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Transforming Knowledge into Wisdom: a Grounded Theory Approach

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Abstract

Introduction:

The aim of this qualitative study was to analyze the process of transforming knowledge into wisdom. We aimed to understand the meaning of knowledge and wisdom, the ways how to transform knowledge into wisdom, obstacles and strategies to facilitate and accelerate access to wisdom and its useful role on the life and the role of books, libraries and librarians in transformation of knowledge into wisdom.

Research Method:

This is a qualitative study with grounded theory based on Strauss & Corbin model (1998). To collect data we used deep interview with 22 participants that were selected through specific criteria including 17 men (77.28%) and 5 women (22.72%) in purposeful theoretical method. The data were analyzed with three coding stages of Strauss & Corbin model (1998), open, axial and selective coding.

Results:

After analyzing data, about 300 open codes (concepts), and then 103 main categories were formed. Some core categories with their related sub-categories were gained that were ended in the main and last category titled: “the process of transforming knowledge into wisdom” based on the participants views.

Conclusion:

Internalizing of knowledge results in individuals and social behaviours or transforming knowledge into wisdom is based on understanding and discovery of facilitating and speeding up strategies of the process of transforming knowledge into wisdom to be able to observe wisdom behaviours in the society.

Keywords:

Data, Grounded Theory, information, Intellectuality, Knowledge, Process, Qualitative Research, Wisdom Introduction

Human requires knowledge and awareness for her/his life to enhance the quality and quantity of it. He needs an intellectual life based on knowledge, a life that practical knowledge results affects all its aspects and margins, comfort and peace, prosperity, peace and non-violence world exist there and is built on the basis of rationality, humanity, compassion, friendship and love. But it seems that we as the humans are not faced with an easier and happier life today and could not make a better life, I mean not in the ideal form but something better than what we have today.

Decisions have not become better and more satisfying, and we have not been more intellectual (Maxwell, 1984), we live in the world of information and knowledge, but it brings to mind that what we have done is not a satisfying life with all the information and knowledge. As Olalla (2006) says, it is enough to turn on the radio or television or to read newspaper headlines to be familiar with the problems and challenges that the humanity is faced with it, today.

According to Maxwell, from Kohn sayings, an intellectual revolution, but not a scientific one, should be happened. In his view, in the current researches the most emphasis has been performed on increasing and enhancing the knowledge itself that should be directed to logical researches based on what that can boost and shape individual and social wisdom (Maxwell, 1984).

McDonald (2001) has also stressed on the need for accessing wisdom and points out that most of us have knowledge, but a few of us have got wisdom and we have not reached to wisdom and intellectuality for directing a good and better life. Chang (2012) believes that transforming knowledge into wisdom at first is based on understanding the difference between knowledge and wisdom, more people as he says have not a deep and proper understanding of the two terms and the difference they have with each other, because they are inherently very close together in meaning.

He pointed out that knowledge must be learned and wisdom must be experienced and it is the proper use of knowledge; wisdom creates insight, vision and correct judgment. Now, this is the question that where the problem is, itself is the problem, I mean that the human is the real problem, or lack of knowledge and necessary tools and improper use of technology is the main problem?

Are the processes as the said problem? So, what is the solution, or the way out? Therefore, this research is to study and analyze the process of transforming knowledge into wisdom with Grounded theory approach, and providing appropriate strategies to facilitate and expedite the process based on the experts points of views.

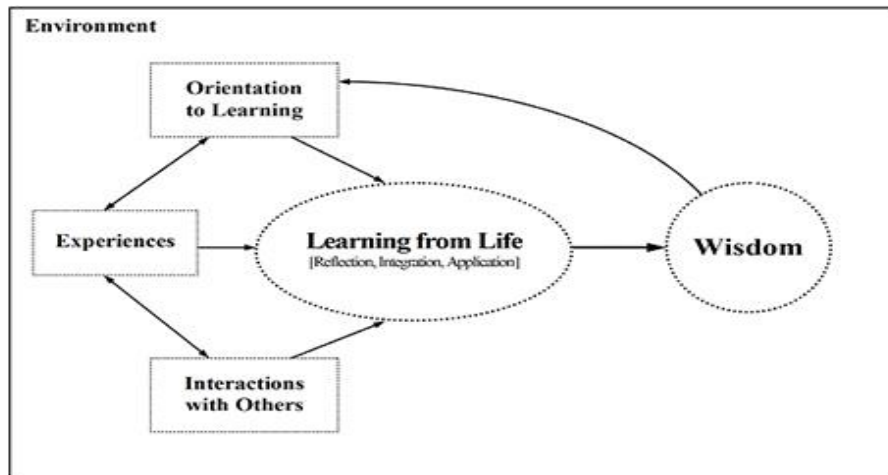


Fig. 1. Model of Wisdom Development (Brown, 2004)

