**Introduction:**

More recently, psychologists, philosophers, and statistics suggest that what matters lost clip in both methods and covariation causal inference accounts the idea of intervention Instinctively, if is the cause related to , then (all other equals) will be something we can do to change that value will change the value of ; that is, direct intervention in can affect . Seriously, if it intervenes change change Y, we can create causal relationships between mutations even if we don't know a hidden path. On the contrary, if, everything else equally, there is nothing we can do for X would like affects Y, we can conclude that nothing is straightforward the causal relationship between X and Y, or X and Y related and even if it is plausible how to connect the two.

Claim that X-switching intervention Y changes can also be represented as a claim -changing interventions are associated with change in Y. However, the intervention account is different essentials from standard covariation accounts. In generally, causal inference covariation accounts they have been criticized for their failure to distinguish between direct causal relationships and illegal organizations, where is the most common cause of invisible). Although X and Y like it a covary under the supervision of both parties, the same combination will not hold under the intervention. If the actual structure is , then the value of Y will depend statistically on the number in X set for intervention, if the actual structure is such , then the value of Y will be independent of any X-value change intervention. In addition, the intervention can lead to speculation about the presence of underlying causal mechanisms: if X no Y covary but '' doing '' X fails to change Y and '' doing '' Y fails to change X, then (even if prior knowledge about the causative processes) one must include the normal invisible cause of X and Y As noted, some studies have looked at how children can use evidence of intervention once the effects of adding the presence of invisible causes. However, children are visible reason about the invisible and the invisible general demand; they are not limited to recognizing common unseen causes of related events. On this page, we will process the file for it is possible for children to cover the assumptions about interventions and outcomes in causal belief decision. In a very simple way, causal determinism is to think that all events have causes. . If you believe that every event has its causes, you should infer causes that can be seen whenever events occur, they happen automatically. There is plenty of evidence that both adults and children do this. However, causal determinism can include strong commitment. In philosophy books, the speculation that causes thought, no not only do events have causes, but that causes the results to emerge. According to this view, the emergence of an existing cause is possible because of our ignorance of all the right changes. This strong version of determinism was popular described by mathematician Pierre Simon LaPlace, who noted that if there is an ‘intelligent’ who knows all the forces working in nature. . . (and) its intelligence was powerful enough to include all the details in the analysis, nothing would be. not sure’’ (1814/1951). This kind of tightness means we must keep it invisible causes, not just when the results appear spontaneously, but also when the results appear differently. We do not want Laplacian determinism to give an accurate picture of the causal relationship in the world. Chaos theory suggests that even determining events may be unexpected as well Quantum mechanics suggests the existence of real random events. What matters, however, is the belief in the description of the cause it does not need to be the same as the physical analogy accurate to match performance. Indeed, decision-making can change dramatically because it encourages people to seek the presence of subtle factors in the underlying causes.

Specifically, by determinists, certain patterns of interventions and evidence would suggest the existence of unseen variables. If X decides form Y, the probability of Y, given the intervention to produce X, is . If X and Y they are not causally related, and then intervene product X should not change the possibilities of . Suppose, however, I interventions to produce X increase the chances, but do not guarantee, the possibility of . By taking Laplacian determinism, this last pattern suggests that the cause the structure must be altered. We need to add variable Z's presence prevents X from producing Y, or its absence interferes with X's ability to produce Y.

Making a statement is important because it might support the premise that undiagnosed causes exist and that they are of a certain type. Children may be able to compare the presence of invisible and avoidable causes to the absence of such causes. They should be less likely to communicate about the origin of the blockage if they feel, for example, that being invisible is sometimes essential (and vice versa). By combining this with other forms of knowledge, youngsters may also be able to determine whether the invisible reasons are positive or preventable. Think about what might happen if the source of birth abnormalities behaved differently. The reason for this failure to generate a result should not exist if it is due to a barrier that is invisible to the naked eye. Therefore, the invisible cause will be there when the reproduction cause provides a result, but you will not be present when the reproduction cause fails to create a result if the reason of reproduction is unclear. Using these facts, children may practice figuring out whether an invisible cause has stopped something from happening. Certain causal notions can be preferred by youngsters who believe in causal determinism. Students can choose between two ways of thinking, namely (1) a potential cause to produce an outcome or (2) another ability the cause that produces the result bluntly because for invisible differences, students should choose the previous account of the cause-and-effect relationship between the two variables. A child's thinking about clarity should be sensitive to the underlying structure of an event when a concept about causality is established.

