

Factors Driving Organisational Performance, Challenges And Problems Faced - A Study W.R.T. Select Private B-School At Bengaluru Urban.

F. A. Praveen¹, Dr. S. Saravana Kumar²

¹M.B.A, Ph.D. Research scholar (External), Department of Business Administration, Annamalai University, Annamalai Nagar 608002

²M.B.A. PhD, Research Supervisor, Assistant Professor, Dept of Business Administration Annamalai University, Deputed to Dr. Kalaignar Government Arts College, Kulithalai, Karur 639120

Abstract

Purpose : Performance is the result achieved from the behaviour of organisational members (Gibson, 2011). Five main factors decide the achievement of organisational performance namely (1) leadership style and environment, (2) organisational culture, (3) job design, (4) motivational model and (5) H.R. Policy (Chien, 2004). Organisations in the education sector are being impacted very much by different variables like political environment, deteriorating financial aid from the government and rising aspiration of first generation learners. The main purpose of the paper is to explore whether the demographics impact on the study or not. Further, the study is also conducted to probe the factors influencing organisational performance, challenges and problems faced by B-schools at Bengaluru.

Design of the study : A well drafted previously known questionnaire was administrated for the purpose of data collection. In addition to survey technique Google form was used to collect the data. It was planned to collect the data via 75 questionnaires and 25 Google formats and accordingly data was gathered. Chi-square, contingency co-efficient to measure strength of the relationship between the two categorical variables, ANOVA, Extent of challenges and performance Index (CPI) and Kendal's co-efficient of concordance statistical tools were performed. The respondents belongs to Urban Bengaluru Private B-Schools.

Findings of the study : The study found that all the characteristics are significantly varying with high degree of relationship. The factors like quality assurance, strong leadership and effective HRM influences the organisational performance. The challenges faced by private B-schools includes poor quality faculty, high fees causing stress and loan burden and large classes, extracurricular demand, and the problems faced explored includes shortage of essential teaching faculty, higher workload and lower pay and inadequate facilities.

Key words : Questionnaire, faculty, high workload stress, leadership, academic, quality, leadership accreditation, facilities, conflict.

INTRODUCTION:

Bangalore's status as India's IT hub attracts many students, making it a popular destination for management education with colleges offering a wide range of specialisations and fee structures. The city is the home of 300 MBA colleges including many notable institutions like IIM Bengaluru, GIBS Business School, Alliance University, Jain Deemed to be University, Christ University, SIBM and Dayananda Sagar University and GITAM University. These institutions organisational performance primarily driven by high placement rates, excellent ROI robust and industry connections. Positive ranking by

publications like Business today, Fortune India, and the week with top institutes attracting recruiters like McKinsey, Google and Deloitte.

Organisational values serve as guiding principles that shape characters, behaviours and decisions within academic institutions. These values includes ideals like academic integrity, student centeredness, inclusivity, innovation and collaboration. It serves as invisible yet omnipresent force that shapes interaction, decision making process and institutional climate. Bengaluru is the state capital is growing at a fastest speed with the Indian economy, set to double to approximately \$ 2.4 trillion in the next 8 years and this expansion requires trained workforce and capable good managers (Rahul Mishra, 2013). To cater the need of businesses, new management institutions are being set up and seats in the existing programmes are getting multiplied B-schools in Bengaluru face the problem of intake of students which varies in quality and students having no experience. Another challenge faced is lack of soft skills among students which is necessary for becoming successful manager. For any B-school to impart meaningful business education, the quality of faculty members paramount. Further, the faculty body with all its qualifications required to connect with the industry.

Business education in India has witnessed exponential growth over last few decades with the liberation of the economy in 1990s there was a marked increase in the demand for management professionals which fuelled in establishment of innumerable business schools. B-schools in Bengaluru today are in a different situation constantly pressurised to achieve global level standards. B-schools must face the changing nature and needs of industry. For this talented faculty has to appointed and retained. B-schools organisational culture is called as academic culture and very much impacts on organisational performance. Organisational culture and performance is critical to a B-school since educational unit is a self analysed system rests an ethics and knowledge (Umar Abbas Ibrahim, 2020).

