Chapter 1
Introduction: An Overview of the Concept of Quality of Life

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Abstract The term '*Quality of Life*' comprises a complex and multidimensional concept, which is rather difficult to define, identify, categorize and analyse. It has vast scope and includes various elements of social, cultural, economic, political and environmental aspects. It is one of the important and challenging social issues of the twenty-first century. Quality of life does not remain the same in the whole life of someone, rather it varies from one stage of lifespan to another and from one type of spatial unit to another because every aspect of life of a person or persons is always influenced by the environment. The study of quality of life of the people of an area can be at any spatial level such as local, regional, national and international level. It can also be studied across social structure such as ethnicity, race, tribes, caste, religion, linguistic culture, gender, age groups, economic and cultural categories, etc. Quality of life of any person or persons of a defined region at a particular point of time is a composite picture of several objective and subjective or quantitative and qualitative variables. This chapter sheds light on the historical perspective, concepts and definition, dimensions, significance, determinants and method of measuring quality of life.

Keywords Multidimensional concept · Environment · Lifespan · Spatial level · Composite picture · Objective and subjective variables

1.1 Epitome

The phrase '*Quality of Life*' comprises a complex and multidimensional concept, which is rather difficult to define, identify, categorize and analyse. It has a very wide scope and includes various elements of social, cultural, economic, political and environmental aspects. This concept has been of great interest to the researchers, academicians, administrators, planners and government officials, because it is a key element of a sincere social planning, the aim of which is to promote and enhance

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the quality of life of the people by reducing the detrimental conditions of social inequalities or circumstances existing in the society. In fact, it is one of the important and challenging social issues of the twenty-first century. Quality of life does not remain the same in the whole life of someone, rather it varies from one stage of lifespan to another and from one type of spatial unit to another because every aspect of life of a person or persons is always influenced by the environment (the surrounding conditions or situation in which a person or group of persons live and spend time). Such surrounding conditions may be natural/physical, or human, or both together, which is being spoken of as *social milieus*.

In fact, the QOL can be considered as a universal concept which can easily be applied in the context of even a single person or persons or group of persons or people of an area at a given point of time. Therefore, a study of the quality of life of a person or persons or group of persons or people of an area can be at any spatial level such as local, regional, national and international level. For more detail, it can also be studied across social structure such as ethnicity, race, tribes, caste, religion, linguistic culture, gender, age groups; economic and cultural category and so on.

The quality of life is normally interpreted as the condition of life of each person or people of any area which results from the combined effect of a number of factors of ecological, demographic, social, cultural, economic and environmental aspects. The word 'quality' refers to that which makes a particular object what it is! It reflects in identity whereas life is considered as a state of existence of individuals. In view of the fact that quality of life of any person or persons of a society of a defined region at a particular point of time is a composite picture of several variables of objective and subjective categories or of quantitative and qualitative categories. In fact, the quality of life of both the rural and urban people remains as one of the important contemporary social issues in the world. This issue especially for the developing countries remains more crucial and challenging. Therefore, there is a need for an extensive research for more purposeful social planning.

This chapter sheds light on the Historical Perspective, Concepts and Definition, Dimensions, Significance, Determinants and Method of Measuring quality of life.

1.2 Historical Perspective

The following literature in chronological order right from the earlier to the recent period witnesses the development of the concepts of quality of life:

After having gone through the quality of life related literature, it was found that the work of Seth James (1889) was probably the first in the history of development of the concept of quality of life. While discussing the nature of ethical end or standard as social welfare, Seth James (1889, p. 43) stated that 'in order to an ethical theory, we must not regard the mere quantity, but also the quality, of the "life" which forms the moral end'. Seth through this study tried to reflect his premier idea among the scholars that both the 'quantity' and 'quality' of life should be taken into consideration from

the point of view of promoting welfare activities to enhance happiness or quality of life of individual members.

Ellwood, C. A. (March 1902, pp. 229–232) carefully went through and intensively studied the earlier works or writings of Aristotle (384–322 B.C.) and tried to reflect ideas or facts and philosophy which Aristotle wrote concerning the individual's 'good life' and 'living well' perceived in the organized 'household', 'village' and 'state' guided by the 'law' or 'science'. In Aristotle's view, the science of the household stands for the 'relations of master and slave, husband and wife, parent and children' and the art of money getting. Such philosophical ideas of him seem to draw attention towards the state or condition of life of an individual or group of individuals residing in the organized household, village, society and state. The art of possessing or getting money should also have a definite limit. The sum of money should be adequate for freedom and a happy life. But it should not be more because the money ends in living well. Everyone has desire to have a desirable life, i.e. a good or happy life and it is possible only by virtue of perfect society or social ethics. For this, a perfect state (the state having virtues of welfare to its people) or in other words, the state which is happy and doing well for 'good and happy life' and 'living well'. Such notions are closer to the concept of quality of life of the people of a particular spatial unit at a given point of time, though the words 'quality of life' was not mentioned in the works of Aristotle.

After integrating the literature concerning the definition and measurement of quality of life **Elyse W. K.** (May 1992, p. 1) found that the concept of quality of life was newer in comparison to the concept of public happiness which was popularly used as a measurable quantity by the political economists in the past. Elyse further pointed out that there is scarce literature about the exact time of the origin of the term 'quality of life'; however, the wider use of quality of life started from 1961, the year during which this term was used in a speech of President Lyndon Johnson. Initially, 'the term was used most often in conjunction with such concerns as environmental pollution or urban deterioration, the context within which it is now used in much broader' scale and received greater attention by the scholars and researchers of different disciplines at global level.

