	0	0	0
to	4	1	0	0	1	1	0		12	1	1	1	0	0	0
Eight	5	1	0	0	0	0	0		13	0	0	0	0	0	0
Year	6	1	0	0	0	0	0		14	1	0	0	0	0	0
Olds	7	1	0	1	0	1	0		15	1	1	1	1	1	0
	8	1	1	1	0	0	0		16	1	0	0	0	0	0
	sum	8	3	5	2	2	0		sum	6	4	4	1	2	0
	1	1	0	0	0	0	0		9	1	0	1	0	0	0
Ten	2	1	0	0	0	0	0		10	0	0	0	0	0	0
to	3	1	1	1	1	0	0		11	1	1	1	0	0	0
Twelve	4	1	1	1	0	0	0		12	1	1	1	1	?	0
Year	5	1	0	0	0	0	0		13	1	1	1	1	0	0
Olds	6	1	0	1	0	0	0		14	1	1	1	1	1	0
	7	1	0	?	0	0	0		15	1	1	1	1	1	0
	8	1	0	0	0	0	0		16	1	1	1	1	1	
	sum	8	2	3	1	0	0		sum	7	6	7	5	3	0
	1	1	0	1	0	0	0		9	1	1	1	1	1	0
	2	1	1	1	1	0	0		10	1	1	1	1	1	0
Adults	3	1	1	1	0	0	0		11	1	1	1	1	1	0
	4	1	1	1	1	0	0		12	1	1	1	1	1	0
	5	1	0	0	0	0	0		13	1	1	1	1	1	0
	6	1	1	?	0	0	0		14	1	1	1	1	0	0
	7	1	1	1	1	0	0		15	1	1	1	1	0	0
	8	1	0	1	0	1	0		16	1	1	1	1	0	0
	sum	8	5	6	3	1	0		sum	8	8	8	8	5	0

Question 5a: After it dies, can it come back to life?															
				CHR	IST	IAN						HINDU			
	Subject	Human	Monkey	Dog	Ant	Tree	Rock		Subject	Human	Monkey	Dog	Ant	Tree	Rock
	1	0	0	0	0	1	1		9	1	1	?	?	0	0
	2	1	0	0	0	0	0		10	1	1	1	0	0	0
Six	3	1	1	1	1	1	0		11	1	0	0	0	0	0
to	4	0	0	0	0	0	0		12	1	1	0	0	0	0
Eight	5	0	0	0	0	0	0		13	0	0	0	0	0	0
Year	6	0	0	0	0	0	0		14	0	0	0	0	0	0
Olds	7	0	0	0	0	0	0		15	1	1	1	1	1	0
	8	0	0	0	0	0	0		16	0	0	0	0	0	0
	sum	2	1	1	1	2	1		sum	5	4	2	1	1	0
	1	0	0	0	0	1	0		9	1	0	0	0	?	0
Ten	2	0	0	0	0	1	0		10	1	1	1	1	0	0
to	3	0	0	0	0	1	0		11	0	0	0	0	1	0
Twelve	4	1	0	0	1	1	0		12	1	1	1	1	?	?
Year	5	?	0	0	0	1	0		13	1	1	1	1	1	0
Olds	6	0	0	0	0	0	0		14	1	1	1	1	1	0
	7	0	0	0	0	0	0		15	1	1	1	1	1	0
	8	0	0	0	0	1	0		16	1	1	1	1	1	0
	sum	1	0	0	1	6	0		sum	7	6	6	6	5	0
	1	0	?	0	0	0	0		9	1	1	1	1	1	0
	2	0	1	1	0	0	0		10	1	1	1	1	1	0
Adults	3	1	1	1	1	0	0		11	1	1	1	1	1	0
	4	0	0	0	0	1	0		12	1	1	1	1	1	0
	5	0	0	0	0	0	0		13	1	1	1	1	1	0
	6	0	0	0	0	1	0		14	1	1	1	1	0	0
	7	1	0	0	0	0	0		15	1	1	1	1	0	0
	8	1	0	0	1	1	0		16	1	1	1	1	1	0
	sum	3	2	2	2	3	0		sum	8	8	8	8	6	0

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