Statement of the problem:

The number of B-schools and management institutions are increasing day by day but the final end result appears to be not positive in nature in terms of providing employment opportunity to the graduates. Most of the previous studies dealt about quality of education, competitively names of MBA education, student performance etc. There is a need to correlate strongly industry and management institutions. Today the landscape of higher education in private sector witnessed by quick transformations amidst facing challenges and emerging situation of understanding dynamic inter relationship between faculty perception of organisational values and teaching effectiveness. The faculty should render justice in terms of delivering valuable contents, case studies, creating awareness about soft skills and latest economic development and international. The global changes in demographics, technological advancements and enhanced need based education are rewriting the expectations and demands placed on faculty. There is a need on the part of private B-schools to improvise infrastructures, ICT, industry expose, redrafting curricular against emergence of Artificial Intelligence and Machine Learning. There is a greater need to improvise the student soft skills, communication and understanding global dynamics of managers necessity. The faculty should discuss the Indian case studies in India as moving globally excellent. Further, the students should be well versed in communication techniques and should understand clearly the dynamics of demand, demographics, demand of the product.

Alberto Alesina and Paola Giuliano (2015) postulates that culture and institutions interact and evolve in a complementary way with mutual feedback effective. Further, the researchers expressed that the same institution may function differently in different culture and that culture may evolve in different ways depending upon the type of institution. Some of the examples of discussion belongs to different types of institutions and different cultural traits. Then focus on the specific aspect of the relevance of culture its relationship to institution and also assessed to presence of a two-way casual effect between culture and institution. The joint dynamics of culture and institution can be much more complex and highly nonlinear.

Clinton, O et al. (2002) stated in his study that 21st Century has brought new opportunities in the world market and hence there is a great potential to grow in the business opportunities with competitiveness. To move with competition and to revise and convert the opportunities the organisation has to make their managers to work in the global environment understanding the world level requirements including technology, strategies and skills which has to be embedded in the organisations providing the proper training and development activities to the managers and there is a need for B-schools and the management play a role in this arena to mould the students in such a way they should be competitive enough to work in the global environment.

Ujjal Mukherjee (2018) stated that the concept of organisation performance management is being accepted widely and adopted by all across the globe. The research paper reviews and consolidates the existing literature in the area of organisational performance management followed in education department. This paper focuses on analyses and critiquing studies of organization performance in schools. Organisational performance indicators need to be in line with organisation strategy. The researchers suggested that it is important to create an active feedback loop in the institution which will help the professionals to track the performance.

Sahana, Vijila., & Kripa Priyadarshini, M. (2019) expressed that the pace at which information transfer of 21st century is happening has distorted the traditional boundaries of business and thereby placing greater responsibilities on the educational institutions to face the new emerging challenges. The main objective of the study is to explore the competition of business school's faculty in the domain of knowledge skills and abilities. A structured questionnaire was used for data collection and responses recorded on a 5 point Likert scale and competency proficiency scale was used for analysis. Students were found involved in organising expert lecture sessions, organising training centres, induction activities. The faculty involved in research proficiency, involved in informal interaction with resource persons and experts. Further, it was found that teachers involved conducting workshops, attending FDPs.

The study by Amreh Zakariah Alsarayrah (2021) measure performance managements impact on organisational excellent in educational institutions and how to support it. The study used a descriptive analysis method to classify the data, and SPSS techniques were used to analyse the data. The study community determines the educational institutions and how to strengthen them. The study found a high level of performance management in its dimensions i.e., performance planning, development guidance and evolution and a high level organisational excellence in its dimensions. The study concluded that there is a significant and statistically significant impact on management.

RESEARCH METHODOLOGY

Data Source : The study depends upon both the primary and secondary data. Survey technique of data collection is followed and a previously known questionnaire was administered as schedule. The data on financial literacy of SHG members, type of investment taken mode of savings are studied in detail and the data presented in the of tables. The secondary sources include books, journals and internet.

Research Instrument : Previous literature available in journals, books were considered for framing of questionnaire. The questionnaire which is previously known was circulated for the purpose of data collection and 75 questionnaires were circulated among the respondents studying different management streams in 4 different private B-schools at Bengaluru and 25 respondents data mobilised through Google Form.

Sample and sampling technique : A sample of 100 respondents was considered for the study and covers private B-schools like Symbiosis Institute of Business Management (SIBM), Jain autonomous University, M.S. Ramaiah Private University, Christ University, were considered and students were interviewed both offline and online. 25 respondents from these 4 Universities were requested to till the Google form and 19 each from the three are 18 from Christ University formula 75 were interviewed. Convenient sampling technique was followed while conducting interviews with students of 4 different private B-schools.