The idea of **Meeberg, G. A.** (1993, pp. 32–38) is almost similar to that of the above. Meeberg also considered quality of life as 'a phrase which was first used shortly after the Second World War and has, since then, been overused and infrequently defined'. Most of the attempts to deal with quality of life occurred in the 1960s.

After consulting relevant literature **Farquhar, M.** (1995, pp. 1439–1440) stated that the term 'quality of life' became more popular after the Second World War. The popularity was increased 'through a range of media from television and magazine advertisements to political speeches and newspaper headlines'. Realizing the importance of this quality of life was given a place 'in the report of President Eisenhower's Commission on National Goals in 1960' with a major focus on objective indicators relating to education, economic growth, health, welfare and the defence of the non-communist world. The late 1960s saw a major shift from the objective indicators to subjective indicators such as 'personal freedom, leisure, emotion, enjoy-

ment, simplicity and personal caring'. The term 'quality of life' was commonly used in speeches and emphasis was given on research in the social and medical science subjects such as sociology, psychology, medical and nursing science, economics, philosophy, history and geography. **Farquhar** also mentioned that from the mid-1970s the term 'clinical interventions' concerning health was also used in the field of medical science along with the increasing importance and use of quality of life in social science. But, in fact, medicine and nursing science focused mainly on quality of life related to health to examine only one domain of quality of life, i.e. physical functioning.

The views of **Roy, I. B.** (1997, p. 229) was similar to that of the above as he also mentioned that prior to the concept of quality of life the term 'life quality' was articulated in the early 1960s and this was first indicated within the 'Report of President Eisenhower's Commission on National Goals', published in 1960 that included concern with individual's views on such issues as health and welfare. Latter in **1964**, **Lyndon B. Johnson** made a speech in which he coined the term quality of life and made clear the distinction between objective and subjective components.

Bowling, A. (1999, p. 10) tried to focus on evaluating and measuring health-related quality of life and while doing so he pointed out that the 'quality of life was introduced by Medline as a heading in 1975, and accepted as a concept by Index Medicus in 1977'. He also mentioned that right from 1970s there had been 'an explosion of interest in the subject, with an increasing number of citations of quality of life in the medical literature'.

Smith, A. (Nov 2000, pp. 2–5) noted that the concept of quality of life was found related to Aristotle's (384–322 B.C.) ideas of 'the good life' and 'living well'. After searching literature, Allison found that 'the first use of the term quality and life was found in an article written by James Seth in 1889 (p. 43)'. Seth believed in morality and put forth the statement that while talking about quality of the 'life' one must consider both the quantity and quality domains of life. Quality of life emerged as an important concept particularly in the second half of the twentieth century. Smith emphasized that the use of the word quality of life in both official and non-official discussions as well as global curiosity of research grew from 1950s. Latter in 1994 several countries such as Denmark, Canada and United Kingdom laid much more emphasis on the study of quality of life and started quality of life research centres, funds were generated and studies carried out for enhancing the quality of life of the people. In addition to such attempts, the World Bank, World Health Organization and the United Nations were also actively engaged in enhancing the quality of life of people of developing and war-affected countries.

After having gone through the literature related to quality of life, **Forward, S.** (Sept 2003, p. 5) stated that the concept of quality of life is not the exclusive result of the twentieth century, it has a link to the historic idea of Aristotle (384–322 BC) referring to the terms 'the good life' and 'living well'. He advocated that the quality of life became very interesting topic of research during the recent period of his work. He studied the work of Smith (2000, p. 4) and quoted that 'the term quality of life was first used in a statement by James Seth in 1889'. Smith himself noted this statement from the article of Seth, J. (1889, p. 43). Forward, Sonja also further

tried to make a temporal link with the advancement in the concepts of quality of life through his review of related literature between 1930 and 2002. After reviewing literature related to quality of life, **Massam, B. H.** (2002, p. 144) explained that from 1930s onward different researchers from different areas took an initiative and interest in 'defining, investigating and measuring QOL using different perspectives'. Particularly, 1933 was marked as an important year for William Ogburn (a sociologist from Chicago) who prepared the two-volume report on 'the recent social trends' for the Hoover administration and opened the way to appear the quality of life as one of the developmental items of the then government. Latter in 1960, the students of Ogburn made a significant contribution 'in the emergence of the social indicators' Sharpe, A. (1999, p. 6). Sharpe noted that this effort gave impetus to the blossom of the social indicators movement in the 1970s in dealing with the quality of life concept in social sciences. Similarly, Massam (2002, p. 144) also noted that development in the field of computer science in the 1970s helped increase social indicator and quality of life movement as well as creation of a specialized journal 'the social indicator research' as an important event. Forward, S. (Sept 2003, p. 5) took the idea from a Baltimore journalist and noted that the study of quality of life involves both the objective criteria such as 'income, education, crime rates, housing prices and infant mortality' and the subjective criteria such as 'people's feelings about their neighbourhood and the environment'. Some valuable works carried out before 1960 were also praiseworthy in the field of advancement of the concept of quality of life. The work of Samuel Ordway (1953) and Fairfield Osborn (1954) was also a step forward in the area of quality of life. (**Snoek, F. J**., 2000, p. 24) stated that **'**there is no certainty as to the origin of the term Quality of Life' but favoured the work of Samuel Ordway and Fairfield Osborn as a milestone in the field of quality of life. Further, he gave more emphasis on quality of life than that on the quantity of goods. **Forward, S.** (Sept 2003, p. 5) further noted that the scholars working in the field of quality of life between 1950 and 2000 gave more emphasis on the qualitative attributes of subjective category such as 'health, education, personal freedom, enjoyment and welfare' in defining the concept of happy and well life, rather than the quantitative or material indicators of quality of life. This caused more interest among the scholars to work in the field of quality of life. As a result, Denmark, Canada and United Kingdom established several research centres with a view to study the quality of life of their people. In addition to this, the World Bank, World Health Organization and the United Nations also worked and contributed a lot for the enhancement of quality of life of people globally.

