
UNIT 27 SOCIAL NETWORKS

Structure

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27.0 OBJECTIVES

After reading this unit you should be able to:

- define a social network;
- describe the process of formation and operation of social network;
- discuss characteristics of personal networks; and
- show the relationship between personal networks and social structure.

27.1 INTRODUCTION

This unit follows those on social structure and social roles. It concerns social networks. Networks or social relationships between individuals are the smallest observable units of social behaviour. These are better known as *personal networks* which are, for purposes of study, extracted from the total networking in society. This unit discusses the process of formation and operation of social networks. After examining characteristics of personal networks the unit focuses on ego-centric personal networks,

and describes some problems in applying this idea to empirical research. Then, we examine the relationship between personal networks and social structure. This is explained in terms of relationships formed in formal organisations. We also discuss the ideas of resource networks and resource groups.

27.2 SOCIAL NETWORK : BASIC CONCEPT

The term “network’ has been added only recently to the vocabulary of sociology. It refers to the set of relationships or links, a person has with others. By the fact of birth, one automatically becomes a member of a family network. Then there are social networks which are created out of individual efforts e.g., membership of a club, a circle of friends and so on. The social networks are both structured and created. This means, that networks have a series of social relationships, ordered in a certain way, and secondly they are built by conscious efforts of individuals for certain goals. As such social factors influence the formation of networks, individuals also play an active role in their formation and continuity.

Social networks basically reflect the nature of links between individuals. That is, they show how individuals relate to each other. Those who can be trusted to provide support are recruited into a network, which then becomes a medium of mobilising resources. Defining networks in this way shows us how significant this concept can be for explaining social behaviour in any organisational setting.

27.2.1 The Total Network of Social Relationships

Society itself is visualised as a chain of social relations. This chain includes various kinds of relations, e.g., acquaintance, friendship, kinship, classmateship etc. Some of the individuals in the chain are in direct contact with each other, while others are linked only indirectly. A chain of social relationships among individuals has no boundary except that of the society concerned. The total chain of social relationships may thus be viewed as coinciding with society itself.

Activity 1

Do you think you are linked up with the wider world and societies? This world may include a range of relationships from your friends, family, kinsmen, etc. doctors, hospital staff, schools, teachers, etc. to the global level of influences on you and your people of other societies, such as, the American society, the British and so on through the mass media, satellite channels on T.V., E-mail or Internet Website etc. Write a report on “My Social Network” of about one page. Discuss your report with your fellow students at the Study Centre.

the basic unit of such a chain is the relationship between individuals. The *dyadic relations*, i.e., between two individuals, from the chain interconnected through the coupling links of individuals. We may, therefore, conclude that the concept of total network is oriented to the individual, and we can delimit and extract personal networks out of the total network. However, before discussing the types of social networks, let us first look briefly at the process of their formation and operation.

27.2.2 Formation and Operation of Social Networks

Right from one’s birth, each person becomes a part of a network. The immediate network of newly born human beings, is their families and kin groups. They are introduced to the social networks of their parents. As children grow, they develop social links with other children in the neighbourhood and school. They begin to look up to their peer groups. By the time they are adults, they are tied with wider networks,

formed on the basis of their profession in groups, social clubs, political parties, affinal relatives etc. The basic parameters of social status, such as caste, class, sex, education, occupation etc., determine how many and what type of networks would be formed. People with more resources and information usually have wider networks. Such persons are able to easily achieve their goals in their life.

The operational nature of social networks is diversified on the basis of social values, beliefs, norms, traditions and customs. Access to information, status and power are achieved through one’s social networks. Recent studies on the use of social relationships in finding jobs. Show that knowing people in right places, (also known as ‘source’) helps young people to find better jobs. The occupational status of the ‘source’ in such cases, is often linked with the status of the parents of those seeking jobs. In section 27.5.2 of this unit we will discuss the concept of ‘source’.