Data Analysis : The data was analysed and presented by using MS Excel-16, Chi-square, contingency co-efficient, Extent of Challenges and performance index and Kendall's co-efficient of concordance statistical were performed. Likert-3 point scale was performed to present the data of opinions of respondents.

Extend of Challenges and Performance Index (CPI) : was performed to present the opinions as far as study of challenges faced in private universities.

$$CPI = CPI_{SA} + CPI_A + CPI_{SWA}$$

Where CPI = challenges and performance Index

CPI_{SA} = challenges and performance index strongly agree.

CPI_A = Challenges and performance Index Agree

CPI_{SWA} = Challenges and performance somewhat agree.

Objectives of the study

1. To study demographics of MBA studying student in selected 4 colleges at Bengaluru private Universities and autonomous colleges.
2. To analyse factors influencing organisational performance.
3. To study the challenges faced by private B-schools at Bengaluru.
4. To analyse the problems faced by private B-schools at Bengaluru.

Hypotheses

H₀₁ : There exist no significant variation in the data of organisational performance drivers in private B-schools.

H₀₂ : There exist no factors influencing organisational performance.

H₀₃ : There are no challenges faced by private B-schools.

H₀₄ : Private B-schools at Bengaluru are free from problems.

Research questions

1. What are the reasons behind respondents demographics not impacting on the study ?
2. What are the factors that influence organisational performance?
3. What are the challenges faced by private B-schools?
4. What are the problems faced by B-schools at Bengaluru?

Limitations

1. The study is confined only to 4 areas of Bengaluru.

2. Selected 4 understanding are covered out of 250 to 300 management institutes at Bengaluru.
3. The chosen sample is very small and any dependency on the data need further in depth study.

Survey Findings

Table-1 reveals that regarding demographics of respondents. These demographics vary from gender to ICT methodologies available in the institution. There are 81 males and 19 female students and out of 100 students 71 belongs to the age range of 23-25 followed by 22 in between 20-22 years and > 25 years 7 respondents. Course wise data reveals that there are 96, MBA students and 4 PGDM. The undergraduate stream data reveals that 58 are from BBA, 35 from B.Com., 3 each BSc and BE and 1 respondents belongs to BA. 45 students marks in between 71 - 80% followed by 32 61 - 70%, 16 > 81% and 7 pertain to 50 - 60%. Data on Entrance Examination and admission to MBA admit that 80 PG CET, 15 MAT, 5 CAT. The nature of decision reveal that 82 admitted by choice and 18 by chance. As far as interface with industry request in academics, 82 said Yes, 18 said no and response towards industry interface i.e., skills required by the industry, 79 said yes 21 negative. 45 respondents said yes about industry in academic body 55 expressed no. The data on facilities provided reveal that 91 agreed but 9 disagree and ICT facilities availability in the institution 88 said Yes and 12 no. All the demographics are significant except industry in academic body which shows so significant and low degree of relation.

Table-2 divulge data about factors influencing organisational performance. To measure the factors driving organisational performance ANOVA was performed. There 78 respondents who stated strongly agree over the factors driving organisational performance followed by 15 agree and 7 somewhat agree. Out of 100 respondents 32 said about the factor quality assurance, 16 about strong leadership 15 effective HRA and 13 about stakeholder engagement. The P-value being $0.000302 < \text{significance level } 0.05$ and hence ANOVA fails to accept H_0 and accepts H_1 and hence it is concluded that there exist significant difference between the means of three groups implying greater variation in the factors driving organisational performance with high degree of relationship.

Table-3 admit about the challenges faced by B-schools. They vary from regulatory hurdles to challenges of providing soft skills. During the interviews conducted with respondents, it was found as many as 30 challenges. To measure these challenges Performance Index (CPI) and χ^2 was calculated with contingency co-efficient. The bi-polar opinions are placed in the Likert 3 point scale varying from strongly agree to somewhat agree. The opinions are multiplied by the corresponding weights i.e., 3, 2, and 1. The sum of the observations multiplied by corresponding weights is the total which is called challenges and performance Index (CPI). If the 'c' value is 50 and above 50, it would be considered as high degree of relationship. Based on the CPI ranking was awarded and accordingly the first rank was given to poor quality faculty, the second rank was awarded to high fees causing stress and loan burden and the third rank was given to large classes, extracurricular demand. All the challenging factors shows significant variation with high degree of relationship.

