



KERALA UNIVERSITY OF HEALTH SCIENCES, THRISSUR ACADEMIC STAFF COLLEGE

Report of Workshop On Systematic Review and Meta-Analysis – A Primer

24th & 25th February 2026

- 1. Title of the program / Workshop:** Systematic review and Meta Analysis [SR & MA] for Dental Faculty
- 2. Introduction:** SR & MA are being important secondary research designs in any clinical research generating highest level of evidence. Hence it is essential that one needs to know its methods and how to do it.
- 3. Justification for the program:** - It is important that a Dental Faculty Member should know how to do a Systematic Review and Meta-Analysis
- 4. Objectives:** -
 - [1] To understand the steps of systematic search of literature
 - [2] To apply the methods of doing a Systematic Review and Meta-Analysis
- 5. Duration of Program:** - 2 days
- 6. Date & Time** – March 24th and 25th, 2026
- 7. Number of participants Attended: 28**
- 8. Eligibility Criteria**
Dental Sciences Faculty of affiliated colleges of Kerala University of Health Sciences, With FEP Number is eligible to attend the program. Three participants from each college are permitted to register.
- 9. Mode of Training:**
Workshop-based, including interactive sessions, hands-on practical exercises, and case-based discussions
Venue- Academic Block (Vigyan Bhavan) KUHS.
- 10. Course Fees:** Nil.
- 11. Criteria:** The applications were to be routed through the Principal. Direct applications were not entertained.

12. Mode of Application:

Online, through www.kuhs.ac.in

Those who required free accommodation on a twin-sharing basis at KUHS were directed to inform the KUHS through mail: shpps@kuhs.ac.in / simulationhead@kuhs.ac.in at the earliest, indicating the estimated time of arrival in the campus.

13. Program schedule

DAY-1 (24th February 2026)

Time	Session	Resource Person[s]
9:00 – 10:00 AM	Registration, Pre-test and self-introduction	
10:00 – 11:00 AM	Introduction to Evidence-Based Dentistry	Dr. Sajith Kumar Dr. Elbe Peter Dr. R. Venkitachalam
11:00 – 11:15 AM	Tea break	
11:15 – 12:00 PM	Formulating a Research Question (Hands-on session 1)	Anju James Malathi Mini
12:00 – 1:00 PM	Protocol Development & Registration	Vivek Narayan R. Venkitachalam
1:00 – 2:00 PM	Inauguration, Photo session & Lunch Break	
2:00 – 3:00 PM	Literature Search Strategy	Vivek Narayan Anju James
3:00 – 3:45 PM	Hands-on Session 2	All faculty
3.45 – 4.00	Tea Break	
4.00 – 4:30 PM	Study Selection Process	R. Venkitachalam
4:30 – 5:00 PM	Demonstration of search management software	R. Venkitachalam

DAY 2 (25th February 2026)

Time	Session	Resource person
9:00 – 9:15 AM	Recap of Day 1	Dr. Sajith Kumar Dr. Elbe Peter
9:15 – 10:00 AM	Risk of Bias & Quality Assessment	Anju James R. Venkitachalam
10:00 – 10:30 AM	Hands-on session 3	
10:30 – 11:00 AM	Data Extraction Methods	Malathi Mini Vivek Narayan
11:00 – 11:15 AM	Tea Break	
11:15 – 12:00 PM	Hands-on session 4	R. Venkitachalam Malathi Mini
12:00 – 1:00 PM	Introduction to Meta-Analysis	R. Venkitachalam Vivek Narayan
1:00 – 2:00 PM	Lunch Break	
2:00 – 2:30 PM	Demonstration	R. Venkitachalam Anju James
2:30 – 3:00 PM	Interpretation of Results	Malathi Mini Vivek Narayan
3:00 – 4:00 PM	Reporting & Writing Systematic Reviews	R. Venkitachalam
4.00 – 4.15PM	Tea break	
4:15– 4:45 PM	Q & A session	All faculty
4:45 onwards	Post-test, Feedback & Valedictory	

