

Designing a Quality Model for justifying the Authenticity of Qualitative Research: Validation and Verification of References

Basit Habib¹ Bahauddin Zakariya University, Multan Shahzad Mahmood² Bahauddin Zakariya University, Multan Mehreen Hashmi³ Bahauddin Zakariya University, Multan Sohail Khan Khakwani⁴ Bahauddin Zakariya University, Multan

Abstract

The Research in social science has a vital impact on the historical background of different event. These events are to be studied under the umbrella of qualitative research methodology. This methodology is based on the critical overview of any event or set of events related to a certain problem statement. To evaluate the authenticity of such research which is conducted on the bases of oral history, it is necessary to define a certain tool which is in hierarchy order and if qualitative research is to be conducted should be gone through using the certain tool. In this paper such a quality model is generated from various aspect of computational quality model which can be helpful for the social scientist to see the authenticity of the references and methodology used during the research of oral history.

Keywords

Quality Model, Factors, Criterion, References, Publishers, Citation, Forgetting modules

1. Introduction

This research discusses all the various aspects by which we can judge the reliability of Oral history and qualitative approach in Social Sciences. The authenticity of such approach of study is described on some various main impacts such as the References coded, the data which is under seen and the interpretation of data. This work desires to see that if a researcher goes through some various steps or process than the work or statement which he is coding is authentic or not and should it be a part of his study?. For such identification a step-wise process is explained known to be such a Model which can identify the quality of the Reference, data under seen and interpretation. The tool which is used to calculate is a Quality Model, in which by following its various step we can justify the coded fact in any of the mentioned forms, (B. Habib, A. Ashfaq,, 2013)(Habib, 2013)(Neuman.L, 1998).

Oral history

Oral history is a collection of verbal account of historical information gathered. The oral history may be recorded on devices, filmed, written or memorized. The references of oral history like every commodity may have different scales of expiries or validities. Here the different intensities of validation of references are marked as the facilitator for the researchers. While Frank Wittingham Skemp was trying to learn Multani language nor mere intention to record the oral history. In the introductory note he argued that he was writing the stories as according to him it was the easiest way to learn the different dialects of Multani and Baluchi languages in the absence of proper available literature of these native tongues. So he didn't give a proper attention to the characters and chronologically important events of the stories. Those were just the folk-lore or fairy-tails which might be liked by the readers who have interest in the Multani language. But unintentionally he was writing the historical events of the Multan, Bahawalpur and Derajat (Dera Ghazi Khan, Dera Ismail Khan and Dera Fateh Khan) of some decades earlier rather he was writing the history of people of these area which had impacts of circum volution of aeon and the events adjoins links of the chains of history of many different cultures and nations of hand-full number of countries as India, Pakistan, Afghanistan, Iran, Turkey, former Russian States, etc. Therefore the references of oral and written history leads the researchers to more than five centuries in past. Professor Dr Ashig Muhammad Khan Durrani referred Shahzada Ali Muhammad Khan Khudakka Sadozai's about Afghanistan and Multan history in his book and in his thesis, 'The Last Phase Of Muslim Rule In Multan (1752 – 1818)', upto more than two and a half centuries in past whereas, Muhammad Sohail khan used the period of references more than five centuries in history with the chronological order. In the Multan account in the chronological list of rulers of Multan the dates are used many centuries 'Before the Emergence of Christ'. Yet the most references are used from the books as written accounts rather the mere oral history (Sohail, 2014) (Skemp, 1917).

This Quality Model for justifying the Authenticity of Qualitative Research: Validation and Verification of References will be of great help for researchers to verify the validation of references and will pave a path for the ongoing and future generations of qualitative as well as quantitative researchers too.

1.1 What is a Quality Model?



A quality model is a set of Factors and their Criterion. The main idea of a quality model is to show such attributes which help in solving a problem statement and justifying facts on reality basis in a systematic manner. A Quality model is based on a set of factors and these factors are based on a set of different criterions, (B. Habib, A. Ashfaq,, 2013) (Habib, 2013).

1.2 What is a Factor?

In a quality model the factor or set of factors (as a quality model is based on a set of factors), when implemented on any problem statement or analysis of subject is the skeleton structure from head to toe which shows the positioning of steps to be followed for the measurement of authenticity. If the steps are properly merged into the bone then the skeleton becomes more and more strong, (B. Habib, A. Ashfaq,, 2013) (Habib, 2013).

1.3 What is criterion?

Criterion is the sub sets of a factor. They are the joints of the bones (factors) which show how the step can be projected on a subject that shows the full implementation of a problem statement and it's fully functionality regarding the authenticity, (Habib, 2013).

1.4 Explanation of Factors

1.4.1 Integrity

"The ability to detect, correct and response all errors or the extent under which the illegal access to data can be controlled". The integrity ensures that the data cannot be altered illegally and access control that can be designed to prevent against this happening. Integrity deal with control of entering inaccurate data by detecting it if it happened, (B. Habib, A. Ashfaq,, 2013).

1.4.2Usability

The effort to learn and handle a subject or the extent to which proposed function is meaningful and minimum chances of human error and proper functionality can be achieved .Usability may be defined as the extent to which a product can be used by specified user to achieve specified goal effectively, (B. Habib, A. Ashfaq,, 2013).

1.4.3Correctness

The extent to which the required task can be done properly or the extent to which a subject fulfill its specification regarding the desired need, or its importance with respect to our work, (B. Habib, A. Ashfaq,, 2013).