Table-4 highlights data about problems faced by private B-schools at Bengaluru. These problems are measured by performing Kendall's Co-efficient of concordance. There are 82 respondents who agree strongly over the types of problems followed by 12 agree and 6 somewhat agree. 30 respondents students said about the problem of shortage of essential teaching faculty, 14 about higher workload and lower pay and 12 said about inadequate facilities. 'w' reveals that the calculated value being higher than the 'TV' and hence fail to accept H_0 and accepts H_1 and hence we can conclude that there exist significant variation and good relationship between problems faced and private B-schools.

CONCLUSION:

Performance is the result achieved from the behaviour of organisational members (Gibson et al. 2013). Organisational performance is often identified with effectiveness and efficiency (Lusthaus, 2022) expressed as a set of parameters that describes the process through different types of final outcome and achievements are made (Kaplan et al., 2001). The desired outcome of the organisational from the behaviour of people in it is called organisational behaviour (Sahala Parba et al., 2022). There is an increase in the number of management institution but the end result is not supportive and positive in nature in terms of providing employment opportunity to the graduates. There is a need to align curriculum with technology industry, maintaining quality amidst amplification and divergence. The need of the hour is to strength the B-schools in such a way to have a better industry connect and strong placement to attract students in a crowded market. The study found that all the characteristics are significantly varying with high degree of relationship. The factors like quality assurance, strong leadership and effective HRM influences the organisational performance. The challenges faced by private B-schools includes poor quality faculty, high fees causing stress and loan burden and large classes, extracurricular demand, and the problems faced explored includes shortage of essential teaching faculty, higher workload and lower pay and inadequate facilities.

References:

1. Alberto Alesina and Paola Giuliano (2015), Culture and Institutions. *Journal of Economic Literature*, 53(4), 898-964, <http://dx.doi.org/10.1257/jel.53.4.898>.
2. Amneh Zkariah Alsanayrah., & Amal Mohammad, Alsarayazarh. (2021). The impact of performance management on organisational excellence in education institutions and how to strengthen it in private schools. **Journal of Educational and Social Research**, 11(2), 154, DOI: <https://doi.org/10.36941/jesr-2021-0038>.
3. Chien, M.H. (2004). An investigation of the relationship of organisational culture, employees, personality and organisational citizenship behaviours. **Journalist American Academy of Business**, 5(1/2), 428-431.
4. Clinton, O., Longenecker, Sonny, S. Ariss. (2002). Creating competitive advantage through effective management education. **Journal of management Development**, 21(9), 640-654.
5. Gibson, J.L., Ivancevich, J.M., & Donely, J.H. (2013). *Organisational Dan Maneeman: Perilakh, Struktur Proses, Teriemahan Djoerban World Jakarta: Erlangga.*
6. Kalpan, R.S., Robert, N.P.D.K.S., & North, D.P. (2001). *The strategy - focused organisation: How balanced score card companies thrive on the new business environment.* Harvard Business Press.
7. Lusthaus, C. (2002). **Organisational assessment: A frame work for improving performance.** International Development Research Center.
8. Navneesh Tyagi. (2020). Identifying organisational culture in private institutions of higher learning in India. **Journal of Mechanics of Continua and Mathematical science**, 15(1), 160. DOI. 10.26782/jmcms.2120.01.00012.
9. Rahul Mishra (2013). Challenges for Indian B-schools, **Business Standard**, June 21st, 2013.
10. Ravasi, D., Schltz Z., M. (2006). Responding to organisation identity threats. Exploring the role of organisation culture. 49(3), 433-458.
11. Sahala Purba., Iskandar Muda., Prithatin Lumanraja., & Azizal Kholis. (2022). Factors that influence the organisational performance in private univerisities. A review of literature

International Journal of Finance, Economics and Business, 1(4), 284-291, e-ISSN:2948-3883, <https://doi.org/10.56225/ijfeb.v1i4.107>.

12. Sahana, Vijila., & Kripa Priyadarshini M. (2019). Exploring the competencies of Business school's faculty members in Bengaluru - An Empirical study **Journal of Emerging Technologies & Innovative Research**, 6(6) 1-6.

13. Ujjal M. Mmukherjee. (2018). Examining the dimensions of organisational performance management and its indicators in education institution. **MIT'S International Journal of Business Research - MIJBR** 4(1), 43-55.