While children may agree that two occurrences might have a contradictory cause (a man has decided to cause events to occur simultaneously and separately at different times), they reject the idea that a single variable can cause another statement. Therefore, the reasons for an intense decision-making process may influence how youngsters learn about earth's causal structure in this regard. Children used covariation patterns to establish causal judgements regarding both the causes of production and trapping, according to a previous study. Currently, however, no more study has been conducted on how clarification and covariation patterns and treatments impact children's perceptions of a minor variation in the cause. Children are causal determinists in the context of physical risk. When perceived causes act stochastically, do children make it a mystery? If so, do children deserve it? Causes of blockage and reproduction that are not visible are subject to conjecture in the financial markets. In experiment 2, children are asked to evaluate whether an undetected cause is productive or preventive using the pattern of indeterminacy.

**Experiment 1:**

The deciding state of the determination and two kinds of stochastic causality are shown to preschool children in Experiment 1. (Unexplained and unexplained). Kids realize that the rationale for doing so always delivers the result, and it shouldn't require them to be physically present. If the cause of reproduction sometimes fails to yield the desired outcome, the offspring are told that they may be able to generate it themselves:. As a result, youngsters must obstruct something that is not immediately evident. According to this scenario, youngsters observe the exact same evidence but are made to believe that the necessary extra proof may be seen. The inevitable cause of prevention should not be held liable for children who comprehend stochastic causality.

**Method:**

**Participants:**

A total of 48 youngsters aged between three and eight years old, or four and seven years old, respectively, were engaged in urban kindergartens. About the equal number of boys and girls competed in the competition. The number of children in each case was determined at random. Despite the fact that the majority of the children were born into a White family, middle class and ethnic diversity were all represented.

**Materials:**

A specifically built remote-operated light was employed in the project. An orange Lucite-covered wooden box with a light intensity of 12 x 17 x 8 cm was used for the toy. When the remote's sliding button is put into the top, the top glows orange. The remote control was replaced by a light that was turned off. If only a portion of the button was pressed, the effect did not occur. A child's perspective, the switch is engaged, and the toy is either illuminated or not. On the scene, there was also an 8 cm broad metal band, as well as a 3 cm long, light touch lamp. Lamps and flashlights have never been mentioned as possible alternatives. All youngsters participated in their own creative process first. Among the words used were hypocrite, red cup, blue cup, and a paperclip.

**Procedure:**

An expert inspector conducted individual tests on each of the youngsters. Refer to Figure 1 for a flowchart.

**Pretest:**

Hence, the job of superstition was assigned to the youngsters in order to introduce and reaffirm the concept that an examiner might fool participants. Underneath one of the two cups, organization inserts a paperclip. The alliance has departed the area, and the paperclip has been moved by the examiner. As a result, the youngsters were asked to estimate where the combination would appear. Two youngsters were replaced because they failed to pretend.

**Training:**

Toy box and remote switch were placed on the table and a ring was put on top of the toy box. The inspector then left the room. The toy lighted up when the tester pressed the switch forward. A few moments later, when he flipped on the switch, the back light went out. Is this switch visible to you?' "This gadget made my toy sparkle." This was said three times by the inspector. Just as the button was responsible for the result's appearance, so too were the children. Afterwards, the youngsters were shown a visual preventive technique. Inspector: "The toy will not operate without a ring on top of it." Because of this, my toy won't sparkle if I take off this ring." A button was pressed once the inspector removed the rings. No power was generated by the toy (in in fact, because the excessive researcher pressed the button only). A child's perception is that the removal of the ring limits the use of the light-up button and toy. This was said three times by the inspector. Push the switch (all the way) and the toy will light up. The ring stayed on top of the toy for the remainder of the trial. As a result of this process, youngsters developed a well-known way to counteract the effects. Toys from the light would not operate after the ring was removed in all three situations. During the testing phase, all youngsters were involved, so he had the choice of duplicating that intervention.

