The differences in perception

Philosophy

Let us consider the case when the null hypothesis is true. That is, the infants did not detect any difference between the slides. But if this hypothesis is rejected, this leads to an error called Type I Error which occurs when the null hypothesis is rejected even when it is true. Hence Type I error would occur if it was concluded that the infants detected the difference between the slides, when in fact they did not.

d. Let us consider the case when the null hypothesis is false. That is, the infants detected a difference between the slides. But if this hypothesis is accepted, this leads to an error called Type II Error which occurs when the null hypothesis is accepted even when it is false. Hence Type II error would occur if it was concluded that the infants did not detect any difference between the slides, when in fact they did.

Some athletes will be given training in a new imaging procedure that they are to use just prior to shooting foul shots; they will be compared with other athletes not given any special training. (4 points)

a. Null hypothesis: The special training did not have any significant effect on the athletes.

b. Alternate hypothesis: The special training had significant effect on the athletes.

c. Let us consider the case when the null hypothesis is true. That is, the special training did not have any significant effect on the athletes. But if this hypothesis is rejected, this leads to an error called Type I Error which occurs when the null hypothesis is rejected even when it is true. Hence Type I error would occur if it was concluded that the special training had a significant effect on the athletes, when in fact it did not.

d. Let us consider the case when the null hypothesis is false. That is, special

training had a significant effect on the athletes. But if this hypothesis is accepted, this leads to an error called Type II Error which occurs when the null hypothesis is accepted even when it is false. Hence Type II error would occur if it was concluded that the special training did not have any significant effect on the athletes, when in fact they did.