Check Your Progress 1

Note: a) Use the space given for your answer.

b) Compare your answer with the one given at the end of this unit.

1) What is the basic unit of a chain of social relationships in a society. Use two lines for your answer.

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2) When does the process of formation of a social network begin? use one line for your answer.

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27.3 TYPES OF SOCIAL NETWORKS

While defining social networks, we have discussed how the total network of chains of social relationships covers the society itself. To learn about the types of social networks, we need to focus on the basic unit of relationships between persons. Such personal networks can be extracted out of the total network. In contrast to personal networks, we can also discuss impersonal networks which are based on group relationships. Let us look at both of networks.

27.3.1 Personal and Group-based Networks

A personal network is a set of linkages which an individual establishes around himself. These linkages may be structurally diverse. Some may be based on kin or caste, while others may be based on classmateships, friendship, workmateship and so on. They possess the *morphological* characteristics of *density*, *reachability* and *range* (See Section 27.3.2). They possess also the *interactional* characteristics of *content*, *directedness*, *durability*, *intensity* and *frequency*. If a personal network has the additional morphological characteristic of *anchorage*, or an ego being the anchor of a personal network, then it becomes an ego-centric personal network.

In contrast to the personal network, the group or impersonal network is viewed in terms of the nature of interaction among its members, and in terms of incorporation of its members in the groups. In terms of interaction, we can characterise a group as an aggregate of persons who interact more with each other. Through these interactions

they form a unit, and identify the groups, and thus the members develop the consciousness of being together. In terms of incorporations, the group assumes more formal characteristics such as common interests, right and obligations of members, organisation and structure.

27.3.2 Characteristics of Personal Networks

Personal networks have morphological and interactional characteristics. Morphological characteristics help in the identification of the form of networks, while interactional characteristics of personal networks are discussed in terms of their constituents.

- i) **Morphological Characteristics :** Mitchell (1969) has identified anchorage, density, reachability and range as the morphological characteristics of personal networks:
 - a) **Anchorage :** The word anchorage indicates that the ego is the centre of his network. He or she is its coordinator. Without her or him the network will become amorphous. Thus, emerges an ego-centric personal network. However, an ego may form a personal network without becoming its coordinator. In fact, in a non-ego-centric personal network nobody may act as a coordinator.
 - b) **Density :** The density in personal network signifies the density of social relations. It can be gauged by the proportion of persons in a network, who know one another. For example members of a club have higher density than people in a crowd.
 - c) **Reachability :** The individual who can be relied upon to act as on the request of another individual is reachable or mobilisable. For example, a friend of a friend can be reached or mobilised by a person.
 - d) **Range :** The term 'range' denotes the limit of direct and regular contacts which an individual has. Thus, the total number of persons ego can contact over telephone, letter or personally, is that person's range of contacts. He or she must also be in touch with these 'contacts' regularly.

BOX 27.01

In this context, it is important to know that in the 21st century the very concept of 'network' has changed. It has expanded to include the world at large. This is because the new technologies of mass communication, such as, computers, Internet, E-mail, teleconferencing and so on has expanded the very notion of range and reachability. It is possible to chat with your pen-pal or childhood friend on the internet even though she or he may be sitting thousands of miles away from you. These developments have had a great impact on the very idea of social network.

- ii) **Interactional Characteristics :** There are five *interactional* characteristics. They are *content, directedness, durability, intensity* and *frequency*.
 - a) **Content :** It refers to the normative context in which an interaction takes place, such as friendship, classmateship, caste, membership, kinship etc. For example, family interaction has kinship content and family members behave towards each other on the basis of their kin relationships.
 - b) **Directedness :** *Directedness* means whether the relationship between ego and a member of his network is reciprocal or only one-sided. One

can, put it differently : whether the relationship flows from one direction or both the directions. For example, in friendship, the directedness is reciprocal.