14. List of Resource Persons

I. External faculty members

1] R. Venkitachalam

Designation: Reader, Dept. Of Public Health Dentistry, Amrita School of Dentistry

2] Anju James

Designation: Addl Reader, Dept. Of Public Health Dentistry, Amrita School of Dentistry

3] Malathi Mini

Designation: Asst Prof., Dept. Of Public Health, Amrita School of Medicine

II. Internal faculty members

1. Dr. Sajith Kumar R
2. Dr. Vivek Narayan
3. Dr. Elbe Peter (Not to be included for remuneration)

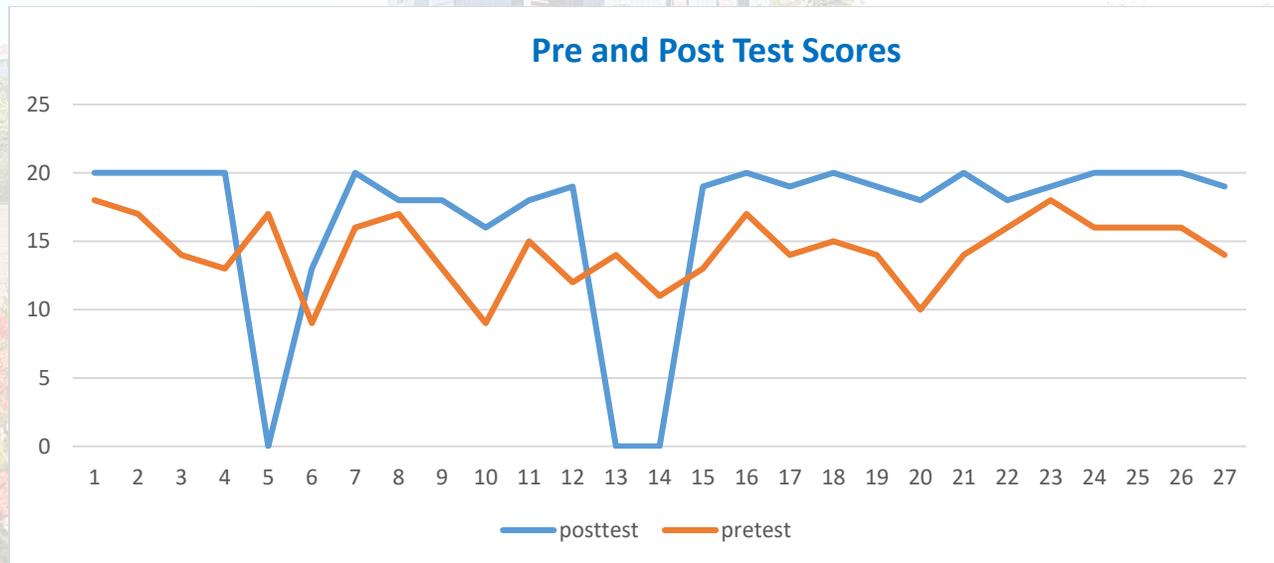
16. List of Participants - Workshop on Systematic Review and Meta-Analysis – A Primer on 24,25 February 2026

Sl.No	Current institution	Faculty Name	Designation
1	Al-Azhar Dental College, Thodupuzha (MD001)	P.R.SREEKALA	Sr.Lecturer
2	Al-Azhar Dental College, Thodupuzha (MD001)	M. A. SHREYA	Sr.Lecturer
3	Al-Azhar Dental College, Thodupuzha (MD001)	PRIJITHA ALEX	Professor cum HOD
4	Government Dental College Thrissur (MD025)	JOY P. T.	Associate Professor
5	Government Dental College Thrissur (MD025)	SUBIJA K NARAYANAN KUTTY	Assistant Professor
6	Government Dental College, Kottayam (MD006)	REBA P B	Assistant Professor