**Test Tasks:**

Cause-and-effect condition that is deterministic. My buddy Catherine is going to try to do it now that the toy is easy," the court case read. During this time the toy is ignited eight times in a succession.

The inspector opened his right hand when the alliance pressed the switch button eight and stated, "Look what I have in my hand." As a result of this, the previously hidden torch was exposed. Unity turned off the controller, and Temptation stated, "We're going to play the game." As soon as I reach the third number, I'll flip a switch to open this toy. The button will not operate, and the toy will not spin to continue if you do so.

Once, place the toy and ring on top. It next changed its own hand and counted to three with the use of a child's flashlight (left / right position assessed amongst subjects). Children did not have access to switches, but they might avoid the impact by working in the ring or using a flashlight to do their job.

A kid should not be concerned about an uncontrolled blockage in this instance. Children must remove the ring in order to stop the intended result. Random causality that cannot be explained. As a result of the unexplained stochastic condition, the light would not always come on until the switch was turned on.

But the toy has a different pattern of behavior. It doesn't make any kind of noise and doesn't produce any light. An observer who was a youngster reported pressing the button eight times before the item lighted up. Remove the ring was not proven to be the source of the blockage by the youngsters (intervention details and oral directions).

Children who are also determinists and sensitive to the conditions of the imperfect cause, on the other hand, are likely to comprehend the presence of a second preventive because that is unseen. The experimenter's flashlight, which was hidden in his hand, may have been an unseen inhibitor of the effect. Despite their lack of experience with flashlights, children might nevertheless attempt to prevent the result of flashlight interlocking from entering the ring.

Stochastic causation has been described in its current condition. A strange stochastic state, except that the inspector added the innovative, a required manufacturing ingredient that produced it after the federation was under pressure. If you want anything to function, you have to press the switch all the way forward." You cannot access the toy if you only push part of the switch. Instant display a flashlight introduced and tested the information in the children's part. On behalf of the youngsters, the inspector turned on the flashlight and gave this information to them.

As a result, they did not get an opportunity to observe, regardless of whether the union was relocated to the right spot or not. Toys are sometimes successful and sometimes not successful in both stochastic instances, and children are aware that the cause of the birth is not always apparent. Turn the power on. Even though they could not see it, the youngsters in the example mentioned were led to assume that there was another production feature that they were unaware of. Some of our testing may not have had access to this functionality.

A kid should not provide the existence of an inescapable cause of reproduction when characterizing stochastic results in terms of an invisible obstructive component. Instead, they should imitate a recognized block intervention to stop the result (removal of the ring).

**Results and Discussion:**

As an unseen decision, children are coded to use or try to utilize a torch by pushing on his face. When removing the ring, the youngsters were programmed to choose the visible obstructing reason.

Therefore, all results were considered significant when the p-value was greater than or equal to 0.05 (alpha =.05). There were just two flashlights chosen by 12.5% of the youngsters (everyone else chose a ring). 15 out of 16 children (94%) interfered in the unprotected process (with illumination) in the programmed, whereas only one kid (6%) considered the reason of the obstacle (ring). Only 4 out of 16 children (25%) have interfered in the light of stochastic causality (all others chose the ring). Your choice may have been influenced by an undiscovered source of blockage in the ineffable state of stochastic as opposed to the decisive factor, or a specified stochastic condition,

Children were more inclined to make choices in the unexplained stochastic condition. The perceived obstacle is the unseen obstruction., . It was the youngsters who chose the visual blocking method in both situations since the reason is an invisible inhibitory factor, and, respectively. The lack of children can be explained by the stochastic cause rather than the deciding element.,.