- c) **Durability** : It signifies the continuity and stability of relationship over a period of time. A relationship is durable if interaction between two individuals continues over a period of time and vice versa.
- d) **Intensity** : Intensity refers to the degree to which individuals are prepared to honour obligations. If a member of an ego-centric personal network feels free to dishonour his or her obligation, (flowing from a favour done to him or her by the ego) the intensity of the relationship is low.
- e) **Frequency** : Frequency signifies the number of times the interaction occurs between two individuals. For example, if the individuals meet daily the frequency of their contacts, is high in contrast to a situation in which they meet only occasionally. The higher the frequency of contacts, the greater are the chances of intensity and durability of relationships.

27.4 EGO-CENTRIC PERSONAL NETWORK

It has been already mentioned in section 27.3.2, that a personal network may become an ego-centric network, when somebody emerges as the coordinator of a network. Here we have an example of the kind of problems sociologists face, while applying theory to empirical research. It is easy to define ego-centric personal networks, and identify their characteristics. But when one is conducting research, one encounters a number of problems, in describing the ego-centric personal networks of any individual actor. Here, we first give a definition of the ego-centric personal network, and then discuss the problems in applying this idea to a research situation.

27.4.1 Ego-centric and Non-ego centric Personal Networks Defined

An ego-centric personal network is anchored on an individual. It includes all those persons with whom he or she is in actual contact. Looked at from the point of view of the members of the network, the ego or the individual on whom it is anchored, is the common connection of all of them. It does not mean that it is the only personal network, and all these personal networks may or may not overlap. The following diagram explains the distinction between the two situations.

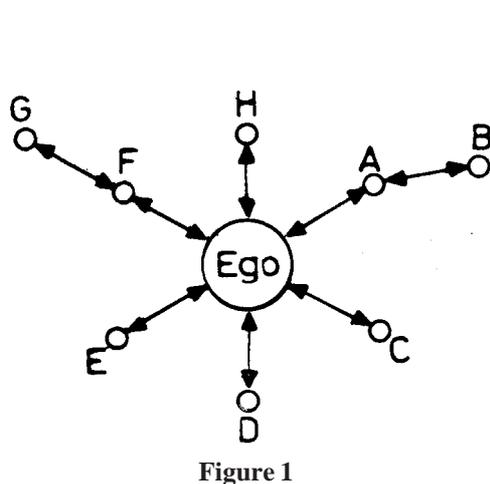


Figure 1

Ego-Centric Personal Networks



Figure 2

The dotted lines indicate the links of A in his ego-centric personal network

In Figure 1 of the above diagram, you have seen the personal network of the ego. It includes ego's direct relationship with A, C, D, E, F, and H and indirect relationships with B mediated through A and G mediated through F. Figure 2 also includes the non-ego-centric personal network of A. In his network are included B, Q, P and R besides the ego of Figure 1. Similarly there can be personal networks of other members of the members of the network of ego. As you can see there is an overlap between the two personal networks. A and B are common to both the ego-centric and non-ego-centric personal networks.

In the diagram Figure 1 and Figure 2 both show the ego-centric personal networks. Figure 1 shows the personal network of ego alone. It shows he has A, B, C, D, E, F. Of these, G and B are indirect contacts. In Figure 2A is shown to have links with ego and these are reciprocal. Thus, two ego-centric networks can be connected and spread outward as a social network.

27.4.2 Problems in the Delineation of Ego-Centric Personal Network

In applying these ideas of ego-centric personal network to empirical research, the most significant problems faced are six in number:

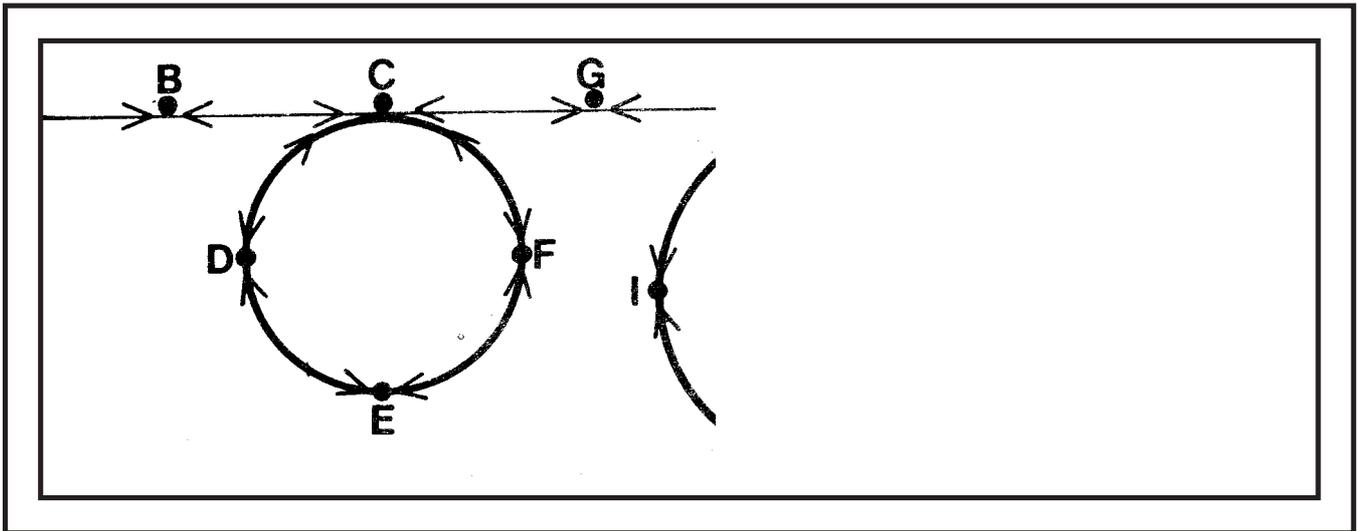
- i) nature of contacts,
- ii) centrality of the ego,
- iii) nature of transactions,
- iv) types of social relations,
- v) mobilisability of the members, and
- vi) identification of the boundary.

i) Nature of Contacts

The social contact, between any two individuals, may vary from a nodding acquaintance and exchange of greetings and pleasantries, (say, in morning walks) to a continual exchange of 'obligations', with built-in expectation of reciprocity. One may have a greeting relationship with many persons in one's neighbourhood or work-place. But can one expect 'help' from all such persons, in all kinds of requirements? Will all such individuals be always prepared to 'help' the ego who is in contact? Obviously not!

ii) Centrality of the Ego

The centrality of the ego is crucial in an ego-centric personal network. An individual may have meaningful contacts with several individuals, on the basis of which a social network may emerge. But he or she may or may not be the centre of this network. In fact, there need not be a centre at all. There could be a situation of a kind of chain of relationships, with a few large or small meshes hanging around the chain, as is depicted below.



In such a chain or mesh of relationship, any one of the members may activate or mobilise others. At the time of mobilisation he or she may be considered the centre of the network. Thus, the centres may shift from one action-set to another action-set. Such chains of links are called non-ego-centric personal network.

The above problem necessitates a distinction between ego-centric and non-ego-centric personal networks. The recruitment of members by an ego, and his or her functioning as the centre of all relationships within the network, make the difference between ego-centric and non-ego-centric personal networks. The latter may not be formed on the initiative of any single person, and nobody acts as its centre or coordinating agency. In this context an action-set would mean, a temporary set of people recruited through various channels to serve some short-term goal.

For example in the diagram on p. 38, we may visualise a situation in which C is the son of D. D approaches E (a doctor) to request F (another doctor) to examine his son C in the hospital of F, and C is examined. This is one action-set in which D has initiated an action of which he may be deemed as the centre. Similarly on another occasion E may initiate an action for achieving some other specific goal. In an ego-centric personal network, all such demands on the network must pass through the centre, or the ego who is the coordinating agency of his or her personal network.

iii) Nature of Transactions

Interactions between the members of a personal network are viewed as transactions. Sometimes even a transaction of market place, may involve a series of interactions. Therefore, transactions signify those sequences of interactions, which are systematically governed by reciprocity. It may be added that reciprocity assumes, that both the parties involved in an interaction are satisfied, both consider it beneficial or profitable. However, two things must be borne in mind.

