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Assessing cultural intelligence of adolescents in relation to their personality traits, communication style, value orientation and perceived parenting style

P. Sooriya

Post-Doctoral Fellow (ICSSR)

Prof. S. Kadiravan

Professor and Head, Department of Psychology, Periyar University, Salem-11

Abstract--Nowadays youth are fascinated towards various job offerings that leads to increased global mobility in turn had high possibilities of cultural conflicts. Cultural intelligence is an essential aspect to uplift individual's flexibility and stability across culture. Generally, individuals expressed their cultural intelligence through its psycho social determinants such as personality traits, communication styles, value orientation and perceived parenting styles which were theoretically interlinked as well as a sense of group belongingness initiated during adolescence. Therefore, an attempt is made here to explore the relationships between cultural intelligence, personality traits, communication styles, value orientation and perceived parenting styles among adolescents. Cluster sampling technique was used to select the participants. A survey was conducted with 480 adolescents in and around Salem city was collected. Results revealed that introvert/ambivert adolescents experiencing positive parenting, exhibit higher value orientation and communication were predicted to have higher cultural intelligence. This study would be helpful for teachers to understand adolescents' individual differences and accordingly modify their teaching behaviour. Imparting cultural intelligence among adolescents would heighten the sense of group belongingness, that show drastic effects in future global economy.

Keywords--cultural intelligence, personality traits, communication styles, value orientation, perceived parenting styles.

Introduction

To have a sophisticated life style in this modern era, youth are fascinated towards various job offerings with good salary packages, which lead to increase in global mobility, in turn induce cultural conflicts and chaos. Cultural intelligence, a prime factor is the need of the hour to uplift individual's flexibility and stability across culture in addition to a sense of group belongingness. Generally, individuals expressed their cultural intelligence through its most potent psycho socio determinants such as personality traits, communication styles, value orientation and perceived parenting styles which were theoretically interlinked. As a result, the sense of group belongingness that initiated during adolescence, has perceived to be prompted by cultural intelligence. Therefore, assessing cultural intelligence of adolescents in relation to their psycho social determinants would provide significant insight to the researchers.

Cultural Intelligence and its Psycho Social Determinants

Earley and Ang (2003) defined cultural intelligence as the capability of an individual to function effectively in culturally diverse situations. Cultural intelligence is considered to be an ability of an adolescent to fulfil their desires and needs in a successful manner during their sub-cultural interaction. Though cultural intelligence is more state-like, certain personality traits have been recognized as antecedents of cultural intelligence. Personality traits reflected the distinctive patterns of thoughts, feelings and behaviours that people exhibit (Diener & Lucas 2022). Personality traits represented how individuals varied in their behaviour. Personality traits were universal, certain discrepancies were observed due to poor lexical approach, translation or variations in communication styles. The integration between personality traits and communication styles were strongly validated by researchers (Pipper & De vries et al., 2013). Communication styles represented the ways in which the individual interact and exchange information with others. Different modes of communication were strongly influenced by the cultural context (Croucher et al., 2012). Each communication style correlated to a basic value orientation (Casse 1981). Value orientation indicated the principles of right and wrong that were adopted by the individual or group. While personality traits built the individuals potential for action, value orientation stimulate the drive to convert their potential into action (Camille 2019). Value orientations influenced interpersonal interactions, communication styles, planning and task performance (Eaglin 2021). Meanwhile, fathers were considered to be more responsible than mothers in communicating their values to their children (Sisler 2016). Here, parenting style, the explicit attitudes and behaviors showed by parents played an eloquent role in child life (Bibi et al., 2013). However, perceived parenting styles were significantly related to personality traits (Savitha & Venkatachalam 2016) and cultural intelligence (Sooriya 2017). Therefore, cultural intelligence, personality traits, communication styles, value orientation and perceived parenting styles were theoretically interlinked.