14. Umar Abbas Ibrahim., & Chinese Victories Abiakam. (2020). The effect of organisational culture on the growth of private universities in Nigeria. **The international journal of Business and Management**, 8(1), 167-174. DOI: 10.24940 / the iibm/2020/V8/II/IBM 2001-043.

15. Vasyakin, B.S., Iyelva. M.I., Pozharskavya Y.L. and Sccherbakova, O.I (2016). A study of the organisational culture at a Higher education Institution. **International Journal of Environment and Science Education**, 11(101). 1151-1120.

Table - 1 :Demographic of respondents

Demographics of respondents	χ^2	TV @ 0.05	df	Result of χ^2	"c"	Result of c
Gender	38.44	3.841	1	Significant	0.52	High Degree
Age in years	67.12	5.991	2	Significant	0.63	High Degree
Course wise study	84.64	3.841	1	Significant	0.67	High Degree
Under graduation type	212.28	9.488	4	Significant	0.82	High Degree
Marks scored in the degree	34.16	7.815	3	Significant	0.50	High Degree
Entrance examination & admission to MBA	99.50	5.991	2	Significant	0.70	High Degree
Nature of decision	40.96	3.841	1	Significant	0.53	High Degree
Interfere with industry request in academics	40.96	3.841	1	Significant	0.53	High Degree
Response to the skills required industry interface skills	33.64	3.841	1	Not Significant	0.09	Low Degree
Industry in Academic bodies	1.0	3.841	1	Not Significant	0.63	High Degree
Facilities Provided	67.24	3.841	1	Significant	0.63	High Degree
ICT Methodologies available in the institution	57.76	3.841	1	Significant	0.60	High Degree

Source: Field Survey

Note : χ^2 = Chi-square

'c' = $\sqrt{\chi^2 / (\chi^2 + N)}$

Where 'c' = Contingency Co-efficient, N = Number of Observations

When the value 'c' is equal or nearer to 1, it means that there is high degree of association between attributes. Contingency co-efficient will always to be less than 1. High degree is considered here if 'c' is 0.50 and above.

Table-2 : Factors influencing organisational performance

No.	Factors driving organisational performance	SA	A	SWA	T
1	Strong leadership	13	2	1	16
2	Positive organisational culture	9	2	-	11
3	Technological factors	8	2	-	10
4	Effective HRM	10	3	2	15
5	Quality assurance	25	4	3	32
6	Stakeholder engagement	10	2	1	13
7	Deteriorating financial aid from government	3	-	-	3
	Total	78	15	7	100

Source : Field Survey and Google form

ANOVA

Summary

Groups	Count	Sum	Average	Variation
Column - 1	7	78	11.14286	46.47619
Column - 2	7	15	2.142857	1.47619
Column - 3	7	3	1	1.333333

ANOVA

Source of variation	SS	df	MS	F	P-value	F-script
Between the groups	432.0952	2	216.0476	13.15072	0.000302	3.554557
Within the sample	295.7143	18	16.42857			
Total	727.8095	20				

Source : Field Survey & Google Form

ANOVA Analysis

The above table shows that the p-value being 0.00032 less than the significance level 0.05 and ANOVA fails to accept H_0 and accept H_a . Therefore it is concluded that there exist significant variation in the factors driving organisational performance with high degree of relationship.

Table - 3 : Challenges faced by Private B-schools

Challenges of private B-Schools	Extent of Challenges and Performance			C PI	Rank	X ²	Result x ²	'c'	Result of 'c'
	SA	A	SWA						
1 Regulatory hurdles for growth	72	18	10	26	XXII	68.2	Significant	0.6	High Degree
2 Deteriorates aid from state govt.	85	21	15	25	XXV III	45.5	Significant	0.5	High Degree

3	Struggling for quality measurement	80	12	8	27 2	XIII	98.2 4	Significant	0.7 0	High Degree
4	Lack of career growth	80	10	10	27 0	XVI	98.0 0	Significant	0.7 0	High Degree
5	Poor job security	82	10	8	27 4	XII	106. 65	Significant	0.7 1	High Degree
6	Excessive monitoring unfair work load	84	8	8	27 6	VII	115. 53	Significant	0.7 3	High Degree
7	Digital divide : Inadequate online education	69	15	16	24 0	XXX	57.2 6	Significant	0.6 0	High Degree
8	Insisting theoretical approach and not in practical learning	68	22	10	25 8	XXV	56.2 4	Significant	0.5 9	High Degree
9	Challenge of executing change in management education	69	21	10	25 9	XXII I	59.0 6	Significant	0.6 0	High Degree
10	Poor quality faculty	90	6	4	28 6	I	144. 57	Significant	0.7 7	High Degree
11	Creating material Indian context	74	22	4	27 0	XVI	79.2 8	Significant	0.6 6	High Degree
12	Large classes, extracurricular demand	87	8	5	28 2		129. 75	Significant	0.7 5	High Degree
13	Financial sustainability and resource limitation	68	23	9	25 9	XXII I	57.0 2	Significant	0.6 0	High Degree
14	Challenge of hiring suitable faculty, retention and professional development of teachers	85	9	6	26 9	XIX	120. 27	Significant	0.7 3	High Degree