First, it is difficult, if not impossible, to calculate profitability in all transaction. Secondly, when one does oblige another person, normally he or she does not specify the expectation of the return. He or she may make demands later as a result of several interactions.

iv) Types of Social Relations

In this context, the distinction between expressive and instrumental relationships is relevant. In expressive relationships, one derives satisfaction from the relationship itself. For example, the relationship between a mother and her child. In contrast, an

instrumental relationship is that, in which the relationship is a means to certain ends, rather than an end in itself. As personal networks are formed by individuals in the pursuit of their self-interests, then relationships are basically instrumental. They may sometimes be couched in an expressive form. For example instrumental. They may sometimes be couched in an expressive form. For example, an employee of an organisation may address the wife of his employer as “Mataji” (mother), but in doing so his basic intention is to secure access to the employer through his wife for instrumental purposes. For this he is using the mode of an expressive relationship. While studying a personal network it may be difficult to distinguish between the two kinds of relations. Nevertheless the distinction is important.

Activity 2

Identify at least five social networks in your social life and distinguish between their types, i.e. whether they are expressive or instrumental in nature. Write a report on these five social networks and their nature in about one page. Discuss your report with other fellow students at your Study Centre and also your Academic Counsellor.

v) Mobilisability of the Members

One of the crucial problems in identifying a personal network, is the mobilisability of members of the personal network by an ego. It is not easy to predict whether a member of one's network, will act definitely in accordance with the request of ego. However, there are four major factors which have a bearing on the mobilisability of a member: (a) relative resources of the ego and the member (let us call him alter in accordance with sociological usage) (b) degree of dependence of the alter on the ego, (c) number of intermediaries between the ego and the alter, and (d) The bearing of the demand action on the interest of the alter. On these four factors one can make the following generalisations : (a) The less the material resources of the alter in comparison with those of ego, the greater are the chances of his acting in accordance with the desire of ego, (b) The more an alter is dependent on ego and his network, the greater are the chances of his acting in accordance with the desire of ego. (c) The more the number of intermediaries between ego, and the terminal alter the less are the chances of this acting in accordance with the desire of ego. (d) The less the adverse effect of the demand action on the interests of the alter, the greater are the chances of his acting in accordance with the desire of ego.

vi) Identification of the Boundary

In an empirical research on personal networks, the most difficult problem is the determination of the boundary of a personal network. For this purpose, two criteria are suggested. It is held by some people that all those persons with whom ego is in contact, are members of his personal network. Others object to this criterion on the ground, that all the persons with whom a person is in contact may not be mobilisable. They assert that the criterion should be actual mobilisation in an action situation. The main difficulty in the second criterion is that, if one draws the boundary of a network on the basis of an actual mobilisation in a situation, then the distinction between a personal and an action-set is blurred, (if not lost), because an action-set is delineated in terms of a specific action that brings it into being. A personal network, on the other hand, denotes a set of linkages which exist beyond the duration of any particular action or transaction. Therefore, the boundary of an action-set will vary, while that of the personal network, (if it is conceived as more durable than an action-set), has to be more or less stable. However, its boundary remains indistinct.

Check Your Progress 2

Note: a) Use the space given for your answer.

b) Compare your answer with the one given at the end of this unit.

- 1) List the morphological and interactional characteristics of personal networks. Use three lines for your answers.

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- 2) Define the ego-centric personal network. Use two lines for your answer.