Literature Review

Nowadays, cultural intelligence was recognised as an indicator for evaluating performances and making recruitment decisions (Nejati, Ikbakhsh, Sharififa 2014). Cultural intelligence was the individual's ability to perform well effectual in culturally diverse settings (Van Dyne et al., 2012). Initially, individuals acquired cultural knowledge and values through their parents and it was altered according to their varied cultural experiences. Adolescents' perception regarding their parents' child rearing practice significantly influenced their cultural intelligence (Sooriya 2017). Some personality traits that are crucial (Devin 2017), positively related to cultural intelligence (Yeke & Semerconiz 2016) were significantly influenced by perceived parenting styles. On the other hand, culturally intelligent individual was capable of understanding the variations in communication styles while working culturally diverse setting (Maclachlan 2011). Therefore, learning communication styles was also necessitated to become culturally intelligent (Livermore 2013). However, some cultural intelligence dimensions showed moderation (Caputo et al., 2018) and mediation (Baluku et al., 2019) effect upon individual's cultural value orientation. Organizations maintain long-term relationships with individuals based on their value orientation and cultural intelligence by allowing them to adjust their timelines and expectations (Livermore & Dyne 2015). Probably personality traits, communication styles, value orientation and perceived parenting styles were considered as the psycho social determinants of cultural intelligence. After critical retrospection, the investigators identified that there were dearth of studies concentrating all these variables at an instance. Though several growth markers of adolescents were obvious at present, systematic evaluation of the integrity of findings should need attention (Levesque 2016). At the same time, assessing and imparting cultural intelligence among adolescents in relation to personality traits, communication styles, value orientation and perceived parenting styles would show dramatic effects in future while they have multicultural interaction.

Research Methodology

The investigators adopted descriptive research method with quantitative research design. Adolescents (13-15 years) studying ninth standard in higher secondary schools, were considered as the sample for this study. Cluster sampling technique was utilized and the data was collected from 480 adolescents in and around Salem city using a survey. Cultural intelligence was considered as the dependent variable, whereas personality traits, communication styles, value orientation and perceived parenting styles were considered as the predictor variables. Demographic variables such as gender, medium of instruction, family type, locality, community and management of institution were also collected. The following measures were utilized to collect the data.

- A 18 item adolescent cultural intelligence scale (validated by the investigators 2021) was a five-point scale, measuring nine dimensions such as planning, awareness, checking, general knowledge, specific knowledge, interest, self-efficacy to adjust, verbal and non-verbal behaviour and speech act. Its CFA model exhibited excellent construct reliability and validity ($R^2=0.99$, $\alpha>0.7$, $AVE>0.54$, $SRMR=0.09$, $Q^2=0.98$).

- Mini International Personality Item Pool (Mini IPIP, Donnellan et al 2006) consisted of 20 items with a five-point scale had 9 positive and 11 negative items measures five factors such as extraversion, agreeableness, conscientiousness, neuroticism and imagination. This measure showed good psychometric properties ($R^2=0.91$, $\alpha>0.61$, $AVE>0.40$, $SRMR=0.11$, $Q^2=0.89$).
- Communication style scale (De vries et al 2013) was originally with 60 items based on the CFA, 5 highest loading items from each dimensions i.e., expressiveness, reflectiveness, aggressiveness, emotionality, supportiveness, preciseness and niceness were considered, validated and utilized as a short measure with good model fit ($R^2=89.1$, $\alpha>0.68$, $AVE>0.40$, $SRMR=0.07$, $Q^2=0.87$).
- Cultural value profile (Van dyne 2017) was a 20 item five point rating scale with ten dimensions namely individualism/collectivism, power distance, uncertainty avoidance, cooperative/competitive, time orientation, direct/indirect context, being/doing, expressiveness, focus and universalism/particularism. Its CFA model exhibited good psychometric properties ($R^2=0.99$, $\alpha>0.75$, $AVE>0.52$, $SRMR=0.09$, $Q^2=0.98$).
- Adolescent perceived parenting styles scale (constructed and validated by investigators) was a 25 item scale with five-point responses consisted of 13 positive and 12 negative items which measures four dimensions viz. warmth & nurturance, control & authority, encouragement & involvement and attitude & behaviour. Measurement model of this measure fit well for both mother ($R^2=0.83$, $\alpha>0.75$, $AVE>0.51$, $SRMR=0.09$, $Q^2=0.98$) as well as father ($R^2=0.89$, $\alpha>0.75$, $AVE>0.52$, $SRMR=0.09$, $Q^2=0.98$).

The collected data was subjected to data screening and cleaning and finally statistical analysis such as descriptive statistics, cluster analysis and decision tree modelling were applied to achieve the research aim.

Results

Decision tree modelling was employed to establish a validated, predictive tree model of adolescents' cultural intelligence in relation to their psycho social determinants. In a decision tree model, the input data of predictor variable should be in categorical form. Therefore, categorization of predictor variables has to be executed first.