1.4.4Reliability

The capacity that persistently perform their function and not fail to work during the processing of gaining the proper concept of a subject showing how much authentic it is so that it can be coded by seeing its expected role within a period of time to predefined condition. Reliability may be calculated between the failure time, repairtime, recovertime, possibility of failure and availability of this subject, (B. Habib, A. Ashfaq,, 2013).

1.4.5Maintainability

The cost of localizing and correct error or the Quality of design which determine the possibility that fails the aspect of the subject and can be restored to its normal operable state within timeframe using prescribed procedure, (B. Habib, A. Ashfaq,, 2013).

1.4.6Reusability

The capacities of being used again and repeatedly of transferring the subject from one purpose to another purpose or its relationship in any scenario are when we can recall what is needed. One benefit of this factor is that once the subject is understood and is ready to be coded it can be used accurately with confidence .No need of testing again, (B. Habib, A. Ashfaq,, 2013).

1.4.7 Interoperability

The cost of connecting the two concepts with one another is known as interoperability. Ability of a concept to work with other concepts use the part of information in the related work. This is a development technique that encourage the work developed in a manner that interacts with other product, (B. Habib, A. Ashfaq,, 2013).

1.4.8Flexibility

The ability of the data being modified into such information which is usable for ensuring the subject is called flexibility. It is linked with adaptability i.e. being able to change or reconfigure the user problem statement to suit user preference, (B. Habib, A. Ashfaq,, 2013).

1.4.9 Modifiability

2279 | Page February, 2017



Capacity of being modified or varied with respect to condition is called modification or modifiability. This is a strategy of any program that if some changes were apply on this then this program have capabilities to adapt this changes or modified successfully. Generallythis strategy is used to fulfill the weaknesses, correct the defects and to improve the performance, (B. Habib, A. Ashfaq,, 2013).

1.4.10 Understandability

Capacity of understanding or being comprehensible and capable of understanding the ability for act and responsive behavior upon the given strategy. This is how we can show a relationship between the information in the sphere being gathered and using it in the subject we are working in, (B. Habib, A. Ashfaq,, 2013).

2. Seven Memory Problems

The seven memory signs of forgetting are explained by Denial. L, in 1999. These signs tell us what are the problems due to which any person forgets any saying, quoted reference or even any incident. These signs are explained as under

2.1 Transience

This is tendency to forget facts or events over time most likely to forget information soon after you learn it. However with the passage of time memories use it or lose it quality of the data. Memories that are called up and used frequently are least likely to be forgotten whereas the memories which are recalled after some time have chances to be forgotten or remembered not with proper approach. Seem like sign of memory weakness Brain scientist regard it as beneficial it clears the brain of unused memories making way for newer, more useful ones factors relate to transience, (Habib, 2013)(Schacter).

2.1.1 Factors that relate to transience

Factors	Criterion
Correctness	Traceability, Completeness, Consistency
Reliability	Consistency, Accuracy, Error Tolerance
Integrity	Access Control , Access Audit
Usability	Operability, Training, Communicativeness
Maintainability	Simplicity, Conciseness, Modularity, Self descriptiveness
Understandability	Legibility , Consistency , Self-descriptiveness , Structuredness , Condsness
Modifiability	Structuredness, Augumentability

Table.1 Factors of transience

2.2 Absentmindedness

This type of forgetting occurs when an entity doesn't pay close enough attention to the event. The entity forgets where, when and in which state the data was being transferred in mind or was being used. A person was thinking of something else (or,perhaps. nothing in particular) so the brain did not encode information properly. It also involve forgetting to do something at a prescribed time i.e. taking about doing something or even while doing something not following the proper steps, (Habib, 2013)(Schacter).

2.2.1 Factors that relate to Absentmindedness

Factors	Criterion
Correctness	Traceability, Completeness, Consistency
Reliability	Consistency , Accuracy , Error Tolerance
Integrity	Access Control, Access Audit
Maintainability	Simplicity, Instrumentation, Modularity
Reusability	Simplicity, System Independence, Machine Independence
Interoperability	Modularity, Communication Commonality, Data Commonality
Modifiability	Structuredness, Augumentability

Table.2Factors of Absentmindedness



2.3 Blocking

If someone ask any query and the answer is right on the tip of the tongue, but cannot be explained in a proper manner verbally. This is perhaps the time is not right, or there is any other thing going in mind and also sometimes there are not words to explain it. Forgetting occurs when an item in memory cannot be accessed or retrieved. But Blocking is caused by Interference. This can de also due to the reason of not being able to recall one memorybecause another similar memory is in the way, (Habib, 2013)(Schacter).

2.3.1 Factors that relate to Blocking

Factors	Criterions
Correctness	Traceability, Completeness, Consistency
Integrity	Access Control, Access Audit
Usability	Operability, Training, Communicativeness
Maintainability	Simplicity, Conciseness, Modularity, Self descriptiveness
Flexibility	Simplicity, Expandability, Generality, Modularity
Reusability	Simplicity, independence,
Understandability	Legibility, Consistency, Self-descriptiveness, Structuredness, Condsness
Modifiability	Structuredness, Augumentability

Table.3Factors of Blocking

2.4 Misattribution

Misattribution occurs when you remember something accurately in part but misattribute some details like time, place or person involved. A memoryfault that occurs when memories are retrieved or recovered, but are associated with wrong time, place or person .Connecting memories of event to wrong time, place or person is the concept of misfit ting those attributes which posses different nomenclatures. This state is called Misattribution, (Habib, 2013)(Schacter).