7	Government Dental College, Kottayam (MD006)	ROSHY GEORGE	Assistant Professor
8	Government Dental College, Thiruvananthapuram (MD008)	SHONY MOHAN	Assistant Professor
9	Government Dental College, Thiruvananthapuram (MD008)	SMITHA RAVINDRAN	Assistant Professor
10	Government Dental College, Thiruvananthapuram (MD008)	GEETHU R.M	Assistant Professor
11	Govt. Dental College, Kozhikkode (MD007)	SOUMYA MOHANAN T V	Assistant Professor
12	Govt. Dental College, Kozhikkode (MD007)	DR BABY JISHA	Assistant Professor
13	KMCT Dental College, Kozhikode (MD011)	TIM PETER	Reader
14	KMCT Dental College, Kozhikode (MD011)	AROMAL	Sr.Lecturer
15	Mar Baselios Dental College, Ernakulam (MD013)	BINILA S BABU	Professor
16	MES Dental College, Malappuram (MD014)	VISHNU RAJ	Sr.Lecturer
17	MES Dental College, Malappuram (MD014)	SRUTHI K S	Sr.Lecturer
18	MES Dental College, Malappuram (MD014)	RAVI K	Professor
19	PMS College of Dental Science & Research, Vattappara, Thiruvananthapuram (MD017)	S S ANANTHALEKSHMI	Reader
20	Pushpagiri College Of Dental Sciences, Thiruvalla (MD019)	A DEVADATHAN	Principal
21	Pushpagiri College Of Dental Sciences, Thiruvalla (MD019)	ELIZABETH JOSEPH	Professor cum HOD
22	Royal Dental College, Chalissery, Palakkad (MD020)	AMRUTHA JOY	Professor

23	Royal Dental College, Chalissery, Palakkad (MD020)	MEERA K PYNADATH	Professor
24	MES Dental College, Malappuram (MD014)	DIVYASHREE P	Reader
25	Govt.Dental College,Thrissur	RESMI RAMESH	Assistant Professor
26	Govt.Dental College,Kottayam	SUDHEER KUMAR L PRABHU	Assistant Professor
27	Govt.Dental College,Thrissur	A R DIVIA	Assistant Professor
28	Govt.Dental College,Kottayam	BAIJU R M	Professor

17. Pre and Post Test Scores



Note :- Three of the participants did not answer the post-test hence the graph shows a dip

18. Conclusion

The two-day program went on well as scheduled. Total 28 participants from different affiliated Dental colleges of KUHS attended the program. The program was inaugurated by The Pro-Vice chancellor, Prof Dr. Vijayan CP. Prof. Dr. Anil Kumar controller of Examination, Prof. Dr. Sajith

Kumar Visiting Professor felicitated the gathering. Dr. VV Unnikrisnan welcomed the audience and Prof Dr. Elby Peter, Dean Dental Faculty proposed the vote of thanks. The participants had hands on training on systematic review and meta-analysis in research.

19. Glimpses of the program







Annexure 1

Pre-test: Systematic Review and Meta-Analysis Workshop (KUHS)

Name of participant: _____

Multiple Choice Questions

1. The PICO framework stands for:
 - Population, Intervention, Comparison, Outcome
 - Patient, Issue, Control, Objective
 - Population, Interest, Context, Outcome
 - Problem, Intervention, Case, Observation
2. Registering a systematic review protocol helps to:
 - Increase publication chances only
 - Prevent duplication and improve transparency
 - Avoid peer review
 - Replace ethics approval
3. Which platform is commonly used to register systematic review protocols?
 - PubMed
 - PROSPERO
 - Scopus
 - Web of Science
4. Boolean operator “AND” in database searching is used to:
 - Broaden search results
 - Combine synonyms
 - Narrow search by including both terms
 - Exclude terms
5. The PRISMA flow diagram describes:
 - Data analysis steps
 - Risk of bias domains
 - Study selection process
 - Forest plot results
6. Risk of bias assessment evaluates:
 - Statistical significance
 - Methodological quality of included studies
 - Sample size only
 - Publication year

