



Moderation Analysis: Gender on the Relationship Between Self-Efficacy and Personality Traits as a Predictor of Personal Identity

Hena Fatma

Ph.D. Assistant professor, Department of psychology, Ala-Too International University-Kyrgyz Republic, Kyrgyzstan

E-mail: hena.ali01@gmail.com

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Abstract

It has been examined throughout the present research that there is a significant moderation relationship between self-efficacy and the role of dimensions of personality traits as a predictor of personal identity in the presence of the variable gender difference. This was taken as a moderator variable. Moderation analysis techniques were used to determine the referent impact of gender difference on the relationship between self-efficacy and dimensions of personality traits. Participants were four hundred adolescents were taken to complete the study. The findings can be inferred that gender was significantly moderates the relationship between self-efficacy and dimensions of personality traits as a predictor of personal identity.

Keywords: *Moderation Analysis; Personal Identity; Personality Traits; Self-Efficacy; Adolescents*

Introduction

The main aim of the present study is to motivate the researcher to investigate social and psychological states in adolescents by suggesting the conclusion of exploratory research conducted on the sample among adolescent of university students. This research can be more beneficial for social development, educational intervention programs, and personality developmental variability. In short, the pervasiveness of gender biases, and realist and reductionist, behavioral, and psychological problems would be decreased in the region.

The research is expected to be loaded with meaningful data which will tend to explore and establish future collateral research on related aspects. Determination of self-efficacy related to personality traits may help social psychologists in creating a tool that could be used for instant application in tackling gender, behavioral, and psychological problems, sometimes intractable.

Personal Identity

Each individual is brought into the world with interesting character attributes. An incredible arrangement is found out through conditions and others. Every adolescent has his/her individual qualities and unique character. Students who have different cultural backgrounds, socioeconomic statuses, and families may have different personality traits. There is a developing identity that understudies who become effectively engaged with the life of their school and society show almost no alienation rather than critical advantages. Even though personality improvement is regularly connected with puberty, each cognitive-developmental stage offers the opportunity for re-evaluation and modification. The person that people ultimately become is unique; however, the process by which identity develops is similar among individuals.

The current research aimed at investigating to determine the referent impact of gender difference on the relationship between self-efficacy and the dimensions of personality traits as a predictor of personal identity among adolescents.

Personal identity is a major key in the developmental stage of adolescence and the transition to adulthood (Arnett, 2014; Erikson, 1950) “The biological, cognitive, psychological, and social changes that occur in early adolescence typically prompt youth to contemplate who they are, what and whom they identify with, what they think of themselves, and what they need to do with their life situations. Early personal identity developmental stages in adolescence often involve balancing one’s newfound self-knowledge and being quality of coherence with a sense of uncertainty or confusion about who one is and where one is headed” (Schwartz et al., 2012a).

Self-efficacy

Self-efficacy is a belief that one can carry out the races of actions required to manage different life situations. The concept of self-efficacy has been evolved from Bandura’s (1986) social cognitive theory. Self-efficacy refers to beliefs about one’s capabilities to learn or perform behaviors at designated levels (Bandura, 1986, 1997). Much research shows that self-efficacy influences academic motivation, learning, and achievement (Pajares, 1997; Schunk, 1995). James (1987) explained the role of self in human functioning in the Principles of Psychology.

Nowadays, adolescent has a highly formulated time for the development of personal identity and motivational aspirations for the future. Teenagers begin to expect their future involvement in the various realities of adulthood life, including work, family, and communities and may think about their future health, with varying dismantle of higher convictions. Youth have stronger judicious of efficacies they are more likely to “select the challenging risky task, set high performance of the task, and concrete desired goals of life and forms well-structured sequences” of actions (Skinner, Zimmermann-Gemback, Conell, Eccles, & Wellborn, 1998). Overall, the adolescent expectation to own competence predicts success in adulthood (Mainquist & Eichorn, 1989).

Muris, (2002) explored the positive significant relationship between self-efficacy and values, personality traits, depression, etc. in the adolescents' stage; he found that a weak sense of self-efficacy was strongly tie-up with the high level of depression and anxiety symptoms of personality traits. Thus, it can be inferred that a high level of psychological and emotional states of self-efficacy could be more vital maintenances of the strong sense of personal identity; self-efficacy also has been invariably associated with different levels of persistence. (Baufford-Bouchard, Parent, & Lairvee, 1991, Multon, Brown, & Lent, 1991).