2.4.1 Factors that relate to misattribution

Factors	Criterions
Correctness	Traceability, Completeness, Consistency
Reliability	Consistency, Accuracy, Error Tolerance
Integrity	Access Control, Access Audit
Maintainability	Simplicity, Conciseness, Modularity, Self descriptiveness
Modifiability	Structuredness, Augumentability

Table.4Factors of misattribution

2.5Suggestibility

It is an acceptance of a false suggestion made by any other source. Memories of past are often influenced in different manners in which they are recalled .The process of memory distortion as the result of deliberate or inadvertent suggestion is where an entity has to give an argument. False but plausible information is given as a result memory is altered. One fills the gaps in memory with false information when recalling a scenario or moment and relating it to other events for his argument, (Habib, 2013)(Schacter).

Factors	Criterions
Correctness	Traceability, Completeness, Consistency
Reliability	Consistency, Accuracy, Error Tolerance
Integrity	Access Control, Access Audit
Usability	Operability, Training, Communicativeness

2.5.1 Factors that relate to Suggestibility



Maintainability	Simplicity, Conciseness, Modularity, Self descriptiveness
Flexibility	Simplicity, Expandability, Generality, Modularity, Self descriptiveness
Reusability	Simplicity, subject independence, Machine Independence
Interoperability	Modularity, Communication commonality, Data Commonality
Understandability	Legibility , Consistency , Self-descriptiveness , Structuredness , Condsness
Modifiability	Structeredness, Augumentability

Table.5Factors of Suggestibility

2.6 Bias

Even the sharpest memory is not flawless as regarding the picture of the reality. In the memory the perception are filtered by personal biases, experiences, beliefs, prior knowledge and even your mood at the moment. These biases affect your perceptions and experiences when they are being encoded in your brain and when you retrieve a memory your mood and other biases at that movement can influence what information you actually recall, (Schacter)(Habib, 2013).

2.6.1 Factors that relate to Bias

Factors	Criterions					
Correctness	Traceability, Completeness, Consistency					
Reliability	Consistency, Accuracy, Error Tolerance					
Integrity	Access control, Access Audit					
Maintainability	Simplicity, Conciseness, Modularity, Self descriptiveness					
Understandability	Legibility, Consistency, Self-descriptiveness, Structuredness, Condsness					
Modifiability	Structuredness, Augumentability					

Table.6Factors of Bias

2.7 Persistence

The failure of the memory system involves the unwanted recall of the information that is disturbing. The remembrance can range from a blunder on the job to a truly traumatic experience and the persistent recall can lead to phobias, post-traumatic stress disorder and even Suicide factor relate to persistence, (Habib, 2013)(Schacter).

2.7.1 Factors that	relate to Persistence
--------------------	-----------------------

Factors	Criterions				
Correctness	Traceability, Completeness, Consistency				
Reliability	Consistency, Accuracy, Error Tolerance				
Maintainability	Simplicity, Conciseness, Modularity, Self descriptiveness				
Interoperability	Modularity, Communication commonality, Data Commonality				
Modifiability	Structuredness, Augumentability				

Table.7Factors of Persistence



3. Explanation of Criterion regarding the quality model

Sr.No	Criterion	Definition						
1.	Consistency	Consistency as the quality criterion reflects consistent behavior of the person. Here it means that after every the and manner the correctness/ reliability/ understandability remains at the same level. These quality factors direct affect the behavior of the person in the changed/ modified circumstances and we still expect same level of performance. Thus the consistency is desired.						
2.	Modularity	Modularity is the degree to which a subject component may be separated and recombined. it becomes far easier to manage the final research if it is suitably modeled.						
3.	Self Descriptiveness	Self Descriptiveness provides simplicity by reducing person's memory load and improves his efficiency by letting them retain their capacity for their tasks instead of bothering with the subject. Presence of this criterion influences flexibility, maintainability, and testability as things go intuitively understood.						
4.	Simplicity	The property, condition, or quality of being simple. If simplicity has been induced into the subject it will be easier to get maintained and tested. Moreover reusing the subject in different contexts will also be easier.						
5.	Accuracy	Accuracy is the condition or quality of the person's memory of being correct and freedom from error or defect. It determines the degree of reliability and affects the functionality of the subject						
6.	Communicativeness	Communicativeness is the ability of the person to communicate its features to the user intuitively. It thus improves its usability and enhances robustness, integrity, accessibility, and communicativeness of the involved humans.						
7.	Conciseness	Conciseness means shortness in size and comprehensiveness in scope of the Subject. A compact and concise subject will not only be easy to comprehend, but will also be easier to maintain because unnecessary details will have been removed.						
8.	Structurednes s	The state or condition of subject of being well-thought and ingenious is known as structurednes. A well structured subject can be modified easily. Its understandability will no doubt be improved.						
9.	Access Audit	Access audit is to establish how well a subject performs in relation to exercise its control on access in the form of information.						
10.	Access Control	Access control refers to exerting control over the subject and defines other different related issue with the subject under seen. It basically shows the interaction of combined subjects related under a single problem statement.						
11.	Accessibility	Accessibility is the degree to which a subject is available to as many users as required. It thus improves its usability and enhances robustness, integrity, accessibility, and communicativeness of the involved humans.						
12.	Augment ability	Augment ability is the capability of the subject to get additional features accommodated to coop with the fresh requirements. So the subject can be modified to get adjusted to changed environment.						
13.	Commonality	Commonality is the possession of common features or attributes. This reduces the efforts required to couple one subject to another.						
14.	Completeness	Completeness means that the requirements are properly fulfilled and correctness is the degree at which basic principles have been followed. This forms the relation.						
15.	Error tolerant	Error tolerant subject is one that does not unduly penalize user errors. This property improves the ability of the subject not to change its meaning while interoperating, and to interoperate as per originality.						
16.	Expandability	Expandability is the ability of a person to accommodate additions to its capacity or capabilities. It makes the subject flexible by providing ease in making changes required by changes in the under seen environment.						
17.	Traceability	Traceability refers to the completeness of the information about every step in a process of subject development. It improves correctness.						
18.	Training	Training is the action of teaching users proper use of the subject. Through this training person remain involve in the working environment.						
19.	Generality	Such kind of statement which is based any truth but with the passage of time abstraction and expandation of that certain statement changes is known as generality regarding its influence in any event or situation,						
20.	Condenses	To reduces or shorten any event or statement is known as condenses.						

