BURNOUT AND PROBABILISTIC ORIENTATION
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The concept of probabilistic orientation is elucidated in this chapter. It reviews studies relating to the relationship between probabilistic orientation and a set of psychological variables. The research questions and hypotheses linking probabilistic orientation to burnout are stated. Evaluation of the current status of probabilistic orientation is also presented in this chapter.

An ancient verse in Tamil language (Kanian Poon Kundranar, Circa, 2000 BC, in Iyer, 1971) describes the conceptual and perceptual style of life assumed to characterise the highly evolved individual. An English translation of the poem has been rendered by Narayanan et al (1984).

All places are my abodes dear
and everyone is my kith and kin
Good and bad are caused by none
Sickness and convalescence are just but natural,
Nothing is new in death
Rejoice life as sweet we do not,
Nor despise it as sour
Since
Convinced are we through the serene vision of the seers
that
Along with the lightning, pour down cold rain drops
The mighty river rolls down the stone
In to pebbles with constant noise, lo
The boat sails in the river,
Likewise precious life has its course
In the course of Nature
Hence
We do not wonder at the great
Nor look down upon the small (P.68)

The poem describes a style of life that imbibes a spirit of a system approach to events in life. It is asserted that Nature acts as a system and every event in it is governed by stochastic principles.
The style of life characteristic of highly evolved individuals depicted in the poem has been operationally defined and given the label 'Probabilistic Orientation' (Narayanan, 1977, 1979, 1983 a, b, c, 1984). Probabilistic orientation may be considered as a discovery of identification of personality by oriental thinkers. Probabilistic orientation emphasizes the total awareness of an individual who is alive to both his/her scope for freedom and his/her bondage. Probabilistic orientation accounts for individual differences in orientation of the attitude and perception of the individual. It is regarded as a personality variable (Narayanan et al, 1984).

The individual, who is probabilistically oriented is presumed to have a balanced perception of his/her choice and bondage. The probabilistically oriented views Nature as a system which determines the choices and freedom available to an individual. The probabilistically oriented is aware that the scope for individual freedom is not an absolute one but only relative. The system characteristics of the Nature is predetermined. The freedom available to an individual in Nature is akin to the freedom available to an individual to draw certain balls mixed with other balls in an urn one by one, without replacement. Probabilistic orientation is not a fatalistic orientation because the role of effort is well recognized. The distinctive sign of probabilistic orientation is the rational acceptance of the scope for freedom of choice and relative deterministic nature of the behavioural field. (Narayanan et al, 1984). It is also suggested that probabilistic orientation is regarded to be having similarity to 'creative pre-commitment' (Pearls, 1971) and 'broad cognitive width' (Guilford, 1959, Narayanan, 1983, a, b, c).
In view of the fact that probabilistic orientation is suggested to be an orientation of the individuals' attitudes and perception it is pertinent to raise the following questions with regard to the relationship between probabilistic orientation and burnout.

**Research Questions**

1.1. Whether a significant relationship exists between the scores of the individuals on the Burnout Inventory and on the Probabilistic Orientation Questionnaire?

1.2. Will there be significant differences between the scores of the High and the Low Groups on probabilistic orientation on the Burnout Inventory?

1.3. Will there be significant differences between the scores of the High and Low Groups on burnout on the Probabilistic Orientation Questionnaire?

1.4. Whether the profiles of burnout for the High and the Low Groups on probabilistic orientation will be parallel?

1.5. Whether the profiles of burnout for the High and the Low Groups on probabilistic orientation will be at the same mean level?

1.6. Whether the 'pooled' profiles of burnout for the High and the Low Groups on probabilistic orientation combined will be perfectly flat?

The literature on probabilistic orientation suggests possible solutions to the research questions raised above. As already stated, probabilistic orientation is regarded as an expectancy variable. It is
claimed to be prototype of the belief system of highly evolved indivi-
duals in India (Narayanan, 1979). Succinctly, it refers to a system perspective on the part of the individual. The relationship between probabilistic orientation and different personality social, motivational and organizational variables are well documented.

A study of 350 adolescents including both boys and girls reveals that probabilistic orientation is significantly and positively related with intelligence, creativity, extraversion and neurotism among girls. The relationship is not sustained in the case of boys (Natarajan, 1983).

In an investigation the Rorschach test (Rorschach, 1921) and Probabilistic Orientation Questionnaire were administered on 100 male individuals. The findings of the study reveal that individuals having high probabilistic orientation have high ego or thinking operation, emotional control, intelligence, interest, control impairement, aggressive acts, sexual interest, perception of reality and the ability to perceive the common place. The findings of the study also show that individuals having low probabilistic orientation are higher in denial, detachment from the real and fantasy (Ganesan, 1986).