7. Which tool is commonly used for risk of bias in randomized trials?
- Newcastle-Ottawa Scale
 - AMSTAR
 - STROBE
 - ROB 2
8. Meta-analysis is:
- Qualitative summary of studies
 - Narrative description
 - Statistical combination of study results
 - Study selection method
9. A forest plot primarily shows:
- Search strategy
 - Risk of bias
 - Effect sizes of studies and pooled estimate
 - Study flow
10. Heterogeneity in meta-analysis refers to:
- Publication bias
 - Variation among study results
 - Sample size
 - Data extraction error
11. An I^2 value of 0% indicates:
- High heterogeneity
 - No observed heterogeneity
 - Publication bias
 - Poor quality studies
12. The PRISMA guideline is used for:
- Conducting meta-analysis
 - Risk of bias assessment
 - Protocol registration
 - Reporting systematic reviews
13. Grey literature refers to:
- Articles published in high-impact journals
 - Only conference abstracts
 - Non-English studies
 - Unpublished or non-commercially published research (e.g., theses, reports)
14. Two independent reviewers are recommended in study selection to:
- Reduce workload

- Increase speed
- Minimize selection bias and errors
- Avoid protocol registration

15. A funnel plot is used to assess:

- Heterogeneity
- Publication bias
- Risk of bias
- Study selection

16. RevMan software is mainly used for:

- Literature searching
- Screening studies
- Meta-analysis and forest plot generation
- Protocol registration

17. MeSH stands for:

- Medical Subject Headings
- Medical Search Headings
- Medical Study Headings
- Meta Subject Headings

18. A scoping review maps the breadth of evidence on a topic.

- Yes
- No

19. Meta-analysis can be performed even if studies are very different and incomparable.

- True
- False

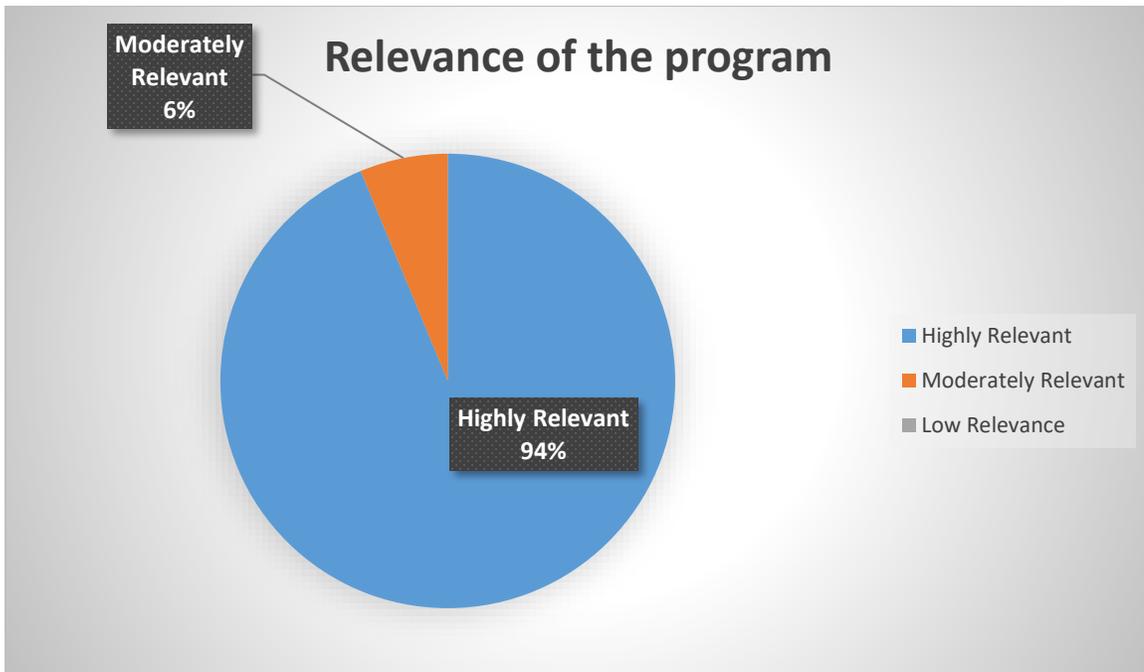
20. Rayyan is a software used for screening studies during study selection.