Table.8 Explanation of Criterion regarding the quality model



Appling test by showing relationship among references with factors of quality models

In this test a research thesis named Gender in Oral History: A critical analysis of F.W Skemp's Multani stories, M.S. Khan written in 2015 and the original book Multani stories collected and translated by F.W. Skemp in 1917 are taken under seen. Five reference of each are taken randomly and are scaled on the Quality Factors with reference to age of the reference, its publisher and citation of the reference, (Sohail, 2014) (Skemp, 1917).

Factor	Reference								
Correctness	Sr.	Nature of	Age of		Publisher			Citation	
	No	Subject	Reference	International	National	Verbal/Oral	International	Nationa 1	
	1	Qualitative/ Gender in Oral History : A Critical Analysis of	1980		1			~	
		F.W. Skemp's,	2007		✓			✓	
		Multani Stories	1997		√			✓	
			1909	×			×	×	
			1929	×			~	×	
	2	Multani Stories	1914		✓ (Sub-Continent)		√		
		collected and translated by F.W.	1787			 ✓ (Sub- Continent) 	Nil	Nil	
		Skemp, 1917	1893			 ✓ (Sub- Continent) 	Nil	Nil	
			1805			✓ (Sub- Continent)	Nil	Nil	
			1901-02		✓ (Sub-Continent)			✓	

 Table.9Relationship of correctness with references

This table shows the references which were used mostly in the above mentioned subjects. Here in the above table 9, the reference 1 showing the detail which is use in national publication and its citation also available on national level while on the other hand in the other reference which is used in 1909 and 1929 is use in international publication and while their citation also used at international level and national level. In the second reference which is related to the Multani stories collected and translated, in this the reference of 1914 is published at national level in the subcontinent and while the reference of 1787, 1893, 1805 is in the verbal/oral level and its citation also not available at international level. While the reference of 1901-02 is use at the national level publication and also in the verbal/oral level and its citation also is in the verbal/oral level and its citation also in the verbal/oral level and its citation also is used in the quality model factor, correctness is used for to make a ground to judge the quality or certainty of a source, which justifies the age of the reference and its certainty, (Skemp, 1917)(Sohail, 2014).

Factor	Reference									
Reliability	Sr.	Nature of Subject	Age of		Publisher	10	Citation			
	No		Reference	International	National	Verbal/Oral	International	National		
	1	Qualitative/ Gender in Oral History : A	1980(No)		🗸 (Yes)	8.)		✓ (Yes)		
		Critical Analysis of F.W. Skemp's.	2007 (Yes)		✓ (Yes)	3	2	✓ (Yes)		
		Multani Stories	1997 (To some extent)		✓ (Yes)			V (Yes)		
			1909 (No)	✓ (Yes)	-	8	🗸 (Yes)	V (Yes)		
		×	1929 (No)	✓ (Yes)		2	 (Yes) 	✓ (Yes)		
	2	Multani Stories collected and translated by F.W. Skemp, 1917	1914 (No)		 ✓ (Sub-Continent) To some extent 		 (Yes) 			
			1787 (No)			✓ (Sub- Continent) No	Nil (No)	Nil (No)		
			1893 (No)			✓ (Sub- Continent) No	Nil (No)	Nil (No)		
			1805 (No)	n		✓ (Sub- Continent) No	Nil (No)	Nil (No)		
			1901-02 (Ne)		 (Sub-Continent) To some extent 			(Yes)		

Table.10Relationship of correctness with reliability

The measures regarding reliability are defined in to different manners, either Yes or No. Reliability is based on the concept when we take all the references with respect to the current era. By the judgment of references regarding 'today' the authenticity of the reference is seen by looking at its age. On the other hand the sub entities of reference such as its source



also plays a vital role in the verification of the reliability of a reference, (Sohail, 2014) (Skemp, 1917). Here in the above table 10, the reference of 1980 showing the detail which is use in national publication and its citation also available on national level while on the other hand in the other reference which is used in 2007 and 1997 is also use in national publication and while their citation also used national level . in two other reference 1908, 1929 are available in international publication and there citation also available in the international and nation level. In the second reference which is related to the Multani stori es collected and translated, in this the reference of 1914 and 1901-02 available in national level in subcontinent and the reference of 1987, 1893, 1805 are available in the verbal/ oral level publication and the citation also not available in international or national level.