Berlim, M. T. & Fleck, M. P. A. (2003, p. 249) have focused on the relation between the condition of life and health and described that in the earlier period the term 'good life' instead of the term 'quality of life' was commonly used by the experts of different disciplines. They considered that the 'concept of "quality of life" is a fairly new one'. According to them, the QOL became as a catchphrase in 1975 in medical literature but its effective and methodical study began in the early 1980s particularly in oncology and soon it came out into existence as a significant trait of medical examination related to disease and its treatment.

Similarly, **Pennacchini, M., Bertolaso, M., Elvira, M. M., & De Marinis, M. G.** (2011, pp. 99–103) mentioned in the abstract of their paper that the catchword 'quality of life' was popularly used in the literature of medicine and philosophy. Practitioners in medicine and philosophers started using quality of life as an indicator in dealing with health-related matters in the 1960s and 1970s. As a result, scientists working in the field of medicine and philosophy during these periods showed their enthusiasm in preparing and examining the tools or implements to be used in measuring health and quality of life. Nevertheless, such tools or implements were found lacking with some notional and technical difficulties in the use of quality of life in medical science. At the same time, some investigators regarded quality of life as a condition of individual life, whereas in the opinion of some others, it was found useful with a view to treat a patient, and therefore suggestions were made for the improvement in the concept and approach of the subject. Similarly, 1980s and 1990s also witnessed the difference of opinion among the thinkers and philosophers engaged in studying quality of life. Some scholars and philosophers in 1980s believed in the ethical decisions based on the expected outcome or consequences of the action. Such scholars 'used QoL to formulate moral judgment' and were known as the 'consequentialist philosophers'. As against them, the scholars of 1990s believed in 'health and happiness', the result of subjective approach and they were known as 'welfarist philosophers'. Thereafter, conceptual concern of scholars with regard to quality of life declined. But physician's interest in the use of quality of life in medical practices continued.

Fagge, R. (2012) wrote 'the Disillusioning of Mr. Priestely, Chap. 4' in which he stated that in 1953, J. B. Priestley told readers of the New Statesman that the 'The English People should have a good life', a statement that included an element of desperation as he believed that this good life was slipping further from view in the years following 1945. Priestley's wartime doubts about the saliency of the post-war world, and its ability to deliver a decent QOL for the people of Britain, hardened in the years that followed as he became progressively more disillusioned with the rise of mass society, the Cold War and pattern of domestic politics.

The work of **Kladivo, P. & Halás, M.** (2012, pp. 49–50) on quality of life is also important. According to them, the works on quality of life first appeared in the 1960s and the 1970s. The works carried out during these periods were from a psychological or an environmental side. The role of some geographers in studying social indicators of quality of life in spatial context was also important particularly during the 1970s. The work of Smith, D. M. (1973) on the geography of social well-being in the United States: an introduction to territorial social indicators and the work of Knox, P. L. (1975) on social well-being: a spatial perspective was very important.

El Din H. S.; Shalaby, A.; Farouh, H. E., & Elariane, S. A. (2013, p. 87) have tried to trace the history of quality of life concept and said that recently the 'quality of life' as a concept caused much inquisitiveness among the scholars. They advocated that quality of life is formally or practically the result of the study of the scholars of the last century; however, its concept reflects the idea of 'the good life' and 'living well' developed by Aristotle during 384–322 BC. Like Allison Smith, Forward, S. and others, they also mentioned that the idiom 'quality of life' was first developed and used by Seth, James (1889, p. 43). Seth, James also emphasized that in the study

of quality of life both the quantitative and qualitative dimensions of quality of life should be given importance.

The chronologically arranged quality of life related studies as carried out by the above scholars show that it was **Seth, James** who formally used first the term 'Quality of Life' and this should be considered as a benchmark in the history of development of the idea of quality of life. However, some other studies from the above provide an idea that the concept of QOL practically and pronouncedly emerged during the 1960s and 1970s. This is also noticed that medical researchers and scientists have taken more interest in the study of quality of life and that is why there is dominance of scholarly literature on quality of life in the field of medical science. They have also used quality of life as an instrument in measuring health, disease and illness. Towards the end of twentieth century, there was greater attention on the status of health rather than simply on quality of life. As a result, many researchers in the field of medical and nursing science gave much more emphasis on 'health-related quality of life' as against the term 'quality of life'. But now in modern time, the study of quality of life has become interdisciplinary and has spread to science, medical science, technology, social science, environmental science, etc. More specifically, the study on quality of life is being carried on in economics, geography, sociology, philosophy, psychology, anthropology, environmental studies, home science, social work, social policy and in different subjects of medical and nursing science.

1.3 Concepts and Definition

Concepts stand for abstract ideas or underlying facts as primary characteristics of a concerned subject. Cognitive psychologists and philosophers assume concepts are the basic constituents of thought and belief. Concepts allow one to sort objects, properties, events and relations into classes on the basis of shared features thereby allowing a person to think about an item in a manner that abstracts from many of the particularities of the specific item. Thus, concepts allow us to create a knowledge base from our past experiences and provide an organizational structure for that knowledge base. Definitions function to fix meaning of a word or phrase in the context of some language thereby eliminating vagueness and/or ambiguity. In other words, definitions function to try to minimize vagueness and ambiguity in argument and discourse (Wallis, C., 2015, pp. 1–28).