Role of Personality Traits (HEXACA)

“Personality begins with traits. From birth onward, psychological individuality may be observed concerning broad dimensions of behavioral and emotional style that cut across situations and contexts and readily distinguish one individual from another” (Caspi, Roberts, & Shiner, 2005).

It is one of the most important factors that influence human values. Personality determines the impact of various other sources on one's value system. A person who has similar traits influences one's personality of an individual. There exists considerable empirical evidence about, both for and against, the influence of personality on values. McClelland (1955), Astin (1958), Atkinson and Litwin (1960), Pal (1968), Southern and Walter (1968), and Rim (1970, 1971) have reported that the value system of one person differs from the others due to the differences in their personalities.

HEXACO model of traits (Ashton & Lee, 2009) is similar to the Big Five, but it posits slightly different versions of some of the traits, and its proponents argue that one important class of individual differences was omitted from the Big Five-Factor Model. The HEXACO adds honesty-humility as the sixth dimension of personality. People high in this trait are sincere, fair, and modest, whereas those low in the trait are manipulative, narcissistic, and self-centered. Thus, trait theorists have agreed that personality traits are important in understanding behavior, but there are still debates on the exact number and composition of the most important traits.

Other important traits are not included in comprehensive models like the Big Five model. Although the five factors capture much that is important about personality, researchers have suggested other traits that capture interesting aspects of our behavior.

Objective

1. To determine the moderating effect of gender in the relationship between:
 - (a) self-efficacy (Psychological Capital) and personal identity
 - (b) Role of Personality traits and personal identity

Hypotheses

H₀₁: Gender will moderate the relationship between Self-efficacy and Personality Traits as a predictor of Personal Identity.

H₀₂: Gender will moderate the relationship between personality traits (its dimensions) and personal identity as a predictor of Personal Identity.

Method

Participants and procedure: The initial sample comprised 400 adolescents in the present investigation, made up of both male and female adolescent university students. The age range of adolescents was 11-19 years. The participants of the students were also ensured that all the comprehensive information would be kept very confidential and would be used only for research purposes. A standardized procedure of administration was used in each class. All the inventories or questionnaires associated with different variables were administered at a five-minute gap. moreover, after completing the questionnaire students were thanked for their patience, and cooperation in our research study, and the scoring was done based on suggestions/ instructions given in the inventories manually.

Measures

1.Aspects of Identity Questionnaire (AIQ-IV)

The aspect of the identity questionnaire was developed by Cheek & Briggs (2013). This scale began with the selection of items from Sampson's (1978) list of identity characteristics that were judged to represent the domains of personal and social identity (Cheek & Briggs, 1981, 1982). The psychometric analyses indicated that certain items originally scored in the social identity category (e.g., "Being a part of the many generations of my family") were tending to cluster on a third factor representing communal or collective identity, a third scale for this domain was developed (Cheek, Underwood, & Cutler, 1985 and Cheek, Tropp, Chen, & Underwood, 1994). Neither the social nor collective scales focus on intimate relationships with close friends or romantic partners, so the fourth scale for relational identity orientation ("Being a good friend to those I care about") was added to the AIQ-IV (Cheek, Smith, & Troop, 2002). Therefore, in the present study, the fourth version of Cheek, Smith and Tropp's (2002) scale was used.

2.The General Self-Efficacy Scale (GSE)

The general self-efficacy was developed by Schwartz and Jerusalem (1995). This scale was designed for the general adult population, including adolescents, to examine a general sense of perceived self-efficacy with the research goal, I kept in mind to predict coping with general and daily convenience as well as adaptation after investigating all types of problems in their life. It is a unidimensional scale, consists of 10 items. The general self-efficacy scale is a self-administered standardized scale with criterion-related validity and reliability with Cronbach's alpha which ranged from 0.76 to 0.90, with the majority in the high range from 0.80.

3.HEXACO PI-R Personality Traits Inventory

Personality traits inventory (HEXACO PI-R 60), a short personality inventory that assesses the six dimensions of the HEXACO model of personality traits structure. We selected the 10 items of each of the six scales from the longer HEXACO personality-revised (Ashton & Lee, 2009) intending to represent the broad range of content that defined each dimension. This scale showed a high level of internal consistency reliability rather than low internal correlations and the convergent correlation between self-reports and observer reports on the HEXACO-60 scales were high, averaging above and responses are in five categories (5 = strongly agree, 4 = agree, 3 = neutral (neither agree nor disagree), 2 = disagree, 1 = strongly disagree). Descriptive and internal consistency statistics for the HEXACO-60 scales in self-report. Cronbach's alpha ranged from .87- 0.90.

