Positive and negative linear relationships

Psychology

Positive and Linear Relationships of Variables in Examples of Criminal Recidivism The levels of criminal recidivism can be affected by several variables which could either affect the ex-prisoners positively or negatively. In a positive linear relationship, the increase in the independent variable also increases the levels of the dependent variable. In a negative linear relationship, as the independent variable increases or decreases, the dependent variable moves in the opposite way. If is easier to track trends in linear relationships because it is easy to pinpoint the optimum levels at which the independent variable would be able to provide the needed results. However, if there is a curvilinear relationship between the factors, it would be difficult to find and implement the needed levels of the independent variables, as well as increased chances of getting the unnecessary results.

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Criminal recidivism is defined as criminal acts that result in the rearrest, reconviction, or return to prison without a new sentence within a three-month period after a prisoner is released (Bureau of Justice Statistics, 2012). While some prisoners are able to live a normal life after regaining their freedom, others are reported to return to prison. Several factors are attributed to the relapse of these criminals.

Information regarding the positive linear relationship of the presence of mental illness in an ex-prisoner to recidivism has been established. In a study by Kubiak (2004), it was found out that a person with numerous observed symptoms of post-traumatic stress disorder (PTSD) is more likely to relapse, and more likely to revert doing criminal acts, as opposed to ex-prisoners without PTSD. In another study by Lamberti (2007), a positive

relationship between being given a complete set of services to incarcerated adults and the probability of them relapsing. If the patient is given three kinds of intervention (competent care, access to services, legal leverage), it is more likely that the patient would be able to stay outside prison for a longer period of time, compared to incarcerated adults that did not receive at least two interventions (Lamberti, 2007). This shows that in positive linear relationships, the increase in the independent variable causes the increase of the dependent variable as well, making a positive slope.

Linear relationships can also be negative. Two studies that show a negative linear relationship show how the increase or decrease in the independent variable would show an inverse result to the dependent variable. In a study by Harris and Koepsell (1996), they found out that the longer an ex-prisoner has been abusing substances, the less likely that the person would be able to stay in the community longer. In the same study, the higher the degree of the severity of the person's mental illness, the less likely that the same person would be able to stay clean and not suffer from relapses (Harris & Koepsell, 1996). Therefore, in a negative linear relationship, there is an inversion of the levels of the independent variable and the dependent variable, creating a graph with a negative slope.

If the relationship between both variables in the three mentioned studies were curvilinear, it would be hard to find the most optimum method of keeping the levels of recidivism low. A curvilinear relationship implies that there is a needed balance between the independent and dependent variables for the model to become efficient. However, this point of balance is rather hard to obtain due to the window being much more narrow compared to the points at which the balance would not be able to reach. This is

exemplified by a bell-shaped curve. The implications would be that there would be more errors that are likely to be committed due to the limited options possible for the independent variables. Thus it is much important that the relationships between two variables in any given situation are linear, whether positive or negative. It would be easier to identify the levels at which the independent variables were able to give the most desirable results, adding up to the predictability of the model.

References

Bureau of Justice Statistics. (2012, October 9). Bureau of Justice Statistics (BJS) - Recidivism. Retrieved October 10, 2012, from Bureau of Justice Statistics Web Site: http://bjs. ojp. usdoj. gov/index. cfm? ty= tp&tid= 17

Harris, V., & Koepsell, T. (1996). Criminal recidivism in mentally ill offenders: a pilot study. Bulletin of the American Academy of Psychiatry and the Law , 24(2): 177-186.

Kubiak, S. (2004). The effects of PTSD on treatment adherence, drug relapse, and criminal recidivism in a sample of incarcerated men and women. Research on Social Work and Practice , 14(6): 424-433.

Lamberti, J. (2007). Understanding and Preventing Criminal Recidivism Among Adults With Psychotic Disorders. Psychiatric Services , 58(6): 773-781.