The term quality of life has been in practice for a long time as a focal theme of research in several subjects but yet there is no unanimity among the scholars regarding its concrete definition. Quality of life is a complicated and multidimensional frame and needs various approaches from varied viewpoints. Several scholars from different disciplines have made their efforts in defining the word quality of life. Following literature shed light on the concepts of quality of life:

Stanley, M. G. (1973, p. Foreword) took into consideration the notion of quality of life as an expression of well-being of a concerned person. In other words, it is an individual's opinion about his/her well-being (the source of happiness in a given

environment) that results from the function of a combination of several quantitative and qualitative attributes. Personal opinion about happiness may not be always the same because a set of things causing one's happiness changes from one point of time to another even at the same place.

According to **Symposium Planning Group** (1973, pp. 1–4), the quality of life refers to the subjective condition of an individual and can only be partially explained by using such terms as trained, happiness, educated, welfare, self-fulfilled, satisfied, reason, purpose, etc. The same holds true of their opposites: discontent, illiterate, frustrated, apathetic, alienated, etc.

Similarly, **Andrews, F. M.** (1974, pp. 280–381) focused on well-being and stated that it is largely perceived to denote the grade of condition of life, the result of the pleasure, happiness, satisfaction, etc. a person gets, enjoys, feels and experiences in the part of life spent. Various miseries in the life of someone also happen and negatively affect the quality of life which the concerned person can refrain. Andrews, Frank M. further considered well-being/quality of life as a result of the interplay of both the objective and subjective criteria/indicators. According to him, the objective indicators consist of 'counts of various types of phenomena' and subjective indicators include 'people's perceptions and feelings'. In broader sense, objective indicators are considered to include the quantitatively measurable criteria 'such as crime rates, population densities and unemployment figures'. Such population components can be directly measured and quantified and can be used while evaluating quality of life of people of a given area at a given point of time. As against this, subjective indicators include those phenomena in measuring well-being or quality of life which are based on the statement of individual's 'perceptions, feelings, responses, and the like'.

Kladivo, P. & Halás, M. (2012, pp. 49–60) laid emphasis on the subjective (endogenous) and objective (exogenous) approaches to the study on quality of life. Subjective approach deals with the subjective dimension relating to feelings, perceptions, opinions and such other phenomena of a person(s) and objective approach deals with the objective dimension relating to a wide range of quantitatively countable parameters of quality of life. From this point of view, these two are also called as subjective and objective dimensional approaches to the study of quality of life. In other words, quality of life is a result of the multiple indicators of subjective and objective types relating to demographic, social, cultural, economic, psychological, political and environmental dimensions.

The concept of quality of life as explained by the **World Health Organization** (1976, p. 312) is succinct, clear, meaningful and important and encompasses the broad range of elements determining quality of life. WHO defined quality of life as the state of life that results from the 'combination of the effects of the complete range of factors such as those determining health, happiness (including comforts in the physical environment and a satisfying occupation), education, social and intellectual attainments, freedom of action, justice, freedom of operation'.

Flanagan, J. C. (1978, pp. 138–147) also focused on the objective and subjective indicators of measuring quality of life. According to him, the former includes income, marital status and such other elements, whereas the latter includes happiness, life

satisfaction, contentment, pleasure and such other elements forming quality of life concept.

George, L. K. & Bearon, L. B. (1980, pp. 6–7) are also of the same opinion as mentioned above. According to them, there are four important aspects in the concept of quality of life of the people of an area. The two of them belongs to objective and reflects statistically quantifiable aspects and the other two belongs to subjective category and mirrors the personal assessment of the life condition. The four basic aspects according to them are the status of health, socio-economic status, life satisfaction and self-esteem. Although, it cannot be claimed that only these four components would be sufficient to completely evaluate the status of quality of life, these four are from among the unlimited number of components of quality of life.

The study of **Nagpal, R. & Sell, H.** (1985, pp. 1–2) on subjective well-being as a measure of quality of life has been very popular and quoted in the work of several scholars. According to him, the quality of life concept includes several occurrences happening in the part of life spent by someone and cause positive or negative effects in terms of pain and pleasure, happiness and unhappiness, limitations and freedom, mental, physical, social, psychological well-being or ill-being. In fact, the quality of life of a person or persons or people of an area can be judged on the basis of subjective responses concerning varied life aspects determining condition of life of the same person or persons or people. Nagpal and Sell consulted the works of some other scholars such as Andrews, F. M. & Withey, S. B. (1976), Campbell, A. & Converse, P. (1970) and Najman, J. M. & Levine, S. (1981) and stated that the quality of life is 'a composite measure of physical, mental and social well-being as perceived by each individual or by each group of individuals, and of happiness, satisfaction and gratification involving mainly such non-esoteric life concerns as health, marriage, family, work, financial situation, educational opportunities, self-esteem, creativity, belongingness and trust in others'.

Valentei D., Kavasha, A. & Ivanov, S. (1986, pp. 8–9) considered quality of life as a result of the type of vital functions and interpreted it in quite different ways. According to them, it is measured in the form of social stability of health, cultural and occupational skill levels, mobility in the labour sphere and so on.