Statistical Analysis

Statistics provides the strategy and methods for gathering the maximum amount of information for a given expenditure of time and other resources. Once the relevant information is obtained, the researcher requires methods to describe and summarize data so that results are interpretable and communicated (Mendenhall and Ramey, 1973). The choice of statistical analysis depends on the purpose and objective to examine the moderating effect of gender on the relationship between self-efficacy and the role of HEXACO PI-R dimensions of personality traits among the adolescents of university students. The moderation analysis technique is effective as it not only between the independent variable and dependent variable but also renders the nature of their relationship, that is, the contribution of predictor and criterion variables.

Results and Discussion

Moderation analysis is a variable that influences the strength of a relationship between predictor (IV) and the criterion variable (DV). Moderators specify when an association will hold. It can be quantitative (age, race, sex, ethnicity), moderation occurs when the strength of the relationship between X and Y is dependent on the different levels of a moderator. The moderation “when” a predictor (IV) and the criterion (DV) are related. It is an interaction effect between X and M which respect to their effect on Y, where the interpretation of moderating variable changes the direction of the relationship between two variables. The hypothesis that gender individually moderates the relationship between predictors (self-efficacy and the role of HEXACO PI-R Personality traits) and the criterion variable (personal identity), multiple regression analysis was used.

Process analysis procedure given by Andrew F. Hayes (<http://www.afhayes.com>) was used to analyze the interaction effect and; the moderation analysis (in the 1st as well as the 3rd model) without the interaction effect and (in the 2nd model) with the interaction effect of gender on the relationship of predictor variables in the variance of the criterion variable.

To confirm a second variable making a moderation effect on the relationship between the two variables X and Y, it must show that the nature of the association change as the values of the moderating variable M change.

Table 1.1: Present the moderation analysis to examine the moderating effect of gender separately on the relationship of overall self-efficacy and role of HEXACO-PI-R dimensions of personality traits with personal identity.

Moderation Analysis: Gender as a Moderator of the Relationship between Self-efficacy and Personal Identity

Moderation schema for gender as a moderator of the relationship between values and personal identity prepared and shown in fig. 1.1.

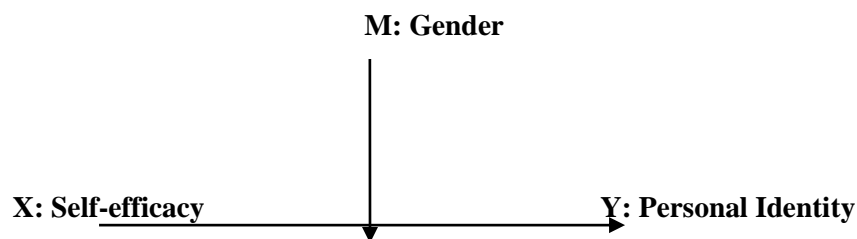


Figure 1.1: Schema for gender as a moderator between self-efficacy and personal identity

Table 1.1: Results of moderation analysis for the moderation effect of gender on the relationship between self-efficacy and role of HEXACO-PI-R dimensions of personality traits as predictors of personal identity (N=400).

	R	R ²	ΔR ²	Change Statistics			
				F Change	df1	df2	p
Model 1st	.405	.164	.164	39.924	2	397	.000
Model 2nd	.411	.169	.005	2.488	1	396	.115

Model 1st: Predictors: Gender, Self-efficacy

Model 2nd: Predictors: Gender, Self-efficacy interaction between Gender, Self-efficacy

As depicted in the above table 1.1, model 1st has the personality traits the interaction effect between gender and self-efficacy, while model 2nd self-efficacy with the interaction effect of gender and role of HEXACO-PI-R dimensions of personality traits.

