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Assessment and prediction of stress-related using SPSS statistical analysis

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Abstract

Predictions provide a reference point for the scientist. If the predictions are confirmed, the scientist hypothesizes supported. If the predictions are not supported, the hypothesis false anyway, the scientist studies increased knowledge of the process being performed. Therefore, for such data analysis in crop forecasting, there are various techniques or methods and those Crop yield can be predicted with the help of methods. A random forest algorithm is used. Weather, Temperature, Humidity, Precipitation, Humidity All these problems and problems like Analyzing the situation we face There is no perfect solution and technologies to deal with. Economic growth in agriculture sector in India There is many ways to increase. To predict crop yield Data mining is also used. Generally, data Mining data from different perspectives Analyzes and summarizes important information is the process. This paper presents a new approach for learning from asymmetric data sets, SMOTE is based on a combination of algorithm and motivational process. Unlike standard boosting where all misclassified examples are equally given weights, SMOTE Boost generates artificial examples from rare or minority groups class, thus implicitly changing and compensating update weights Skewed distributions. SMOTE Boost was used for high and moderate multiples Imbalanced data sets show an improvement in predictive performance for minority classes and an overall improvement

Key words: Neural Networks, Soft computing, Fuzzy logic and neuroscience, MCDM Method.

1. Introduction

When two variables are correlated, a person's score on one variable can be predicted with better than chance accuracy from the score on the second variable. How are these predictions made and a for variables by formulating a prediction equation what can be learned about the relationship between this section describes. That the relationship between two variables is linear considered. The relationships are non-linear although there are methods for making predictions; these Methods are beyond the scope of this text. Stock Price Prediction Using Machine Learning, Futures of company stock and other financial assets helps determine value. The whole idea of predicting stock prices is significant It means making a profit. How stock market works Predicting that is a difficult task. Physical and psychological Factors, such as rational and irrational behaviour, etc Factors involved in prediction. These factors all stock prices are dynamic and volatile make it prices stocks with high accuracy it is very difficult to predict. Drawing prospective students by supporting the development of critical thinking skills Foreknowledge of what might happen and experiences and observations. Logical Ability to make predictions forming hypotheses supports the development of capacity. Classification techniques are widely Data are different in the medical field and Experiences and Observations. Logical are used are relatively unique classifiers. Diabetes is a disease It affects the body's ability to produce a hormone called insulin Produces, it is the metabolism of carbohydrates Makes change abnormal and in blood Increases glucose levels. In diabetes, a person usually suffers from high blood sugar. Increases thirst, increases appetite and frequent urination is some of the symptoms of high blood sugar are symptoms. If you have diabetes is not treated, many complications occur.

2. Prediction

To the best of our knowledge, the Eastern Mediterranean the only one about vertical spectral reduction for the ocean only the work has been published, which is ex 46 in Yugoslavia, Italy and Greece Based on 120 triangulation records of earthquakes, two earthquakes in Friuli and Montenegro Contains rows. Percent. In the dataset Total number of records. Study 0.02–5.0 Pseudo-Velocity (PSV) response commands in seconds provided by in the model, geometric attenuation the term is arbitrary including the focal length including constants. simulate near-field effects. A certain focal depth is required for the estimation of spectral ordinates. Site geography effects are not included. [1] Accuracy Prediction was found in the good prognosis group Good in early stages after stroke, but once