- True
- False

Annexure-2: Feedback

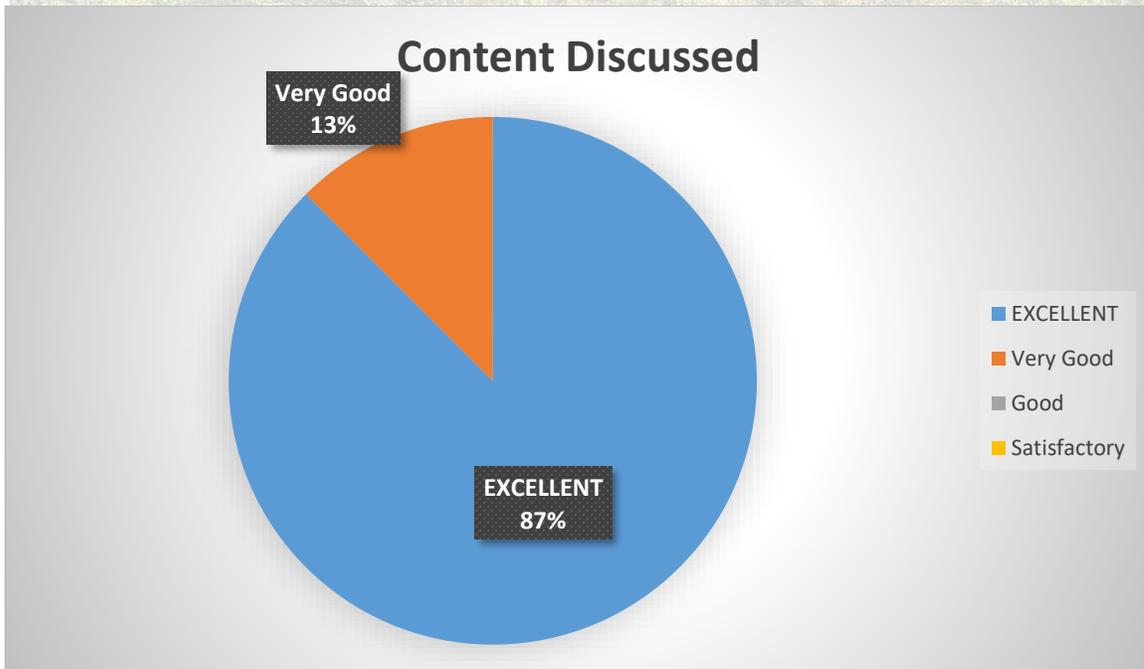
1. Relevance of the program

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2. Content Discussed

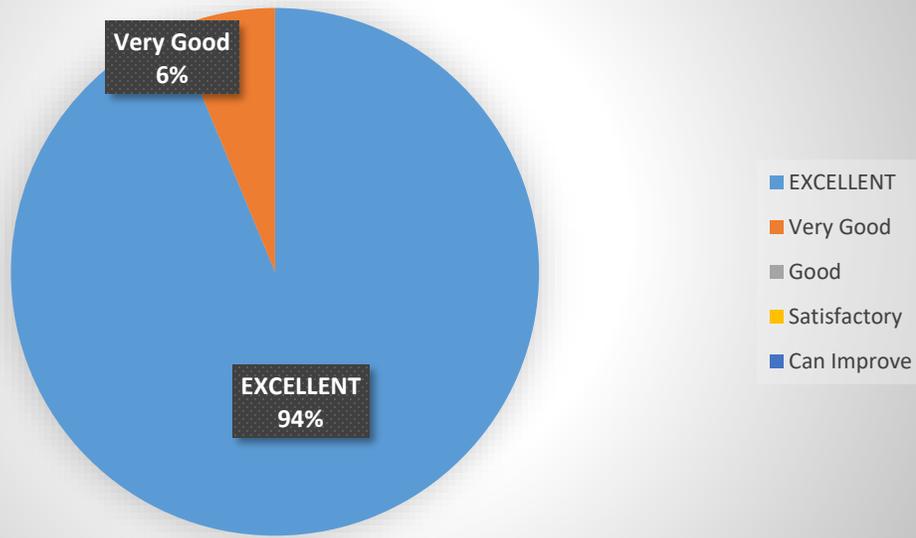
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3. Knowledge of Faculty

