1-1 Background

Knowledge management can improve continuous performance in terms of resource use and environmental impact, as well as financial performance. However, performance management must be closely linked, particularly with metrics, performance measurement and goal setting.

Knowledge management consists of ensuring that teams and individuals have the know-how they need to facilitate their mission and improve their performance. Thus, knowledge fuels performance, knowledge is derived from performance.

It can be said that knowledge management and performance management are strongly linked. The more you know, the better your performance. If you learn from performance, you increase knowledge, if you increase knowledge, you improve performance. Therefore, the Knowledge management will be one of the engines that will improve continuous performance. The knowledge management cycle should be included in the performance management cycle.(sung,2012)

1-2 Problem statement

There is no study in Sudan that investigated the impact of knowledge management on Team Performance .

1-3 Objectives

1-3-1 General Objectives

- Analyzing the impact of knowledge management on team performance in Sudanese organization.

1-3-2 Specific Objectives

1- Specify the attributes that determine impact knowledge management on team performance.

2- Propose a model to determine impact between knowledge management and team performance.

1- Verify a model for the attribute that Impact of Knowledge Management on Team Performance in Sudanese Organization.

1-4 Research methodology

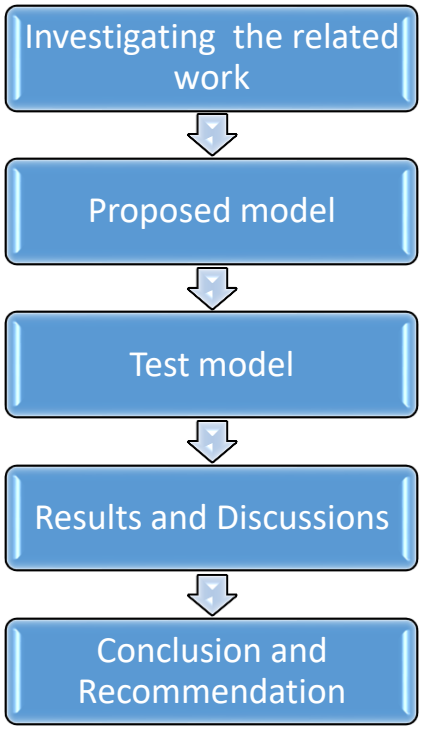

Figure (1-1): Methodology steps

1-5 Research Scope

This research covers a number of institutions that adopt the concept of knowledge management and others do not have this concept.

1-6 Thesis Outline

The thesis includes six chapters, first chapter include: introduction, Chapter Two contain Literature Review and related works, Chapter Three : Methodology, Chapter Four discuss data collection and data analysis, Chapter Five:Result and Discussions,Chapter Six: Conclusion and recommendations .

CHAPTER 2: Literature Review

2.1 Overview

Knowledge is a familiarity, awareness, or understanding of someone or something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering, or learning.

2.2 Theoretical Background

2.2.1 Knowledge Management

Knowledge Management is a subset of enterprise content management software, which contains a suite of programs that specialize in collecting, storing and / or accessing information. The concept of knowledge management is based on a set of practices used by an individual, firm or institution to identify, create, represent and redistribute information for a range of purposes. Software that enables the exercise of information or a set of practices in any part of the information management processes can be considered as an information management software designation. A subset of information management software is often called a focus on approaches to building knowledge from information that is managed or contained in knowledge management programs.

In most cases, KM programs provide a means for individuals, small groups or medium-sized companies to innovate, build new knowledge in the group, and / or improve customer experience .(maier,2011)

2.2.2 Team Performance Evaluation

There's no doubt that tracking team member performance is important. Talented team members will want feedback to help them grow and improve, but beyond that, it simply makes sense to keep track of what's going on at your business. However, quantifying and measuring performance metrics is easier said than done. Traditional metrics such as productivity can present a moving target and can often be misleading. As Jeff Haden notes in an article for Inc, "measuring is important, but measuring what you need to measure and measuring it the right way is critical."

There are a number of different methods to choose from for actually tracking performance metrics. The Houston Chronicle outlined regular appraisals, productivity tests, 360-degree feedback, and management by objectives as a few common forms of measuring individual performance metrics. That's a lot to consider, but there are certainly options out there that can help you along. For instance, tools like WIRL and 7Geese aim to simplify feedback and help team members reach their goals.

Certainly, there are a number of different metrics that can be used when it comes to tracking how team members are doing, and the most effective ones will depend on your business and on different team member roles. Here are five metrics for measuring team member performance. (rosen,2010)

2-2-3 Team Member Performance Metric: Attendance

First and foremost, it's important to look at whether a team member shows up to work or not. Attendance is definitely worth tracking. We've talked about using time and attendance data for company growth before, but team attendance can be a useful performance metric as well. Automating time and attendance is a great way to keep an eye on things. If a team member is consistently showing up late, leaving early, or taking an unusual number of sick days, they're likely not showing their full potential.

Poor attendance can be caused by any number of things, including a lack of motivation, health issues, or burnout. HR World notes that absenteeism can put extra pressure on other team members who have to make up for missing coworkers. Furthermore, if your organization is understaffed and team members are overworked in general, it's best to address the problem as soon as possible to avoid putting team health and well-being at risk.(pinter,2018)

2-2-4 Team Member Performance Metric: Helpfulness

We love helping our clients, so it isn't surprising that we'd aim to include helpfulness on a list of team member performance metrics. Joshua Konawa of Konawa & Associates told All Business Experts that helpfulness is a key performance metric at his company: "At our company, we ask: 'Who in your department (or another department) has been the most helpful over the past six months to you and your operational role?'"

He adds that posing this question to team members is "a great motivator, is totally anonymous, and identifies the real doers in the company—not just what management believes.'" Helpfulness is important for fostering a culture of teamwork, allowing your team to perform better when tackling difficult tasks together. It might be difficult to measure helpfulness, but Konawa's method is a great place to start .(Nembhard,2015).

2-2-5 Team Member Performance Metric: Efficiency

Team members need to be able to complete their work on time. They should have a good handle on the limitations provided by the time and resources available and should be able to prioritize to get things done as efficiently as possible. Look for missed deadlines or work that suffers as a result of cramming for deadlines for clues as to how efficiently a team member is working.

Attendance is important here too: if you see a team member clocking large amounts of overtime every day, you may need to speak to them about time management .(cima,2013)

2-2-6 Team Member Performance Metric: Initiative

It's nice when those you work with ask what's needed and where they can help. It's even nicer when they see a need and take steps to meet it on their own. An employee that takes initiative is definitely a sign of team satisfaction and engagement. Looking at team members who take initiative is also important for growing businesses and for rapidly changing workplaces that require people who can adapt and be proactive. Initiative-taking is definitely a difficult metric to measure, but a good place to start would be by keeping track of the times you see a team member taking initiative, either with a nifty app or with good old-fashioned pen and paper . (pinter,2018)

2-2-7 Team Member Performance Metric: Quality

The quality of work your team members put out is perhaps the most important metric, but it is also the most difficult to define. Team members who care about what they do and are engaged at work will likely perform better, and it's a good idea to recognize resulting achievements. Productivity is more complex than simply looking at the number of sales calls put out or the number of blog posts published. How many meaningful connections did your salesperson actually make with the new leads? How much of your content actually gets viewed and shared by your audience? HR World suggests measuring the amount of work that gets rejected or needs to be redone as a proxy for the quality of work, but it's best to pick and design the method that suits the business best .(dunh,2010)

2-3 Related Works

2-3-1 Teamwork and and supporting knowledge management

- Patil and kant sayed this study aims at investigating how far teamwork can support Knowledge Management. In doing so, 384 employees working in Iran Khodro, Neyshabour branch, located in Khorana-e-Resave, Iran were randomly selected as our participants. Based on studies done trough framework, we distinguish which features of teamwork support the KM course of action in its different phases (i.e. formation, transfer and incorporation). In order to analyze the data obtained, multiple regression and analysis of variance were used. The results of the study indicated that complementary skills (H2) and a climate of trust (H3) in teamwork were more significant factors that support management of organizational knowledge.(patil and kant,2014)

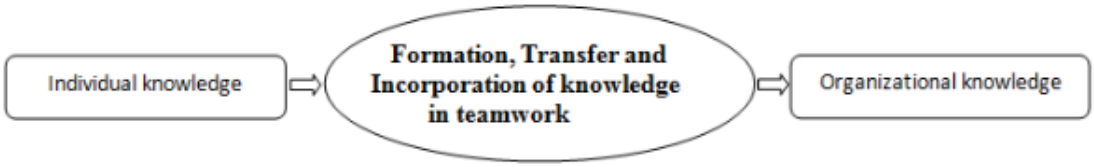

Figure (2-1) Knowledge transfer

2-3-2Knowledge sharing with teamwork diversity

- CHENGHAO MEN sayed the role of knowledge sharing on team creativity through absorptive capacity and knowledge integration evaluated within analysis with an evaluation framework, and tested the condition under which knowledge sharing is positively related to absorptive capacity and knowledge integration.. Results demonstrate that knowledge sharing was positively related to team creativity, fully mediated by both absorptive capacity and knowledge integration. In addition, cognitive team diversity played moderating role in the relationship between knowledge sharing and absorptive capacity, as well absinthe relationship between knowledge sharing and knowledge integration. Theoretical and practical implications of these findings on knowledge management and team creativity are discussed.(Men,2019)

- Faizuniah Pangil sayed the purpose of this paper is to discuss knowledge and the importance of knowledge sharing in organizations. Hence, this paper discusses in detail the different types of knowledge that are important in organizations and the definition of knowledge sharing. Besides that, this paper also details out the benefits of knowledge sharing in organizations and various factors that could influence knowledge sharing in organizations.(Pangil,2016)

- The authors (Slovenia Živa, Jurišević Brčić) sayed the study aim to investigates how selected individual factors (i.e. willingness, motivation, communication, collaboration) impact upon the sharing of own knowledge with co-workers. In addition, it analyses the perceptions of the amount of knowledge shared through cross-generational mentoring relationships. A web-based survey was used to obtain the data from 268 employees. Findings indicate that while motivation and willingness significantly influence knowledge sharing, communication and collaboration exhibit insignificant relationships. Furthermore, respondents, both younger and older, report that the amount of knowledge received in mentoring processes is less than what is desired .(Slovenia,2015)

Shen Ling sayed this research aim to explores factors affecting knowledge sharing of virtual teams. Collectiveness and conscientiousness emerge as important socio-cultural enablers for avoidance of uncertainty and risk by team members, so technology assets, human networks, social capital, intellectual capital, and change management are identified as essential factors that have the potential to ensure effective knowledge sharing. (Ling,2010)

2.4 summary of related work

Table 2.1: summary of related work:

No.	Paper Title	Publication Date	Author	Methods
1	relationship between teamwork and supporting knowledge management	2014	Patil kant	Framework analyze the data obtained, multiple regression and analysis of variance were used.
2	When and how knowledge sharing benefits team creativity: The importance of cognitive team diversity	2019	CHENGHAO MEN	- analysis with an evaluation framework, and tested . - tacit knowledge.
3	Knowledge and the Importance of Knowledge Sharing in Organizations	2016	Faizuniah Pangil	Analyze various factors that could influence knowledge sharing in organizations.
4	Knowledge sharing between different generations of employees	2015	1-Slovenia Živa 2-Jurišević Brčić	A web-based survey was used to obtain the data by used willingness, motivation, communication, collaboration
5	Essential Factors of Affecting Knowledge Sharing in Virtual Teams	2015	Shen Ling	technology assets, human networks, social capital, intellectual capital.

CHAPTER 3: METHODOLOGY

3-1 Introduction

This chapter discusses the proposed model for analyzing the impact of knowledge management on team performance, including related work investigations**.**

3-2 Methodology

3-2-1 Investigating the related work

After investigating the related work, it was found that most of the papers work with a model to evaluate the impact of knowledge management on team performance. The idea from the old studies investigation is to overview most of the frameworks and modeling used to evaluate the impact of knowledge management on team performance.

3-2-2 proposed model for analyzing the impact of knowledge management on team performance

The proposed model relies on knowledge management features such as culture, leadership, technology and other features. Here is the model has introduced to suit many organizations.

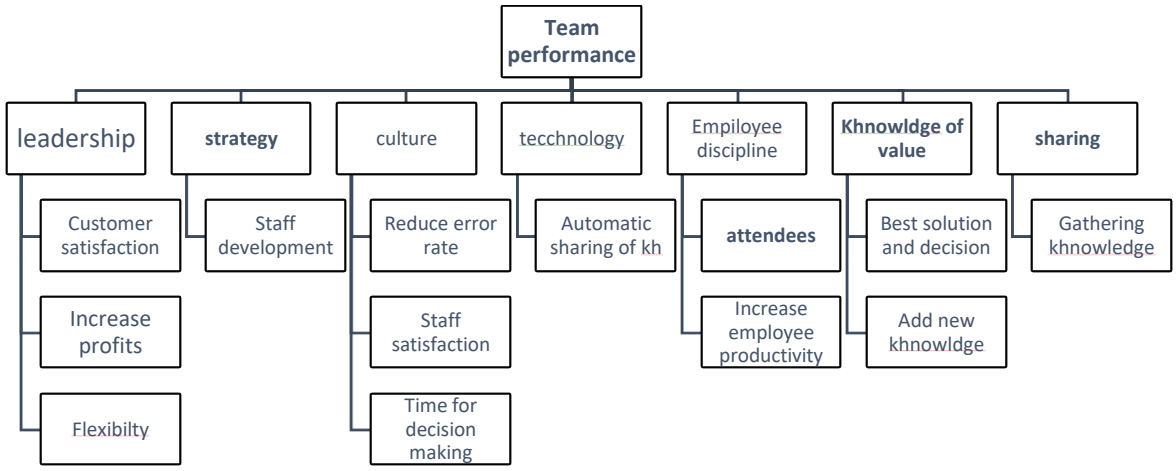

Figure 3.1: proposed model

Attributes of the Model

3-2-2-1 Leadership

To obtain these criteria a measurement of how the organization manage knowledge is central to the organization strategy, the organization understands the revenue-generating potential of its knowledge assets and develops strategies for them.

Individuals are hired, evaluated and compensated for their contributions to the development of organization knowledge. A climate of openness and trust permeates the organization. Improving care for customers is acknowledged as a major objective of knowledge management. Flexibility and a desire to innovate drive the learning process.

The organization has invented ways to link knowledge to financial results. The organization has developed a specific set of indicators to manage knowledge. They include both financial and non-financial indicators.

Matrices
• customer's satisfaction • Increase profits • Flexibility and willingness to innovate

3-2-2-2 Strategy

The booklets and best practices are regularly used, there are morning or evening meetings in the circle where important events / events / issues are discussed, and in the organization, conferences of continuing education and conferences are held regularly to help keep abreast of the latest developments. Internet facilities are available to staff to search for information; Members of the organization are actively searching for better treatment methods.

Matrices
• Staff development

3-2-2-3 Culture

KM helps to learn new things in the workplace, KM helps store learning from each new work experience, helps knowledge sharing learn something new every day, helps support culture reduce mistakes by sharing best practices and problems, helps support culture for Sharing and discussing ways to prevent repetition of errors, a culture of trust helps to make better and

informed decisions, and helps a culture of confidence to make the decision-making process simpler and lead to improved performance.

Matrices
• Reduce the error rate • Staff satisfaction • Time for decision making

3-2-2-4 Technology

Technology links all members to one another and to all relevant external portals, Technology creates an institutional memory that is accessible to the entire organization, The organization fosters development of human-centered information technology, It supports collaboration and is used by Organization employees, Information systems are real-time, integrated, and smart, KM helps to bring new ideas to the organization, IT helps employees by keeping them updated regarding their field by facilitating knowledge sharing across the organization as well as on social networks.

Matrices
• Automatic sharing of knowledge is easy to access

3-2-2-5 Employee Discipline

In this attribute attending on time, behavior inside the organization, increasing / decreasing of productivity which monitor how is the employee increase the productivity after applying the knowledge sharing / transfer, also the daily working hours one of the indicators that help evaluate the performance, as the employee increase their knowledge the engage factor with Team increases.

Matrices
• Increase employee productivity • Attendees

3-2-2-6 knowledge of value

Knowledge will not only improve the performance of individuals, teams, and members, but will also provide value to your employees, customers, customers, and organization. This will improve your ability to develop the best solutions and make the best decisions.

The content must be rich in new and important knowledge. Employees tend to share rare knowledge and share good knowledge. It supports the knowledge management process. It is important to share useful knowledge in the field of organization, which indicates an increase in team performance.

Matrices
• Develop the best solutions and decisions • Add new knowledge

3-2-2-7 Sharing

In this context, senior staff should use KM platforms to share new ideas. Senior staff share their experiences and advice through KM practices, and new employees are encouraged to use the knowledge portal and knowledge bank to learn how things work. Learning, and should encourage other older people to share best practices and learning experiences. It is easier to browse the knowledge bank, use KM portals to coordinate with other teams to achieve organizational goals, and use knowledge sharing platforms. For all relevant work information from others, knowledge sharing platforms help create awareness and support to demonstrate the mission of the organization. Cognitive gaps are systematically identified and well defined processes are used to close them. A mechanism must be developed to gather advanced and ethical knowledge. Including documentation, lessons learned, and tacit knowledge. They are evaluated and transmitted across the organization, and the Knowledge Bank is regularly used to learn ways to improve business processes and knowledge sharing. Used to share problems and errors so that corrective action can be taken.