Factor	Refe	Reference												
Integrity	Sr.	Nature of	Age of		Publisher	Citation								
	No	Subject	Reference	International	National	Verbal/Oral	International	National						
	1	Qualitative/ Gender in Oral History : A Critical Analysis of	1980(Certain)		✓ (Yes)			✓ (Yes)						
		F.W. Skemp's.	2007 (Certain)		✓ (Yes)			✓ (Yes)						
		Multani Stories	1997 (Certain)		✓ (Yes)			✓ (Yes)						
		*******	1909 (Un-certain)	✓ (Yes)			✓ (Yes)	✓ (Yes)						
			1929 (Un-certain)	✓ (Yes)			✓ (Yes)	✓ (Yes)						
	2	Multani Stories collected and	1914 (Certain)		 ✓ (Sub-Continent) To some extent 		✓ (Yes)							
		translated by F.W. <u>Skemp</u> , 1917	1787 (Un-certain)			✓ (Sub- Continent) No	Nil (No)	Nil (No)						
			1893 (Certain)			✓ (Sub- Continent) No	Nil (No)	Nil (No)						
			1805 (Un-certain)			✓ (Sub- Continent) No	Nil (No)	Nil (No)						
			1901-02 (Certain)		 ✓ (Sub-Continent) To some extent 			√ (Yes)						

Table.11Relationship of correctness with integrity

Integrity by definition means to see the how right a statement or a reference is. Integrity is based on the probable values by which it can be seen how certain or uncertain the trend of a statement or a reference exists. By the combination of integrity as a factor on different signs of forgetting in the above mentioned subjects, the integrity will be seen in the perceptive era's of the subject individually, (Skemp, 1917) (Sohail, 2014). Here in the above table 11, the reference of 1980, 2007, 1997 showing the detail which is use in national publication and its citation also available on national level while on the other hand in the other reference which is used in 1909 and 1929 are use in international publication and while their citation also available at the international level and national level. In the second reference which is related to the Multani stories collected and transla ted, in this the reference of 1914 and 1901-02 available in national level in subcontinent and the reference of 1987,1893, 1805 are available in the verbal/ oral level publication and the citation also not available in international or national level.

Factor	Reference											
Usability	Sr.	Nature of	Age of Reference		Publisher		Citation					
	No	Subject		International	National	Verbal/Oral	International	National				
	1	Qualitative/ Gender in	1980 (Agree)		✓ (Yes)			✓ (Yes)				
		Oral History : A Critical	2007 (Strongly Agree)		✓ (Yes)			✓ (Yes)				
		Analysis of	1997 (Strongly Agree)		✓ (Yes)			✓ (Yes)				
		F.W. Skemp's,	1909 (Strongly disagree)	✓ (Yes)			✓ (Yes)	✓ (Yes)				
		Multani Stories	1929 (Disagree)	✓ (Yes)			✓ (Yes)	✓ (Yes)				
	2	Multani Stories	1914 (Strongly Agree)		 ✓ (Sub-Continent) To some extent 		✓ (Yes)					
		collected and translated by	1787 (Strongly disagree)			✓ (Sub- Continent) No	Nil (No)	Nil (No)				
		F.W. <u>Skemp</u> , 1917	1893 (Agree)			✓ (Sub- Continent) No	Nil (No)	Nil (No)				
			1805 (Strongly disagree)			✓ (Sub- Continent) No	Nil (No)	Nil (No)				
			1901-02 (Strongly agree)		 ✓ (Sub-Continent) To some extent 			✓ (Yes)				

Table.12Relationship of correctness with usability

Usability define how much, how to and when any reference can be quoted. Usability is a set 5 scaler attributes named as strongly



Agree, Agree, Neutral, disagree and Strongly disagree. Usability as a factor of a quality model when correlate which the sign of forgetting describes that the reference quoted is certain in its subject in the existing timeline within its own domain. Either that reference is new or possesses a certain age it will be considered usable in its era, (Skemp, 1917). Here in the above table 12, the reference of 1980, 2007, 1997 showing the detail which is use in national publication and its citation also available on national level while on the other hand in the other reference which is used in 1909 and 1929 are use in international publication and while their citation also available at the international level and national level. In the second reference which is related to the Multani stories collected and translated, in this the reference of 1914 and 1901-02 available in national level in subcontinent and the reference of 1987, 1893, 1805 are available in the verbal/ oral level publication and the citation also not available in the verbal/ oral level publication and the citation also not available in the verbal/ oral level publication and the citation also not available in international level.

Factor	Refe	rence						
Maintain	Sr.	Nature of	Age of Reference		Publisher		Citati	ion
ability	No	Subject		International	National	Verbal/Oral	International	National
	1	Qualitative/ Gender in Oral History	1980(Patch)		✓ (Yes)			✓ (Yes)
		: A Critical	2007 (Patch)		✓ (Yes)			✓ (Yes)
		Analysis of	1997 (Patch)		✓ (Yes)			✓ (Yes)
		F.W. Skemp's.	1909 (Replace)	✓ (Yes)			✓ (Yes)	✓ (Yes)
		Multani Stories	1929 (Replace)	✓ (Yes)			✓ (Yes)	✓ (Yes)
	2	Multani Stories	1914 (Patch)		 ✓ (Sub-Continent) To some extent 		✓ (Yes)	
		collected	1787			✓ (Sub-	Nil	Nil
		and translated by	(Replace)			Continent) No	(No)	(No)
		F.W. Skemp,	1893			✓ (Sub-	Nil	Nil
		1917	(Replace)			Continent) No	(No)	(No)
			1805			✓ (Sub-	Nil	Nil
			(Replace)			Continent) No	(No)	(No)
			1901-02		✓ (Sub-Continent)			✓ (Yes)
			(Patch)		To some extent			

Table.13 Relationship of correctness with maintainability

Maintainability is one of the most important factors which describes how a reference is maintained directly proportional with its age. If a reference has a large time span and it does not fulfill the requirement of publishers and citation than its image is replaced. This replacement can work from time to time in new era. If on the other hand the reference does not possess an age factor, in this state it has a precedence regarding its publisher or citation but has a dull image then a patch is inserted for its maintainability, (Skemp, 1917)(Sohail, 2014). Here in the above table 13, the reference of 1980, 2007, 1997 showing the detail which is use in national publication and its citation also available on national level while on the other hand in the other reference which is used in 1909 and 1929 are use in international publication and while their citation also available at the international level and national level. In the second reference which is related to the Multani stories collected and translated, in this the reference of 1914 and 1901-02 available in national level in subcontinent and the reference of 1987,1893, 1805 are available in the verbal/ oral level publication and the citation also not available in international or national level.