Methods:

Since the purpose of our study was to analyze the process of transforming knowledge into wisdom from experts points of views and the development of a theory from the experiences and interviews with the participants, the qualitative methodology was used based on Grounded theory approach with Strauss and Corbin, 1998 model (Hariri, 1385). The study population was consisted of 22 participants selected by theoretical sampling method. Some criteria were used such as: 1. Age (criteria for age was being older than 35 years needed for assistant professor degree) and sex of the participants (male and female), 2. Have PhD degree or at least to be assistant professor and above) 3. To have Humanity fields degree 4. Having experience and history employment (employed for usually 5 years and more) and being retired (30 years of job services and higher) 5. Publication rate (Publishing at least 1 book or at least 5 articles) was considered for selection of the participants.

The data collection tool was deep interview. Theoretical saturation and repetitive interviews, were considered as the end of the interviews. After determining the person to conduct interviews and gaining the consent to perform an interview, appropriate coordinations was directed for performing the interview with him for the proper time and the right place.

After finishing the interviews, the audio recorded files and sometimes video interviews were converted into text files (verbatim) in separate files on the Word software and regularly using three-stage constant comparison coding and data analysis: Namely (a). Open coding (discussing, comparing, conceptualizing and categorizing data), b. Axial coding (re-accumulation of data in groupings based on relationships and patterns within and among the categories identified in the data), and c. Selective coding (identifying and describing the central phenomenon or "core category" in the data), was coded and then data analysis was performed. And then extracted and classified codes from each interview was returned back to the interviewee (reflex mode) to control and revise them. The steps of performing the research was generally as the following:

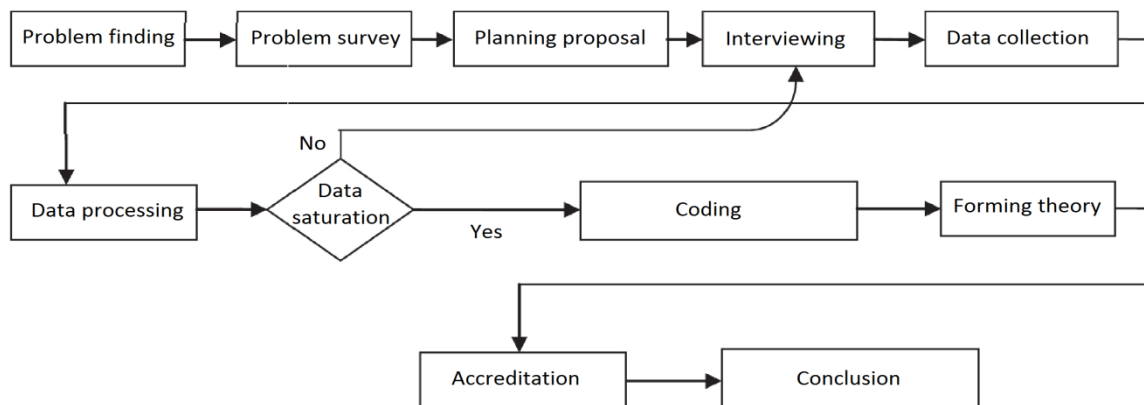


Fig. 2: The steps of performing the research (Rezaee Nour et al., 2015)

During the interviews, according to the interview methodology, some questions and necessary key words such as Who? where? what? How? How much? Why?, were asked to deepen the interviews according to Shiri comments (2009). The interviews duration time was lasted from 40 to 60 minutes.

Recording method of the interviews was conducted by a small electronic voice recorder with high volume, clear sound and with encoding ability, start time, date and end of recording of the interview, the file type and file size.

SPSS software, descriptive statistics and frequency distribution tables were used to analyze demographic information and for encoding text data, MAXQDA-10 analytic software was used that 1200 initial open codes were emerged and then 300 open codes (concepts) and then they decreased or were limited to 103 main categories. Overall, the data were as follows during the analysis to become a theory.