Matrices
• Develop a mechanism for gathering knowledge(Database, recording, documenting)

3- 5 Performance

KM helps people to learn in the organization and this helps in improving performance, Use of KM practices help employees to share best practices thereby reducing the learning curve, New employees use knowledge bank and portal learn quickly thereby improving productivity, Organization productivity has improved after increased learning due to KM practices, Knowledge sharing helps to work more efficiently thereby improving performance, Well defined KM practices helps to improve performance by providing faster customer care.

3-7 verifying the model

Model's steps used to check all attributes which is covered by the questionnaire and reflect users experience:

1. **Leadership**
   - Definition of knowledge management
   - Performance support by adopting knowledge management
   - Increased performance with the participation of knowledge management
   - Motivate employee to spread knowledge
2. **Strategy**
   - Good knowledge management strategy
   - Good strategy has specific knowledge management objectives
   - Adopting a good knowledge management strategy
3. **Culture**
   - Publishing the company's management of knowledge culture
   - The impact of knowledge management on employee culture
   - Effect of knowledge sharing on employee performance
4. **Technology**
   - Technology contributes to knowledge management
   - Technology programs help to spread knowledge
   - Technology works as a memory to store and share knowledge
   - Technology helps to adopt the latest knowledge management methods
5. **Employee Discipline**
   - Employee commitment improves knowledge distribution
   - Adopting employees to perform knowledge
6. **knowledge of value**
   - Content is enriched by knowledge management
   - Exchange of important and rare knowledge of employees
   - The exchange of new knowledge supports knowledge management
7. **Sharing**
   - Organizations create a good environment for sharing knowledge
   - Encourage institutions to share their knowledge
   - Common knowledge is available to everyone

In the third chapter, a new model was proposed and applied to a number of organizations in order to achieve the overall performance of teams in different sectors within organizations. To assess the impact of knowledge management on team performance, a questionnaire was distributed to individuals as described in Chapter 4.

CHAPTER FOUR : Data Collection And Data Analysis

4 -1 Descriptive statistics:

This chapter discuss how the attributes individually affect the team performance positively or negatively, and the attributes is (leadership, strategy, culture, technology, discipline, value of knowledge, share knowledge), and after analyzing this attributes the Conclusion will discuss the impact of it in team performance.

the total questionnaire number of the sample was (150) members and only (136) was valid and complete, the data collected during september-2018 using simple random sample, this chapter offer the methodology of Descriptive to describe the sample and analysis to analyze all responses.

4 -1-1 Gender:

Table 4 - 1

	Frequency	Percent
Male	65	49.2
Female	67	50.8
Total	132	100.0

Table 4 - 1 and figure 4- 1 show that 49.2% of sample is Male and 50.8% are female.

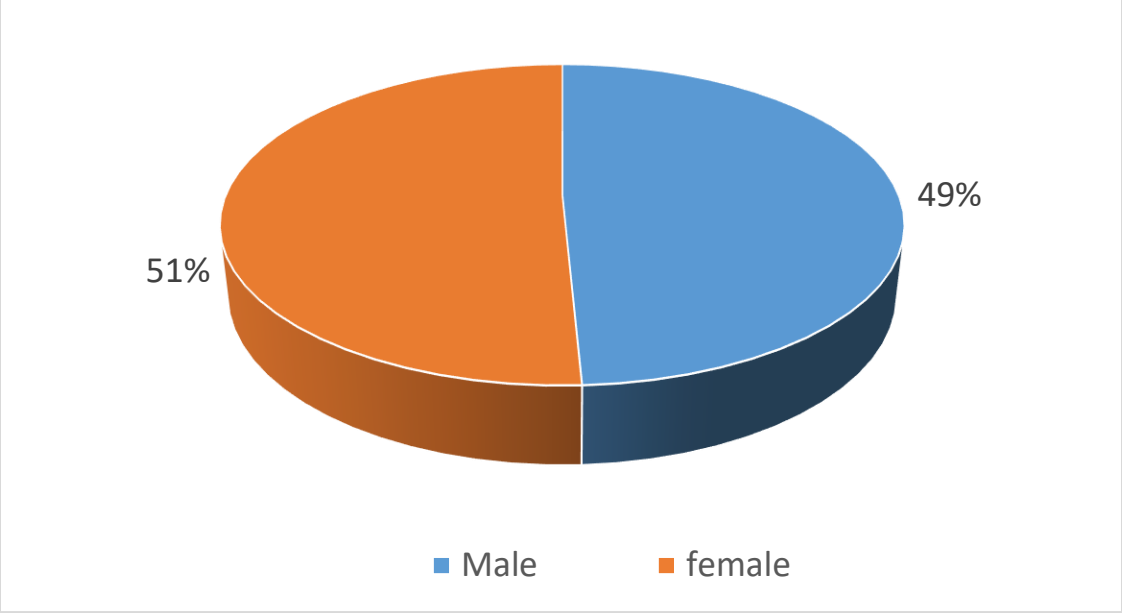

Figure (4 – 1)

4 -1-2 Age

Table 4 - 2

	Frequency	Percent
less than 25	15	11.4
from 25 to 35	76	57.6
above 35	41	31.1
Total	132	100.0

After viewing table 4 - 2 and figure 4 - 2 we observer that 57.6% of sample were middle aged.

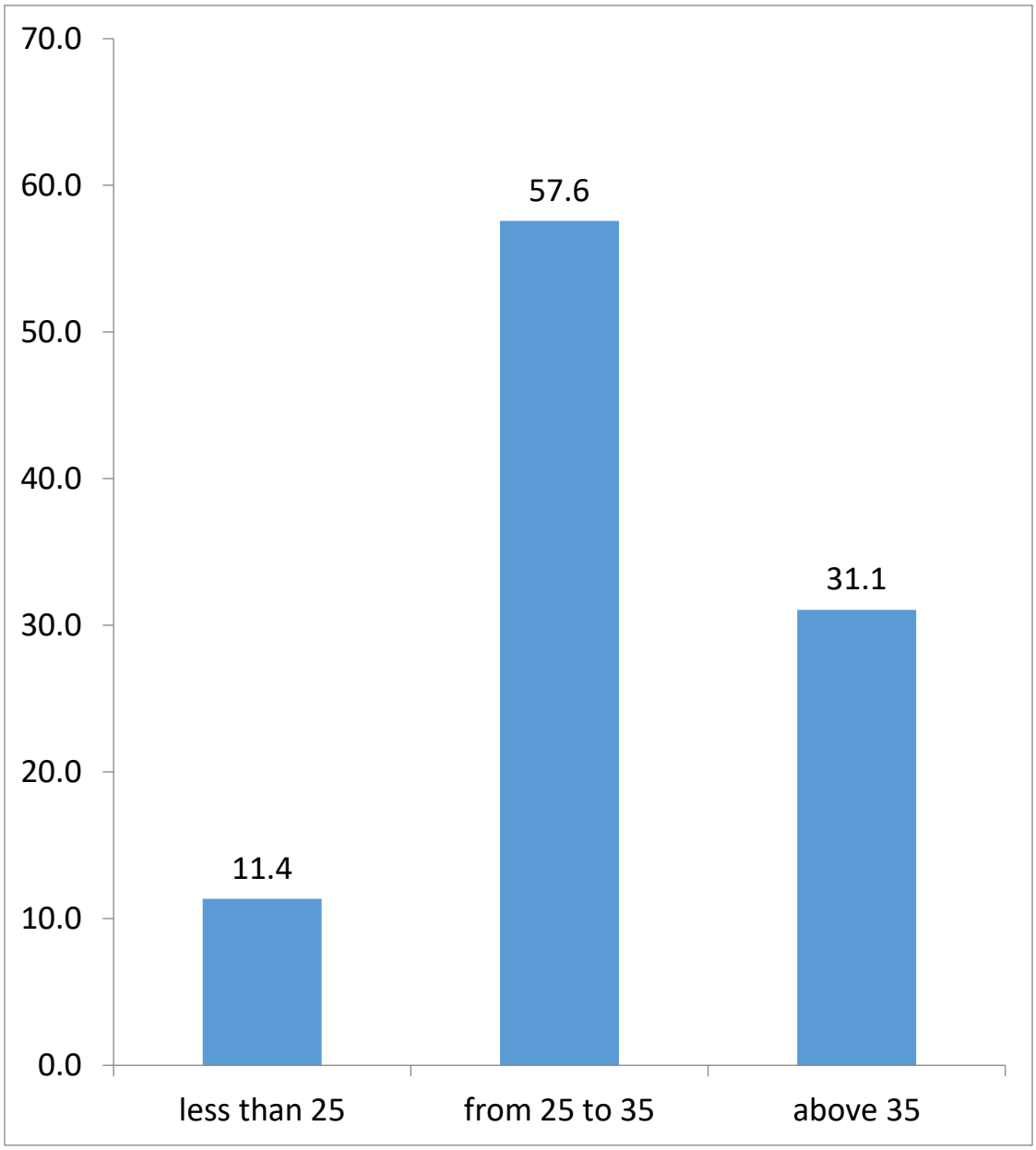

Figure (4 – 2)

4 -1-3 Education

Table 4 - 3

	Frequency	Percent
Diploma	9	6.8
Bachelor	78	59.1
Master	38	28.8
PhD	2	1.5
Other	5	3.8
Total	132	100.0

From table 4 - 3 and figure 4 - 3 we observe that 59.1% of sample hold Bachelor degree from university.

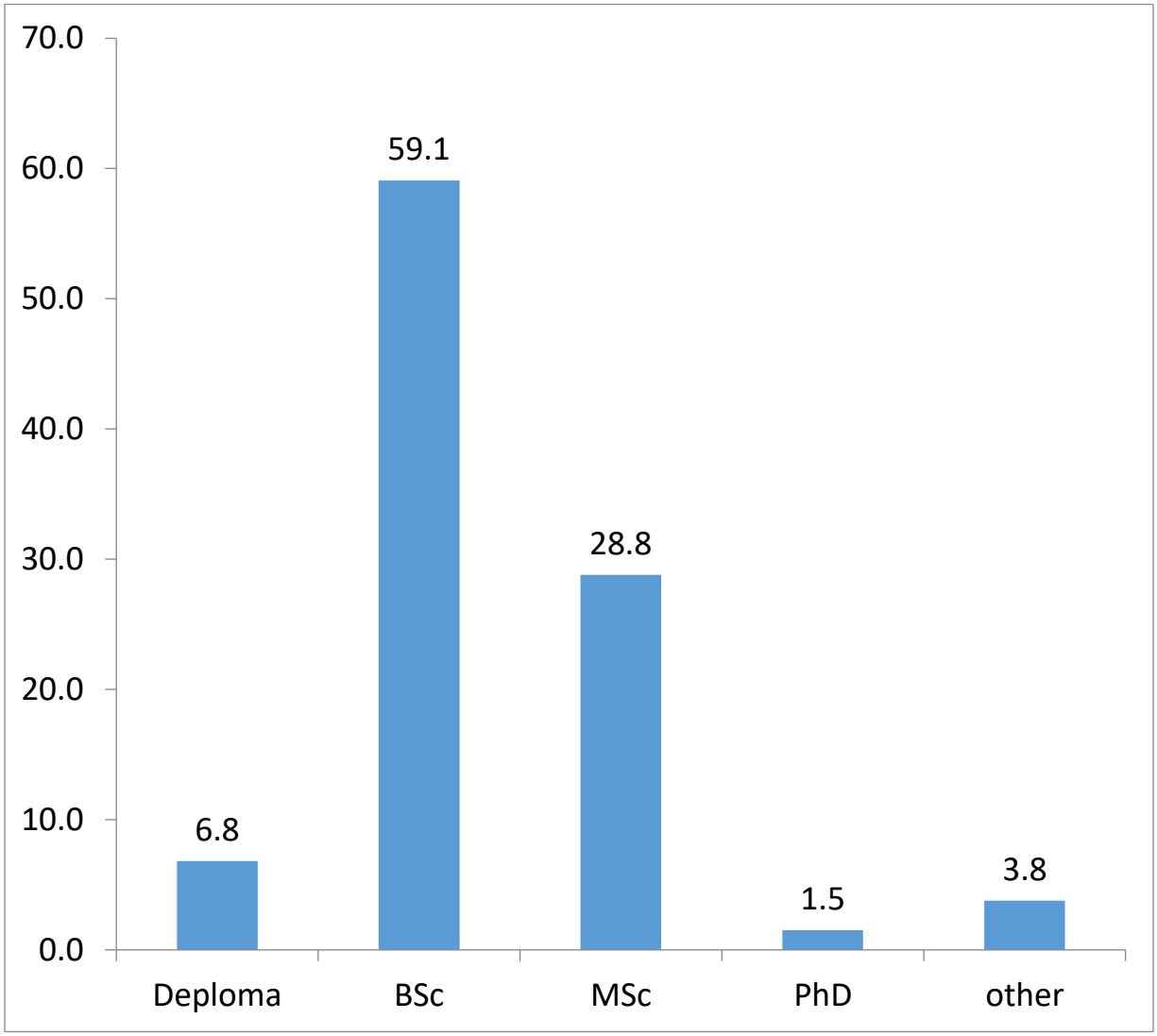

Figure (4 -3)

4 -1-4 Job

Table 4 - 4

	Frequency	Percent
worker	11	8.3
employee	96	72.7
Head of Department	20	15.2
Manager	5	3.8
Total	132	100.0

The Table 4 - 4 and Figure 4- 4 show the job or occupation of the respondent we note that 72.7% of the sample was employees.

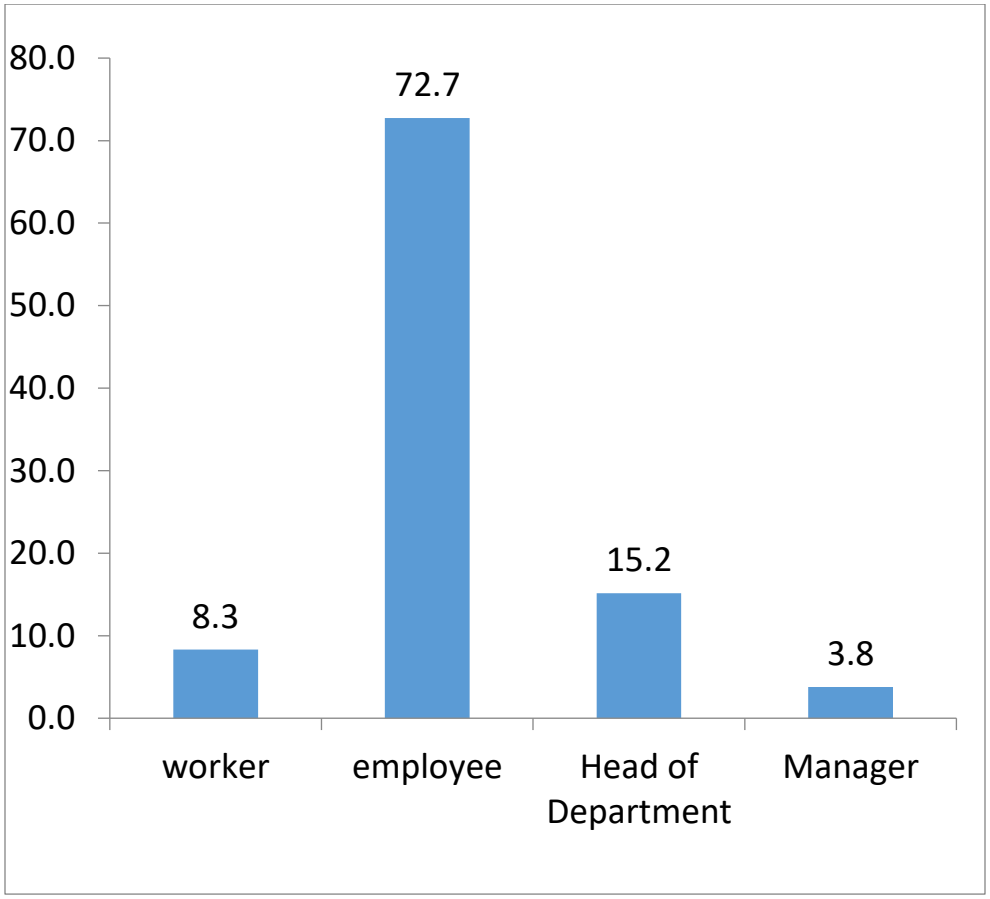

Figure (4 – 4)

4 -1-5 Work Experience

Table 4 - 5

	Frequency	Percent
below 3 years	52	39.4
3 to 5 years	29	22.0
above 5 years	51	38.6
Total	132	100.0

the Table 4 - 5 and Figure 4 - 5 show the work experience of the respondent and note that 39% of the sample had less than two years of knowledge and 38% more than five years.