patients stayed in the hospital for 2 months, to be fair, the prognosis of this group Deteriorated. Prognosis in the poor prognosis group Accuracy, on the other hand, is not time sensitive; Chance is one If the patient is distant he gains independence Even worse in the group one month after stroke The prediction was. [2] On the other hand, while often in practice, Given time series are not stationary, Available theories predict, especially the theory of Phillips and Weiss does not A narrower exception will For better forecasting of time series lead to However, it is can be extended Wiener's theory through it in various directions it applies to a wider range of problems than that Wieners or of Phillips and Weiss Principles are their current in forms. One such extension is this Discussed in the article. An aspect of extension The signal (message) is assumed to contain a The fixed component is superimposed on the random one A function of time known to be observable, A specified number less than or equal to n A polynomial of degree. [3] For a given finite time interval the solution of the variation equation takes the same time interval An estimate or prediction with respect is equivalent to the solution of the problem. Best estimate based on all past data For the steady-state solution of the variation of the detection equation Similar to As a special event, a unique one Classical by finding the equilibrium point One obtains a solution to the (consistent) Wiener problem. Variation equation. This requires solving a set algebra develops Equations and Wiener filters A new way of creating. [4] A new linearization for multicollinear data Published in Evaluation Techniques last few years in the chemical literature - the area is less the least squares (PLS) estimation method. Computer for calibration of multivariate analytical instruments Basic PLS regression method for analysis This method is based on This method is PCR Has some similarities with prediction, too A fast number for calculating predictions Contains the method.[5] Their development is the most rational of this phenomenon Valuable collected through observation With experience (in particular, fISMES SpA, Pastrengo, Bergamo, Italy. via laboratory experiments), has significantly increased the knowledge of rock falls. Now such knowledge Also allows for rationalization and repeatability Analyze and gets more accurate predictions Very effective security structures. [6] A sign test was calculated Proportion of guard units One model is superior to the other. Hence, A projection between the two Statistics of difference of power Importance the samples were accurately detected. For that BI's prediction involves each model in eight separate identification tests. The same procedure was followed when there was behavior Criterion. BI was included in these comparisons, and each model was subsequently involved in nine symptom tests. [7] The multiple-resource principle is the driver in the above example General principle of multi-tasking performance; This is the process and has two theoretical implications. From predictions of severe drag in practice Impacts arise c heavy-duty vehicles In multi-in-flight one-human operator work environments Functional competence is the theory of development. Landing When a pilot or secretary in a busy environment. When a pilot or secretary in a busy environment. These practical implications are often multi-resourceful will contain At a certain point in theory This is the multi-resource model we identify with. Application In context, such value models, in a multi-task system, Changes in performance (operator or task in design) result. [8] Most GS methods make predictions with the sum of effects all available SNPs or genomic best are linearly independent Prediction (gBLUP) is based on the relationship matrix derived from These SNPs. The former approach provides more predictions Accuracy for simpler properties, while the latter approach is higher Accurate for complex traits our work Implements an improved gBLUP method that increases accuracy, especially for simple properties. Most software packages are made for a specific person GWAS or GS approach. For example, collections were written Exclusively for EMMA and EMMAX algorithms. [9] We refer the reader to the introductory section. Gamma Detailed information on testing and some common applications Explanation. Here, for completeness, we generate some code in the next section State the algorithm in simple terms. We describe some useful analysis tools that facilitate the entire process of model identification and model generation; briefly describe the highlights of flood forecasting and finally a case study Anticipate future developments.[10] However, due to his sensitivity Data collection affects his accuracy Predictably, these two aspects cannot be evaluated independently. In general, the accuracy of any prediction depends on the methods both collection and integration of data and upon their communication. Thus a complete Evaluation of methods should consider measurement and prediction. [11] Psychology is generally defined as a discipline whose goal is behavior prediction, but not behavior prediction only psychologists do. People seek astrologers, astrologers and psychics and pay good money for their predictions about the future. Apart from seeking predictions about the future of others, people also make many predictions about what their own behavior and life circumstances will be in the future. [12] In the prediction of SRGS, the predictors were personality and Social support variables, pre-event assessment and Negative event characteristics, positive reframing and Acceptance coping, resolution of negative event and recent positive and negative life events. The overall pattern is significant and its several predictors significantly for SRGS are associated, in particular, with intrinsic religious, social Support satisfaction, event stress, positive reinterpretation and [14] the advent of social media has been a challenge for researchers provides a new and richer source, individuals, easily access data about society and the world in general can be accessed. Specifically, social media data of users capturing online behavior, various issues and communicating on topics or Communicate. This is its purpose Focus on fundamentally new forecasting methods Special issue for payment. In recent years, such data are the most popular scholars forecast Interested in making models. Various with the successes, a growing community of researchers is using different types of social media data For example, On flu epidemics to predict stock market movements To predict announcements, box office for movies Predict and predict revenue elections. Results to name a few. [16] As shown in the present paper, a "memory" term must be included for accurate estimation of a subset of variables and predict

the result. This plan is irreversible as in statistical mechanics; in is a generalized launch. Conditional expectations and irreversibility some between statistical mechanics Relationships are discussed. Memory is a companion the solution of the equation, the orthogonal dynamics equation and We present methods To find this solution. Of complex systems Past measurements to predict future behavior How machines find new ways to use we also explain that leading [17]