Fig.2: The process of transforming knowledge into wisdom in Grounded theory method (Kousary et al., 2013)

The validity and reliability of the interviews was performed based on the proposed indices quoted by Guba and Lincoln (1994), or the four criteria of validity or acceptance, the confidence and reliability, verification capabilities (verifiability) and transferability (Atarodi et al., 2014, Streobert et al., 2007).

The researcher with carefully selection of the participants, a combination of data collection methods such as the use of deep interviews, making notes in the area, recalling, literature review and synthesis of the study fields, observations, tried in securing the accreditation of the data. The data was also controlled in terms of objectivity, transferability, fitness or ability of generalization. To reliable the interviews, we used intra-subject agreement method, based on the following Formula 1, two coders (evaluators), a professor of knowledge and information science and an MA in Persian language literature was requested to participate as our research partners (coder) in the study to recode three interviews which were checked anonymous.

Formula: 1

$$\text{intra-subject agreement} = \frac{\text{The no. of agreements} \times 2}{\text{The no. of total codes}} \times 100$$

Table 1: The results of validity rate between two coders (evaluators)

Row	The interview No.	The Total codes	The No. of Agreements	The No. of Non-agreements	Recoding Validity(%)
1	The 3 rd interview	60	23	3	76%
2	The 11 th interview	56	22	1	78%
3	The 21 st interview	32	13	0	81%
Total	3 interviews	148	58	4	78%

According to Table 1, the validity and reliability of codes on average was obtained 78% that was higher than 60% or the necessary amount said by Bazargan results (2009), so the reliability of codings could be approved.

Results

The participants were in total 22 individuals, including 17 (77/28%) males and 5 (22/72%) were females. All participants had Ph.D degree with a frequency of 22 (100%). The age range of the participants was 35 to 76 years.

Most of the age group were in 51-60 years with a frequency of 7 participants (31/81%). The mean age of the participants was about 54 years (53/68 years) with the standard deviation of 12/29. Most published papers was approximately 1,000 papers and the lowest number of the articles published by the participants in this study was 5 articles. Most published books by the participants was 60 titles and 1 as the lowest. In terms of employment, 16 (72/73%) were still employed and 6 cases (27.27%) were retired during data collection.

Table 2: The frequency distribution and frequency percent of the participants based on their academic rank

The participants Rank	Frequency	Percent	The cumulative frequency
Assistant Prof.	12	54.54	12
Associate Prof.	5	22.73	17
Full Prof.	5	22.73	22
Others	0	0	0
Total	22	100	22

Table 2 shows that the majority of the participants rank, 12 participants (54.54%), were assistant professor, 5 (27/73%) were associate professor and 5 cases (27/73%) were also as full professor. The results from the main data from the participants was as follows:

The first results of the interviews was to define the concept of knowledge and the way it was formed. About 50 open codes (concepts) and then 10 categories were extracted, such as: knowledge as the foundation for the formation of wisdom, acquired awareness, knowledge as life strategy and so on. In part (b) of the research first question, as: what is wisdom from the experts views and how it can be achieved? About 13 categories of more than 50 concepts was obtained. The categories such as: "the right decision at the right time, knowledge and transcendental and deep values, wisdom as behavioral deep knowledge, and so on".

From the research second question or "how knowledge is transformed into wisdom from the participants views?", 33 extracted concepts was limited to about 16 categories at the next coding in the study. Extracted categories were recorded in the axial coding of how to transform knowledge into wisdom from the experts point of views (Figure 1) as follows:

		Context ↓	
		Need to explore the process of transforming knowledge into wisdom God centeredness	
Causal condition →	Phenomenon →	Action/interaction strategies →	Consequences
To put advices into practice To reach the wise insight and attitude The need for application of knowledge The need for wisdom	The process of transforming knowledge into wisdom from the participants views	Interaction with the wise Free study of theoretical works and practical experiences of the wise A need to seminary and scientific demand Proper Education Establishing and activating of independent and goal-oriented social institutions Fostering critical thinking and questioning spirit Establishing a democratic educational system	Strategic Management and institutionalizing of knowledge and experiences Achieving to the way to transform knowledge into wisdom Achieving to wisdom
		Intervening condition ↑	
		To have a long and effective life A world in stability and peace	

Fig 1: axial coding of how to transform knowledge into wisdom from the perspective of the participants

Another question as the third question entitled: "Barriers or pathological process of transforming knowledge into wisdom from the participants views", were asked from them. About 41 open codes (concepts) and approximately 17 categories were extracted of the data. Some properties were also developed for each category. After the above questions, the fourth question as "the identified and appropriate measures and strategies to facilitate and accelerate

the transformation of knowledge into wisdom from experts views", was formed. From the said question also 75 concepts was obtained and then were limited to 25 categories. Table 3 shows an example of open coding, the impact and usefulness of wisdom on life from experts views, shows the research fifth question results in extracted concepts and categories.