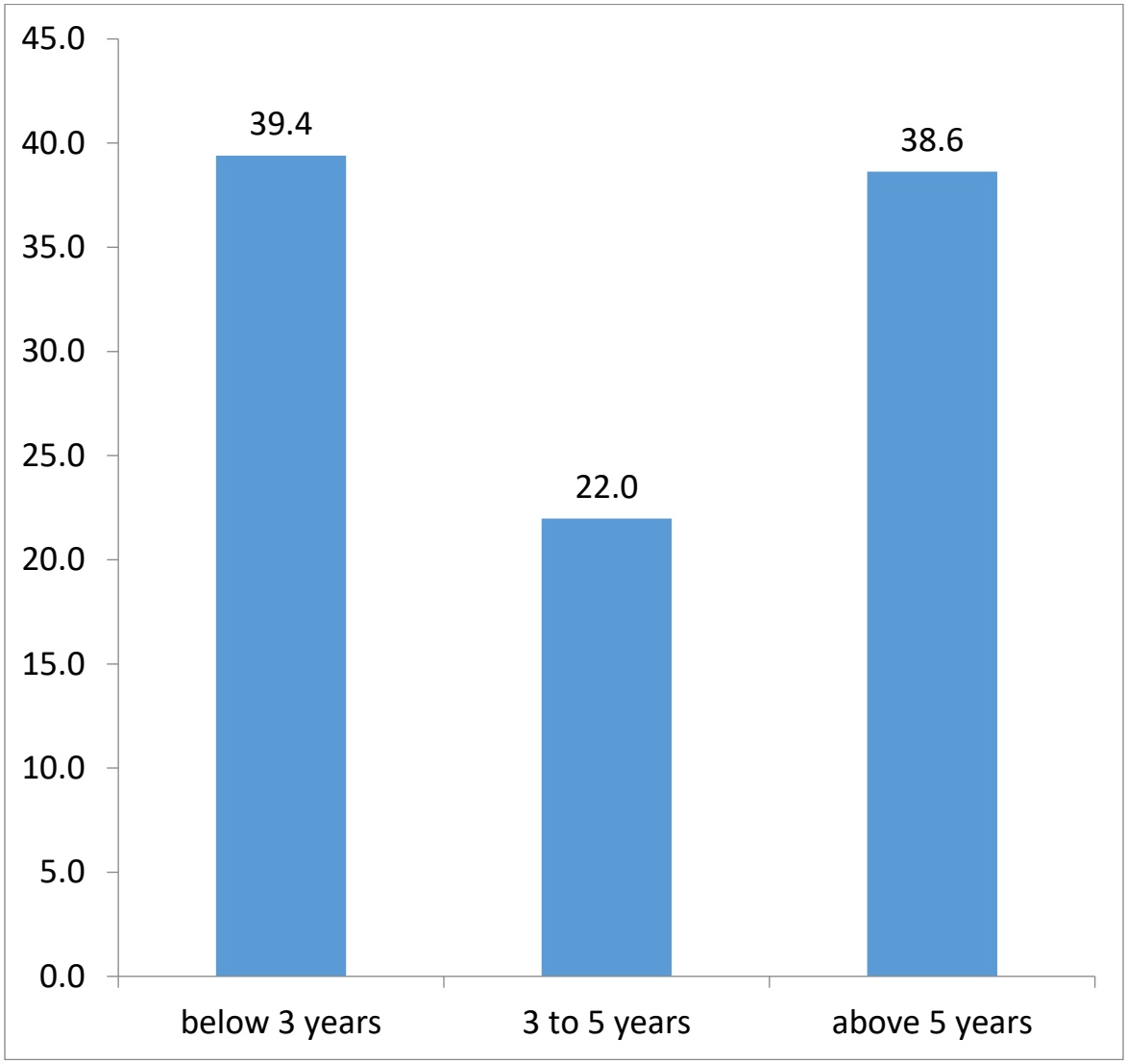

Figure (4 – 5)

4 -1-6 Leader who Know of the concept of knowledge management affects performance
Table 4 - 6

	Frequency	Percent
disagree	3	2.3
neutral	1	.8
agree	50	37.9
strongly agree	78	59.1
Total	132	100.0

From Table 4 -.6 and Figure 4 - 6 we note that 97% of the sample confirmed that the leader who defines the concept of knowledge management affects performance.

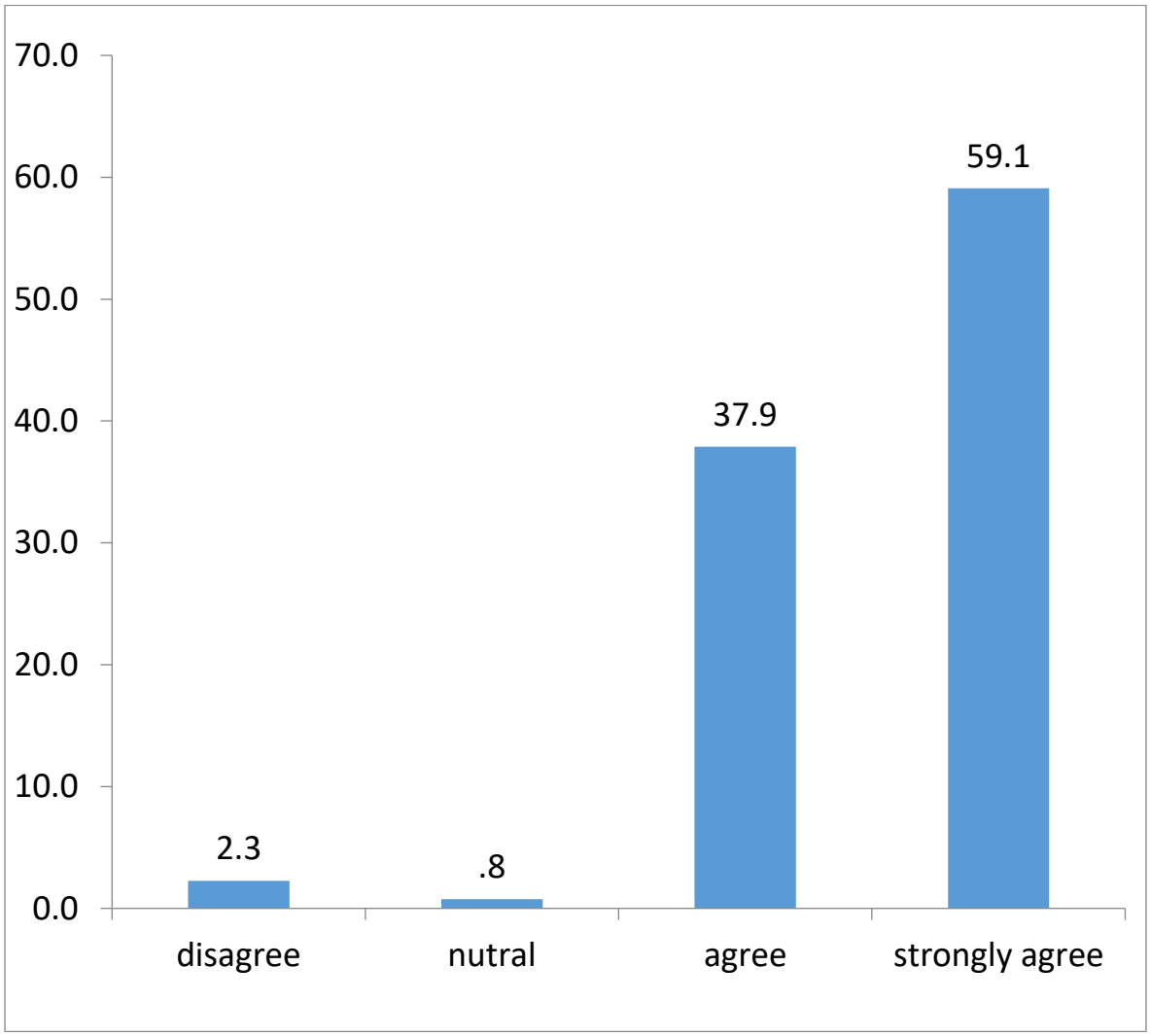

Figure (4 – 6)

4 -1-7 The leader who adopts a concept of knowledge management is supporting the performance

Table 4 - 7

	Frequency	Percent
disagree	1	.8
neutral	7	5.3
agree	58	43.9
strongly agree	66	50.0
Total	132	100.0

From Table 4 - 7 and Figure 4 - 7, we noted that 93.9% of the sample confirmed that leaders adopt the concept of knowledge management support.

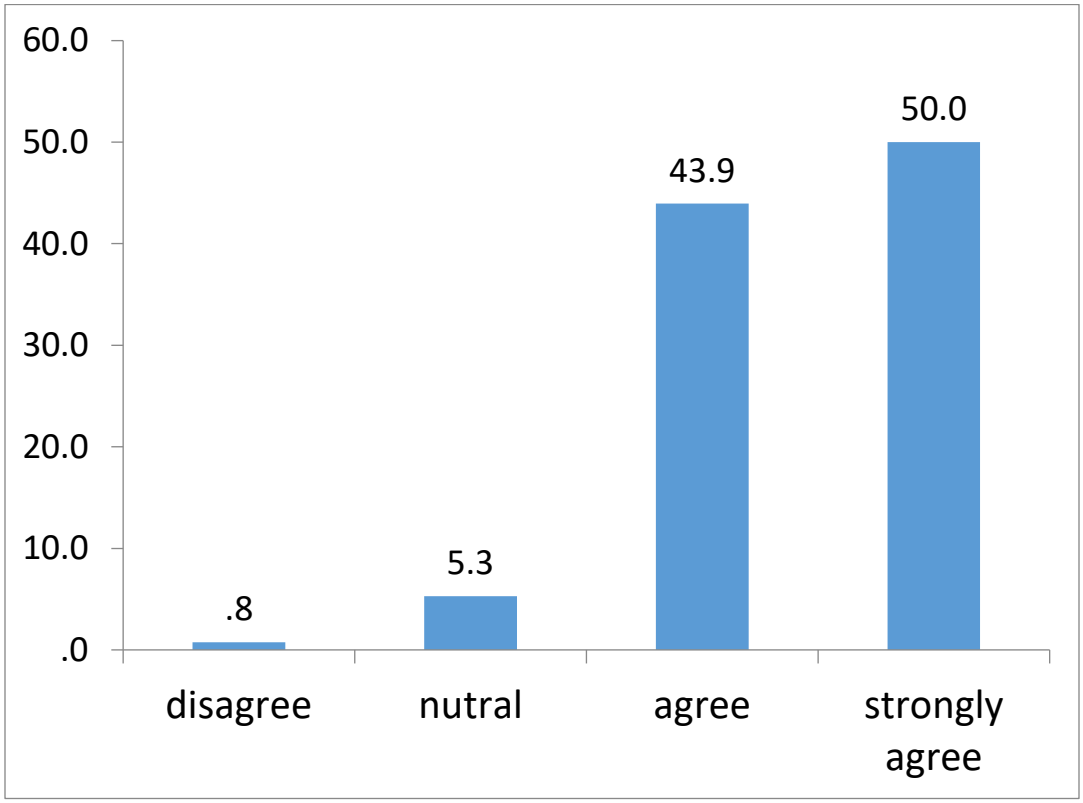

Figure (4 - 7)

4 -1-8 Leader who share his knowledge is scaling up the performance

Table 4 - 8

	Frequency	Percent
disagree	2	1.5
neutral	8	6.1
agree	58	43.9
strongly agree	64	48.5
Total	132	100.0

From Table 4 - 8 & Figure 4 - 8 we note that 92.4% of the sample confirmed that the leader who shares his knowledge is to raise the level of performan

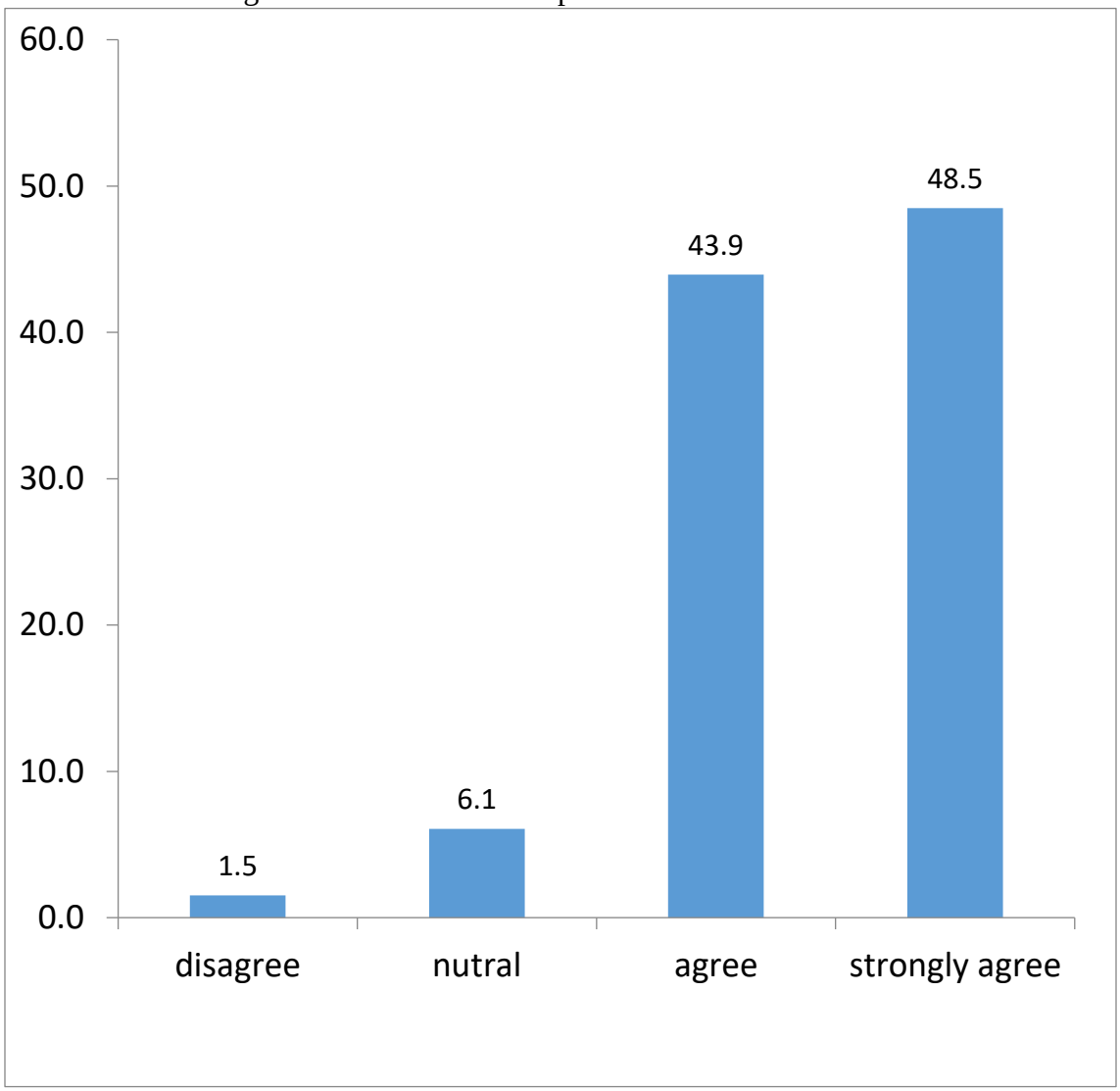

Figure (4 - 8)

4 -1-9A good leader motivates an employee to spread knowledge

Table 4 - 9

	Frequency	Percent
disagree	2	1.5
neutral	6	4.5
agree	35	26.5
strongly agree	89	67.4
Total	132	100.0

From table 4 - 9 & figure 4 - 9 we observe that 93.9% of sample confirmed that a good leader motivates an employee to spread knowledge.

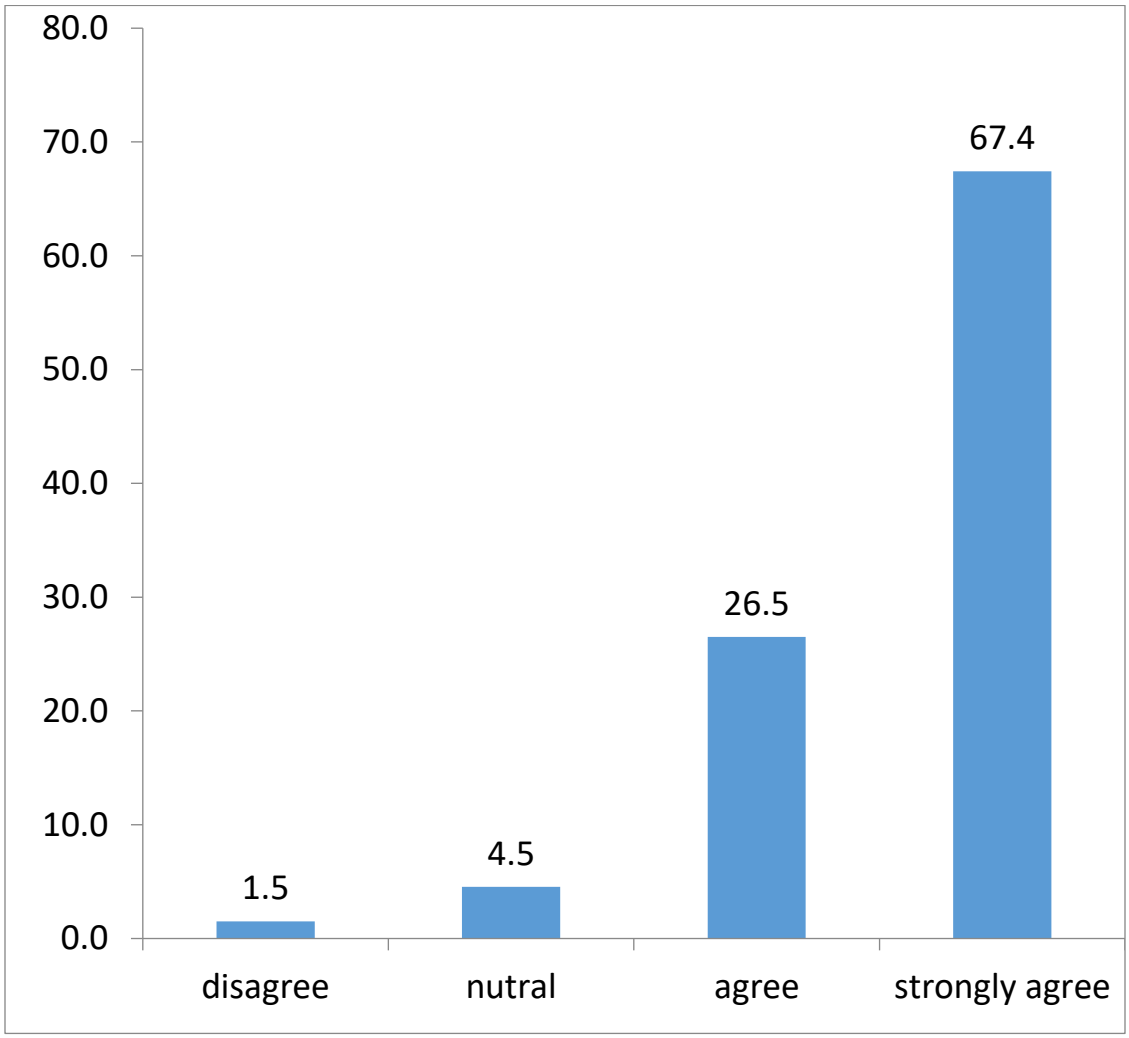

Figure (4 - 9)

4 -1-10 Good strategy is concerned with knowledge management

Table 4 - 10

	Frequency	Percent
disagree	1	.8
neutral	7	5.3
agree	65	49.2
strongly agree	59	44.7
Total	132	100.0

From table 4 - 10 and figure 4 - 10 we observe that 93.9% of sample confirmed that good strategy is concerned with knowledge management.