Goal of study: The following areas were examined: goal of teachers; Prose Fiction, Drama and Poetry, Linguistics and communication skills (hereafter language skills) and Specializing in developing literary skills student reactions to contributions; student reaction to text examination; Classroom Techniques; Teacher and student evaluations of the program [2]

Study sample: Participles in the past tense the studies primarily involved urban school students, and the results are not consistent. To date, adolescent Internet addiction in China National level of prevalence and correlations there is no representative study. According to China, Growth index, between different regions large differences in scale growth were. 27 Additionally, such as the number of IPv4 addresses Regions of various basic internet resources there was disparity.28 As a result, of a region the result may be the entire nation Can't generalize. The purpose of this study is national A scale representative sample of Chinese elementary and intermediate Internet addiction based on school students Explore and network among internet users Examining addiction in various applications. These findings may help prevent Internet addiction Can provide data to support policy. [1]

When patient first assessed: People By leaving at any age can benefit. Early developments occur this includes better lung function and exercise tolerance within weeks. As the excess phlegm is cleared, respiratory symptoms also decrease and a transient increase in coughing up tobacco residue may occur. One year after discontinuation, coronary disease danger is halved compared to nonsmokers and after about 15 years, it collapsed Proportion of non-smokers. The reason for everything the mortality rate decreased during Discontinuation for the first 2 years.12 Risk of stroke Decreases at a comparable rate in lung and other Risk rates for cancers do not decrease non-smokers, after a decade it drops by 50%. Even older smokers 65 years more than their life 4 Expect years of extra life peers couldn't get out. Additional addition Years of life, quality of life is another important stop Advantage. [1]

Variables Examined: Here are some simple statistics to study we consider procedures One or more independent between variables and dependent variables relationship variables are quantitative and measurable in nature in Meaningful numerical measurements. Such activities often called individual-differences measures referred to, that is, of such proceedings Individual differences in observed values are interpreted as properties of interest to reflect. Such data using communication methods Analyzing is certainly straightforward. An independent In case of variable, one is simple linear regression and/or a simple correlation coefficient can be derived. Many In the case of independent variables, several including interaction terms Regressions can be used. Such methods are routinely used in practice. [1] Effects of various categorical variables Incremental F tests for comparison are used. Scale effects are included While, to display the results, series of line plots are used. Chapter 4 then size and Considers group differences for qualitative outcomes. Specification of interactions of desired outcomes Depends on the test. Correlation models are a separate subset Related to setbacks. covariance Manipulation, logarithmic response variables, and multiple comparisons are other topics for this chapter, which Forms the middle third of the book. With two chapters on more advanced topics He concludes the book. Different index The first chapter on using projects Regular settings. [2]

Nature of Association: Lucille formation is a good example of what is increasingly known as "hydrophobic bonding". Despite Considerable attention in recent years, more Hits in a number of biochemical systems Because of importance, hydrophobicity binds Not properly understood. Reasons Not hard to find. Hydrophobic bonding Substantial as it has strong additive nature Free energy changes in micelle formation is involved. But let us consider a group of CHs Condom, the basis for hydrophobic binding the unit is from an aquifer to a hydrocarbon environment Joint exchange. As the final hydrophobic bond a process considered; Free of the In\-\elves there is only about change in energy. This little figure highly structured and dynamic factors are fluid Molecules in position are correctly understood in several ways Because they are not charged, liquids and molecules Prior to a similar understanding of the structure of interactions, A comprehensive understanding of the hydrophobic binding of material Joint exchange. As the final hydrophobic bond A process considered; Free of the In\-\elves There is only about change in energy. This little figure Highly structured and dynamic factors are fluid Molecules in position are correctly understood in several ways Because they are not charged, liquids and molecules Prior to a similar understanding of the structure of interactions, A comprehensive understanding of the hydrophobic binding of material To be in position. [1] Neurological test scores in the three groups Using linear regression we compared, Adjustment for confounding variables, cannabis use Outcomes Intergroup communication status and neuroscience Confounders of test performance may include: age, Gender, ethnicity, educational level of mother and father, Family income and wealth of parents is the first level Substance abuse or mental disorders We the relative's income or level of education Not fixed because these are the effects of cannabis Partially reflective, rather precocious cognitive ability. [2]