They support the concept that children are causal determinists and may utilize patterns of intervention and proof of presence of unknown causes to arrive at their decisions. They entered the outcome of an inescapable cause for once and for all creating a unique, a proper intervention for an unforeseen difference when they believed that fruitful interventions merely happened. A person who is invisible causes blockage when youngsters think that stochastic causation is conceivable, which is defined as the absence of a reason for reproduction. When the outcomes were intended, they never seemed to be the product of unobserved factors. There are several factors that may be involved a flashlight is a visible, probable cause. Hiding lamp in hand experimenter enabled with opportunities for the inspector to intervene in it. Flashlights have been priced so that they can be considered potential buttons because they are a physical item with a depressing force. If the tester had a mistaken superstition, an object hidden in his hand may be exposed for many causes. Kids, if none of these things are true, it is possible that that light was a source of influence that was unseen. Children's willingness to regulate some variables, such as causally accurate, may be studied more in future study.

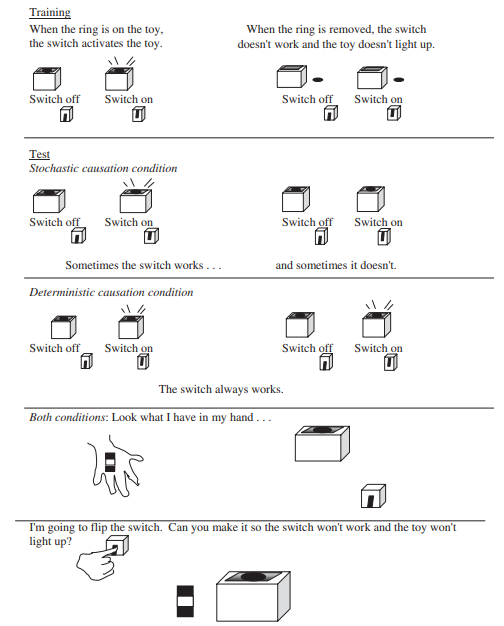
As a result of this discovery, however, these characteristics were always maintained under the given conditions as a result, even though there are several factors that might explain why youngsters grabbed the file. These qualities do not explain why youngsters search out underlying causes in a stochastic condition but not in the other two. In fact, the results of this study show that youngsters are irritated by the idea that there are invisible factors at work. Neither the children nor their parents looked for a preventive reason that was not described when the findings were determined or when there was no manufacturing of a medication. Unseen stochastic effects can only be seen by youngsters, and only they can show the presence of an unseen barrier.

Figure 1: System configuration and process used in Experiment 1.

**Experiment 2:**

In Experiment 1, children were asked to behave only if there was an unseen barrier preventing them from doing otherwise. It was shown that youngsters may utilize specific patterns of ambiguity to determine whether the unseen causes are constructive or preventable in Experiment 2. This is especially important when youngsters feel that the invisible cause of a perceived birth could not be determined (e.g., could not be opened for successful testing) by failed tests, in which case they should make the invisible cause produce. Alternatively, if youngsters think that a cause may be discovered, but that it hasn't been proven to work in successful trials, it should be proven to be preventative.

**Method:**

**Participants:**

Forty-two urban kindergartens hired children between the ages of 4 month and 5 year 7 month (age means: 4 year 7 month). The child's failure to finish the training task a second time was added to the list of mistakes. The first condition is the outcome, and the last condition is the result. He was joined by a similar number of boys and females. Despite the fact that the majority of the children were born into a White family, middle class and ethnic diversity were all represented.

**Materials:**

This test did not include the use of a metal ring. This research utilized the same materials as Experiments 1 and 2. On top of all the other items utilized were a monkey doll, six switches, and a remote-control plane. Without color, three of change was the same (green, white and red). The remaining three switches are all different colors (blue panel button, gold click button switch, and cream-colored switch). Despite considerable success, none of the alternatives were able to replace the original. As explained in the process below, it appears that this is the case. As a remote-control pilot, the airplane was either flying or not flying properly.

**Procedure**

**Pretest:**

However, instead of human organization, a monkey doll was used in this experiment. All of the youngsters completed the pre-testing process with flying colors.