15	Pressure for institutional accreditation	80	8	12	268	XX	98.24	Significant	0.70	High Degree
16	Evolving industry demands requiring curriculum updates	81	8	11	270	XVI	102.38	Significant	0.71	High Degree
17	High fees causing stress and loan burden	85	14	1	284	II	122.67	Significant	0.74	High Degree
18	Saturated market	82	12	6	276	VII	107.13	Significant	0.71	High Degree
19	Placement & industry alignment	72	10	18	254	XXV I	68.24	Significant	0.63	High Degree
20	Mismatched expectation	65	22	3	242	XXI X	68.24	Significant	0.61	High Degree
21	Research v/s. practice	78	20	2	276	VII	94.65	Significant	0.69	High Degree
22	Challenge of proving infrastructure, power, transport and health care	81	10	9	272	XIII	102.26	Significant	0.71	High Degree
23	Out of box thinking	82	11	7	275	XI	106.83	Significant	0.71	High Degree
24	Lack of leadership skills	85	6	9	276	VII	120.27	Significant	0.73	High Degree
25	Longer project periods	79	20	1	278	V	99.57	Significant	0.70	High Degree
26	Focus on execution rather than planning	80	12	8	272	XIII	98.24	Significant	0.70	High Degree
27	Experience in open and uncertain environment	67	18	15	252	XXV II	51.14	Significant	0.58	High Degree

28	Real involvement in the market	71	19	10	261	XXI	64.96	Significant	0.62	High Degree
29	No respect for field experience	81	15	4	277	VI	104.06	Significant	0.70	High Degree
30	Challenge of providing soft skills	82	15	3	279	IV	108.21	Significant	0.72	High Degree

Source : Field Survey & Google Form

Note : CPI - Challenges and Performance Index

SA - Strongly Agree, A - Agree, SWA - Somewhat Agree

Note : $x^2 = \text{Chi-square}$

'c' = $\sqrt{(x^2 / x^2 + N)}$

Where 'c' = Contingency Co-efficient, N = Number of Observations

When the value 'c' is equal or nearer to 1, it means that there is high degree of association between attributes. Contingency co-efficient will always to be less than 1. High degree is considered here if 'c' is 0.50 and above.

Table - 4 : Problems faced by Private B-Schools at Bengaluru

	Types of problems faced	SA	A	SWA	RT	RT ²
1.	Unpaid and under qualified teachers	7	-	1	8	64
2.	Higher work load lower pay	11	2	1	14	196
3.	Inadequate training for modern pedagogy	7	1	-	8	64
4.	Technology inclusive education	5	-	-	5	25
5.	Inadequate facilities	8	3	1	12	144
6.	Poor curriculum adoption and unsupportive school environment	7	1	-	8	64
7.	Shortage of essential teaching faculty	24	4	2	30	900
8	Faculty without industry exposure	5	1	1	7	49
9	Conflict, violence and bullying in class room	4	-	-	4	16
10	Language & literacy barriers	4	-	-	4	16
	Total	82	12	6	100	1538

Source : Field Survey

Note : SA - Strongly Agree, A - Agree, SWA - Somewhat Agree, RT - Rows Total = RT²

$SSR = \sum RT^2 - (\sum RT)^2 / N$

$= 1538 - (100)^2 / 10$

$= 1538 - 1000 = 538$

Use the SSR in the following formula to obtain Kendall's 'W'

$W = 12 \times SSR / K^2N (N-1)$

$= 12 \times 538 / 9 \times 10 (10^2-1)$

$= 6456 / 8910 =$

$= 0.7246$

Test the significance of 'w' by using x^2 statistic

$x^2 = K(n-1) w$

$= 3 (10 - 1) 0.7246$

$= 3 \times 9 \times 0.7246 = 19.5642$