According to **Lawton, M. P.** (1991, p. 6), quality of life is an outcome of the combined function of various objective and subjective aspects and is considered to involve multi-dimensions. It is normally evaluated on the basis of an assessment of personal perceptions as well as social and economic criteria applicable to the persons under investigation.

Qasim, S. Z. (1993, p. viii) considered 'quality of life' as a holistic one which encompasses not only the physical and economic improvements but also the social, cultural and even perhaps the political ideas of community. He included per capita income, life expectancy, levels of education, communication facilities, transportation, health and hygiene, energy availability, etc. as various aspects of development in measuring condition of life.

The World Health Organization Quality of Life Group (1995, pp. 1405) tried to highlight the three distinctive features such as subjective-concerning individual's opinion regarding self-health functioning or state of health; multifaceted-concerning

condition of physical health, psychological condition, social condition and faith in spirituality and religion composing condition of life and positive and negative characteristics of quality of life. In extension of such facts, quality of life is defined as 'individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns'. In fact, the concept of quality of life has a very wide scope of combining several complicated domains such as state of physical health, psychological state, extent and degree of freedom, state of relation in the society, faith and acceptance in spiritual and religious activities as well as adaptation to the prevailing environmental condition. In brief, the quality of life, according to WHO Group, is subjective and involves diverse aspects of positive and negative nature, for instance, pleasure and pain, happiness and unhappiness, satisfaction and dissatisfaction, contentment and discontentment, comfort and discomfort, dependence and independence and the like, and is called as multifaceted concept.

The approach of **Farquhar, M.** (1995, p. 1440) about the concept of quality of life is to some extent different from the others. He asserted that the quality of life is defined differently by different experts and noted that it is a complicated notion because varied persons look differently and incorporate dissimilar matters. Likewise, Aristotle's interpretation about the good life describes that every individual considers and evaluates different items differently at different points of time owing to situation in which the concerned person live. In other words, meaning of quality of life varies in terms of its conception. Some researchers consider several general measures and some other particular measures.

Shookner, M. (15 Oct, 1997, p. 5) has made an attempt to define quality of life in his own way. According to him, it can be defined as an outcome of the role of interconnections of sociocultural-, economic-, health- and environment-related situation that influence humans and the process of change in the society.

Nussboum, M. C. & Sen, A. (1999 p. 3) stated that a person's life can be perceived as a result of the amalgamation of 'various doings and beings' (commonly known as functionings) and include basic and complicated elements such as well-fed, disease-free, having self-esteem, maintaining human nobility, participation in community activities, etc. Nussbaum and Sen, however, have not directly used the word 'quality of life' but different basic and complicated elements reflect the idea of quality of life. Brock, Dan (1999, p. 96) has used the 'concept of a "good life" to refer to the quality of life of persons in its broader interpretation', (in Nussboum and Sen 1999).

Smith, A. (Nov 2000, pp. 5–6) noted that there is no universal definition of quality of life which can please every researcher working in this field. This is because of the fact that different scholars/researchers have taken into account different elements or phenomena related to condition of life from different angles while defining quality of life.

The view of **Massam, B. H.** (2002, pp. 143–145) regarding the definition of quality of life is almost similar to that of the above. He stated that there is slight consensus amidst the researchers and other experts with regard to the exact definition/meaning of quality of life. Even despite this, numerous documents mention the quality of life as a consequence of the combined role of sociocultural, economic, environmental

and other conditions. It is also considered as the cause or source of an idea or opinion of someone about the quality of life where such notions and views can impact the well-being of people of a place. He further reviewed related literature and noted QOL in terms of pleasure, comfort, contentment in one's life and other characteristics such as needs and desires, aspirations, life styles preferences, existing social and economic activities, climate, equality of cultural institutions, etc. determining condition of good life.

Similarly, **Berlim, M. T. & Fleck, M. P. A.** (2003, pp. 249–252) also stressed that there is no final yardstick for measuring QOL. According to them, there is no any exclusive meaning of the word 'quality of life', especially in the field medical science. Though, it has a very wide notion and includes different dimensions such as physical, psychological and social functioning as well as an understanding of state of health, discomfort, contentment and self-satisfaction concerning condition of life.

From the above literature, it is quite apparent that different institutions, scholars and researchers from science and social science subjects have viewed the concept of quality of life in different perspectives. Each has its own way of approaching the concept. An economist approaches it from a material well-being point of view and a sociologist looks from a social point of view such as differences in social identity. A psychologist has a cognitive way of viewing the quality of life concept, a political scientist looks at the freedom of political choice and participation, whereas a geographer views the concept of QOL from a spatial viewpoint to trace the spatial inequality in it. In fact, quality of life is all about the state of life—whether happiness or despair or satisfaction or dissatisfaction. Life may be full of happiness, if all the needs are fulfilled, it is happiness, and if not, it is despair. It is more of an abstract and subjective rather than an objective reality. The quality of life is, therefore, more a theoretical concept rather than an empirical one. However, it comprises three important dimensions of overall individual need satisfaction: 'having, loving and being' (Erik, A.,1999, pp. 89–94). According to him, *having* refers to the basic needs for survival, i.e. food–nutrition, air, water, resources, amenities and the like; *loving* is more of personal relations such as friendship, affection, love, belongingness and solidarity; and *being* as a dimension lies on the threshold of alienation and self-actualization. Therefore, quality of life is a complicated and multidimensional composition and involves diverse methods from varied conceptual points of view.