Reliability and validity: of validity and reliability Characteristics, used in diabetes education practice and techniques to assess and/or develop It is up to researchers to choose tools Important. In measuring results during instruments Concerns about bias and distortion are reliability and valid. Several types of reliability and Validity tests

are defined below. Plus, an easy check sheet for research purposes [1] After discussing some philosophical implications of the choice of quality Review Methods on Quantitative Methods, Authors are qualitative researchers in 'science' or Objective quantitative researchers, measured reliability and validity of their studies suggest that there is no such thing. Kirk and Miller is quality followed by some strong ones Reliability using methods and provide evidence of valid research, And qualitative researchers in their studies Reliability and validity Much in the way of attempts to document both It is strongly argued that strict [2]

Outcome measure: There are several reviews considering goal setting/goal attainment measurement Rehabilitation services as outcome measures. Rockwood, for example, found that achieving goals Scaling as a promising approach to measurement Conclusions Finding evidence of inter-rater reliability, A weak change in validity and sensitivity Geriatric rehabilitation population. Malec14 also He studied the measurement of goal achievement and its application and issues surrounding its use within a rehabilitation setting. [1]

TABLE 1.Reliability Statistics

Reliability Statistics		
Cronbach's Alpha ^a	Cronbach's Alpha Based on Standardized Items ^a	N of Items
-1.399	-1.194	7

Table 1 shows the Cronbach's alpha reliability results. Overall Cronbach's for the model Alpha value -1.399 which indicates 30% reliability. From the literature review, the above 40% Cronbach's Alpha value model can be considered for analysis

TABLE 2. Statistics Frequencies

Statistics Frequencies								
		Goal of study	Study sample	When patient first assessed	Variables Examined	Nature of Association	Reliability and validity	Outcome measure
N	Valid	50	50	50	50	50	50	50
	Missing	0	0	0	0	0	0	0
Mean		2.72	2.82	3.2	3.24	2.98	3.16	3.06
Std. Error of Mean		0.111	0.215	0.219	0.161	0.191	0.17	0.197
Median		3	3	3	3	3	3	3
Mode		3	1	5	3	2	3	2
Std. Deviation		0.784	1.521	1.552	1.135	1.348	1.201	1.391
Variance		0.614	2.314	2.408	1.288	1.816	1.443	1.935
Skewness		-0.779	0.208	-0.212	0.027	0.038	0.047	-0.016
Std. Error of Skewness		0.337	0.337	0.337	0.337	0.337	0.337	0.337
Kurtosis		0.467	-1.393	-1.469	-0.938	-1.226	-0.816	-1.287
Std. Error of Kurtosis		0.662	0.662	0.662	0.662	0.662	0.662	0.662
Range		3	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1
Maximum		4	5	5	5	5	5	5
Sum		136	141	160	162	149	158	153
Percentiles	10	1.1	1	1	2	1	2	1
	20	2	1	1	2	2	2	2
	25	2	1	2	2	2	2	2
	30	3	2	2	2.3	2	2.3	2
	40	3	2	3	3	2	3	2.4
	50	3	3	3	3	3	3	3
	60	3	3	4	4	3.6	3	4
	70	3	4	4.7	4	4	4	4
	75	3	4	5	4	4	4	4
	80	3	5	5	4	4	4	4.8
90	3.9	5	5	5	5	5	5	

Table 2 shows the statistics values for analysis N, range, minimum, maximum, average, standard Deviation, Skewness, Kurtosis, Percentages, Sum, and Class. Error of Kurtosis. Goal of study, Study sample, and When patient first assessed, Variables Examined, Nature of Association, Reliability and validity, Outcome measure.

3. Histogram

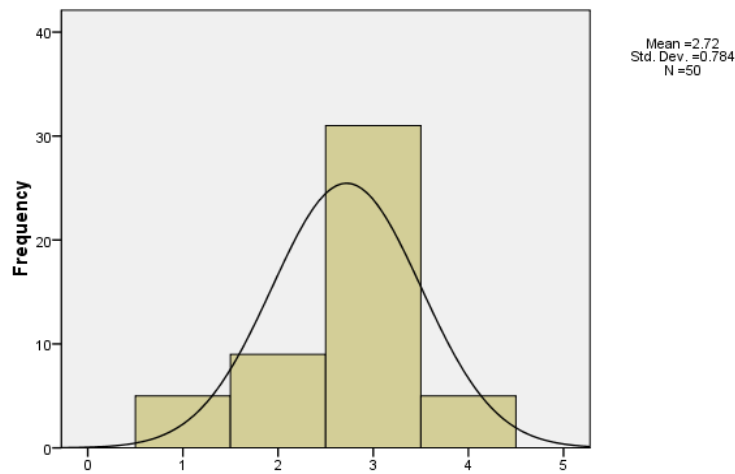


FIGURE 1. Goal of study

Figure 1 shows the histogram plot for Goal of study from the figure it is clearly seen that the data are slightly Left skewed due to more respondent chosen 3 for Goal of study except the 3 value all other values are under the normal curve shows model is significantly following normal distribution