It can be observed that in table 1.1, in model 1st that there is a significant variance in the personal identity, $\Delta R^2=.164$, $\Delta F(2,488) = 39.924$, $p<0.000$ which is a significant $p<0.001$ level of significance. It can be concluded that self-efficacy is a significant predictor of personal identity among the Bishkek adolescents, and; (in the 2nd model) the interaction effect between gender and self-efficacy was added to the regression model which is potentially significantly of the variance in the criterion variable, $\Delta R^2=.169$, $\Delta F(1,396) = 2,488$, $p<0.00$ which is significant $p<0.001$ level of significance. To determine this quantitative moderating analysis, it can be inferred that there is the strongest significant moderating interaction effect of gender on the relationship between self-efficacy with the criterion variable. Further, data for visualizing the conditional effect of the values (X2) on personal identity (Y) interaction plot was prepared and shown as fig. 1.2.



Figure 1.2: Interaction Plot-Gender as a moderator between self-efficacy and personal identity.

As it can be revealed from table 1.2 that by consideration of the interaction plot in fig. 1.2 that there is an interaction effect as the score of females increases with the increases in self-efficacy, there is an increase in personal identity. On the other side, when male scores increase with the increase in efficacy status, there is an increase in personal identity. It is mentioned that the scores of both groups (male and female) are high in self-efficacy.

After the results given in Table 1.2 indicates that the gender moderating effect is high with personal identity and self-efficacy among adolescents. We can conclude that self-efficacy and the role of HEXACO-PI-R dimensions of personality traits made the strongest and statistically positive significant contribution to the prediction of personal identity among the adolescents of Bishkek.

Moderation Analysis: Gender as a Moderator of the Relationship between Role of HEXACO PI-R Dimensions of Personality Traits and Personal Identity

Moderation schema for gender as a moderator of the relationship between role of HEXACO PI-R dimensions of personality traits and personal identity prepared and showed in fig. 1.3.

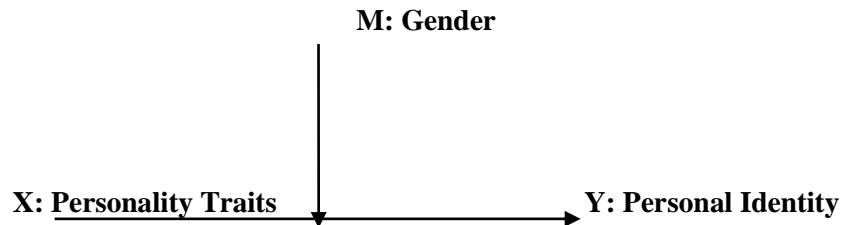


Figure 1.3: Schema for gender as a moderator between the role of HEXACO PI-R dimensions of personality traits and personal identity

Table 1.2: Results of moderation analysis for the moderation effect of gender on the relationship between self-efficacy and role of HEXACO PI-R dimensions of personality traits as predictors of personal identity (N=400).

	R	R ²	ΔR ²	Change Statistics			
				F Change	df1	df2	p
Model 1st	.284	.018	.018	35.040	1	398	.000
Model 2nd	.365	.133	.052	11.940	2	396	.000

Model 1st: Predictors: Gender, Role of HEXACO PI-R dimensions of personality traits

Model 2nd: Predictors: Gender, personality traits interaction between Gender, personality traits

It can be observed from Table 1.2, values (in the 1st model) separately explained 1.8% of the variance in criterion variable, $\Delta R^2 = .018$, $\Delta F(1,398) = 35.040$, $p < 0.001$ which is a significant $p < 0.001$ level of significance. It can be concluded that personality traits are a significant predictor of personal identity and; (in the 2nd model) the interaction effect between gender and dimensions of personality traits was added to the regression model which is potentially significantly of the variance in the criterion variable, $\Delta R^2 = .133$, $\Delta F(1,396) = 11.940$, $p < 0.001$ which is a significant $p < 0.001$ level of significance. To determine this quantitative moderating analysis, it can be inferred that there is the strongest significant moderating interaction effect of gender on the relationship between self-efficacy and personality traits with personal identity. Further, data for visualizing the conditional effect of the role of HEXACO PI-R dimensions of personality traits (X₂) on personal identity (Y) interaction plot prepared and shown as fig. 1.4.