In another investigation, the Thematic Apperception Test (TAT, Murray, 1943; Choudhry, 1960) and Probabilistic Orientation Questionnaire (Narayanan, 1979) were administered to a sample of 100 male graduates (Natarajan, 1986). The findings of the study reveal that highly probabilistically oriented individuals are having high n Achievement, n Agression, n Passivity when compared to the low probabilis-tically oriented invididuals. On the other hand low probabilistically
oriented individuals have high Abasement, Dominance, Intragression, Nurturance, sex and Succorance compared to high probabilistically oriented individuals.

Another study on the organizational climate (Litwin & Stringer 1968) has attempted to relate probabilistic orientation to organizational climate and role conflict (Indumadhi, 1985). The findings of the study involving 80 clerks reveal that the higher probabilistically oriented individuals have greater scores on the organizational climate dimensions, viz., structure, responsibility, reward, risk, warmth, support, standard, conflict and identity compared to their less probabilistically oriented counterparts. The findings further show that probabilistic orientation has no significant relationship with role conflict.

A study of 50 potential entrepreneurs, 50 entrepreneurs and 50 managers of small scale industries reports that potential entrepreneurs and entrepreneurs are more probabilistically oriented compared to the managers (Balakrishnan, 1985).

Another study on a sample of 200 teachers equally divided into both the sexes reveals that perceived support for innovation (Siegel & Kolmmerer, 1976) has no significant effect on probabilistic orientation (Jayaraj, 1984). The findings further show that female Ss are more probabilistically oriented compared to male Ss.

In a study of 170 bank employees, consisting of 70 officers and 100 clerks it is revealed that probabilistic orientation does not have significant effect on role conflict (Devi, 1982).
In an investigation of 100 male transport drivers reveals that Accident Free Drivers, Low Accident Drivers and High Accident Drivers do not differ among themselves with regard to their probabilistic orientation (Govindarasu, 1984).

A study on probabilistic orientation and Death Anxiety (Templer, 1970) on a sample of 60 males reveals that probabilistic orientation is related to death anxiety in the case of elders and not in the case of adults (Narayanan, 1983c).

Another study on a sample of 240 women consisting of equal number of house wives, career women and women entrepreneurs reveals that career women and women entrepreneurs have high probabilistic orientation than the house wives. (Sunandini, 1985).

A study on a sample of 120 male employed, 120 male unemployed, 120 female employed and 120 female unemployed reveals that the unemployed and the employed remain homogeneous with regard to probabilistic orientation. The findings further reveal that males are probabilistically oriented than the females (Michael, 1985).

Probabilistic orientation has been related to level of aspiration (Rotter, et al., 1972) also. A study of 150 adolescents equally divided into the sexes reveals that the probabilistic orientation is negatively correlated with mean performance, goal discrepancy and achievement discrepancy among both boys and girls (Narayanan, 1984).

Another study has attempted to link probabilistic orientation and mental health (Augustine, 1978). The sample of the study comprised of 75 adolescent boys and 75 adolescent girls. The findings of the study
reveal that the level of probabilistic orientation and sex do not have any significant effect on mental health (Narayanan, 1985a). The results are in line with the findings in another study of 200 adult teachers (Jayaraj, 1984).

Probabilistic orientation has also been studied in relation to Holland Personality Dimensions. (Holland, 1975, Balakrishnan, 1979). The findings of the study of 150 adolescents equally divided into sexes show that probabilistic orientation is significantly and positively correlated with realistic, investigative, artistic, social and enterprising dimensions among boys and negatively related to investigative and conventional dimensions among girls (Narayanan & Govindarasu, 1986a).

Another study of 75 transport drivers (Narayanan, 1986) reveals that probabilistic orientation is significantly related to certain personal values (Gorden, 1967). Probabilistic orientation is found to be significantly and positively related to Variety and Practical Mindedness and negatively to Orderliness and Decisiveness.

A study on a sample of 55 adult drivers in a transport corporation (Narayanan & Govindarasu, 1986b) reveals that probabilistic orientation is positively related to security (Maslow, 1962).

