Abstract

The present study investigated epistemological development among adolescents, young and middle aged adults in terms of first six stages of epistemological development proposed by Perry (1968). The investigation was carried out in a series of three studies. The first study involved generating culture specific dilemmas that triggered higher stages of epistemological development among 63 men and women in Pakistan with an age range of 17 to 55 years. The cue-list developed by Mentkowski, Moeser and Strait (1983) was used to categorize the descriptions of participants’ experiences of dilemmas on Perry’s first six stages of epistemological development. Two independent judges rated the participants’ narratives of their experiences along the Perry stages. The findings revealed substantial inter-rater agreement \( k = .71 \) on the rating process along the six stages. Four types of dilemmas were identified i.e. loss related, relationship related, work related and belief related. Types of dilemmas did not show any association with age. However gender was associated with types of dilemmas with women reporting more relationship related dilemmas and men reporting more career-related dilemmas. The stages of epistemological development also did not turn out to be associated with types of dilemmas, thus implying that epistemological stages are not associated with external situations and dilemmas that emerge in the external world.

Two dilemmas that were culturally most relevant with the consensus of three judges were selected for use as vignettes in study 2. Additional cues were included in the cue list from the observations of two judges in the rating process in study 1. The cues in the original cue-list by Mentkowski, Moeser and Strait (1983) that were not used in the rating process in study 1 were dropped from the cue-list in study 2. Thus the cue list consisted of
seventy nine cues that included additional cues suggested by raters and the cues (from original cue-list) cited in study 1.

The study 2 involved piloting the vignettes and the cue list. The findings revealed the ratings by two independent raters to be significantly correlated with education, age and HEXACO-openness to experience subscale. The main study of study 2 involved exploring the relationship of epistemological development with age, education, gender, social paradigm beliefs in terms of Social Paradigm Belief Inventory, personality traits in terms of HEXACO-openness to experience subscale, HEXACO-emotionality subscale and wisdom in terms of Wisdom development scale. The sample consisted of 180 participants with the age range of 17-55 years, classified into adolescents (17-21 years), young adults (22-40 years) and middle aged adults (41-55 years). A two way ANOVA revealed significant main effect of age and education on epistemological stage scores. However no significant main effect of gender in terms of epistemological development was found.

The findings of correlational analysis showed epistemological stage scores to be significantly correlated with age, education, wisdom and openness to experience. Multiple linear regression revealed age, education and wisdom to be the significant predictors of epistemological stage scores. A standardized mediation analysis showed education to have a significant mediation effect on the relationship of age and epistemological development. Findings also showed wisdom to have a significant mediation effect on the relationship of education and epistemological development.
Study 3 was conducted to explore the nature of experiences of the people at higher levels of epistemological development regarding socio psychological conflicts, coping with negative emotions and age related changes in epistemological levels in Pakistan. Nine participants with the age range 20-55 years were interviewed. Seven of them were at 4\textsuperscript{th} and 5\textsuperscript{th} stages, whereas two were at stage 3 of epistemological development. The selection of participants was based on the analysis of responses given to epistemological vignettes in study 2.

The interpretative phenomenological analysis of the transcribed interviews revealed categories of meaning which were organized into seven super ordinate themes: sticking firmly to immediate experience, reluctance in accepting own judgment, internally and externally induced personal responsibility, turning negative emotional experience into self-regulation, being compassionately critical, striving for external change without compromise, belief in spirituality in the face of uncertainty. These super ordinate themes suggested that epistemological development is accompanied by emotion-stimulating situations formed by a dynamic interaction of environmental restrictions and individual choice. Proactive and religious coping leads to development of self-regulation and insight. The study also highlighted the difference in the epistemological experiences between younger and older adults in terms of emotion regulation. This study has wide implications in the field of education, cognition and developmental psychology.

\textit{Key-words}: Epistemological development, adolescents, young and middle aged adults, education, gender, wisdom and dialectical thinking.