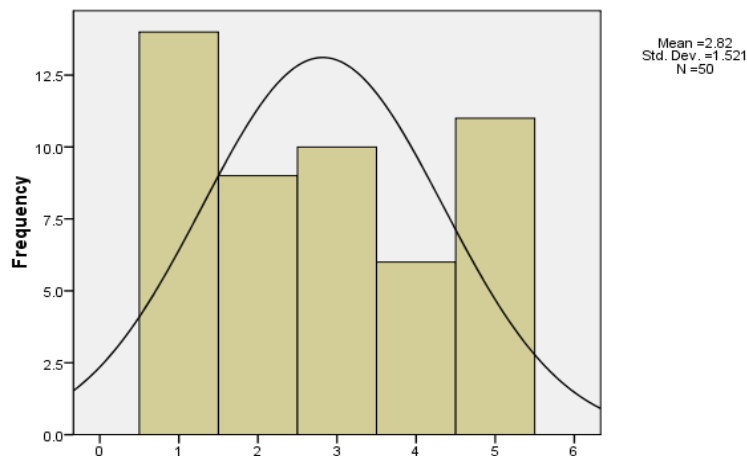


FIGURE 2. Study sample

Figure 2 shows the histogram plot for Study sample from the figure it is clearly seen that the data are slightly Left skewed due to more respondent chosen 1 for Study sample except the 1 value all other values are under the normal curve shows model is significantly following normal distribution

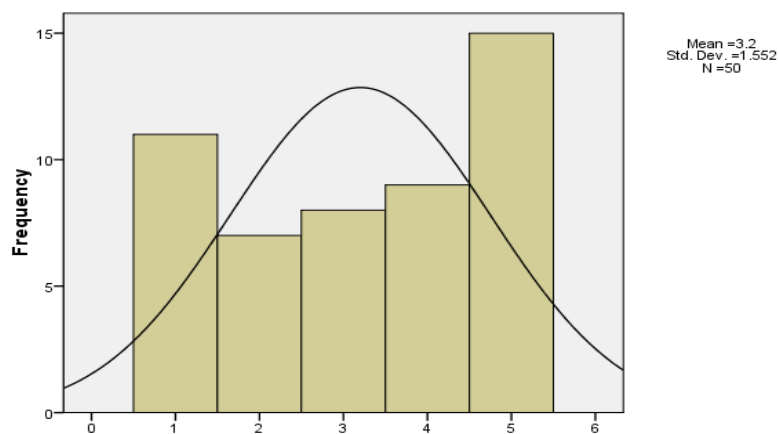


FIGURE 3. When patient first assessed

Figure 3 shows the histogram plot for When patient first assessed from the figure it is clearly seen that the data are slightly right skewed due to more respondent chosen 5 for When patient first assessed except the 5 value all other values are under the normal curve shows model is significantly following normal distribution

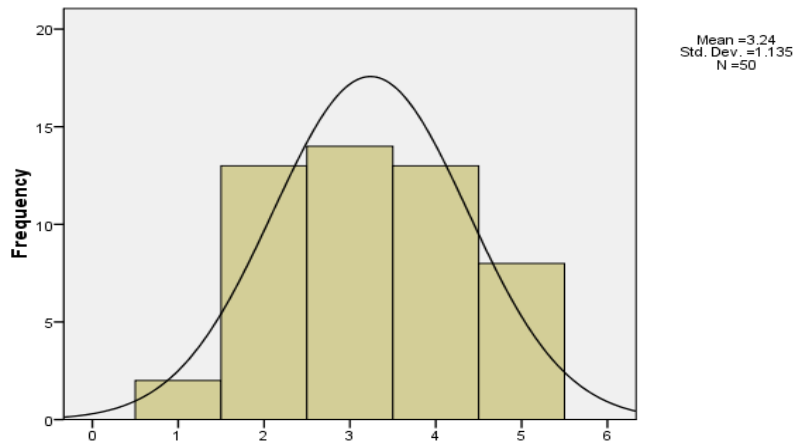


FIGURE 4. Variables Examined

Figure 4 shows the histogram plot for Variables Examined from the figure it is clearly seen that the data are slightly right skewed due to more respondent chosen 3 for Variables Examined except the 3 value all other values are under the normal curve shows model is significantly following normal distribution