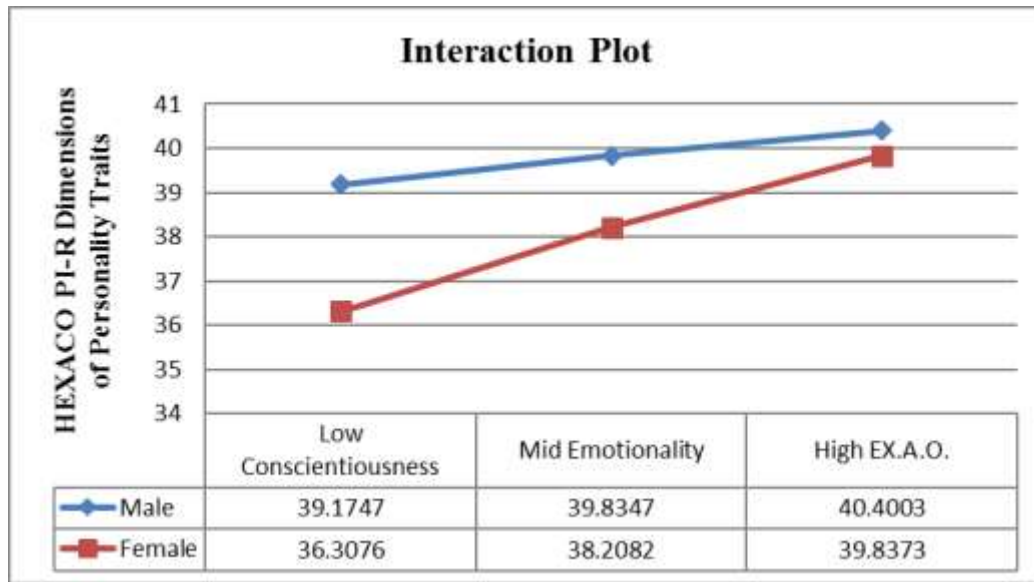


Figure 1.4: Interaction Plot-Gender as a moderator between the role of HEXACO PI-R dimensions of personality traits and personal identity

As it can be revealed from Table 1.2 that by consideration of the interaction plot in fig. 1.4 there is an interaction effect as the score of females increases with the increases in role of HEXACO PI-R dimensions of personality traits emerged as a significant predictor of criterion variable, there is an increase in personal identity. On the other side, when male scores increase with the increased role of HEXACO PI-R dimensions of personality traits status, there is an increase in personal identity. It is mentioned that scores of both gender male and female.

After that deliberating on the results given in Table 1.2 indicating the gender moderating effect is high with personal identity and the dimensions of personality traits (Extroversion, agreeableness, and openness to experience among the adolescents of Bishkek communities. It can be inferred that self-efficacy and dimensions of personality traits made the strongest and statistically positive significant contribution to the prediction of the criterion variable.

Based on the review of literature, it can be concluded that the moderating effects of gender difference on the relationship between self-efficacy and the role of HEXACO PI-R dimensions of personality traits have a significant role in adolescents for prediction of future perspectives of different communities. These variables play a vital role in interpersonal identity, good health (mental and physical), well-being, adjustment, and environmental competence. In a specific manner, self-efficacy is closely related to avoidance of sadness and one's feeling of control in the outcomes, but more pivotal variation in the influences of personal identity, personality traits among the adolescents of Bishkek through these variables can develop themselves in a better way of life.

Conclusion

Adolescence is a significant life stage when both individual character and dimensions of personality traits are entirely helpful, especially among the adolescents of university students. The exploration is relied upon to be stacked with important information which will in the general investigation and establish future collateral research and related perspectives. Determination of self-efficacy related to personality traits may help clinical psychologists in creating tools that would be utilized for instant

applications in tackling behavioral, mental, and psychological problems, sometimes intractable. Based on the findings of previous studies, Ambiel and Noronha (2016) suggested that the predictive capacity of the personality factors related to self-efficacy draws a personality profile of people with diverse self-efficacy levels. It may also be concluded that extraversion, agreeableness, and conscientiousness were the main predictors of self-efficacy. Differences from medium to large were observed between extreme groups, and extraversion and conscientiousness were the personality factors that distinguish people with low and high levels of self-efficacy. The findings revealed that self-efficacy and personality factors emerged as significant predictors of people with diverse Personal identity.

Implications of the Study

The findings of the present research could benefit individuals of varying age groups, gender, race, and educational levels. Findings are applied to the approaches that facilitate learning pathways and support ability processes in achievement and could be structured as intervention programs for adolescents in communities colleges and institutions that are appropriate to their development, with clear expectations for alleviating behavioral problems as well as increasing opportunities to develop positive healthy behavior and social values and norms. This research aim was to introduce positive values, beliefs, and attitudes among adolescents. It should be required for schools to have at least one trained social psychologist and counselor to improve personality, health, and well-being among adolescents.

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