In another study probabilistic orientation has been related to the characteristics assessed by Minnesota Multiphasic Personality Inventory (MMPI). The sample used consisted of 33 male graduates. The findings reveal that probabilistic orientation is significantly and positively related to Hypochondriasis, and Psychopathic Deviate and significantly and negatively related to Masculinity - Feminity, Schizophrenia and Social Introversion (Narayanan, 1985b).
Another study of 360 adolescents consisting of 120 boys and 240 girls reveal a systematic positive relationship to exist between probabilistic orientation and Internal-External Locus of Control variables (Rotter, 1966) in the case of girls and not in the case of boys (Narayanan et al., 1984).

The findings of a study of 75 adolescent boys and 75 adolescent girls show that innovative personality (Venkatachalam, 1978) and sex do not have significant effect on the levels of probabilistic orientation (Narayanan, 1984). Similar findings are found in another study on 200 adult teachers belonging to both the sexes (Jayaraj, 1984).

An attempt is made to study probabilistic orientation with reference to personality dimensions identified in Indian literature (Synthia, 1988). These personality types are labelled Tamas, Rajas and Sattav. The description of the types given below owes to Singh (1980). The Tamas type is considered to be intellectual, ignorant, disguising, lethargic, egoistic, sadistic, crude, asocial, instinctive emotional and quarrelsome. This type of individual is devoid of religion, morality, foresight, benevolence, rationality and goodness. The Tamas type is full of unconscious complexes of destructive and harmful nature. These individuals usually are pessimistic, greedy and susceptible to mean, cruel, antisocial and exhibit lawless behaviour. The Rajas type is considered to be erotic, passionate, motivated, active, constructive, ambitious, valiant, fashionable, authoritative, social, extrovert and productive. These individuals are devoid of dullness and depression. The third type of personality, the Sattav type is considered to be clean, calm, illuminating, balanced, hospitable, complex free, self-controlled and genius. These individuals are devoted to truth, sacrifice, vows,
study, celibacy, patience, religion, moral and social duties. This type of individuals are loved, praised, honoured and helped by most of the people at all times and the places. The sample used in the study above cited comprised of 100 female graduates in the age 20 to 27 years. A Q-sort Self Concept Test containing 118 items developed exclusively for the study was employed to verify the individuals into the personality types. The findings show that high groups and low groups based on Tamas, Rajas and Sattav, do not differ between themselves or across the types with regard to probabilistic orientation. Further analysis reveals probabilistic orientation to be significantly negatively related to Rajas. It is also reported that the combination of Tamas and Rajas, the combination of Tamas and Sattav and the combination of Rajas and Sattav are detrimental to probabilistic orientation.

A study on a sample of 220 textile mill supervisors show that probabilistic orientation is significantly and positively related to work commitment, alienation and profile of organizational characteristics. Probabilistic orientation is not significantly related to role conflict. The findings further reveal that probabilistic orientation is significantly and positively related to leadership, motivational and communication processes. Probabilistic orientation is positively and insignificantly related to interaction influence process, goal setting or orderliness and control process. Probabilistic orientation is negatively and insignificantly related to decision making process. Performance goals and training is not related to probabilistic orientation (Indumathi, 1988).
Evaluation of the Current Status of Probabilistic Orientation Research

The review of literature cited above provides a brief account of the status of probabilistic orientation research. From the literature on probabilistic orientation it could be concluded that probabilistic orientation, as an experimental variable, has shown meaningful relationship with a number of variables. Probabilistic orientation is derived from a style of life assumed to characterise the highly evolved individual in ancient India. Attempts to obtain psychometric measures of the style of life and attempts to relate probabilistic orientation to a number of well defined variables in psychology are seen in the literature.

Researches on probabilistic orientation are still in a state of flux. It is a challenging task for researchers to understand the nature of probabilistic orientation. Probabilistic orientation is not the first concept in psychology to be plagued with problems regarding its characteristics. It may be argued that, this is to be expected in the growth of any new concept emerging in the literature. Various findings with regard to probabilistic orientation only suggest that it is worthwhile to treat probabilistic orientation as a variable for indepth research. Further researches on probabilistic orientation are needed to define the exact nature of the variable.

It may be argued that varying instruments and mode of responses to these instruments may reveal different pattern of results. Originally Probabilistic Orientation Questionnaire (POQ) was developed with 40 items (Narayanan, 1979). Devi (1982) and Indumathi (1985) used
the same 40-items POQ in their studies. Some researchers used 30 items of the 40-items POQ in their studies (Narayanan, 1984, 1985 a,b, Jayaraj, 1984, Narayanan et al. 1984, Govindarasu, 1984, Michael, 1985, Sunandini, 1985, Balakrishnan, 1985, Narayanan & Govindarasu, 1986a,b). Natarajan (1983) used 30 items selected from the 40 items of the POQ based on item analysis done on an adolescent sample and named Junior Probabilistic Orientation Questionnaire. A few researches generated a few more items and the POQ with 70-items were used in their studies (Ganesan, 1986 ; Natarajan, 1986).