Factor	Reference												
Flexibility	Sr.	Nature of Subject Qualitative Gender in	Age of Reference		Publisher		Citation						
	No		ndaharr	International National		Verbal/Oral	International	National					
	1		1980 (Decrease)		🗸 (Yes)			✓ (Yes)					
		Oral History A Critical	2007 (Decrease)		✓ (Yes)			V (Yes)					
		Analysis of	1997 (Decrease)		 (Yes) 			V (Yes)					
		F.W. Skemp's. Multani Stories	1909 (Increase)	✓ (Yes)			✓ (Yes)	V (Yes)					
			(Increase)	✓ (Yes)			(Yes)	V (Yes)					
	2	Multani Stories collected and translated by F.W. Skemp, 1917	1914 (Increase)	/	 (Sub-Continent) To some extent 		 (Yes) 						
			1787 (Increase)			✓ (Sub- Continent) No	Nil (No)	Na (No)					
			1893 (Increase)			✓ (Sub- Continent) No	Na (No)	Na (No)					
			1805 (Increase)			✓ (Sub- Continent) No	Nil (No)	Nil (No)					
			1901-02 (Increase)		✓ (Sub-Continent) To some extent	a desta de la companya de la company		✓ (Yes)					

Table.14Relationship of correctness with flexibility

Flexibility is a factor which is in itself a very comprehensive argument. The age of the reference has a vital relationship with flexibility. A common scenario describe more the age of the reference will have more flexibility. This problem occurs when the



publisher is not defined and most of the contents are the part of verbal/oral. Flexibility is seen with the passage of the time, such as any reference quoted either today or hundred years before will be considered in the frame of today's timeline. This is how we determine the increase and decrease rate of how much a reference is flexible, (Skemp, 1917)(Sohail, 2014). Here in the above table 14, the reference of 1980, 2007, 1997 showing the detail which is use in national publication and its citation also available on national level while on the other hand in the other reference which is used in 1909 and 1929 are use in international publication and while their citation also available at the international level and national level. In the second reference which is related to the Multani stories collected and translated, in this the reference of 1914 and 1901-02 available in national level in subcontinent and the reference of 1987,1893, 1805 are available in the verbal/ oral level publication and the citation also not available in international level.

Factor	Reference											
Portable	Sr.	Nature of	Age of Reference		Publisher		Citation					
	No	Subject		International	National	Verbal/Oral	International	National				
	1	Qualitative/ Gender in Oral History	1980 (Likely)		✓ (Yes)			✓ (Yes)				
		: A Critical	2007 (Even Chance)		✓ (Yes)			✓ (Yes)				
		Analysis of	1997 (Even Chance)		✓ (Yes)			✓ (Yes)				
		F.W. Skemp's.	1909 (impossible)	✓ (Yes)			✓ (Yes)	✓ (Yes)				
		Multani Stories	1929 (impossible)	✓ (Yes)			✓ (Yes)	✓ (Yes)				
	2	Multani Stories	1914 (impossible)		 ✓ (Sub-Continent) To some extent 		✓ (Yes)					
		collected and translated by	1787 (impossible)			✓ (Sub- Continent) No	Nil (No)	Nil (No)				
		F.W. Skemp, 1917	1893 (impossible)			✓ (Sub- Continent) No	Nil (No)	Nil (No)				
			1805 (impossible)			✓ (Sub- Continent) No	Nil (No)	Nil (No)				
			1901-02 (impossible)		 ✓ (Sub-Continent) To some extent 			✔ (Yes)				

 Table.15Relationship of correctness with portable

Portable is a term derived from portability. This factor shows that how a reference is explained in various problem statements regarding various time spans. This factor relies on five different attributes which show the portability of a same reference in different problem statements can be very same, likely to be same, not same or in a certain manner. The reference varies between these attributes. The interpretation regarding portable is within a time line either it is quoted in any time space, (Skemp, 1917)(Sohail, 2014). Here in the above table 15, the reference of 1980, 2007, 1997 showing the detail which is use in national publication and its citation also available on national level while on the other hand in the other reference which is used in 1909 and 1929 are use in international publication and while their citation also available at the international level and national level. In the second reference which is related to the Multani stories collected and translated, in this the reference of 1914 and 1901-02 available in national level in subcontinent and the reference of 1987,1893, 1805 are available in the verbal/ oral level publication and the citation also not available in international or national level.