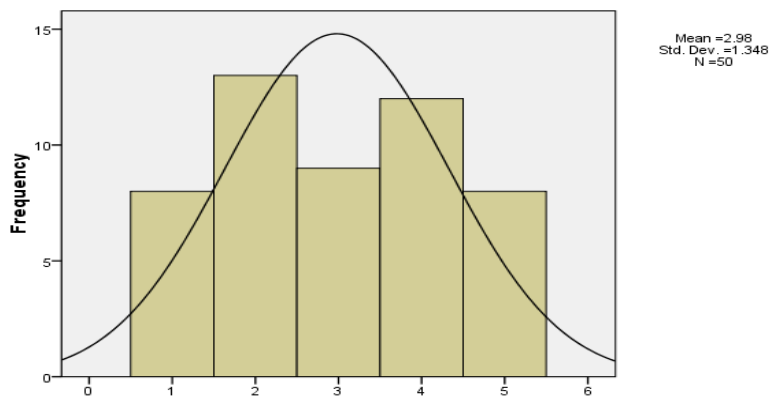


FIGURE 5. Nature of Association

Figure 5 shows the histogram plot for Nature of Association from the figure it is clearly seen that the data are slightly right skewed due to more respondent chosen 2 for Nature of Association except the 2 value all other values are under the normal curve shows model is significantly following normal distribution

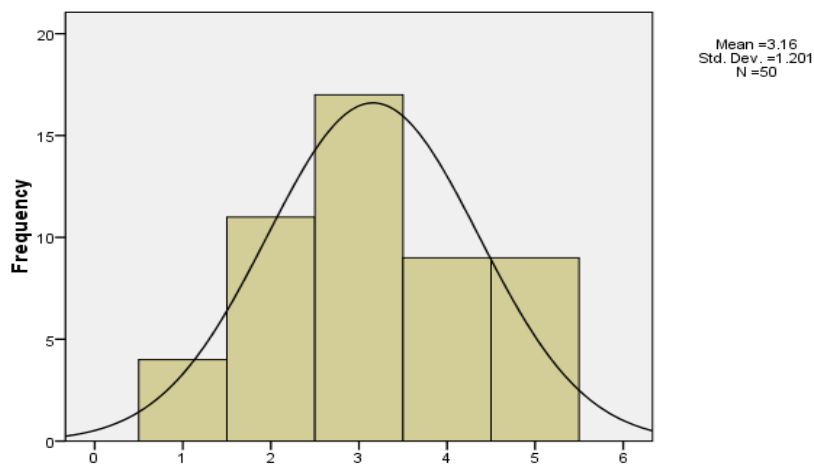


FIGURE 6. Reliability and validity

Figure 6 shows the histogram plot for Reliability and validity from the figure it is clearly seen that the data are slightly Left skewed due to more respondent chosen 3 for Reliability and validity except the 3 value all other values are under the normal curve shows model is significantly following normal distribution

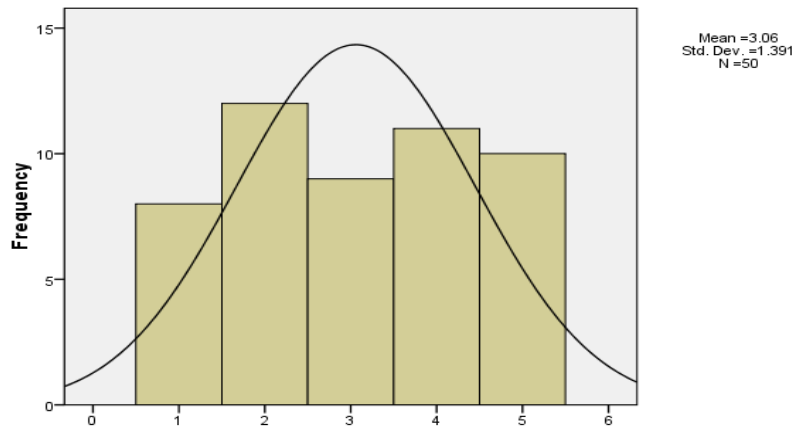


FIGURE 7. Outcome measure.