N=16

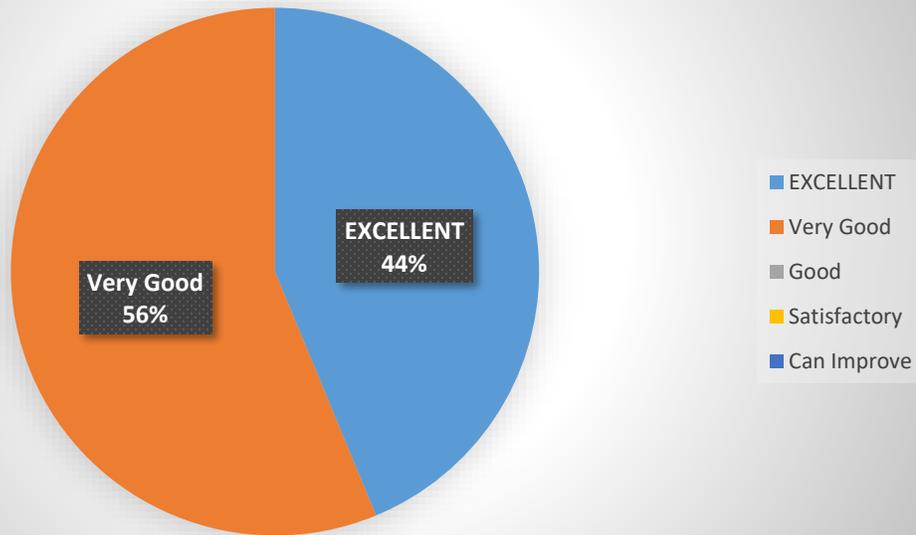
Knowledge of Faculty



4. Resource Materials

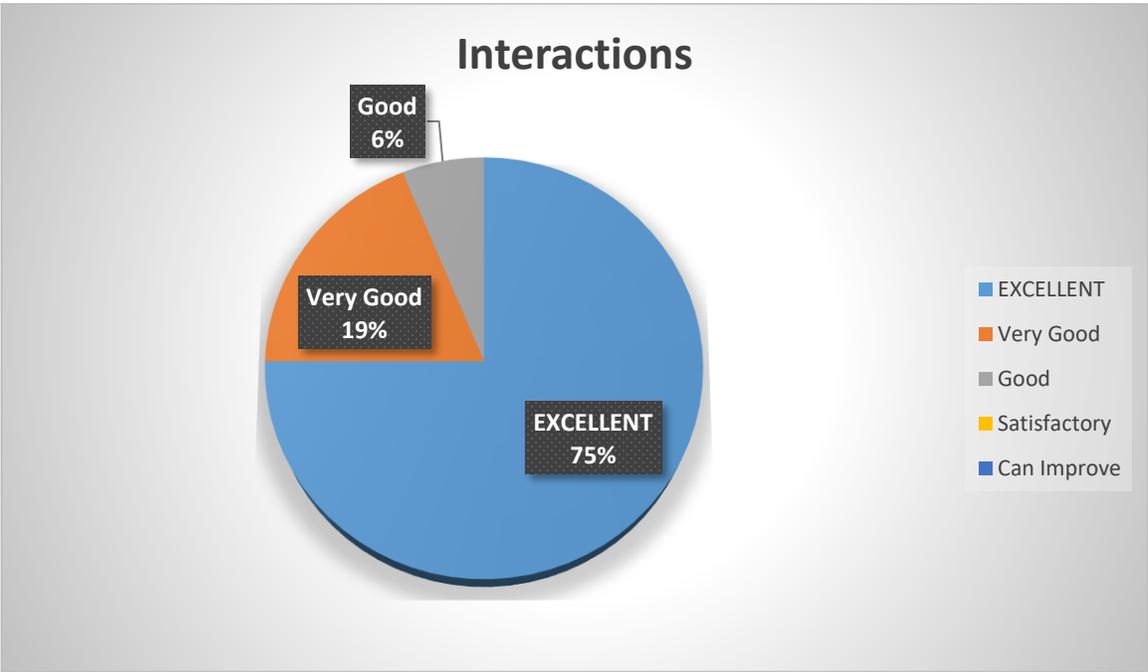
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Resource Materials