Table 3: An example of open coding of effect and usefulness of wisdom on life

The Participa nts codes	Sample sentences	Concepts	Categories	Properties
FA1	Undoubt wisdom has impact on life	wisdom positive impact on life	usefulness factor in life	A successful sterategy
FA14	All people can not be wise, If they use the results, it will profit their lives	the usefulness of knowledge on life		
FT3	They show the true path of life	an Index and a leading for life	a proper strategy for life	A propper guide for life
FT3	The more the number of wise men of a society are, the more welfare and luck of the society will be	happiness of life	factor of happiness	To be blissful
NA17	Knowledge Translation to transform knowledge into wisdom for use in life of people should happen	applicability factor of life	the of making life wise	Being wise

Table 3 shows that from approximately 26 concepts, 11 categories in this case, according to the analyses was obtained. Some properties was formed in the same direction.

The sixth question was about the role of libraries, information centers, library and librarians in transforming knowledge into wisdom from experts views.

In this case, 25 extracted concepts were merged into 11 categories. 7 features was also made for these categories that was recorded in the table. The resulted categories included: "library as the base of studying books, resources and experiences of scientists and intellectuals, library as an encouragement factor for public reading, a place for leisure time and librarians as knowledge management operators" was some examples of the said categories. After open coding (tables) and axial coding (charts) and identifying the main categories, the final axial coding "**the process of transforming knowledge into wisdom**" was formed.

Figure 2: axial coding shows derived categories from open coding on the main category of "the process of transforming knowledge into wisdom" and also the subcategories relationship with the main categories.

Context ↓

		Personal Acquired knowledge/ wise and deep values/ behavioral deep internal knowledge/ need to explore the process of transforming knowledge into wisdom / need to identify barriers of transforming knowledge into wisdom / society awareness from the role of libraries in formation of wisdom	
Causal condition →	Phenomenon →	Action/interaction strategies →	Consequences
Need to basic and necessary knowledge / need of wisdom/ to put the advices into practice / need to use knowledge applicationally /need to reform personal and social behaviors / require some changes in attitudes and beliefs / need to know the cause of happiness /Need to recognize the role of libraries in transforming knowledge into wisdom / need to understand the role of librarians/ need for a rational life	The process of transforming knowledge into wisdom	Acquiring knowledge and information / personal knowledge / socialization of knowledge / institutionalization and internalization of knowledge / interacting with the wise / to motivate for seminary and scientific demand / proper education/ establishing purposeful, dynamic and independent social institutions / building democratic educational system / To do purposeful and community-based researches / to study and application of experiences and knowledge of wise men / simplification of knowledge results for easy access of the public / to make life wisdom / creation and strengthening of social participation / deep and effective use of library resources predisposing of wisdom / production and dissemination of right information at the right time / activity of librarians as knowledge management agent / to activate libraries for encouraging people to read books more	Acquiring knowledge/ understanding of the universe / to gain wisdom / knowledge/ strategical management and institutionalizing of knowledge and experiences / to achieve the the way to transform knowledge into wisdom/Facilitating and accelerating the pursuit of wisdom / Recognizing and understanding of the transcendent value of the human / effective management of knowledge and applying the results of it / special and deeper attention toward the humanities / Making education meaningful, structured and dynamic / Acquiring right strategy of living / Deep and effective use of library resources / access to required knowledge and attitude / Establishing of human transcendent values in the society
		Intervening condition ↑	unstable awareneses / demographic data /God-centered knowledge / Knowledge without wisdom / To have noble objectives / long and useful living of a person / security, stability and peace in the world / utilizing social media, cyberspace, publishing / type of library and its resources / amount of study and book reading

Fig 2: Axial coding of "the process of transforming knowledge into wisdom"

The findings from the performed interviews and analyzing data showed that "the process of transforming knowledge into wisdom" could be resulted as the main category (core issue) of this process, which is considered as the heart of our theory in the process of transforming knowledge into wisdom. It seems that achieving it requires removing barriers of the way and the process of transforming knowledge into wisdom with discovering and using rational and

wise strategies and solutions based on rational knowledge and wisdom and also through correcting the processes, as well.