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27.5 PERSONAL NETWORK AND THE SOCIAL STRUCTURE

It may be emphasised that a personal network may become an ego-centric network, when somebody emerges as the coordinator of a network, and an ego-centric personal network may develop into a group. It all depends on the acquisition of additional characteristics, through interaction and change in the nature of social relations. The changes can proceed in the opposite direction as well. The structure of a group may weaken, and it may turn into a personal network or an ego-centric network. This depends on the non-emergence or emergence, of an individual as its coordinator. Thus, personal networks are intimately related to the social structure both in its integrational and disintegrational aspects. They provide a window to look at the social structure both in its integrational and disintegrational aspects. They provide a window to look at the social structure and changes going on in it. As personal networks play an important role in the functioning of formal organisations, the relationship between personal networks and social structure can be illustrated, by showing how personal networks operate in formal organisations. Here, we are taking formal organisation as a social collectivity, and hence a unit of social structure.

27.5.1 Personal Network and Formal Organisations

We can illustrate the relationship between the social structure and personal network, through the study of an interface between personal networks and formal organisations. Before doing so it is in order to explain what we mean by formal organisations.

i) Nature of Formal Organisations

Without going into the technical details, we can say that a formal organisation is a social collectivity, the goals of which are formally defined. It has authority(ies) vested with power. The authorities are expected to mobilise the power vested in them for achieving the goals of the formal organisation. Formal organisations operate through impersonal, universalistic rules and procedures, which are expected to be mobilised across the board impersonally.

ii) Illustration of Formal Organisation

A University may be taken as an example of a formal organisation. Its goals of education are formally defined. It has various authorities such as the Chancellor, the

Vice-Chancellor, Deans, Heads of departments and so on. Each one of the authorities is vested with some defined power to carry out the functions of the university, which may include recruitment of staff, admission of students, administration of educational functions, and conduct of the examinations.

iii) **Formal Organisation in a Traditional Society**

In India, a traditional society, the collectivities such as the family, kin, caste, religion and language, help an individual to achieve his ends through personal and informal relationships. The introduction of formal organisation has created a serious problem. Indians, generally speaking, are used to personal and informal relations. Armed with such relations they feel safe. However, formal organisations function on the basis of universalistic rules and procedures, which operate impersonally and formally. Thus, the juxtaposition of formal organisation with traditional collectivities, such as caste, has created an anomaly.

27.5.2 **The Concept of ‘Source’**

The people who are used to operating on a personal basis do not feel secure with an impersonal system. You must have heard people using the word ‘source’ and trying to find ‘sources’, for getting things done through informal organisations. A source may be conceived of as a person, through whom the power vested in an authority of a formal organisation may be utilised for personal ends. These may or may not be in conflict with the goals of formal organisation.

27.5.3 **Resource Networks and Resource Groups**

These networks and groups are called resource networks and groups. Resource networks are extracts from the total network. They are based on the criterion of shared interest, in the mobilisation of power of formal organisations for personal ends. Therefore, they may be called *partial networks*. They may be either ego-centric personal networks, or non-ego-centric personal networks.

The linkages between the members of a personal resource network may be diverse. They may be based on kin, caste, family, classmateship, etc. An ego may have different degrees of understanding with the members of his resource network, regarding the *mobilisability* of each other. The transactions on which resource networks develop lead to the development of instrumental relationships. Finally, the uncertainties inherent in the mobilisability of members, marks the boundary of a resource network indistinct. Let us now look at the idea of *resource groups*, and functions of resources networks and groups.

i) **Resource Groups**

When the exchange of obligations between the members of a resource group stabilises the unity, then identity and consciousness of kind emerge. Thus, a resource network would turn into a resource group. Its boundary is identifiable and interactions between the members become patterned.

ii) **Functions of Resource Networks and Groups**

The functions of resource networks and groups, may be seen from the viewpoint of individuals, formal organisations and the Indian society. For individuals, they are functional or beneficial because they serve their interest, whether it is in the context of formal organisations or conflicts. They guarantee the requisite support. but for formal organisations they are highly dysfunctional. In other words, they contribute negatively to the achievement of goals of formal organisations, by putting a premium on individual ends vis-a-vis the goals of formal organisation.