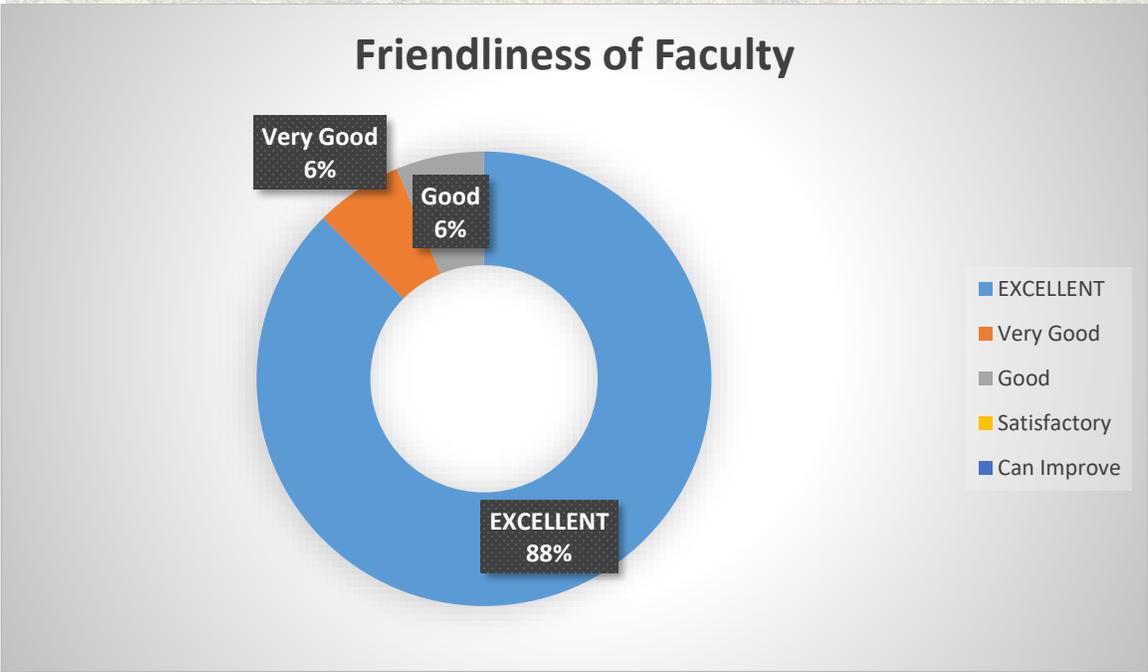
5. Interactions

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6. Friendliness of Faculty

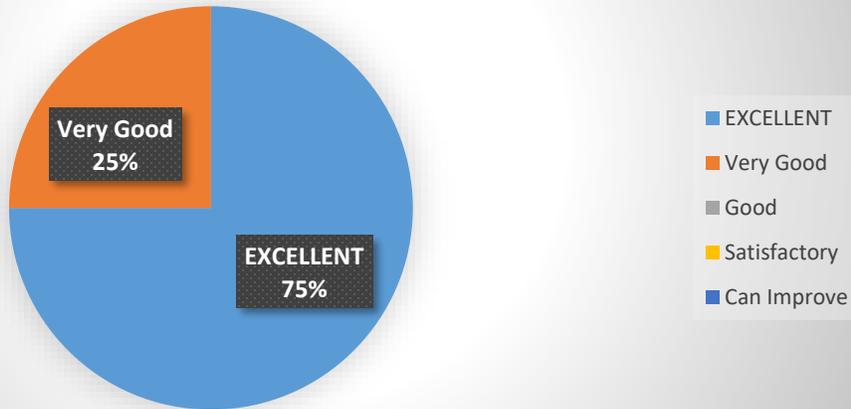
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7. Will you recommend such a program to your colleagues?

N=16

Will you recommend such a program to your colleagues



8. Food & Hospitality

N= 16



Food & Hospitality