Discussion:

At first, the participants demographic information were analyzed. In the study main data, the concept of knowledge and how it was obtained was asked from the participants, since Chang (2012), says that, transforming knowledge into wisdom at first is in deep understanding of the difference between knowledge and wisdom.

The participants definitions and concepts for knowledge and wisdom was in consistent with documentary and scientific resources, such as Dehkhoda Encyclopedia (2000), Oxford dictionary (2010) and Webster dictionary (2003). In the study of Abtahi, et al. (2007) had pointed to some elements and components of knowledge such as experience, truth, complexity, judgments, values and beliefs that was also in consistent with the results obtained in this study in most cases, but, in Abtahi, et al. (2007) study, judgments was diagnosed from knowledge components when in our study it was expressed for wisdom that it seems such so, because most researchers in this topics knew wisdom and rationality akin to judgement.

On the concept of wisdom and its formation, our results with the results of Malekifar (2006), Alidoust (2013), Oxford Dictionary (2010), Dehkhoda encyclopedia (2000) and Webster dictionary (2003) was in accordance and confirmed the core category of wisdom resulted in our study. But, Moradi (2015) knew wisdom a Qur'anic term that its wideness is far more than western wisdom. In next step, it was determined that for transforming knowledge into wisdom, it is needed to improve the attitudes of people that requires many components as was mentioned by the participants that was in consistent with the results of Salavati (2012), Elliott (1984) and Malekifar (2006). The researcher also found that human is looking for a way out of today chaotic and challenges.

Some obstacles and barriers showed themselves in the process that the participants pointed out to some issues of them such as: weakness of management and knowledge, improper attitude and poor vision, poor social interaction and sharing, inconsistent and confused world, lack of proper notification and malfunctioning social institutions that was in accordance with the results of other researchers such as Mahdipour (2000) and Hosseini (2011). The categories that participants offered as a solution to facilitate and accelerate the process of transforming knowledge into wisdom, such as creating a culture of study and reading, acquiring intellectuals and thinkers experience and application of research results, production and dissemination of knowledge and proper notification at the right time were a sample of the hundreds of issues relevant to our subject that was in accordance with the results of Mokhtari (2005), Bellinger (2004) and also Firouz Yamin (2004), which considered wisdom as the application of knowledge, together with developments, experiences, being expert and synergies to achieve objectives and also with Mazloun Khorasani, et al. (2010) which knew the way to wisdom or transformation of knowledge into wisdom maturity and having deep understanding. In addition, the participants knew wisdom as a guiding tool for life, prosperity factor, stability and sustainability of life, making the right decisions at the right time, of participation and social interaction factor and so on and also insisted on achieving and realization of these factors, to build a happy life that was in consistent with the results of Moshayekhi (2010), Kord-e-Nooghabi (2016) and Brugman (2006) studies and also approved the results of our survey.

It seems that wisdom is making a positive impact on life and a life that is not based on wisdom, will not be viable and may collapse soon. In this respect, another question was

formed that how was the impact of libraries and information centers, books, librarians and information agents on the process of transforming knowledge into wisdom?

The participants offered some answers in the interviews, showed that libraries and information centers have an effective role on knowledge sharing as management centers through storage and transferring knowledge to the right people at the right time and in the appropriate form. Yesterday librarians and knowledge experts of today, convert data into information with cataloging, organizing and producing metadata and help them on creation of knowledge and wisdom that the said results is in consistent with Fattahi (2003), Hormozi (2008), and sultani et al. (2015) results.

In addition, other properties obtained in the present study was discussed in the research results and other models such as the Moore model, the wisdom of Berlin Model, the model of data, information, knowledge, wisdom, models of psychology, philosophy and also other models, such as Matney et al. (2011), Christley et al. (2012), and Nelson (2002) was in consistent with our study results and confirmed it.

Conclusion:

According to the above results and the comments of the participants in this study, it seems that for achieving desired goals and facilitating the process, deep and universal studying in all cognitive, emotional, behavioral, attitudinal, educational, research, training, governance, management fields and honorable and also respecting human noble values based on divine religions and using technology tools in the desired and effectiveness form can be a hope for understanding and application of facilitating and accelerating strategies of transforming knowledge into wisdom process for applicational use of knowledge and its results properly and to be able to put its results into practice and action and make it more effective mostly in the behavior of human beings and in the society, as well. In this way we may be able to fulfill the process of transforming knowledge into wisdom through institutionalization and internalization of them.

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