In **author's opinion,** the term quality of life stands for the state or condition of life of a person or persons or group of individuals of a particular place at a particular point of time. Generally, it is perceived in a positive sense. However, this is not the fact when one talks in terms of health-related quality of life which has been more popular in the field of medical science and psychology. Quality of Life in positive sense is meant to be free from functional defects or impaired functioning of both the body and mind of an individual. In other words, quality of life in positive sense is dealt with positive health the meaning thereof is a normal functioning of body and mind. Therefore, good quality of life is possible only when both the body and mind work in normal state or when both the body and mind work as naturally designed. But when the body and mind work with functional defects or impaired functioning, the quality of life is perceived in negative sense. This may result due to presence

of disease(s) or lack of congenial environment. Thus, good quality of life is the positive residual value or the surplus positive value remained after subtraction of negative composite score value from the positive composite score value of complete range of physical, mental, psychological, social, cultural, economic, political and environmental parameters or variables of both the objective and subjective nature applied for measuring quality of life. The reverse result stands for not good quality of life and shows lack of energy and resilience of the concerned person(s).

1.4 Dimensions of QOL

Dimension stands for the constituent elements or components or aspects or phenomena or any other characteristics of quality of life. Different dimensions and its interactive role determine disparity and variation in the level and state of life of population of a given place and time. Shookner, M. (15 Oct, 1997, p. 6) mentioned several aspects of quality of life which are related to society, economy, environment and a person's physical and mental wellness.

El Din H. S.; Shalaby, A.; Farouh, H. E., & Elariane, S. A. (2013, pp. 89–92) were of the opinion that quality of life involves several different subjects and aspects from the point of view of its study and that is why it is called as having multi-subject and multi-aspect notion. According to them, quality of life encompasses seven dimensions. These are *environmental dimension* that focuses on local or surrounding area's innate characteristics; *physical dimension* stands for facilities, social amenities and social fabrics, utilization of land, basic developmental structure and capital equipments; *mobility dimension* includes approachability, movement of vehicles and other transport-related problems; *social dimension* consists of those parameters which are related to interactive activities with the neighbours and involvement of people in decision-making activities in the community and society; *psychological dimension* relates emotion- and perception-related matters of people in the neighbourhood; *economic dimension* identifies and denotes neighbourhood with a viewpoint of economically gainful pursuits or employment; *political dimension* stands for plans, programmes, schemes of the local bodies and government and its implementation for underpinning the quality of public life. **Massam, B. H.** (2002, p. 145) reviewed several literature related to quality of life and came out with the two major aspects, namely, psychological and environmental. These two dimensions have special bearing on the state of life. In fact, the QOL of an individual depends to a large extent on the external or 'objective' evidence based on information related to material wealth of the same individual and internal or 'subjective' evaluation based on personal understanding or feelings about his/her life. In other words, the psychological dimension stands for individual/personal life quality, self-evaluated state of satisfaction in life and the environmental dimension refers to the quality of life of urban area, a community and a place. While explaining a methodology of measuring human health (**Sinha, B. R. K.**, 2015, pp. 228–232) focuses on different health-related dimensions and the same dimensions may be applicable in case of the study of quality of life.

Therefore, 'quality of life' includes several dimensions such as social, cultural, economic, political, demographic, psychological, environmental, physical and mental, positive and negative, spiritual, emotional, vocational, curative and preventive and other quantitative and qualitative dimensions of objective and subjective nature.

1.5 Determinants/Factors

Qasim, S. Z. (1993, p. x) pointed out that science and technology plays a crucial role in promoting the QOL. Similarly, **Mukherjee, P.** (1993, pp. 1–13) stressed on income, employment, alleviation of poverty, health, education, social amenities and related programmes because these aspects help improve quality of life, and hence there is need for proper planning of these aspects. In the same way, **Bajaj, J. S.** (1993, pp. 15–17) also considered health as an important factor that determines quality of life. He also considered stabilization of population as a prerequisite measure for the enhancement of quality of life. The basic needs such as health, drinking water, food and shelter play important role in improving and maintaining quality of life. **Menon, M. G. K.** (1993, pp. 42–55) took into consideration vocational education and training, employment, population, food and biomass production, water management, energy, transport, shelter and construction, information and telematics, regional holistic development in playing positive role in quality of life. **Sharma, S.** (1993, p. 261); **Naik, C.** (1993, p. 407) have considered the role of mental health and basic education in quality of life.

Shookner, M. (15 Oct, 1997, pp. 6–8) also tried to highlight the factors which normally affect the condition of life of the concerned person(s) and took into consideration the level of income, status in the society, supporting system of the society, job opportunity and working culture and environment, social conditions and natural environment as important determinants of quality of life.

Smith, A. E., Sim, J., Scharf, T. and Phillipson, C. (2004, pp. 794–801) tried to demonstrate the role of determinants in quality of life of persons of 60 and above years. They took into consideration the words variables, attributes, characteristics, factors and determinants as synonymous to each other for signifying the same meaning. To fulfil the objectives of their study, they selected seven factors, namely, 'socio-demographic characteristics, social support, health, material resources, crime, the residential neighbourhood and housing'. These factors/determinants are elaborated in detail in their Table-1(pp. 800–801). Further, they evaluated and explained the quality of life of older people on the basis of potentially more effective social cum demographic variables as well as objective and subjective variables. Social and demographic variables or parameters considered by them were age and sex (biological characteristics of population), marital status (married, unmarried, divorced, widow/widower), social class (profession-based economic activities requiring trained and experienced persons, administrative and bureaucratic personnel, mechanical and vocational persons, specific economic activities in which persons possessing particular skill(s) are gainfully employed), ethnicity, education, physical

as well as mental health. Objective criteria based evaluation of condition of life included availability of daily need items, for instance, level of income, availability of adequate food for daily consumption, indemnity for house property and possession of telephone; deprivation (items considered necessary but not available, for example, lack of room warming system, telephone and car service); participation in social activities, time spent in neighbourhood; house-related problems; victim of lawlessness; supporting system from society; illnesses or disabilities that restrict a person's activities in any way. Subjective assessment of quality of life involves opinion about penury; social isolation, which means feeling isolated from society; perception about own health; fear from crime; feeling of loneliness; perception about community integration; satisfaction with accommodation; satisfaction level with neighbourhood and ability to manage financial liabilities. In addition to such purposeful variables, some other relevant variables relating to the above domains may also be considered in measuring life quality of the concerned inhabitants.

