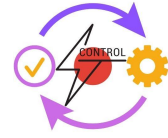




Gateway - 관련 요인이 결과에 영향을 미치도록 내버려두지 마라!

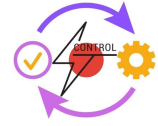


Don't Let Irrelevant Factors Influence the Results!

- (1) In studies examining the effectiveness of vitamin C, researchers typically divide the subjects into two groups.
- (2) One group (the experimental group) receives a vitamin C supplement, and the other (the control group) does not.
- (3) Researchers observe both groups to determine whether one group has fewer or shorter colds than the other.
- (4) The following discussion describes some of the pitfalls inherent in an experiment of this kind and ways to avoid them.
- (5) In sorting subjects into two groups, researchers must ensure that each person has an equal chance of being assigned to either the experimental group or the control group.
- (6) This is accomplished by randomization; that is, the subjects are chosen randomly from the same population by flipping a coin or some other method involving chance.



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Don't Let Irrelevant Factors Influence the Results!

〔7〕 Randomization helps to ensure that results reflect

the treatment and not factors that might influence

the grouping of subjects.

〔8〕 Importantly, the two groups of people must be similar

and must have the same track record with respect to colds

to rule out the possibility that observed differences in the rate,

severity, or duration of colds might have occurred anyway.

〔9〕 If, for example, the control group would normally catch

twice as many colds as the experimental group,

then the findings prove nothing.

〔10〕 In experiments involving a nutrient, the diets

of both groups must also be similar, especially with respect

to the nutrient being studied.

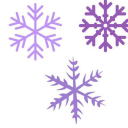
〔11〕 If those in the experimental group were receiving

less vitamin C from their usual diet, then any effects

of the supplement may not be apparent.



01-02편 - 눈 결정의 다양한 모양



Various shapes of snow crystals

[1] The secret as to why there are so many types of snow

crystals can be found in the clouds.

[2] A typical winter cloud is colder at the top than the bottom

exhibiting a wide range of water vapor saturations as a function

of height, and these conditions are constantly changing

over time.

[3] The cloud also has wildly varying up- and down-drafts,

these too varying rapidly.

[4] An incipient snow crystal goes for a wild ride in such

a cloud.

[5] Initially, being so light and small, it has a slow fall rate and

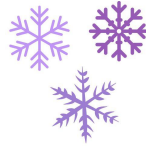
the updrafts in the cloud keep sending it back into the air.

[6] Eventually, it will grow heavy enough that it begins to settle

and fall.



01-02편 - 눈 결정의 다양한 모양



Various shapes of snow crystals

[7] As the snowflake falls it will travel downward through cloud

layers that have very different temperatures and vapor

saturation conditions than at the level where it originated.

[8] The crystal growth rate and habit will keep changing

as the crystal makes this downward journey.

[9] By the time it lands on the dark sleeve of an observer,

it will have gone through multiple distinct growth cycles,

and its form will reflect the journey.

[10] This is what Nakaya, a physicist known for his works about

snowflake crystals, meant by snow crystals being "letters sent

from heaven."



03-04편 - DJ의 리믹싱의 독립된 장르로의 발전



Development of DJ's Remixing into an Independent Genre

❶ Take a painting, cut it into pieces and rearrange the bits.

❷ How much do you have to change it before the end result

is your work and no longer something made by someone else?

❸ Does it help if more people like your collage than liked

the original painting?

❹ Can the collage be a genuinely new piece of art?

❺ By the end of the seventies, DJs knew that the remix could go

further than just make a song more functional for the dancefloor.

❻ It also offered them a route into the record industry

and the means to finally gain recognition as creative artists.



〔7〕 By adding stylistic twists, they could give a song

the precise musical flavor they wanted, and if their enhancements

were individual enough, these would mark out the remixer

— rather than the original writer/musician — as the creative

force behind a track.

〔8〕 If their particular flavor was reasonably consistent over

a series of records, a remixer could even develop a "sound,"

just like any other recording artist.

〔9〕 And since a DJ's remixes were usually based on the kind

of music he chose to play when he performed in a club,

the musical style evident on his remixes would serve

to reinforce and further distinguish the musical style of his DJing,

and vice versa.

〔10〕 Through remixing, the DJ had a way of pushing his music

in a distinctive direction, both on the dancefloor and in the studio.