**Labelling Training Task:**

In order to determine if a candidate was generating, blocking, or doing nothing, we have trained youngsters to recognize switches such as "starters," "blocks," and "do-nothings" during testing sessions. This is Temptation's table, with a toy plane on it and the controller in his hand. The green button was placed on the table by him. At the same time, (humbly) Temptation shook up the remote so that the plane might begin to buzz. He pointed to the start button and exclaimed, "Here it is!" "Watch as it opens the toy. There is a white switch that may be removed because of the temptation to remove the start button. He mumbled "white switch" back and forth incoherently. There was no event. This is what I'm seeing without doing anything. ", he said. There is nothing to be done with this switch." Playing with an idle machine was permitted for children. As a last resort, the figure pulled out a red button and handed the youngster a starting switch. His request was that the youngster input a beginning switch, and the toy would begin to wound itself automatically. Red lights flash on the temptation and flip buttons. The toy ceased to make any noise. See, it's obstructing." Because the start button is blocked, the toy cannot move. ’’ The youngster was urged to look into restarting his or her computer. There was no event. See, the block is going to stop you." The red button was then turned off by the tester. A green button was pressed by the youngster, and the wind-up toy began to spin. Afterwards, all three switches were released. His questions were directed toward the kid and were directed toward each switch in turn. He asked the child to identify each button and explain its function. Whenever required, children were corrected. Having resisted the previous replacement, three new switches have been introduced. "Now, I want you to understand what this modification accomplishes," he added. ‘’ Otherwise, he repeats the procedure described above, without labelling the changes or explaining their implications. A start, doing nothing, and blocking were identified by all of the children's approaches as new changes. Each condition has its own training procedure. Default settings were identical to those stated above. In order to shorten the procedure, students with first results who were witnessing the inspector make a mistake with switches (as seen above) were not required to include switches.

**Test Task:**

The first condition's effects His right hand was masked by a flashlight while he put up the miniature lamp and switch. I asked him to bring back the monkey animation and he said that the monkey would try to switch on this light. The toy lighted up every time the monkey flipped the switch four times. Looking at his right palm, the inspector exclaimed: "Look at what I have in my hand." It was then that he put the light down and said, "Monkey, try again." The toy did not turn on after the monkey pressed the button four times. That was Temptation who shined a spotlight at the table and said, "What do you suppose it does?" Do you believe this is a good place to start, stop, or stay put? There was no interference with the flashlight for the youngsters. If, on the other hand, the youngsters are causal determinists, they should talk about the presence of an unseen cause that makes the button behave in an autonomous manner. However, children may believe that a flashlight is responsible for an unseen effect, such as "Getting Started," since it would have triggered when the result appeared (despite though it was concealed from tester's view) and not active when the result failed (even if it was resting on a table). The outcomes of the study are definitive. When the monkey flipped the switch four times, the toy did not light up. "Monkey, try again," he urged after failing to place a button under the table. The toy lighted up four times after the monkey explored the switch four times. Again, the youngsters had never witnessed the use of a flashlight in a situation like this. Children may believe that the flashlight was the source of the invisible block effect (e.g., "blocker") if it was engaged when the outcome failed but not when it succeeded.

**Results and Discussions:**

As well, the intervention may influence children's decisions. chances are you'll come up with an explanation for a result that isn't quite as clear as beginning in the first place., , there is a good possibility you will uncover a cause that is less evident than blocker in the final outcome.,.

First, 11 out of 16 youngsters (69%) pointed to an unseen flashlight as a beginning point or instinctively stated that the flashlight "opened the toy". Four youngsters (25 percent) have recognized an invisible cause as a blocker or have instinctively stated that the spotlight " has prevented the toy from moving forward. ‘’ One youngster (6%) claimed that the torch had no effect. Most youngsters (75%) in the second example recognized the cause as a blocker or instinctively reported "stop toy" as the cause. Two children (12.5 percent) correctly recognized the underlying reason as a start, while two other children correctly identified the underlying cause as an idle change in the vehicle.