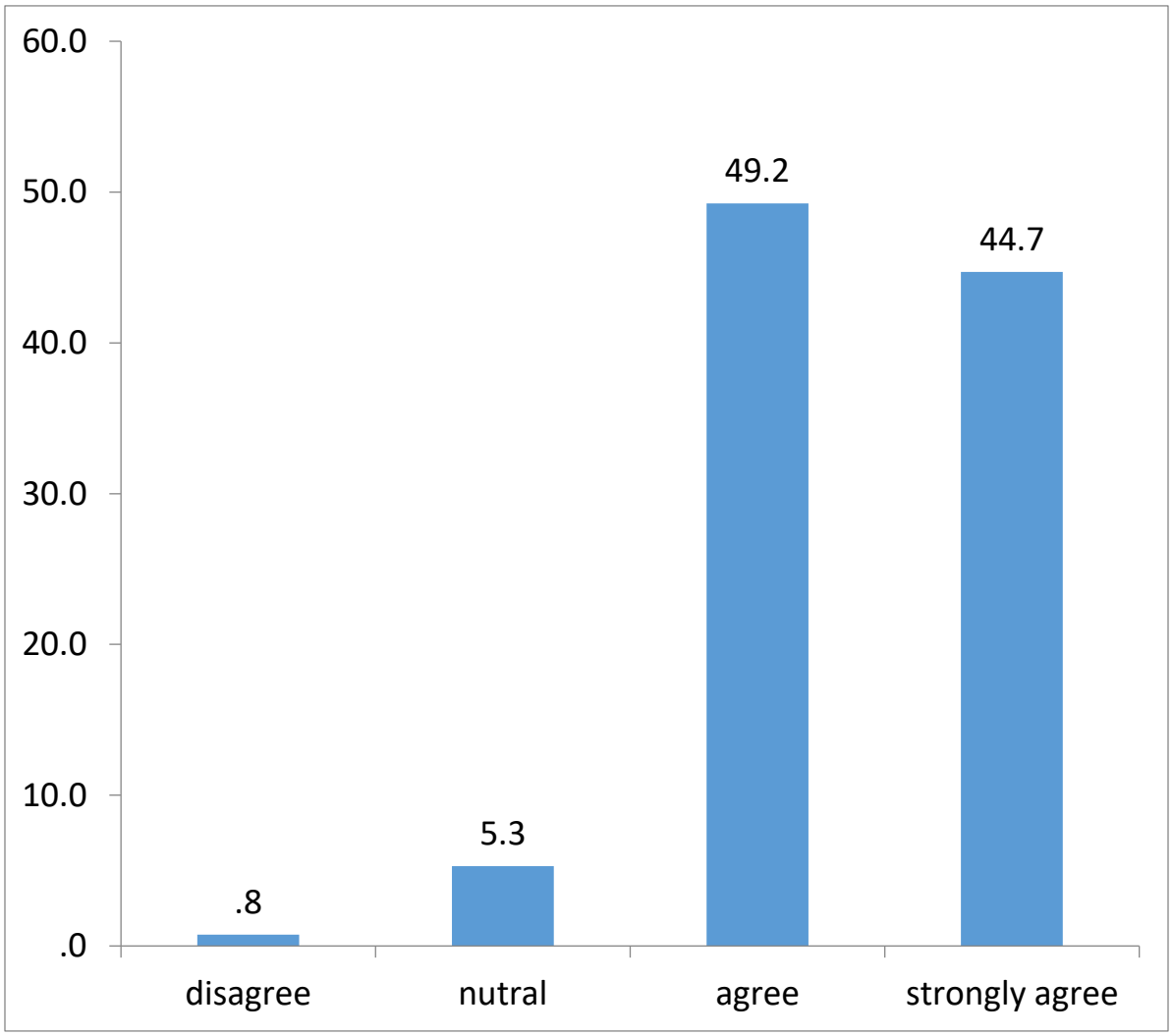

Figure (4 - 10)

4 -1-11 A good strategy has specific objectives for knowledge management
Table 4 - 11

	Frequency	Percent
disagree	3	2.3
neutral	12	9.1
agree	66	50.0
strongly agree	51	38.6
Total	132	100.0

From table 4 - 11 and figure 4 - 11 we observe that 88.6% of sample, confirmed that a good strategy has specific objectives for knowledge management.

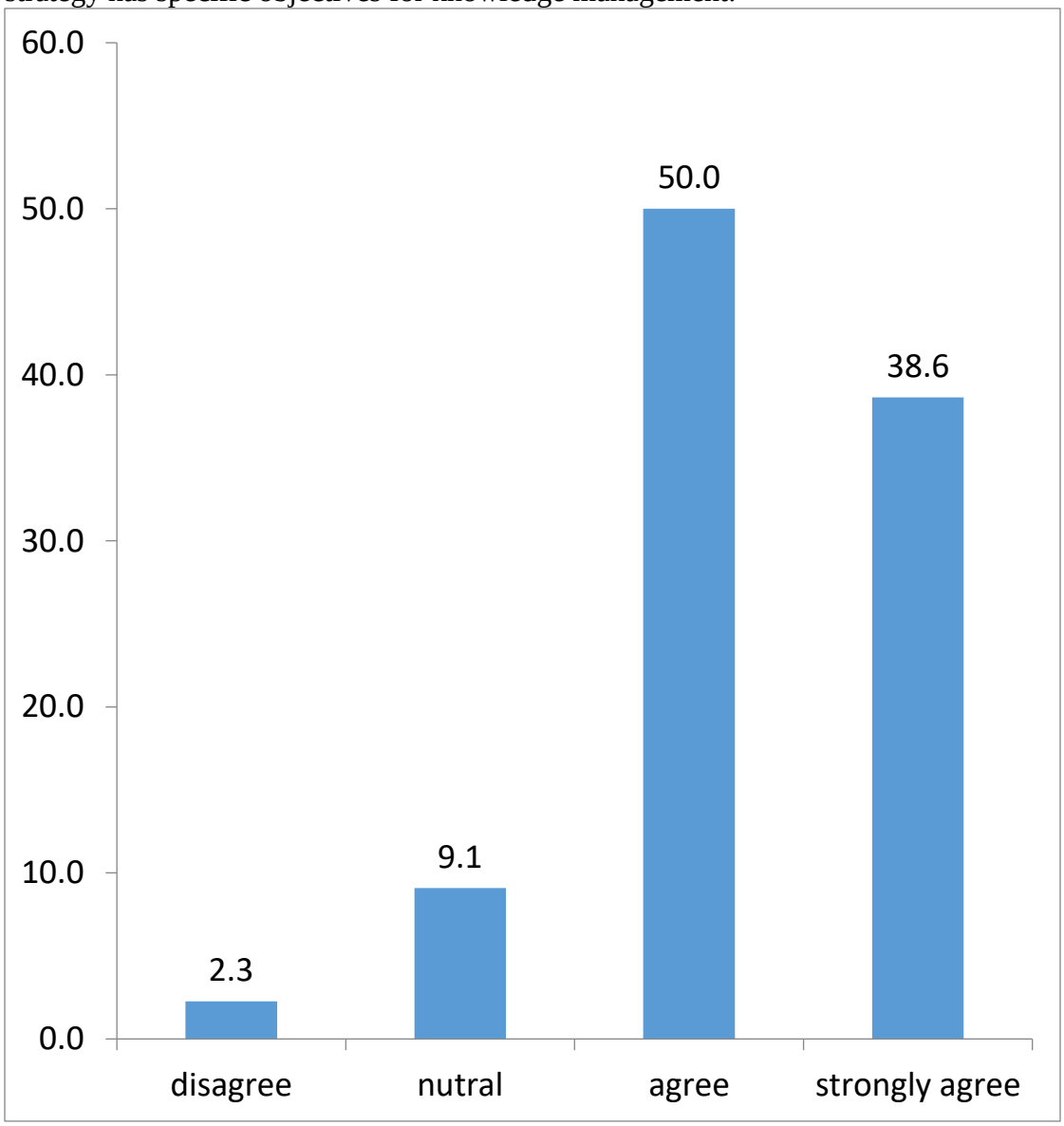

Figure (4 - 11)

4 -1-12 Adopting a good knowledge management strategy ensures its continuity

Table 4 - 12

	Frequency	Percent
disagree	4	3.0
neutral	10	7.6
agree	61	46.2
strongly agree	57	43.2
Total	132	100.0

From table 4 - 12 and figure 4 -12 we observe that 89.4% of sample confirmed that adopting a good knowledge management strategy ensures its continuity.

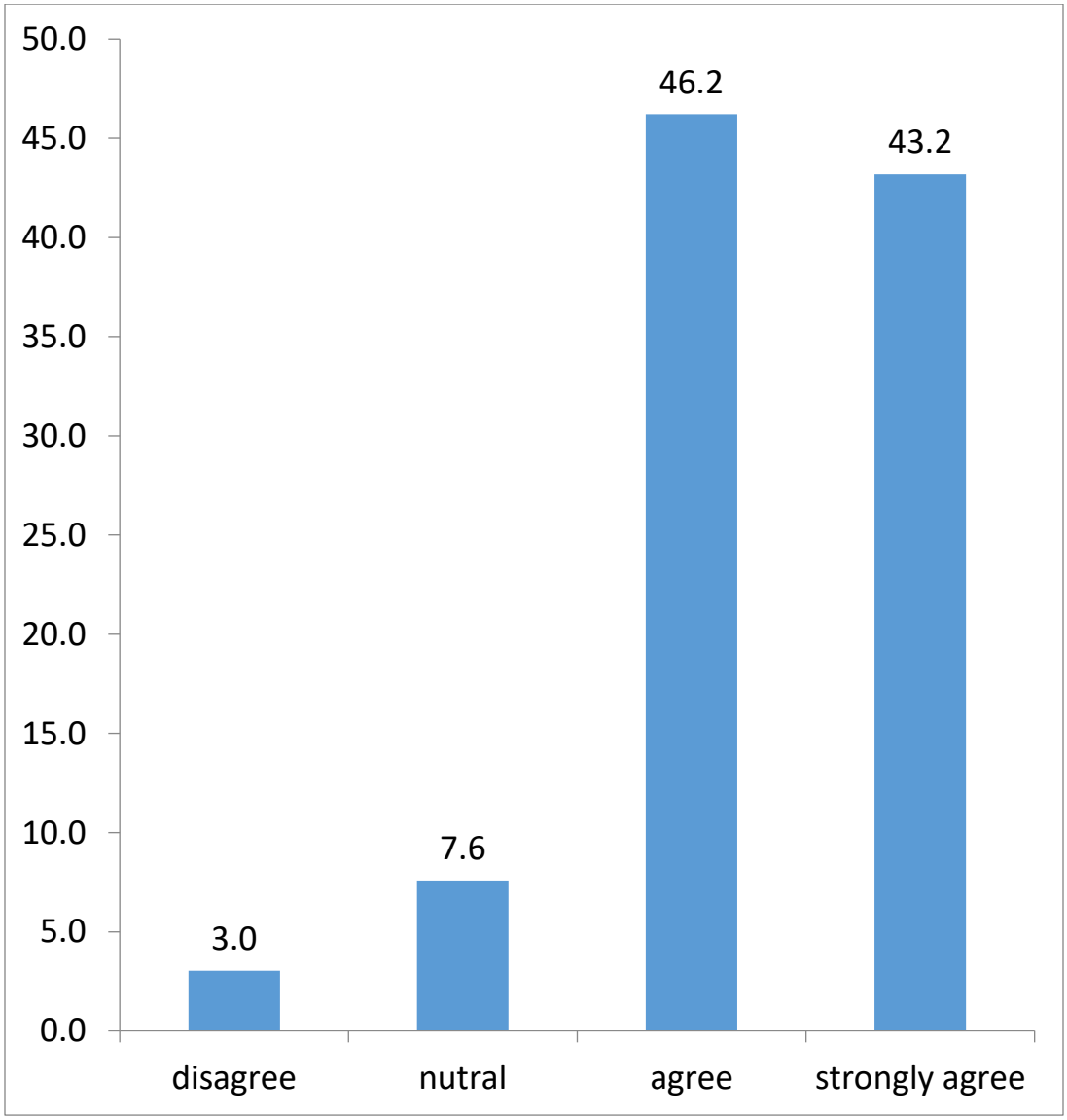

Figure (4 - 12)

4 -1-13 The company's management works to spread the culture of knowledge

Table 4 - 13

	Frequency	Percent
disagree	7	5.3
neutral	23	17.4
agree	69	52.3
strongly agree	33	25.0
Total	132	100.0

From table 4 - 13 and figure 4 - 13 we observe that 77.3% of sample confirmed that the company's management works to spread the culture of knowledge.

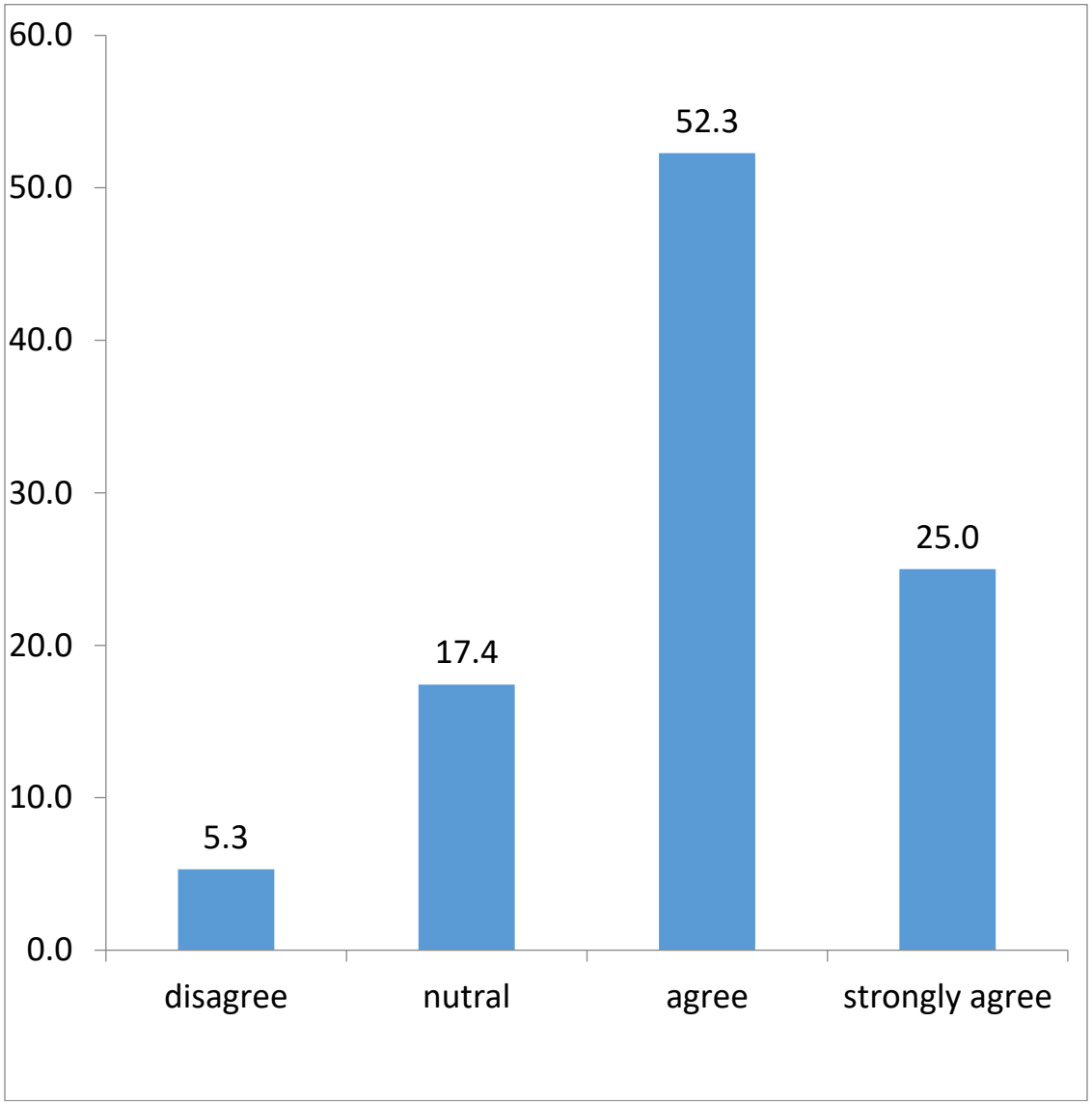

Figure (4 - 13)

4 -1-14 The culture of employees on knowledge management positively affects performance
Table 4 - 14

	Frequency	Percent
strongly disagree	1	.8
disagree	3	2.3
neutral	3	2.3
agree	50	37.9
strongly agree	75	56.8
Total	132	100.0

From table 4 - 14 and figure 4 - 14 we observe that 94.7% of sample, confirmed that the culture of employees on knowledge management positively affects performance.