Investigators not only used POQ with 30-items, 40-items and 70 items, but also changed the mode of response required to the items. In a few investigations POQ were administered with Yes/No response format (Devi, 1982, Narayanan, 1983b, Natarajan, 1983, Jayaraj, 1984, Narayanan et al. 1984, Balakrishnan, 1985, Sunandini, 1985, Indumathi, 1985, Thirunavukkarasu, 1987). Govindarasu (1984) and Michael (1985) used POQ with 7-point rating scale ranging from very strongly agree to very strongly disagree. Natarajan (1986), Ganesan (1986) and Synthia (1988) have used Q-sort to obtain statistics on probabilistic orientation.

To test whether the different mode of responses for Probabilistic Orientation Questionnaire have any significant effect on the findings, Probabilistic Orientation Questionnaire with 70 items was administered in one study to 60 individuals with yes/no, 3-point, 5-point, 6-point and 10 point scale format. The obtained reliability coefficients were reported to be 0.70 for yes/no scale format, 0.87 for 3-point scale format, 0.84 for 5-point scale format, 0.83 for 6-point scale format and 0.78 for 10-
point scale format (Kalyanaraman et al., 1988). The high reliability coefficient for each questionnaire with varying format reveals that the findings may not be affected by the mode of response to probabilistic orientation.

Eventhough researchers used different instruments to measure probabilistic orientation with different scale format for responding, a meaningful pattern of relationship between probabilistic orientation and a number of personality, cognitive and motivational variables has emerged in the literature. This provides adequate scope for further research on probabilistic orientation. Literature on burnout and on probabilistic orientation reveals that a few variables show different pattern of relationship with probabilistic orientation and with burnout.

Literature on burnout reveals that burnedout individuals may have lowered creativity, jadedness and loss of interest (Veninga & Spradley, 1981). Introverts more likely experience more tension in high role conflict situations when compared to extroverts. Introverts more likely withdraw from their workers when conflict and stress occur (Kahn et al., 1964).

'Externals' are more prone to learned helplessness (Seligman 1975). These individuals likely hold the view that they are helpless and have no control over the situation. These feelings make them withdraw from stressful situation. Externals may manifest motivational deficits associated with learned helplessness and burnout. (Cherniss, 1980a). Externals experience more depersonalization, intense experience of lack of personal accomplishment and intense emotional exhaustion (Cadavid 1987).
Studies on role conflict and burnout show that role conflict is related to burnout (Schwab, 1981; Pohl, 1984; Conway, 1984; Olson, 1985 Reetz, 1985; Barnes, 1986; Scharf, 1986; Mazur, 1987; Capel et al, 1987).

Social desirability is regarded as a reliance on the evaluative judgement of others. Review of literature also indicates that social desirability is significantly and negatively correlated with emotional exhaustion and depersonalization (Balter, 1984).

Burnout individuals may experience lowered work efficiency by showing increased accidents committed by them (Veninga & Spradley, 1981).

The foregoing analysis of the literature on probabilistic orientation leads to the following hypotheses.

Hypotheses

1.1. A significant negative relationship will exist between the scores of the individuals on the Burnout Inventory and on the Probabilistic Orientation Questionnaire.

1.2. There will be significant differences between the scores of the High and the Low Groups on probabilistic orientation on the Burnout Inventory.

1.3. There will be significant differences between the scores of the High and Low Groups on burnout on the Probabilistic Orientation Questionnaire.

1.4. The profiles of burnout for the High and the Low Groups on probabilistic orientation will be parallel.
1.5. The profiles of burnout for the High and the Low Groups on probabilistic orientation will be at the same mean level.

1.6. The 'pooled' profiles of burnout for the High and the Low Groups on probabilistic orientation combined will be perfectly flat.

Summary

The concept of probabilistic orientation as employed in various research studies is reviewed and presented in this chapter. Probabilistic orientation orients an individual to a system perspective. When an individual perceives outcomes of events in their background of system characteristics, s/he develops greater flexibility behaviour and this provides scope for independence and autonomy on the part of the individual. When a person is under probabilistic orientation, s/he is less dependent on the immediate environment. A probabilistically oriented individual is likely to feel free to make choices. The research questions and hypotheses relating probabilistic orientation to burnout are logically derived and presented in this chapter.