Categorization of predictor variables

Classifying adolescents' personality traits

While executing hierarchical cluster analysis, 3 distinct adolescent clusters based on their personality traits were identified. Further, K means cluster analysis was carried out. 3 different adolescents' personality clusters were converged at the end of 10th iteration with a small maximum absolute coordinate change (0.063) and minimum distance (12.08) between initial centers. The clusters were named as introvert, ambivert and extrovert based on the characteristics observed by comparing item wise final cluster centre values. The anova value of all statements revealed that, adolescent clusters differ significantly ($F>3.00$, $p<0.05$) based on

their personality traits. On the whole, 34.6% (n=166) adolescents were extrovert, 32.3% (n=155) were ambivert and 33.1% (n=159) were Introvert. Hence, it was concluded as all the three personalities were approximately distributed in same ratio.

Level of adolescents' communication style

Results of descriptive statistics revealed that, adolescents exhibited average communication (M=172.74, SD=25.53). Slightly a more number of adolescents (n=242, 50.4%) exhibited lower communication than those who exhibited higher communication (n=238, 49.6%).

Level of value orientation of adolescents

Adolescents exhibited average level of value orientation (M=61.35, SD=10.90). Out of 480 school going adolescents, majority of them (n=257, 53.5%) orienting lower cultural values than those who orienting higher (n=223, 46.5%).

Clustering adolescents' perceived parenting style

By conducting K means cluster analysis, 2 distinct adolescent clusters of perceived parenting styles for both mother and father were obtained separately. They were converged at 8th iteration, with there is no change in maximum absolute coordinate change (0.00) and minimum distance (20.00) between initial cluster centers center. The clusters were named as positive mother, negative mother, positive father and negative father based on the characteristics observed by comparing item wise final cluster centre values. Anova value revealed that, adolescent clusters differ significantly ($F > 3.09$, $p < 0.05$) based on their perceived parenting styles. On the whole, 31.7% (n=152, mother) and 35.2% (n=169, father) adolescents experienced positive parenting and 68.3% (n=328, mother) and 64.8% (n=311, father) adolescents experienced negative parenting. Therefore, it is concluded that majority of adolescents experienced negative parenting. Father as well as mother both played equally important role in child's development. Therefore, combination of different parents has to be find first. Overall, majority of adolescents (n=284, 59.2%) perceived their parents as negative parents (NN) and one fourth of adolescents (n=125, 26%) perceived their parents as positive parents (PP). Remaining a few adolescents perceived their parents as positive mother negative father (PN, n=27, 5.6%) and negative mother positive father (NP, n=44, 9.2%). Thus categorization of predictor variables has been carried out.

Decision tree modelling of cultural intelligence of adolescents in relation to their psycho social determinants

By opting CHAID growing technique, 4 as maximum growing limit and maximum number of cases limited to parent node as 60 and child node as 30, decision tree modelling was executed to detect interaction between variables at 0.05 significance level based on Bonferroni testing. 10-fold cross validation test was utilized to establish a valid predictive tree model. Fig. 1 represented the predictive tree model of cultural intelligence of adolescents which had 12 Nodes with 7 Terminal Nodes. While considering the interacting variables, personality traits

was forced first to classify the cultural intelligence of adolescents, which was followed by communication style, value orientation and finally parenting of different parents.

Among 7 paths, introvert/ambivert adolescents experiencing positive parenting, exhibit higher communication and value orientation were predicted to have higher cultural intelligence. Likewise, introvert/ambivert adolescents exhibiting lesser communication and value orientation were predicted to have lower cultural intelligence. However, extrovert adolescents exhibiting high communication were predicted to have high cultural intelligence when compared with those who exhibiting low communication. The predictive model has exhibited 77.83% correct classification.