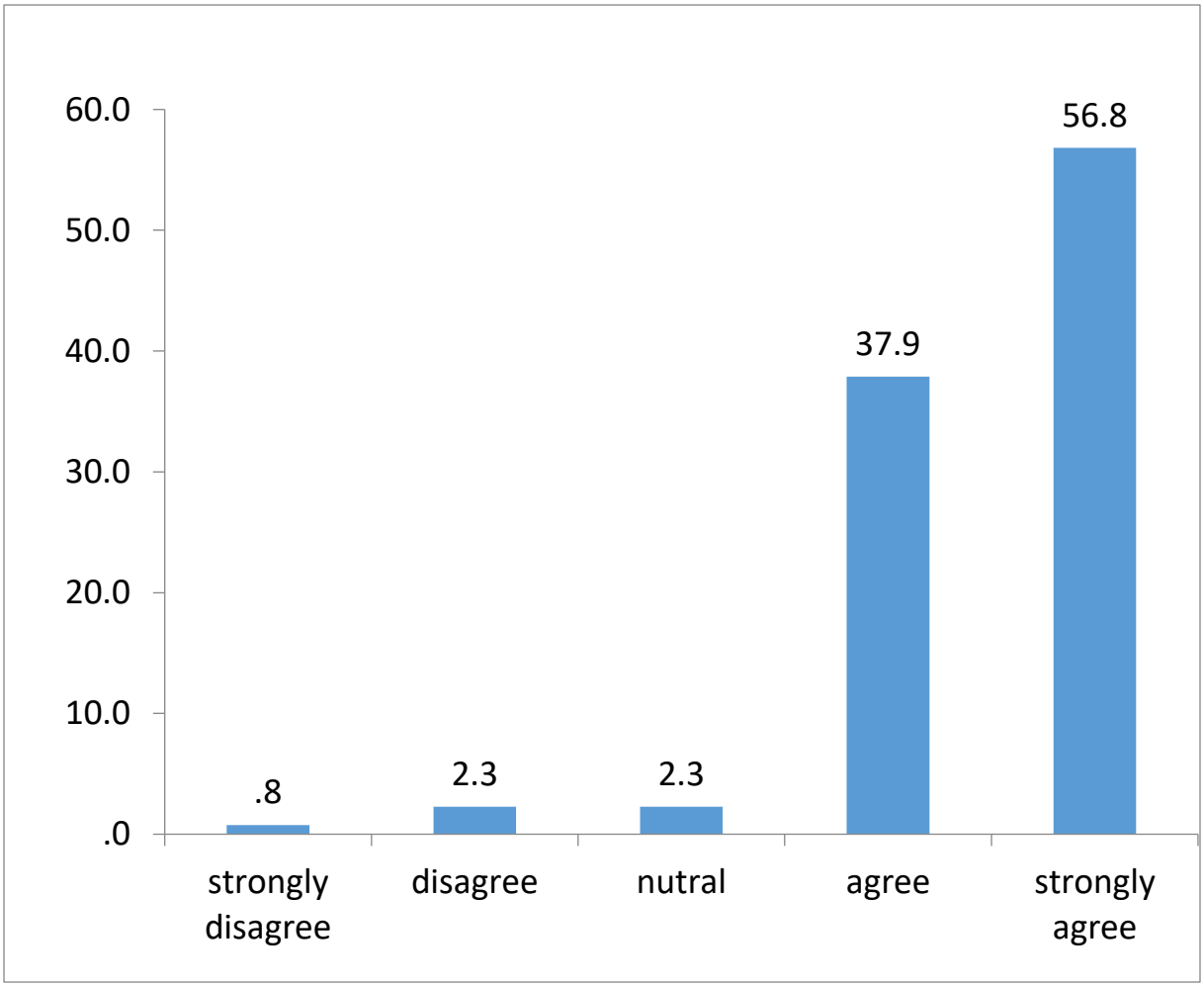

Figure (4-14)

4 -1-15 Accepting employees to share knowledge positively affects performance
Table 4 -15

	Frequency	Percent
disagree	2	1.5
neutral	10	7.6
agree	43	32.6
strongly agree	77	58.3
Total	132	100.0

From table 4 - 15 and figure 4 - 15 we observe that 90.9% of sample confirmed that accepting employees to share knowledge positively affects performance.

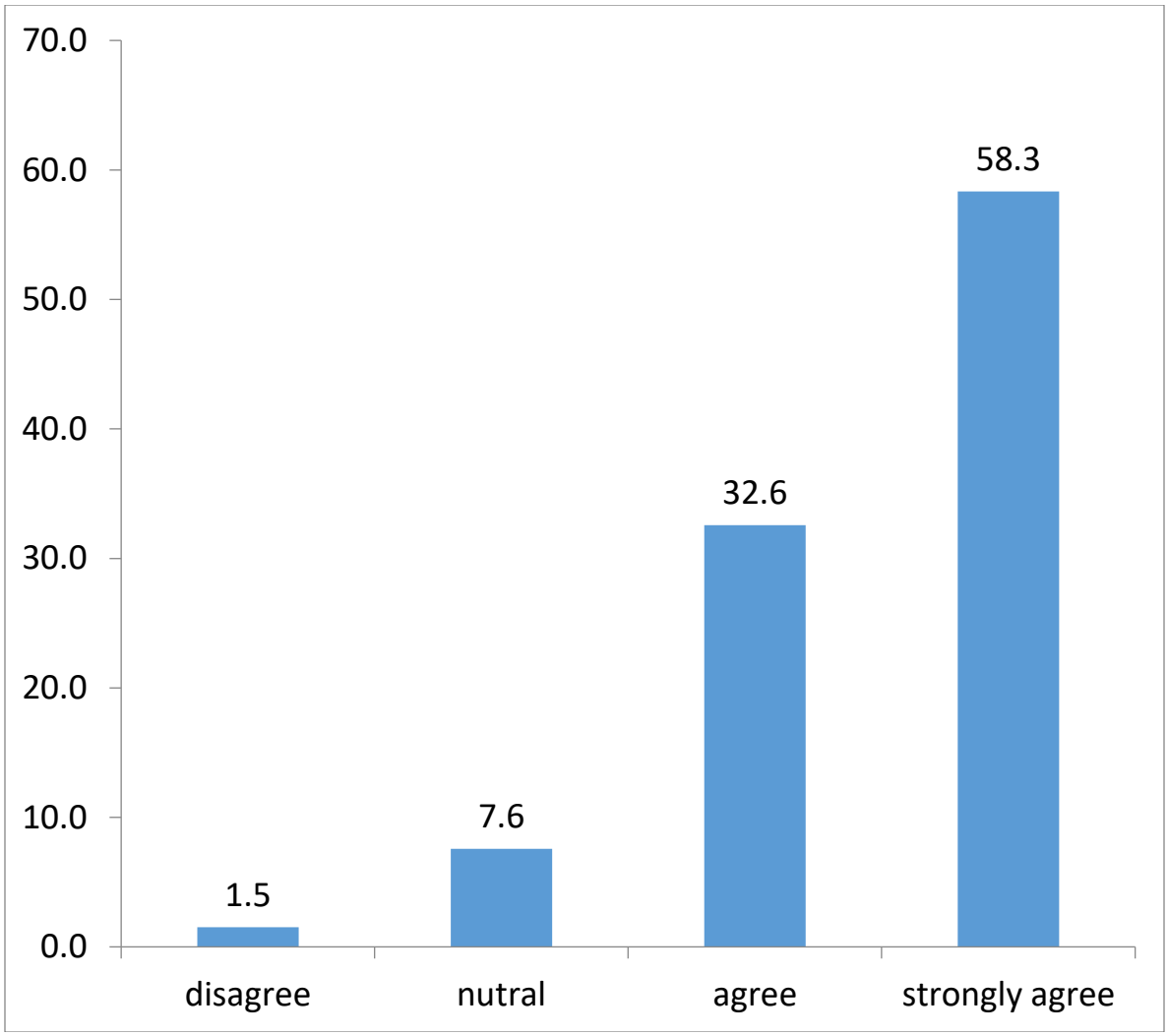

Figure (4 - 15)

4 -1-16 Technology contributes to knowledge management

Table 4 - 16

	Frequency	Percent
neutral	8	6.1
agree	41	31.1
strongly agree	83	62.9
Total	132	100.0

From table 4 - 16 and figure 4 -16 we observe that 94% of sample confirmed that technology contributes to knowledge management.

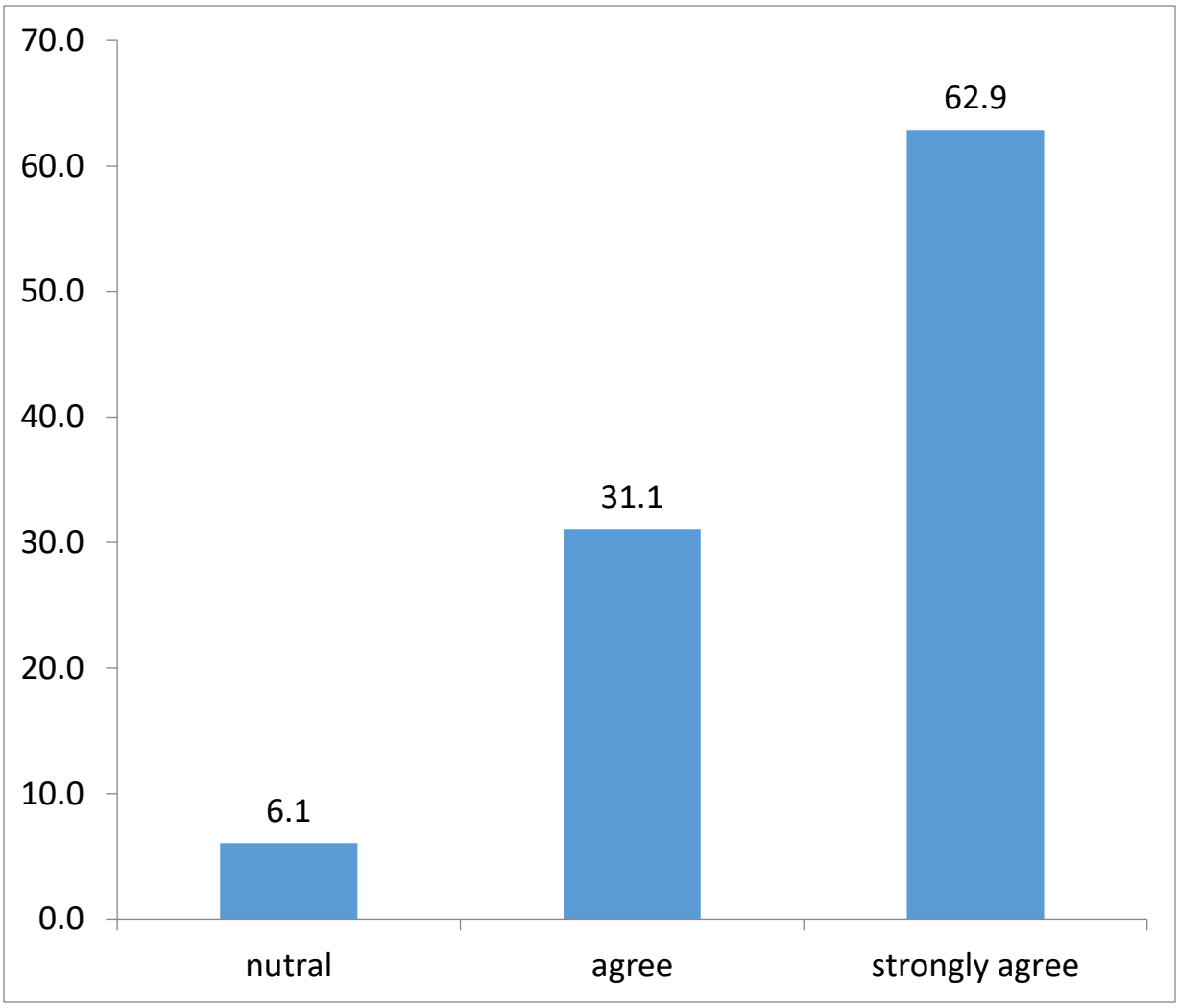

Figure (4 -1 6)

4 -1-17 Technology programs help spread knowledge

Table 4 - 17

	Frequency	Percent
disagree	1	.8
neutral	7	5.3
agree	48	36.4
strongly agree	76	57.6
Total	132	100.0

From table 4 -17 and figure 4 - 17 we observe that 94% of sample confirmed that technology programs help spread knowledge.

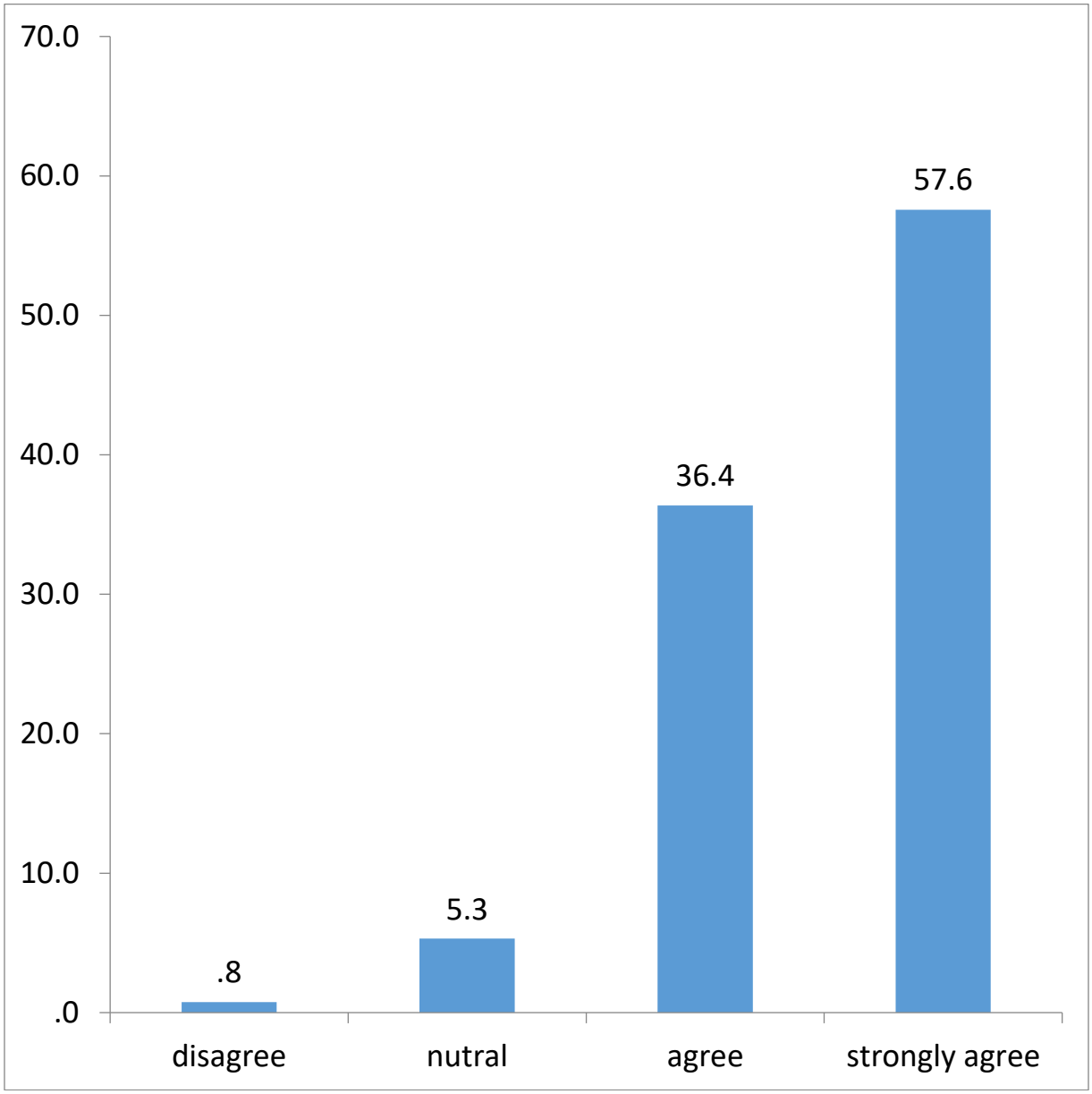

Figure (4 - 17)

4 -1-18 Technology works as a memory to save and share knowledge

Table 4 - 18

	Frequency	Percent
strongly disagree	1	.8
disagree	4	3.0
neutral	14	10.6
agree	44	33.3
strongly agree	69	52.3
Total	132	100.0

From table 4 - 18 and figure 4 - 18 we observe that 85.6% of sample confirmed that technology works as a memory to save and share knowledge.