Factor	Reference												
Reusability	Sr.	Nature of Subject	Age of Reference	1	Publisher	16	Citation						
	No		CARDING COMPANY AND A COMPANY	International	National	Verbal/Oral	International	National					
	1	Qualitative' Gender in Oral History : A Critical Analysis of F.W. Skemp's. Multani Stories	1980 (Neutral)		✓ (Yes)			✓ (Yes)					
			2007 (Neutral)		(Yes)		-	V (Yes)					
			1997 (Neutral)		(Yes)			V (Yes)					
			1909 (Strongly disagree)	V (Yes)		5. -	✓ (Yes)	V (Yes)					
			1929 (Strongly disagree)	V (Yes)			✓ (Yes)	Y (Yes)					
	2	Multani Stories collected and translated by F.W. Skemp, 1917	1914 (Strongly disagree)		✓ (Sub-Continent) To some extent		V (Yes)						
			1787 (Strongly disagree)			✓ (Sub- Continent) No	Nil (No)	Nil (No)					
			1893 (Strongly disagree)			✓ (Sub- Continent) No	Nil (No)	Nil (No)					
			1805 (Strongly disagree)			✓ (Sub- Continent) No	Nil (No)	Nil (No)					
			1901-02 (Strongly disagree)		 (Sub-Continent) To some extent 	6. (1995) 6.		✓ (Yes)					

Table.16Relationship of correctness with reusability



Reusability is such a factor which determine how and where to reuse a reference on the basis of its age. It is simple phenomenon, more the age of the reference less it should be used. And if an aged reference is quoted then it should be scaled regarding it's usage in terms of applying Likert scale explained as strongly agree, agree, neutral, disagree and strongly disagree. One thing is to be seemed that the factor of reusability is dependent on other factors of the model which includes usability and reliability, (Sohail, 2014) (Skemp, 1917). Here in the above table 16, the reference of 1980, 2007, 1997 showing the detail which is use in national publication and its citation also available on national level while on the other hand in the other reference which is used in 1909 and 1929 are use in international publication and while their citation also available at the international level and national level. In the second reference which is related to the Multani stories collected and translated, in this the reference of 1914 and 1901-02 available in national level in subcontinent and the reference of 1987,1893, 1805 are available in the verbal/ oral level publication and the citation also not available in international or n ational level.

Factor	Refe	erence	rence										
Interoper	Sr.	Nature of	Age of Reference		Publisher		Citation						
ability	No	Subject		International	National	Verbal/Oral	International	National					
	1	Qualitative/	1980 (Stimulate)		✓ (Yes)			✓ (Yes)					
		Gender in	2007 (Response)		✓ (Yes)			✓ (Yes)					
		Oral History	1997 (Response)		✓ (Yes)			✓ (Yes)					
		: A Critical	1909 (Stimulate)	✓ (Yes)			✓ (Yes)	✓ (Yes)					
		Analysis of F.W.	1929 (Stimulate)	✓ (Yes)			✓ (Yes)	✓ (Yes)					
		Skemp's. Multani Stories											
	2	Multani	1914		✓ (Sub-Continent)		✓ (Yes)						
		Stories	(Response)		To some extent								
		collected	1787			✓ (Sub-	Nil	Nil					
		and	(Stimulate)			Continent)	(No)	(No)					
		translated by				No							
		F.W. Skemp,	1893			✓ (Sub-	Nil	Nil					
		1917	(Stimulate)			Continent)	(No)	(No)					
						No							
			1805			✓ (Sub-	Nil	Nil					
			(Stimulate)			Continent) No	(No)	(No)					
			1901-02		✓ (Sub-Continent)			✓ (Yes)					
			(Response)		To some extent								

Table.17Relationship of correctness with interoperability

In above table the factor of interoperability basically consist on the age of reference regarding its use in that time span when any particular subject was under seen. Here in the above table 17, the reference of 1980, 2007, 1997 showing the detail which is use in national publication and its citation also available on national level while on the other hand in the other reference which is used in 1909 and 1929 are use in international publication and while their citation also available at the international level and national level. In the second reference which is related to the Multani stories collected and translated, in this the reference of 1914 and 1901-02 available in national level in subcontinent and the reference of 1987,1893, 1805 are available in the verbal/ oral level publication and the citation also not available in international or national level. Interoperability has two variations either it is stimulated or it is in a responsive manner. The concept of stimulation is in which the age of the reference is above than 20 years, whereas the term of response indicate such a reference which can interact with the facts of grounded theory and has a prominent aspect (response) in that era. Response will be within the age of 20 years and will show a positive effect on today, (Skemp, 1917)(Sohail, 2014).

Factor	Reference												
Understand	Sr. Nature of		Age of Reference	1	n - 0	Pu	blisher	A432-3	0.010 32	Citation			17 - D
ability	No	Subject		Internat	ional	Nation		Verb	al/Oral	Internat	ional		tional
	1	Qualitative Gender in	1980 (Moderately comparable) 2007 (Moderately			~	(Yes)					1000	(Yet)
		Oral History : A Critical Analysis of	2007 (Moderately comparable)				(Yes)					~	(Yes)
		F.W. 5kemp's. Multani	1997 (Not at all comparable)			~	(Yes)					*	(Ves)
		Stories	1909 (Not at all comparable)	*	(Yes)					1	(Yes)	*	(Yes)
			1929 (Not at all comparable)	~	(Yes)	Socialization	an a			~	(Yes)	1	(Yes)
	2	Multani Stories collected and translated by F.W. Skemp, 1917	1914 (Extremely comparable)				Continent) me extent			-	(Yes)		
			1787 (Not at all comparable)						ub. sutinent)	CN CN			(No)
			1893 (Not at all comparable)			5		× (8	ub- entinenD	No.			Nil (No)
			1805(Not at all comparable)			0 1907 - 382 C		V (8	ub- ontinent)	No.			Nil (No)
			(Moderately comparable)				Continent) me extent					1	(Yes)