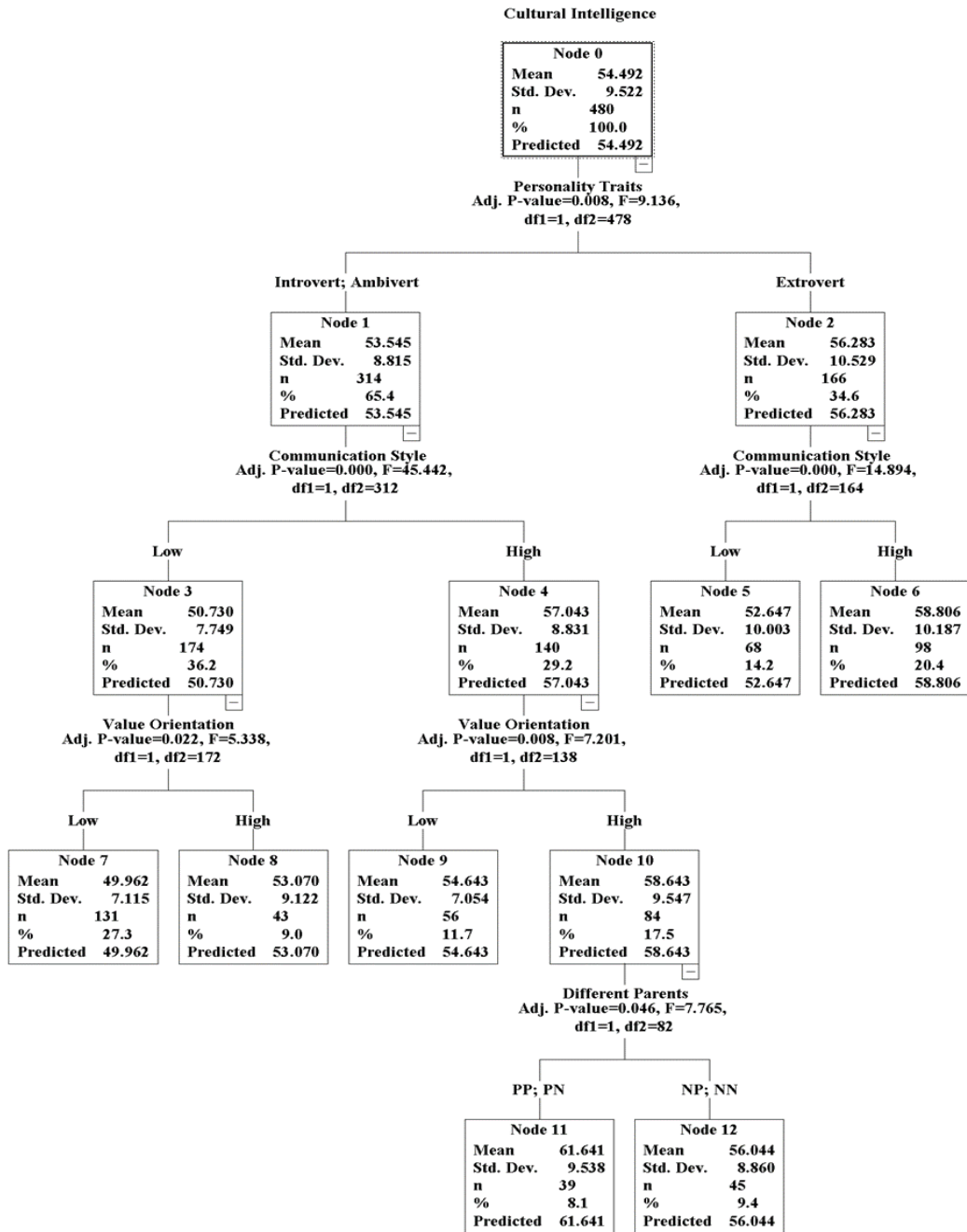


Figure 1. Assessing Adolescents' Cultural Intelligence in relation to their Personality Traits, Communication Styles, Value Orientation and Perceived Parenting Styles

Discussion

The overall percentage of adolescents' cultural intelligence was 60.55. Therefore, it was concluded that adolescents had average cultural intelligence, which was supported by a study of Jaseena & Vijayan (2016). Individuals with high cultural intelligence clearly recognize the way in which personality traits affects them from understanding attitude and behavior of people from various cultures (Yeke & Semerciozb 2016). Cultural intelligence showed significant effect on communication skills of adolescents which was supported by Ahmadian and Amirpour (2018). Individual's cultural value orientations impact their interpersonal interactions, communication styles and preferences, negotiation and task performance (Eaglin 2021). Therefore, culturally intelligent individuals interact sociably by utilizing positive cues while communicating with others, in order to better adjust and adequately collect information during intercultural interaction (Bhatt 2020). Cultural intelligence influenced differences in bridging organizational cultural disparities by distressing service encounters (Arora & Rohmetra 2010). Therefore, continual blend of activities (Murphy 2013) and indicators increasing education and training classes (Box 2012) have needed to impart cultural intelligence.

Conclusion

Though cultural intelligence has gained significant attention from researchers, researches targeting especially adolescents has to be focus more research on this area with interrelated variables. It is the need of the hour to assess adolescents' cultural intelligence in relation to various psycho social variables in a combined manner. Since, imparting and prompting adolescents' cultural intelligence show drastic effects in future global economy due to its determinative role in heightening the sensitivity towards group membership. This study would be helpful for teachers to understand adolescents' individual differences and accordingly modify their teaching behaviour.

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