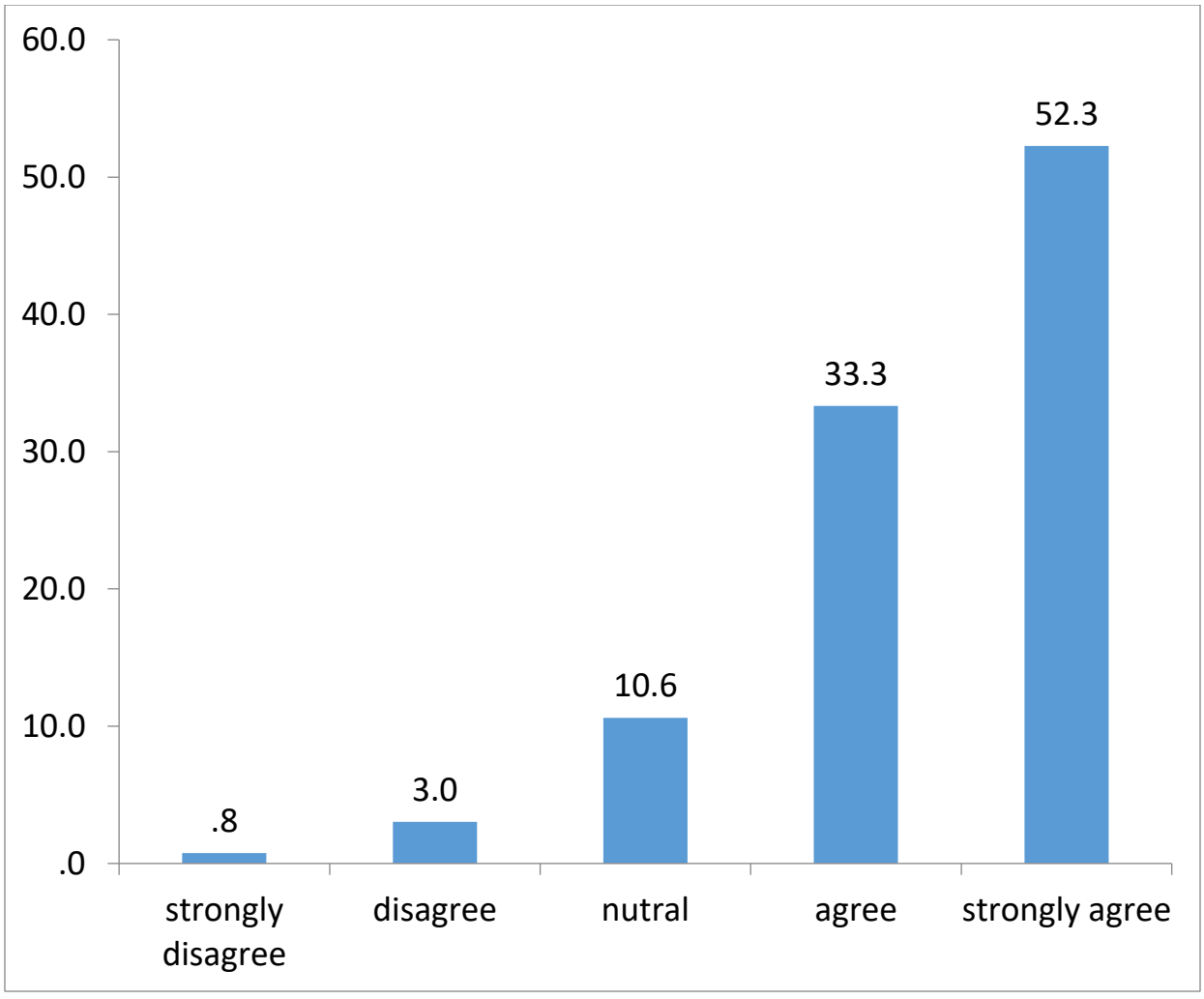

Figure (4 - 18)

4 -1-19 Technology helps to adopt the latest knowledge management methods
Table 4 - 19

	Frequency	Percent
disagree	2	1.5
neutral	9	6.8
agree	58	43.9
strongly agree	63	47.7
Total	132	100.0

From table 4 - 19 and figure 4 - 19 we observe that 91.6% of sample confirmed that technology helps to adopt the latest knowledge management methods.

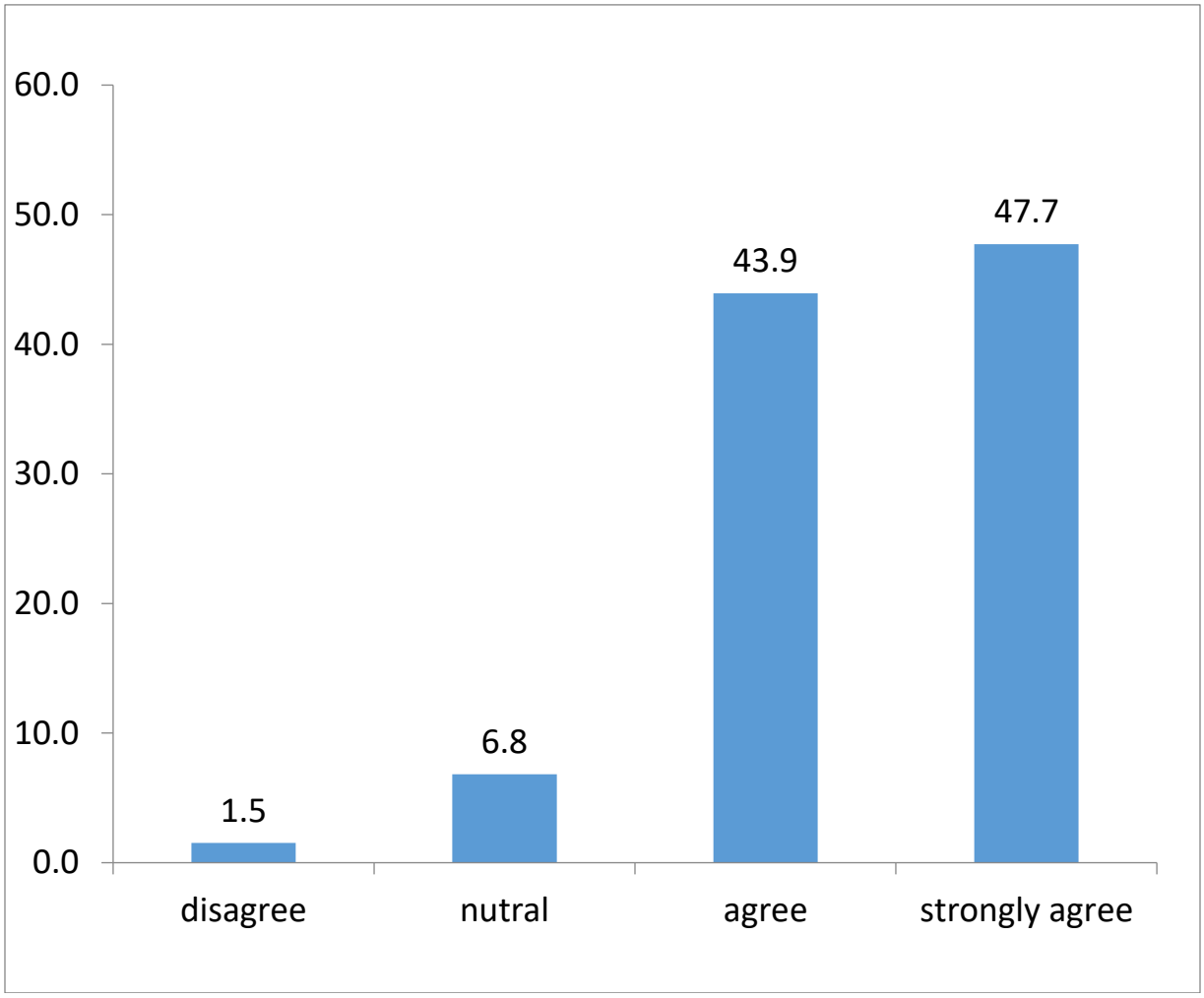

Figure (4 - 19)

4 -1-20 Employee commitment to knowledge dissemination improves performance
Table 4 - 20

	Frequency	Percent
disagree	4	3.0
neutral	2	1.5
agree	55	41.7
strongly agree	71	53.8
Total	132	100.0

From table 4 - 20 and figure 4 -20 we observe that 95.5% of sample, confirmed that employee commitment to knowledge dissemination improves performance.

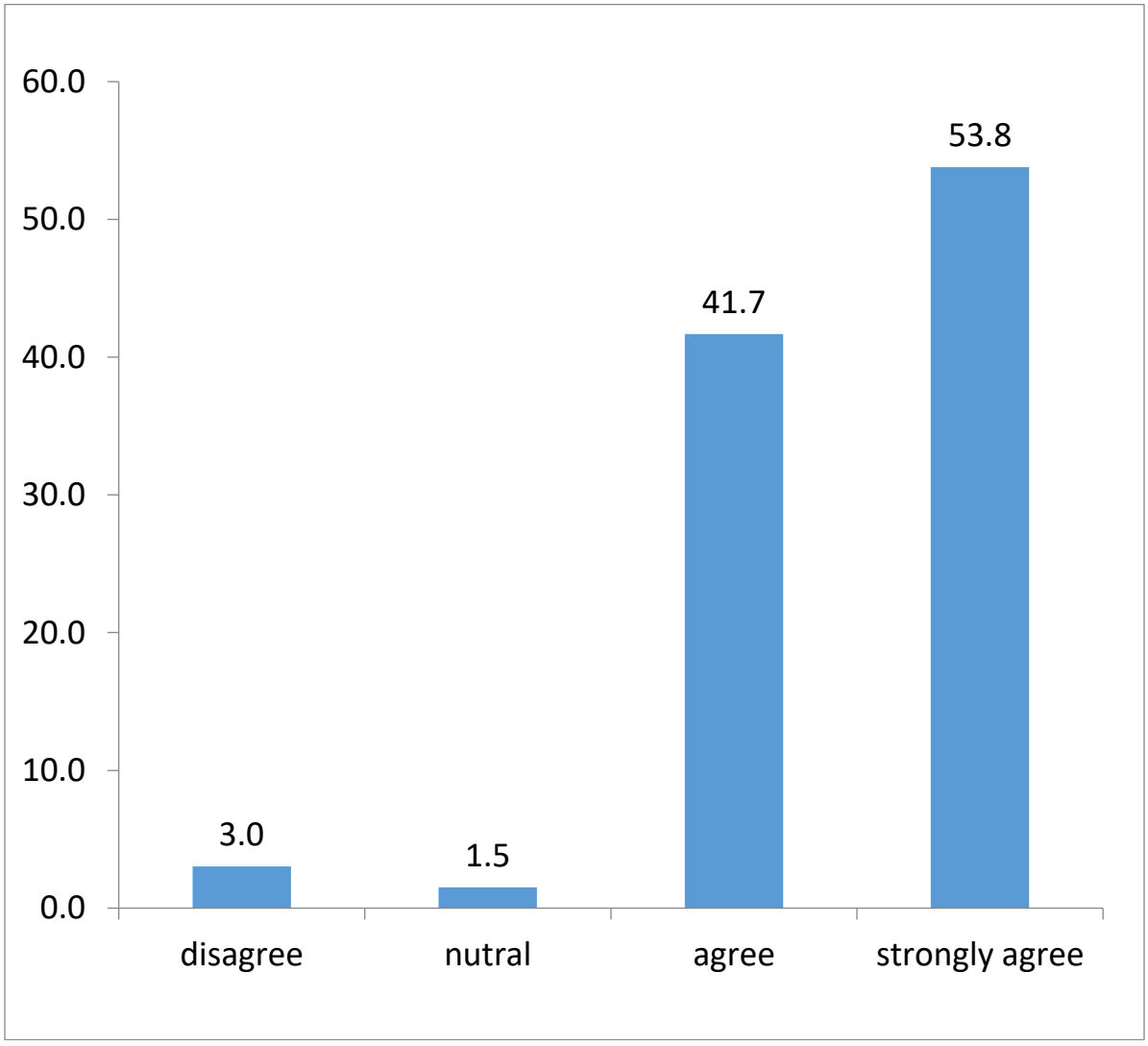

Figure (4 - 20)

4 -1-21 Employees' adoption of the concept of knowledge raises performance
Table 4 - 21

	Frequency	Percent
strongly disagree	1	.8
disagree	2	1.5
neutral	8	6.1
agree	68	51.5
strongly agree	53	40.2
Total	132	100.0

From table 4 - 21 and figure 4 - 21 we observe that 91.7% of sample confirmed that employees' adoption of the concept of knowledge raises performance.

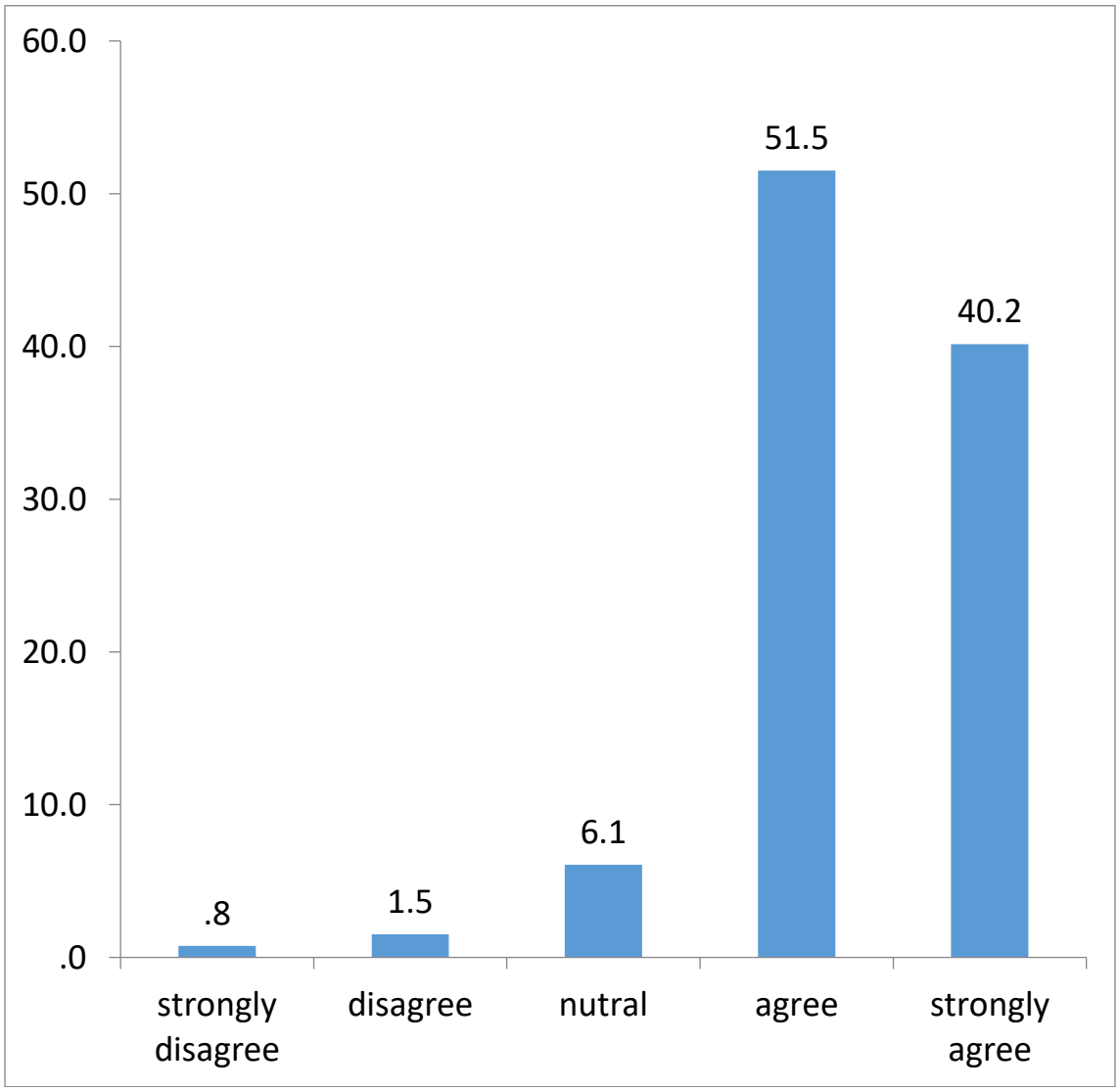

Figure (4 – 21)

4 -1-22 Content rich in knowledge increases performance

Table 4 - 22

	Frequency	Percent
disagree	1	.8
neutral	13	9.8
agree	55	41.7
strongly agree	63	47.7
Total	132	100.0

From table 4 - 22 and figure 4 - 22 we observe that 89.4% of sample, confirmed that content rich in knowledge increases performance.