Initial results showed that youngsters were more likely to recognize the root of a problem than a block., instead of doing nothing, youngsters were more likely to identify the root problem as a starting point.,. Instead of a block, youngsters were more likely to point out an unlockable reason., , or as an idle switch,. In both situations, the children had the choice of treating the button as a sufficient, but stochastic, cause of effect. They may, in other words, accept that the button sometimes works and sometimes doesn't, and not worry about it. They could use a flashlight as an idle button if they agree that well-behaved switches exist (especially as they had never seen a torch do anything and they were trained to label other changes as nothings). As a result of this belief in determination, youngsters appear to be resistant to the idea that the button may function autonomously. Children will be able to discern whether a flashlight is a starter, a blocker, or an inactive one by observing the pattern of the continuous detailed switch. This doesn't explain why two youngsters believed different things, even though one flashlight had numerous qualities (it was in the inspector's hand, it had great power, etc.). Uncertainty patterns made a substantial difference between the two. As with determinism, children's judgements are characterized by a pattern of uncertainty.

**General Discussion:**

Young children, according to this research, have a rudimentary understanding of the structure of the Earth. Children, at least in these settings, appear to believe that the causes of the body's consequences manifest themselves in a determined manner. This way of thinking helps youngsters to take advantage of opportunities to learn about causes that are not readily apparent to the naked eye. These beliefs regarding the presence of inhibitory factors and the absence of producing factors may be compared by youngsters. Allows youngsters to establish opinions as to whether the unseen cause is constructive or inhibitive when combined with other forms of rational thinking. Further, the idea of causal determinism appears to weaken children's views about the causes of novel effects, given that they want to avoid potential triggers. Determinism is seen by children in the same way that causal structure is perceived by other people. When there is no direct relationship between two occurrences, they're willing to create stochastic signals. Cause-and-effect thinking appears to be important for youngsters in all of these areas. The ability to form sophisticated inferences regarding invisible occurrences is enabled by children's ability to reason logically. Considering such factors can help youngsters learn about the underlying reasons and modify their perspectives. These findings, on the other hand, also emphasize the importance of asking questions. Children's thoughts may be affected by the degree of uncertainty. More frequently than not, in Experiments 1 and 2, the observed cause did not produce the desired effect. Even if you've seen a lot of success, do the children still make you think about the underlying causes?

Is it possible that a single perceived failure in the cause of delivery may be enough for children to make it invisible? The youngsters may believe that invisible causes are constantly present, but they (or we) may not always be concerned about them or seek for them. The youngsters were introduced to the concept of being captured for an unknown reason in our first test. There are two main reasons for this: the flashlight and the children. An inspector's hand and cunning made flashlight a desirable choice for several reasons. But the motives for running for government might be difficult to determine. As a result, youngsters may be less motivated to look for explanations that are not obvious. We've previously described why, to be unambiguous, our examination solely examines children's perceptions of the body's causes. Children may be more inclined to tolerate indeterminacy in mental circumstances than in physical ones, it appears. Because of this, youngsters may be less inclined to believe that there are unseen factors that can be affected by stochastic effects (e.g., smiling sometimes but can be repeated). What it means to comprehend an event as a function of the mind, on the other hand, is to realize that invisibility changes (beliefs, desires, feelings, etc.). Psychological reactions indeterminacy can consequently obscure the fact that there are factors that can be identified by children since they often believe that psychological reasons that are unseen exist. Research in the future will examine if there are causal domain differences in decision-making. Finally, children do not need to believe in a strong causal determinism to recognize the existence of unseen causes. As we've shown, youngsters may make such inferences based on location information, as we've seen. Evidence also suggests that infants become invisible when an occurrence appears to be spontaneous and so has a weak causal element underlying it Further, as said, intervention patterns and effects may suggest reasons that are not evident even when causal reasoning is not employed at all Taking the example of causal net formalist Bayesian theory, it shows how interventions and evidence might lead to the introduction unknown causes. Irrespective of this, our data show that infants who believe in causal determinism have a formal basis for believing in invisible causes. When youngsters realize that a decision has been taken as a result of cause indeterminacy, they avoid it by believing in it. As well as empowering youngsters, causal determinism appears to stifle their quest for hidden causes. A similar propensity can play a role in the formation of children's daily concepts.

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