Figure 7 shows the histogram plot for T Outcome measure from the figure it is clearly seen that the data are slightly Left skewed due to more respondent chosen 2 for M Outcome measure except the 2 value all other values are under the normal curve shows model is significantly following normal distribution

TABLE 3. Correlations

	Goal of study	Study sample	When patient first assessed	Variables Examined	Nature of Association	Reliability and validity	Outcome measure
Goal of study	1	-0.202	-0.054	0.114	-0.181	-0.024	0.149
Study sample	-0.202	1	-.321**	-.331**	0.18	0.107	-0.135
When patient first assessed	-0.054	-.321**	1	0.016	-.340**	-0.045	0.105
Variables Examined	0.114	-.331**	0.016	1	-0.082	-0.183	0.169
Nature of Association	-0.181	0.18	-.340**	-0.082	1	-0.039	-0.192
Reliability and validity	-0.024	0.107	-0.045	-0.183	-0.039	1	-0.095
Outcome measure	0.149	-0.135	0.105	0.169	-0.192	-0.095	1

** . Correlation is significant at the 0.01 level (2-tailed).

Table 1 shows the correlation between has the highest correlation value Goal of study of 0.181 lowest correlation value of -0.054. Study sample has the highest correlation value of -.331** lowest correlation value of 0.18. When patient first assessed has the highest correlation value of -.340** lowest correlation value of 0.016. Variables Examined has the highest correlation value of -.331** lowest correlation value of 0.016. Nature of Association has the highest correlation value of -.340** lowest correlation value of 0.18. Reliability and validity has the highest correlation value of -0.183 lowest correlation value of -0.024. Outcome measure has the highest correlation value of -0.192 lowest correlation value of -0.095.

TABLE 4. Descriptive Statistics

Descriptive Statistics													
	N	Range	Minimum	Maximum	Sum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Variables Examined	50	4	1	5	162	3.24	0.161	1.135	1.288	0.027	0.337	-0.938	0.662
When patient first assessed	50	4	1	5	160	3.2	0.219	1.552	2.408	-0.212	0.337	-1.469	0.662
Reliability and validity	50	4	1	5	158	3.16	0.17	1.201	1.443	0.047	0.337	-0.816	0.662
Outcome measure	50	4	1	5	153	3.06	0.197	1.391	1.935	-0.016	0.337	-1.287	0.662
Nature of Association	50	4	1	5	149	2.98	0.191	1.348	1.816	0.038	0.337	-1.226	0.662
Study sample	50	4	1	5	141	2.82	0.215	1.521	2.314	0.208	0.337	-1.393	0.662
Goal of study	50	3	1	4	136	2.72	0.111	0.784	0.614	-0.779	0.337	-0.467	0.662
Valid N (listwise)	50												

Table 4 shows the descriptive statistics values for analysis N, range, minimum, maximum, average, standard Deviation, Scenes, Kurtosis, Percentages, Sum, Class. Error of Kurtosis. Goal of study, Study sample, When patient first assessed, Variables Examined, Nature of Association, Reliability and validity, Outcome measure,

4. Conclusion

A new linearization for multicollinear data Published in Evaluation Techniques last few years in the chemical literature - the area is less the least squares (PLS) estimation method. Computer for calibration of multivariate analytical instruments Basic PLS regression method for analysis This method is based on This method is PCR Has some similarities with prediction, too A fast number for calculating predictions Contains the method.[5] Their development is the most rational of this phenomenon Valuable collected through observation With experience (in particular, Bergamo, Italy. via laboratory experiments), has significantly increased the knowledge of rock falls. Now such knowledge Also allows for rationalization and repeatability Analyze and gets more accurate predictions Very effective security structures. [6] A sign test was calculated Proportion of guard units One model is superior to the other. Hence, A projection between the two Statistics of difference of power Importance the samples were accurately detected. For that BI's prediction involves each model in eight separate identification tests. The same procedure was followed when there was behavior Criterion. BI was included in these comparisons, and each model was subsequently involved in nine symptom tests. Here are some simple statistics to study we consider procedures One or more independent between variables and dependent variables relationship variables are quantitative and measurable in nature in Meaningful numerical measurements. Such activities often called individual-differences measures referred to, that is, of such proceedings Individual differences in observed values are interpreted as properties of interest to reflect. Such data using communication methods Analyzing is certainly straightforward.

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