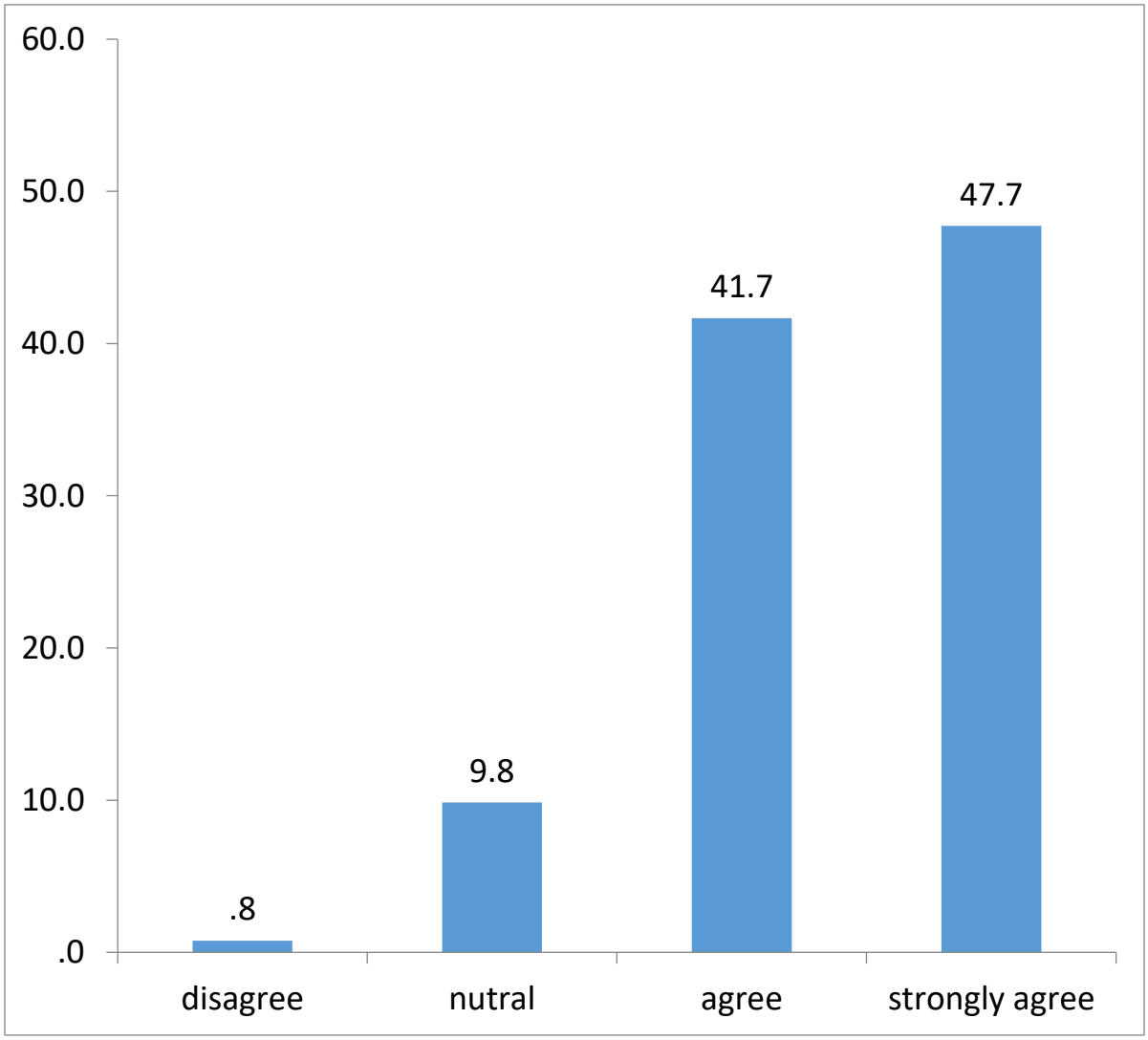

Figure (4 - 22)

4 -1-23 Employees tend to share important and rare knowledge

Table 4 - 23

	Frequency	Percent
strongly disagree	1	.8
disagree	18	13.6
neutral	46	34.8
agree	41	31.1
strongly agree	26	19.7
Total	132	100.0

From table 4 – 23 and figure 4 – 23 we observe that 50.8% of sample confirmed that employees tend to share important and rare knowledge.

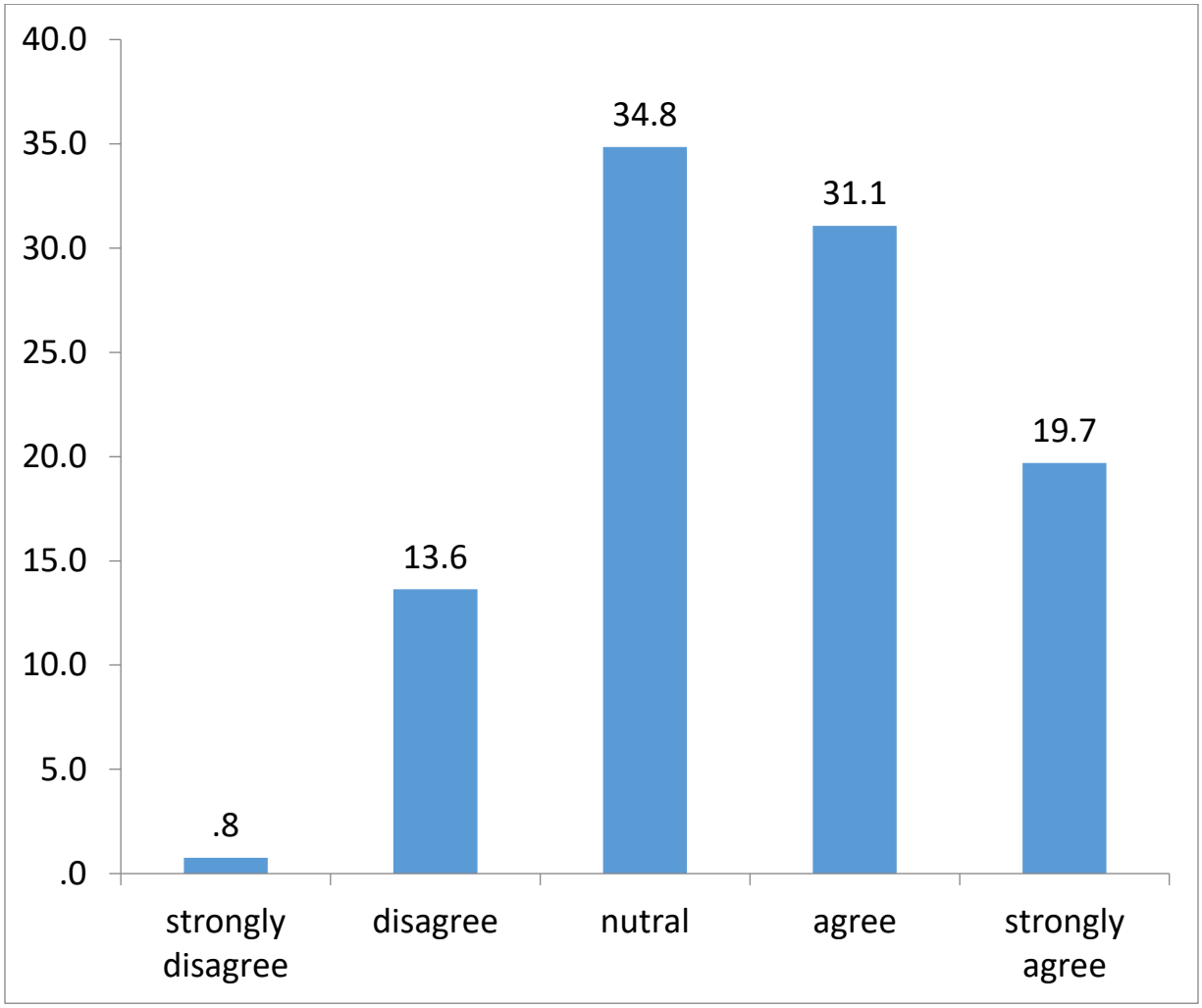

Figure (4 - 23)

4 -1-24 Sharing new knowledge supports knowledge management

Table 4 - 24

	Frequency	Percent
disagree	2	1.5
neutral	9	6.8
agree	71	53.8
strongly agree	50	37.9
Total	132	100.0

From table 4 – 24 and figure 4 – 24 we observe that 91.7% of sample, confirmed that sharing new knowledge supports knowledge management.

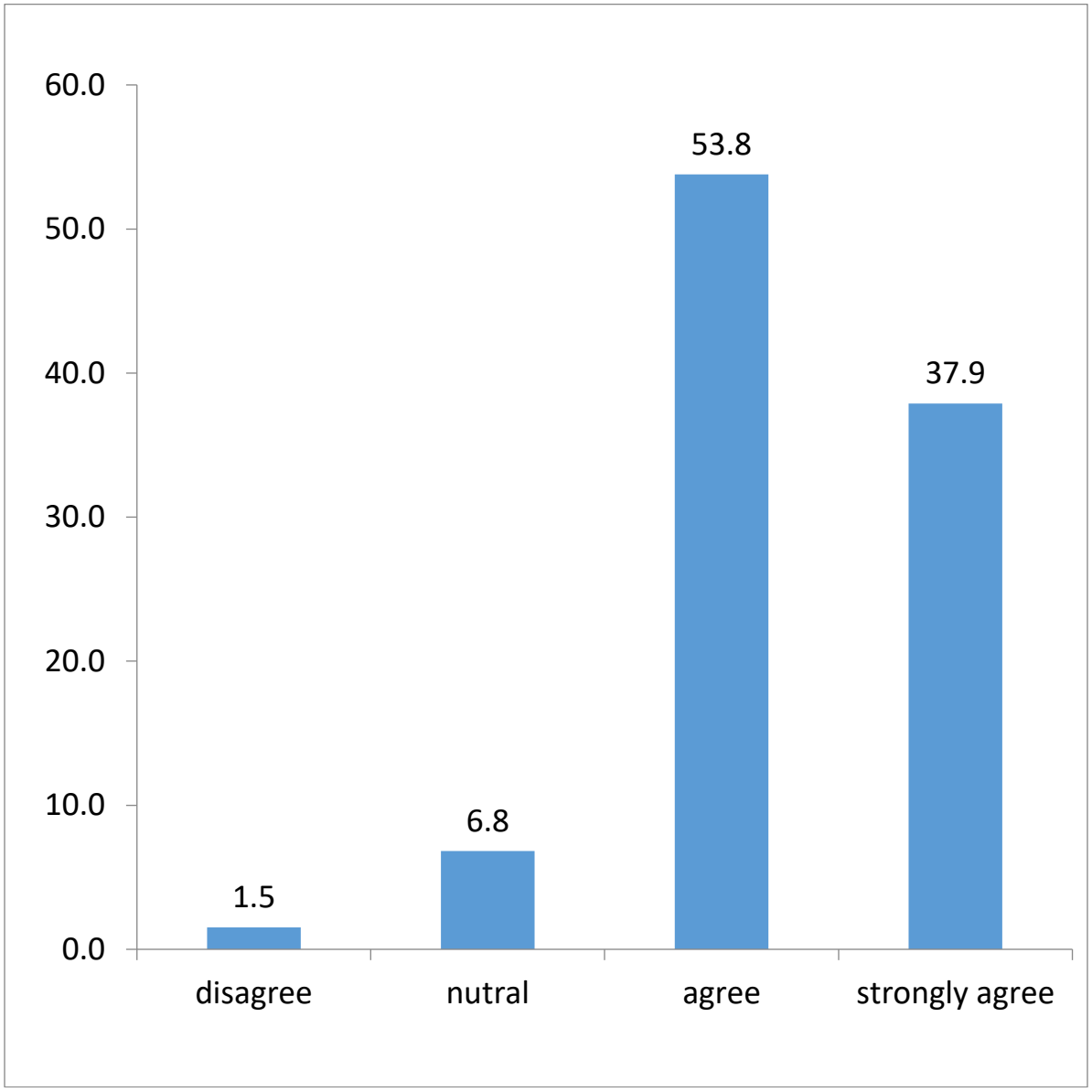

Figure (4 - 24)

4 -1-25 Organizations create a valid environment for sharing knowledge

Table 4 - 25

	Frequency	Percent
strongly disagree	3	2.3
disagree	18	13.6
neutral	37	28.0
agree	46	34.8
strongly agree	28	21.2
Total	132	100.0

From table 4 - 25 and figure 4 - 25 we observe that 56% of sample, confirmed that organizations create a valid environment for sharing knowledge.

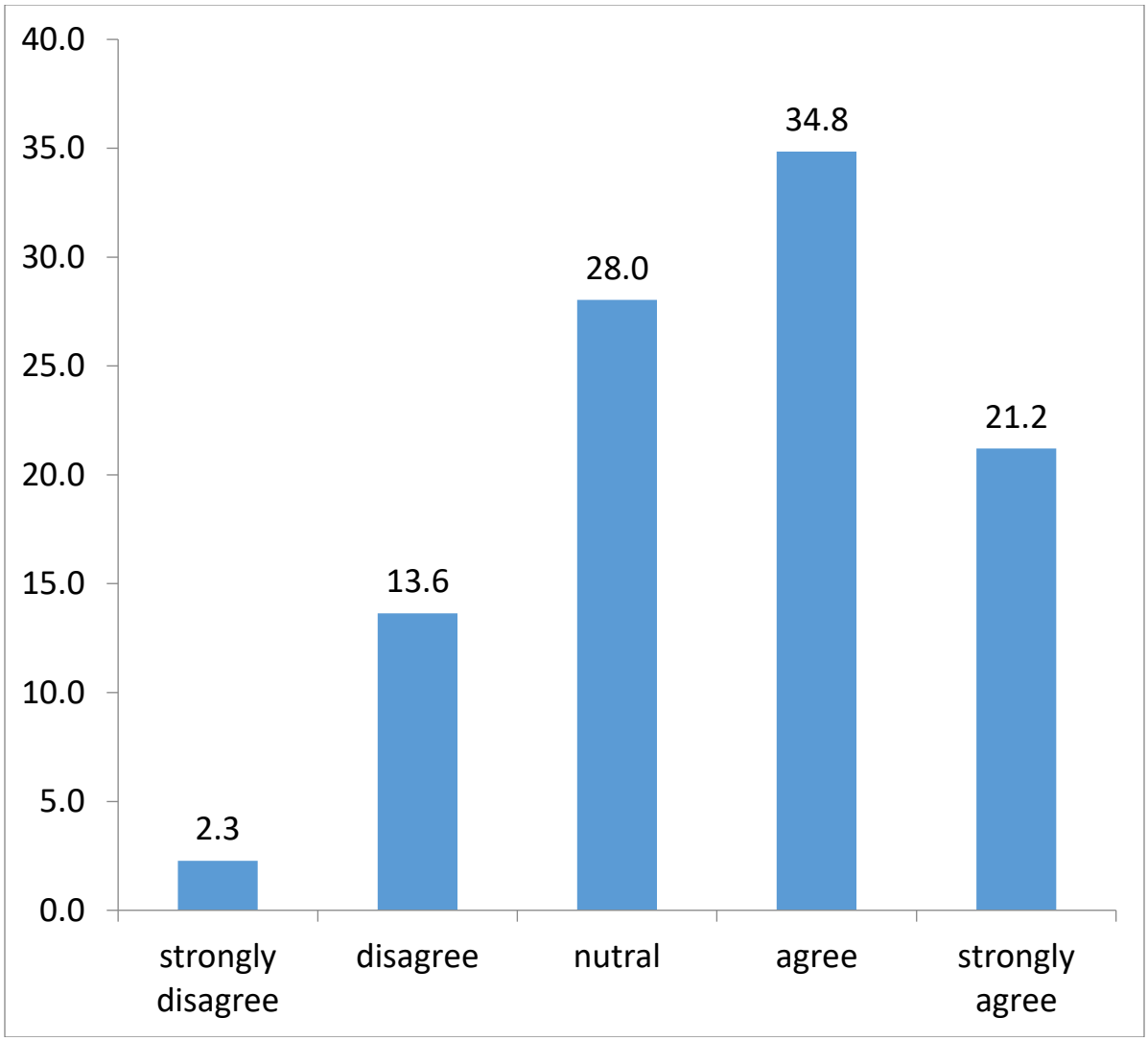

Figure (4 – 25)

4 -1-26 Institutions are encouraging those who share their knowledge

Table 4 - 26

	Frequency	Percent
strongly disagree	1	.8
disagree	19	14.4
neutral	46	34.8
agree	38	28.8
strongly agree	28	21.2
Total	132	100.0

From table 4 - 26 and figure 4 - 26 we observe that 50% of sample, confirmed that institutions are encouraging those who share their knowledge.