Truly speaking, amalgamation of the above variables and their score values in composite form gives the output of overall subjective well-being or subjective quality of life. In other sense, QOL is an outcome or effect of the composite value of several variables or parameters which are related to social and demographic aspects as well as objective and subjective aspects. However, the state and level of life quality can differ from one place to another, from one type of environment to another (in terms of natural and human), from one type of population to another (in terms of social and economic groups/classes). It can also vary on the basis of questions designed or developed and methods adopted for field work, data collection and analysis. That is why, QOL is known as multidimensional.

1.6 QOL: Indicators, Constraints and Measurement

Conceptually, the word 'indicator' is meant to point out a related fact or state or level of something. In other terms, indicator is interchangeably used as an index or measure to unveil or exhibit both the quantitative and/or qualitative characteristics of related aspect(s) under study. This can be used in studying the state or level of given topic, e.g. health, quality of life, human development, human resource development, deprivation and happiness level or the like with reference to a person or group of persons or a place/region/state or a country at a given time (OECD 2008, p. 13). United States Agency International Development (2014, p. Introduction) considered that indicator is a kind of measure that can be directly or indirectly used to show the existing or expected condition or position of a trait or characteristic of a given aspect. Such aspect, e.g. may be related to people, geographical area, social, economic and political aspect, etc. Indicator may be of quantitative or qualitative nature, for instance, fertility ratio, general mortality or infant mortality rate, expectancy of life, etc. Indicator is a kind of sign that shows what something is or what something is likely to be. Actually, this may be anything or any element, e.g. low birth weight as a

question in the questionnaire that indicates the state of health. Therefore, an indicator is a general question and a means of information.

Prutkin, J. M. (2002, p. 19) explained some constraints in the way of measuring quality of life. According to him, an assessment or evaluation of quality of life is a tough task on account of involvement of several elements or factors of varied nature and role, importance, selection and applicability of indicators.

Similarly, **Saxena, S.; Chandiramani, K.; Bhargava, R.** (1998, p. 164) also expressed some limitations concerning quality of life measurement. According to them, the idiom 'quality of life' is frequently used as a concept but it is very vague because it involves diverse social, cultural, economic, regional and other aspects and that is why the measurement of quality of life through any designed or arranged schedule of questions in a precise form remains inconclusive. **The World Health Organization Quality of Life Group** (1995, pp. 1406).

The work of **Smith, D. M.** (1977, pp. 33–36) on the quality of life is highly appreciable as he considered different elements relating to improvement of the material quality (housing condition, resources), physical quality (health, reduced violence, preservation of the natural environment), mental quality (education, knowledge, cultural environment) and improvement in the spiritual quality (talents and capabilities, social harmony, moral and ethical stands) of life. Further, he prepared a list of several indicators relating to ecological, demographic, social, cultural, economic, environmental aspects in measuring the status of life quality of the inhabitants of a concerned region.

Jones, E. & John E. (1977, p. 234) also employed some criteria in measuring quality of life. These are per capita and household income, unemployment rate, housing cost, infant mortality, suicide rate, robbery, traffic rate, voting in presidential election, etc.

Ginsberg, E. (1980, pp. 3–4) stated that variation in the pattern of economic growth of an area is by and large a result of variation in qualitative aspects of its inhabitants. It is because of the fact that qualitative attributes of people of an area play a great role in the process of an increase in the level of peace, progress, prosperity and in turn life quality.

Mittal, L. N. (1993, p. 3) and Ghosh, A. K. (1993, p. 11) focused on literacy and education and equitable distribution of resources in raising the quality of life of the people.

Rajesh (1993, pp. 11–12) and Ramaswami, A. and Ram, N. V. R. (1985, pp. 72–73) revealed the importance and role of the quality of human resource (knowledge, skills, attitudes, vigour, attitude, capacity, etc.) and the development of human resources through formal and non-formal education, training, food and nutrition, etc. in maintaining and raising the quality of life of the people. Ramaswami and Ram further added habits, culture, environment, standard of living, number of children, expenditure towards children's education and health awareness, etc. as indicators of destitution and condition of life.

According to **Qasim, S. Z.** (1993, p. 57), GNP or per person income do not truly helps in meeting the basic needs of people. The needs could be many, besides food, clothing, education, health and transport. Maintenance of ecological balance and

human rights are as important as the other basic needs. Perceiving various dimensions of the issues of human needs and life quality one gets fully convinced that unless the question of population control is aggressively pursued and some stability is achieved, a real improvement in the quality of life is hard to accomplish. There is utmost urgency for the implementation of two components—literacy and availability of energy from the point of view of improvement in the quality of life.