The social structure is affected by resource networks in a very fundamental manner. The social relations inherent in resource networks and groups, as particular and personal, and, therefore, may be treated as extensions from the traditional social structure. The traditional social structure, however is based on greater normative and juridical support for the corporate groups. Besides these, love, respect and loyalty play significant roles in the maintenance of the traditional collectivities. In contrast to such collectivities, resource networks are based on instrumental relationships, which affect a much larger number of social interactions. The underlined expectations about reciprocal obligations in such relationships, bring uncertainty and fluidity in social relationships, whether in the traditional collectivities or in formal organisations.

Check Your Progress 3

Note: a) Use the space given for your answer.

b) Compare your answer with the one given at the end of this unit.

1) What is the resource network? Explain briefly in three lines.

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2) A resource group is one from which one can get a loan without interest.

Yes No

27.6 LET US SUM UP

In this unit, you were introduced to the concept of social networks, which was defined in terms of the chain of social relationships. In this perspective, individuals establish social relations in the pursuit of their self-interests, and the society is viewed as a chain of social relations which forms the total network.

Then, personal network was contrasted with group-based social network. This was followed by an outline of the *morphological* and *interactional* characteristics of personal networks. The morphological characteristics are anchorage, density, reachability and range, while the interactional characteristics are content, directedness, durability, intensity and frequency of interactions. On the basis of anchorage, a further distinction was made between ego-centric personal networks which are co-ordinated by an individual, and non-egocentric personal networks which are not so co-ordinated. However, in a specific situation, for achieving a specific objective, any member can mobilise others. For such an action-set the ego performs the role of the coordinator.

The unit also pointed out the problems one encounters in identifying a personal network empirically. These problems are:

- i) nature of contacts,
- ii) centricity of the ego,
- iii) nature of transactions,

- iv) types of social relations,
- v) mobilisability of the members, and
- vi) identification of the boundary.

This discussion was followed by a focus on the relationship between personal networks, and the social structure. This relationship was illustrated by describing the introduction of formal organisations in a traditional society. It was pointed out that personal networks and groups are formed for the mobilisation of the power of formal organisations for personal ends. Such networks and groups have been termed as resource networks and resource groups.

27.7 KEY WORDS

Anchorage	: Ego as the centre of his/her network.
Centricity	: The central nature of ego in a network.
Density	: The proportion of persons in a network who know each other.
Directedness	: Whether a relation is one sided or reciprocal.
Ego	: Terms used to denote an individual.
Expressive Relationship	: Relationship in which one derives satisfaction from the relationship itself.
Formal Organisation	: A social collectivity, the goals of which are formally defined.
Mobilisability	: The ability to put into circulation the resources or contacts for action.
Morphological	: Those features which help in the form and structure of something e.g., density, reachability etc. of personal networks.
Personal Network	: This indicates all those persons with which ego is in contact.
Range	: Denotes the limit or span of direct and regular contacts which an individual has.
Total Network	: Chains of social relationship which cover the whole of society.

27.8 FURTHER READINGS

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Persell, C.H., 1987. *Understanding Society*. Harper and Row Publishers : New York. Chapter IV.

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27.9 MODEL ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

- 1) The basic unit in social networks is a dyadic relationship i.e., between two individuals.
- 2) The process of formation of a social network begins right from the time of birth of a human being.

Check Your Progress 2

- 1) The morphological characteristics of personal networks are:
 - i) anchorage;
 - ii) density;
 - iii) reachability; and
 - iv) range.

The interactional characteristics of personal networks are :

- i) content;
 - ii) directedness;
 - iii) durability;
 - iv) intensity; and
 - v) frequency.
- 2) When a person or the ego is the centre of a network and he or she coordinates it, we find the emergence of an ego-centric personal network.

Check Your Progress 3

- 1) A resource network is a part of the total network. Shared interest is basic to them. They are partial networks and may be ego-centric or non-ego-centric personal networks.
- 2) No.