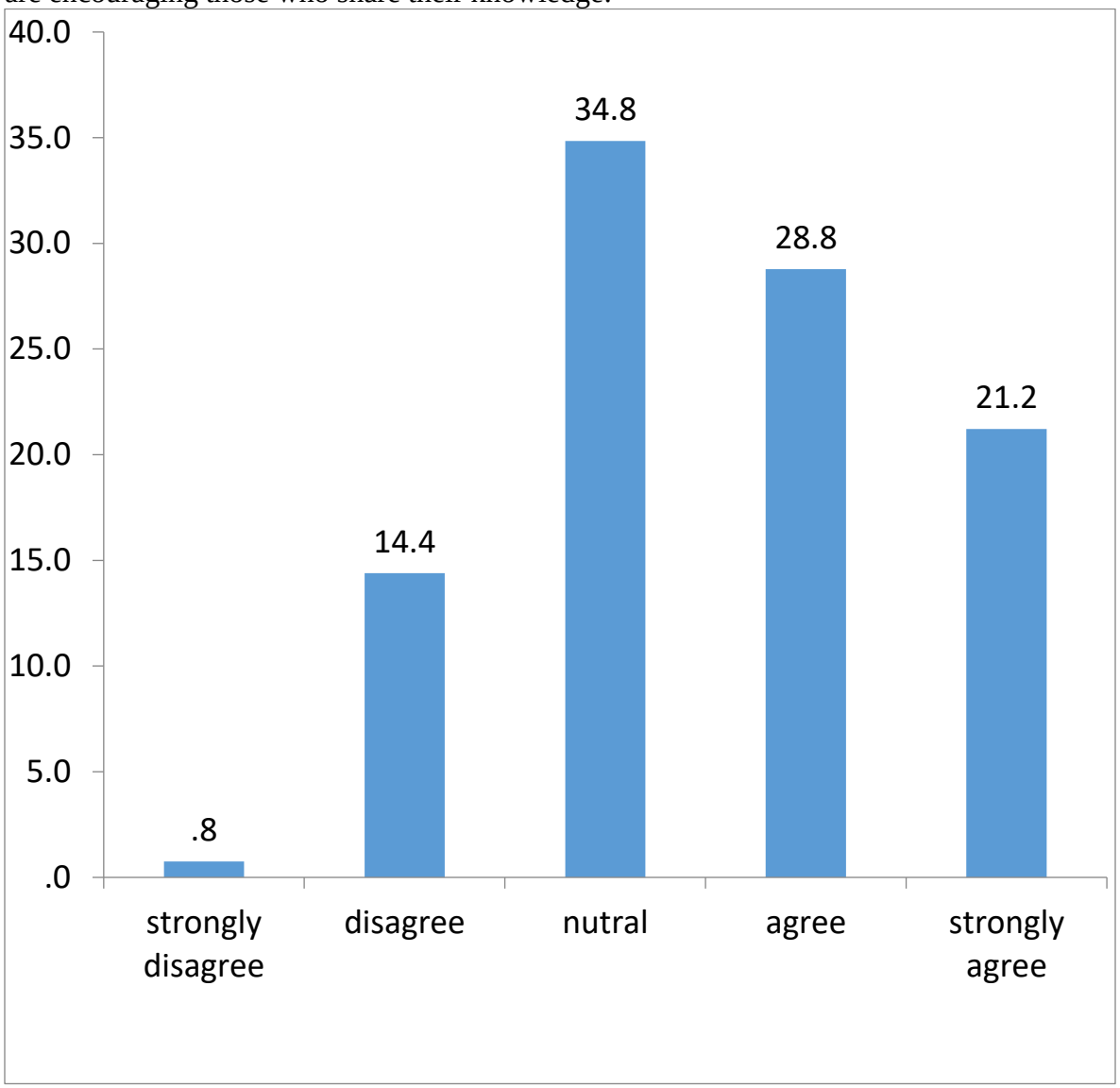

Figure (4 - 26)

4 -1-27 Shared knowledge is available to everyone

Table 4 - 27

	Frequency	Percent
strongly disagree	1	.8
disagree	10	7.6
neutral	28	21.2
agree	58	43.9
strongly agree	35	26.5
Total	132	100.0

From table 4 - 27 and figure 4 - 27 we observe that 70.4% of sample confirmed that shared knowledge is available to everyone which means the groups share knowledge between the members.

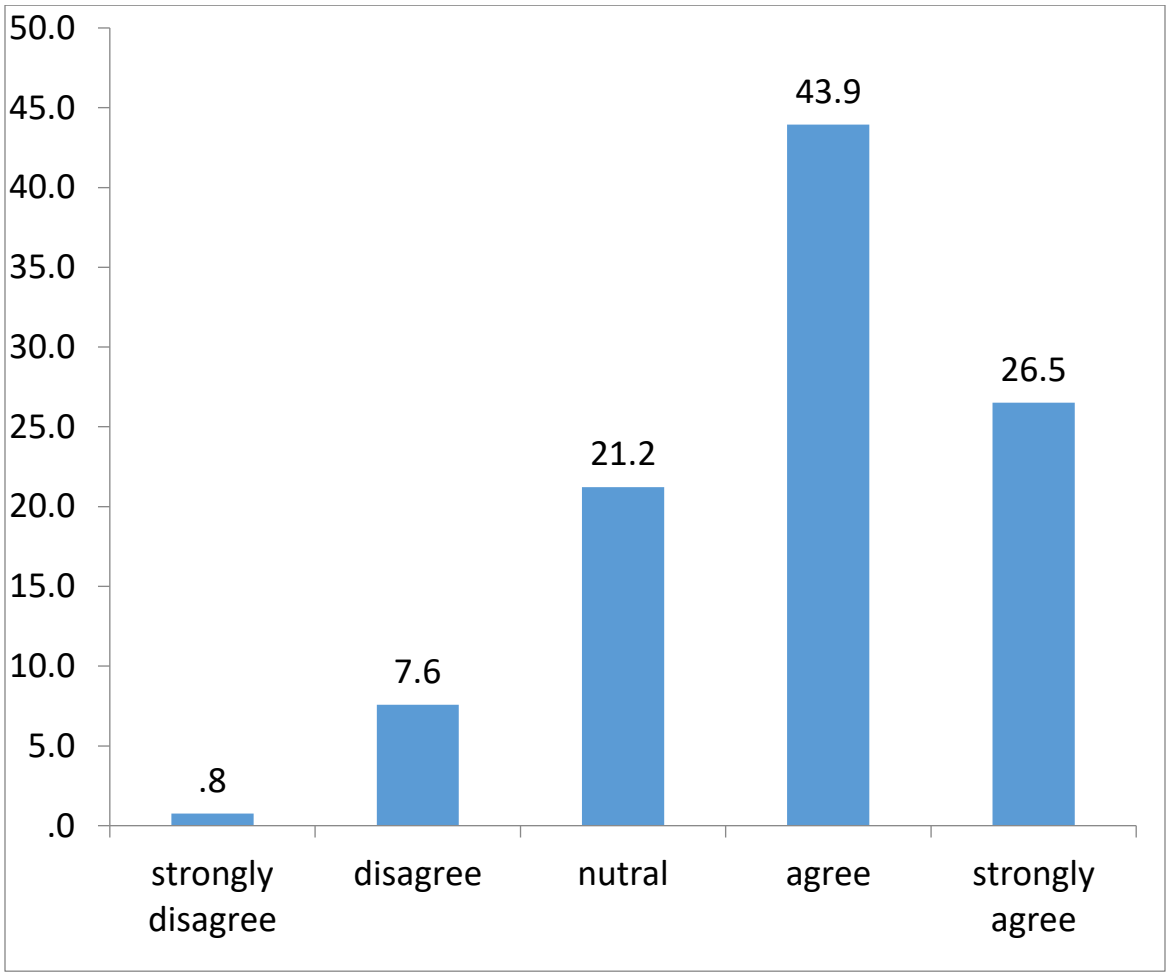

Figure (4 – 27)

4 -2 Data analysis:

This part of chapter view the analysis section of discussion and the technique used here is Likert scale, and it is the most widely used approach to scaling responses in survey research, such that the term (or more accurately the Likert-type scale) is often used. Interchangeably with rating scale, although there are other types of rating scales. The scale named after its inventor, psychologist Rensis Likert. In this research, we used Likert 5 – point scale (Strongly Agree, Agree, neutral Disagree and Strongly Disagree), and the weight of each category is (5, 4, 3, 2 and 1) respectively, the mean of this category is calculated by the formula:

Mean = ((5*Strongly Agree+4*Agree +3*neutral +2*Disagree+ 1*Strongly Disagree)/ (total responses))
And as the category weighted the percent column represent the means we calculated before for 100%, the range for it is shown as:

- 100% – 80% strongly agree.
- <80% - 60% Agree.
- <60% - 40% Neutral.
- <40% - 20 Disagree.
- <20% - 0% Strongly Disagree.

4-2-1 The First attributes is Leadership, and here we focus on if the leadership has fluency and it is important criteria and must be check tested.

Table 4 - 28

#	Phrase	Strongly Agree		Agree		neutral		Disagree		Strongly disagree		Mean	%	Indicator
		#	%	#	%	#	%	#	%	#	%			
1	leader who Know of the concept of knowledge management affects performance	77	58	50	38	1	1	3	2	1	1	4	100	Strongly Agree
2	The leader who adopts a concept of knowledge management is supporting the performance	66	50	58	44	7	5	1	1	0	0	4	100	Strongly Agree
3	leader who share his knowledge is scaling up the performance	64	48	58	44	8	6	2	2	0	0	4	100	Strongly Agree
4	A good leader motivates an employee to spread knowledge	88	67	35	27	6	5	2	2	1	1	4	100	Strongly Agree
	Total	295	56	201	38	22	4	8	2	2	0	4	100	Strongly Agree

Table (4 - 28) represent the respond of sample members for each phrase and from the indicator column, we can say that “Strongly Agree” with 100% that the general thought refer to the leaders who know and adopt knowledge management are affect team performance.

4-2-2 Strategy attributes

Table 4 - 29

#	Phrase	Strongly Agree		Agree		Neutral		Disagree		Strongly disagree		Mean	%	Indicator
		#	%	#	%	#	%	#	%	#	%			
1	Good strategy is concerned with knowledge management	59	45	65	49	7	5	1	1	0	0	4	100	Strongly Agree
2	A good strategy has specific objectives for knowledge management	51	39	66	50	12	9	3	2	0	0	4	100	Strongly Agree
3	Adopting a good knowledge management strategy ensures its continuity	57	43	61	46	10	8	4	3	0	0	4	100	Strongly Agree
	Total	167	42	192	48	29	7	8	2	0	0	4	100	Strongly Agree

Table (4 - 29) represent the respond of sample members for each phrase and from the indicator column, we can say that “Strongly Agree” with 100% the general thought refer to that the strategic which adopt and concerned about knowledge management is increasing the total performance.

4-2-3 Culture attributes

Table 4 - 30

#	Phrase	Strongly Agree		Agree		neutral		Disagree		Strongly disagree		Mean	%	Indicator
		#	%	#	%	#	%	#	%	#	%			
1	The company's management works to spread the culture of knowledge	33	25	69	52	23	17	7	5	0	0	4	100	Strongly Agree
2	The culture of employees on knowledge management positively affects performance	75	57	50	38	3	2	3	2	1	1	4	100	Strongly Agree
3	Accepting employees to share knowledge	77	58	43	33	10	8	2	2	0	0	4	100	Strongly Agree

	positively affects performance													
	Total	185	47	162	41	36	9	12	3	1	0	4	100	Strongly Agree

Table (4 - 30) represent the respond of sample members for each phrase and from the indicator column, we can say that “Strongly Agree” with 100% the general thought refer to that the company's culture which spread knowledge management and prepared the perfect environment, is supporting the total performance .

4-2-4 Technology attributes

Table 4 - 31

#	Phrase	Strongly Agree		Agree		neutral		Disagree		Strongly disagree		Mean	%	Indicator
		#	%	#	%	#	%	#	%	#	%			
1	Technology contributes to knowledge management	83	63	40	30	8	6	0	0	1	1	4	100	Strongly Agree
2	Technology programs help spread knowledge	76	58	47	36	7	5	1	1	1	1	4	100	Strongly Agree
3	Technology works as a memory to save and share knowledge	69	52	44	33	14	11	4	3	1	1	4	100	Strongly Agree
4	Technology helps to adopt the latest knowledge management methods	63	48	58	44	9	7	2	2	0	0	4	100	Strongly Agree
	Total	291	55	189	36	38	7	7	1	3	1	4	100	Strongly Agree

Table (4 - 31) show that the respond of sample members for each phrase and from the indicator column, we can say that “Strongly Agree” with 100% the general thought refer to that technology is supporting knowledge management which is affect the total performance .

4-2-5 Employee discipline attributes

Table 4 - 32

#	phrase	Strongly Agree		Agree		neutral		Disagree		Strongly disagree		Mean	%	Indicator
		#	%	#	%	#	%	#	%	#	%			
1	Employee commitment to	71	54	55	42	2	2	4	3	0	0	4	100	Strongly Agree

	knowledge dissemination improves performance													
2	Employees' adoption of the concept of knowledge raises performance	53	40	68	52	8	6	2	2	1	1	4	100	Strongly Agree
	total	124	47	123	47	10	4	6	2	1	0	4	100	Strongly Agree

From Table (4 - 32) the respond of sample members for each phrase and from the indicator column, we can say that “Strongly Agree” with 100% the general thought refer to that the commitment of employees is supporting knowledge management which is affect the total performance.

4-2-6 knowledge Value attributes

Table 4 - 33

#	phrase	Strongly Agree		Agree		Neutral		Disagree		Strongly disagree		Mean	%	Indicator
		#	%	#	%	#	%	#	%	#	%			
1	Content rich in knowledge increases performance	63	48	55	42	13	10	1	1	0	0	4	100	Strongly Agree
2	Employees tend to share important and rare knowledge	26	20	41	31	46	35	18	14	1	1	4	100	Strongly Agree
3	Sharing new knowledge supports knowledge management	50	38	71	54	9	7	2	2	0	0	4	100	Strongly Agree
	total	139	35	167	42	68	17	21	5	1	0	4	100	Strongly Agree

Table (4 - 33) view that the respond of sample members for each phrase and from the indicator column, we can say that “Strongly Agree” with 100% the general thought refer to that the value of knowledge management is affect the total performance .

4-2-7 Sharing attributes

Table 4 - 34

#	phrase	Strongly Agree		Agree		neutral		Disagree		Strongly disagree		Mean	%	Indicator
		#	%	#	%	#	%	#	%	#	%			
1	Organizations create a valid environment for sharing knowledge	28	21	46	35	37	28	18	14	3	2	4	100	Strongly Agree
2	Institutions are encouraging those who share their knowledge	28	21	38	29	46	35	19	14	1	1	4	100	Strongly Agree
3	Shared knowledge is available to everyone	35	27	58	44	28	21	10	8	1	1	4	100	Strongly Agree
	total	91	23	142	36	111	28	47	12	5	1	4	92	Strongly Agree

Table (4 - 33) represent the respond of sample members for each phrase and from the indicator column, we can say that “Strongly Agree” with 92% the general thought refer to that the sharing of knowledge management is spreading the total performance.

CHAPTER FIVE: Result and Disscusion

5-1 Results

- In leadership we can say that the general thought of the questionnaire and its analysis and observation of the team's performance in the organization indicates that the leaders who know and depend on the management of knowledge affect the performance of the team so that the expression of the leader is an important attribute in the model.

- Strategy attributes we can say that through the questionnaire and observation in the performance of the team from attending conferences, meetings and discussion on important issues, we find that the strategy that adopts and takes care of the management of knowledge increases the overall performance, which means that it must be a major attribute.

- Companies supported overall performance by deploying knowledge management and creating the ideal environment through culture attributes. We can say that the culture of the company is the one that disseminates knowledge management and prepares the perfect environment and the results in the company reduce errors and avoid the best decisions that support overall performance.

- Technology supports knowledge management that affects overall performance through technology attributes we can say from the name application in the company staff began to think about the means of knowledge sharing There were many means, including e-mail and social media, which influenced the technology on the performance of the team and this shows that the technology supports the management Knowledge that affects team performance.

- The commitment of staff supports knowledge management that affects the overall performance of Employee discipline attributes indicating that staff increased productivity and after application of knowledge sharing.

- The value of knowledge has been positively influenced by the dissemination of knowledge-rich knowledge that has influenced performance positively and thus affects the concept of knowledge sharing through the development of a mechanism to collect advanced knowledge and this increases the overall performance of the team.

CHAPTER SIX: Cconclusion and Recommendation

6-1 Cconclusion:

From the analysis and discussion above, each feature has a significant impact on team performance, resulting in the description of the model in (Chapter 3) effective and must be relied upon.

After checking all attributes that proposed to the model, and from table 4.28 to table 4.34, all responses were agreed on the significant of each one in term of identifying the Impact of Knowledge Management on Team Performance in Sudanese Organization.

which means this model have to be one of the tools and guide line when the consideration is about analyzing the Impact of Knowledge Management on Team Performance in Sudanese Organization.

6-2 Recommendation:

1. Leadership should be one of the main attribute because it affects the performance.
2. The strategic should be one of the main attribute because it is adopting and concerning about knowledge management which increase the total performance.
3. companies supported the total performance by spreading knowledge management and prepare the perfect environment
4. Technology has to be one of the main attribute because it is supporting knowledge management which is affect the total performance.
5. The commitment of employees should be one of the attributes because it is affecting knowledge management which affected the total performance.
6. The value of knowledge management has to be one of the main attributes because it is affecting the total performance.
7. The concept of sharing is affecting the performance positively and must be one of the major attributes.

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Appendex

Please fill the box with (√):

Gender: - ☐ Male ☐ Female

Age group: - ☐ less than 25 ☐ 25 to 35 ☐ more than 35

Education: - ☐ Diploma ☐ Bachelor ☐ Master ☐ PhD ☐ other

Occupation: ☐ worker ☐ employer ☐ Head of Unit ☐ Manager

Work experience: ☐ less than 3 year ☐ 3 to 5 year ☐ more than 5

Please (√) in front of the answer meet your choice:

#	Title	Strongly Agree	Agree	neutral	Disagree	Strongly Disagree
1.	leader who Know of the concept of knowledge management affects performance					
2.	The leader who adopts a concept of knowledge management is supporting the performance					
3.	leader who share his knowledge is scaling up the performance					
4.	A good leader motivates an employee to spread knowledge					
5.	Good strategy is concerned with knowledge management					
6.	A good strategy has specific objectives for knowledge management					
7.	Adopting a good knowledge management strategy ensures its continuity					
8.	The company's management works to spread the culture of knowledge					
9.	The culture of employees on knowledge management positively affects performance					
10.	Accepting employees to share knowledge positively affects performance					
11.	Technology contributes to knowledge management					
12.	Technology programs help spread knowledge					
13.	Technology works as a memory to save and share knowledge					
14.	Technology helps to adopt the latest knowledge management methods					
15.	Employee commitment to knowledge dissemination improves performance					
16.	Employees' adoption of the concept of knowledge raises performance					

17.	Content rich in knowledge increases performance					
18.	Employees tend to share important and rare knowledge					
19.	Sharing new knowledge supports knowledge management					
20.	Organizations create a valid environment for sharing knowledge					
21.	Institutions are encouraging those who share their knowledge					
22.	Shared knowledge is available to everyone					