Singh, N. K. (1993, p. 138) took into account income, employment, health, education, physical environment, human dignity and freedom as quantitative and qualitative indicators in measuring quality of life of the people. **Sarma, E. A. S.; Maggo, J. N. and Sachdeva, A. S.** (1993, p. 107) took into consideration life expectancy at birth, infant mortality rate, crude death rate, literacy rate, per capita income, number of hospitals and dispensaries, telephone exchange, post and telegraph office, per capita availability of food grains, population covered by radio, T.V. as indicator of quality of life.

Hussain Majid (1994, p. 230) has also considered population characteristics such as infant mortality, expectancy of life and literacy as important factors in promoting physical quality of life; however, he added GNP per capita, education and health also in evaluating physical quality of life of the targeted population.

Rajev, A. (2006, p. 143) noted that the spatial variation in the distribution of different urban social groups has been a major area of research among the scholars both in America and in Europe. Such variation not only determines the urban landscape features such as building density and house types but also variation in the quality of life.

Park, K. (2009, p. 16) expressed his opinion that the standard of living and quality of life are not the same rather both are different in its concept. Here, standard of living is basically the result of material-based resources and opportunities (measured by objective indicators), whereas quality of life is the result of a person's subjective assessment about his/her life. In other words, the measurement of quality of life is based solely on the personal opinion and evaluation about satisfaction in his/her life. The most convenient approach of measuring quality of life is to apply the composite index that is calculated on the basis of the sum values of a variety of physical and mental health and other aspect-related indicators. The basic objective of this is to perceive a life of peace, comfort and happiness.

1.7 Variables, Its Composite Measures and Computation of Quality of Life Index

Statistically, the term 'variable' may be a particular thing, element or attribute or a particular characteristic of quantitative or qualitative nature that is used in logical or mathematical calculation to show a variable quantity or quality with reference to a selected or given topic/aspect or task. It varies in situation, space and time. Age, height, eye colour, temperature, rainfall, production, labour input in terms of hours

worked, number of hours of television watched in a week or any other such traits are the examples of variables and can be counted or measured and observed. Sometimes it is necessary to make observation of attributes that are not easily observed, such as intelligence or health. These are multidimensional concepts that can be measured using composite variables (https://study.com/academy/lesson/composite-variable-definition-lesson-quiz.html). Composite variable is obtained by merging together the multiple variables (indicators) into a single one. A lone variable or indicator normally does not furnish the needed facts/data or information, but from the combination of two or more one can get meaningful information known as composite value or composite score. In other way, when such composite scores are used in measuring quality of life, it is called composite measures of variables (https://en.wikipedia.org/wiki/Composite_measure).

A 'composite index' is a result of the combination of two or more quantitative and qualitative variables and helps in understanding the status or nature of a subject under study at a certain point of time in an area. This, in other words, according to **United States Agency for International Development** (2014, p. Introduction), combines several particular measures and produces compound result of a complicated, multidimensional and purposeful society-related matters such as penury, rate of progress in mental and physical state, position of supporting capacity, etc. Separate parameter and group of yardsticks can be chosen, systematized and joined to provide subindices exhibiting the major elements or aspects to be examined and studied. For instance, educational subindex may combine measures like literacy, student's enrolment in school, achievement of education. A group of subindices may be combined or summed together to get finally the composite index. Human Development Index (HDI), e.g. includes three aspects of human well-being. These are related to health, education and income.

Composite Scores: After putting assigned positive or negative weight against selected variables of positive or negative nature related to social, cultural, economic, political, demographic, psychological, environmental, physical, mental, spiritual, emotional, vocational, curative and preventive aspects and so on, the total composite scores (an outcome of positive + negative scores) of all variables for each person should be found out.

Thereafter, the percentage of total positive or total negative scores for each person should be worked out. While doing so, the total composite scores (value of total positive and negative scores) should be considered as 100%. Later, Quality of Life Index for the positive and negative performances of each person should be separately calculated dividing the percentage of total positive or negative scores of each person by 100.

Finally, on the basis of variation in the **quality of life index** of the positive and negative performances among the persons under investigation a sequential arrangement of this in certain groups or levels at equal class interval in a convenient manner should be framed for tabulation, cartographic representation and interpretation.

1.8 Meaningful Framework of Positive and Negative Quality of Life Index (QOLI) and Its Level

Following arrangement, for example, can be made to provide a meaningful and acceptable framework for measuring and interpreting level of quality of life of the surveyed persons/individuals or population of an area at any given point of time.

For measuring **Positive Dimension** of Quality of Life, the Index and Level of it can be framed as

i. >0.80 (Very Good), **ii**. 0.61–0.80 (Good), **iii**. 0.41–0.60 (Average), **iv**. 0.21–0.40 (Poor) and **v**. <0.21 (Very Poor).

Similarly, with regard to **Negative Dimension** of quality of life, its level or status and index can be framed as

i. >0.80 (Very High Negative), **ii**. 0.61–0.80 (High Negative), **iii**. 0.41–0.60 (Average Negative), **iv**. 0.21–0.40 (Low Negative) and **v**. <0.21 (Very Low Negative).

Thus, the above approach is considered practically more realistic, appropriate and useful and can be conveniently used in order to fulfil the objective of researchers while working for an evaluation and interpretation of the status and levels of quality of life of the surveyed people/individuals from spatial and temporal perspective point of view. The same approach can also be employed in studying the levels and status of health or human resource development of the concerned person(s), group of persons or population of an area over a specific period of time.

Use: Such sequential arrangement of quality of life Index (QOLI) can be employed to explain the status of quality of life of individuals by age and gender, social class/group, race, ethnicity, religion, educational level, income level and by occupational categories in both the rural and urban areas.

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