Table.18Relationship of correctness with understandability



Understandability is a factor which helps the researcher to understand the importance of any reference in his work. Here in the above table 11, the reference of 1980, 2007, 1997 showing the detail which is use in national publication and its citation a lso available on national level while on the other hand in the other reference which is used in 1909 and 1929 are use in international publication and while their citation also available at the international level and national level. In the second reference which is related to the Multani stories collected and translated, in this the reference of 1914 and 1901-02 available in national level in subcontinent and the reference of 1987,1893, 1805 are available in the verbal/ oral level publication and the citation also not available in international or national level. Understandability acquires such modules which show a comparison statement regarding the age of a reference these comparisons are to be extreme, moderate and not comparable. This comparison of the understating regarding any reference is done which respect to the need of the time. This need of time is separated in a sequence regarding today. Understandability is such a factor which is dependent on its own and is based on the need of the researcher, (Skemp, 1917)(Sohail, 2014).

Factor	Reference												
Modifi	Sr.No	Nature	Age of Reference		Publisher		Citat	ion					
ability		of Subject		International	National	Verbal/Oral	International	National					
	1	Qualitati ve/ Gender	1980 (Moderate) 2007(Moderate)		✓ (Yes) ✓ (Yes)			✓ (Yes) ✓ (Yes)					
		in Oral History :	1997 (Easily)		✓ (Yes)			✓ (Yes)					
		A Critical Analysis	1909 (Easily)	√ (Yes)			✓ (Yes)	✓ (Yes)					
		of F.W. Skemp's, Multani Stories	1929 (Easily)	✓ (Yes)			✓ (Yes)	✓ (Yes)					
	2	Multani Stories collected	1914 (Easily)		 ✓ (Sub-Continent) To some extent 		✓ (Yes)						
		and translated	1787 (Easily)			 ✓ (Sub-Continent) No 	Nil (No)	Nil (No)					
		by F.W. Skemp. 1917	1893 (Easily)			 ✓ (Sub-Continent) No 	Nil (No)	Nil (No)					
			1805(Easily)			✓ (Sub-Continent) No	Nil (No)	Nil (No)					
			1901-02 (Easily)		 ✓ (Sub-Continent) To some extent 			✓ (Yes)					

Table.19Relationship of correctness with modifiability

Modifiability is that factor which is use in terms on the modification of any reference with today passage of time. This modification is done time to time by looking at the concepts of grounded theory in today's sphere. Today sphere describes what the needs of research in the existing environment are. Modifiability has the attributes of any reference to be easily modifiable will have a large age where as moderate and non moderate will be close to the existing time era. It to be seen that time and modules of modifiability have a inversely proportional relationship, (Skemp, 1917)(Sohail, 2014). Here in the above table 19, the reference of 1980, 2007, 1997 showing the detail which is use in national publication and its citation also available on national level while on the other hand in the other reference which is used in 1909 and 1929 are use in international publication and while their citation also available at the international level and national level. In the second reference which is related to the Multani stories collected and translated, in this the reference of 1914 and 1 901-02 available in national level in subcontinent and the reference of 1987,1893, 1805 are available in the verbal/ oral level publication and the citation also not available in international level.



5. Validation and Verification model:

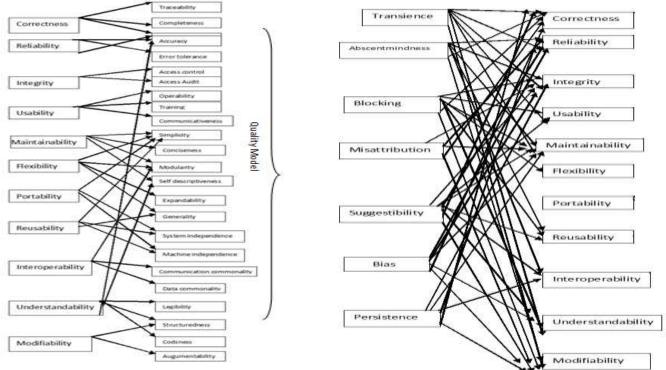


Fig 1. Verification and validation model

Conclusion:

In this study the workout regarding the verification and validation of the references which are used by the researchers of social sciences are seen in various situations with respect to the Age, Publisher and the Citation of the Reference. Giving a Model is an easy work to do but the main thing is to justify it. By applying test related to the Factor and the Reference a scale has been provided which varies from Factor to Factor and determines how to quote the reference. References in Social science related to a qualitative approach have a criterion of being from any age either old or new. To see the importance of judgment of giving the reference is determined by using a Quality Model. Such a model which verifies and validates the age of the reference to be quoted keeping in mind the signs of forgetting is given in a reachable and understandable manner for Social Scientists.

References

Kitchenham, B., Pfleeger, S. L. "Software Quality: the Elusive Target,"1996. IEEE Software, vol. 13, no., pp.

12-21.

Al-Qutaish, R. E., "Quality Models in Software Engineering Literature: An Analytical and Comparative Study," *Journal of American Science*, 2010. Vol. 6, no. 3, pp. 166-175.

Neuman.L. (1998). Social Research Method qualitative and quantitative approaches. University of Wisconsin at Whitewater.

Schacter, L. (n.d.). 'The Seven Sins of Memory Insights from Psychology and Cognitive Neuroscience. *Harvard University*, 54(3), 182-203.

Skemp, W. (1917). Multani Stories collected and translated. In Multani Stories . Government of Punjab Printing Press.

Sohail, K. (2014). Gender in oral History: A Critical Analysis of F.W Skemp's Multani Stories. Department of Gender Studies.