

Gender Differences in Persistent Academic Possible Selves and Self-Esteem in University Students

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This study investigated the gender differences in persistent academic possible selves and self-esteem in university students. A sample of 176 students was collected from the University of the Punjab, Lahore, Pakistan, using a convenient sampling technique. Rosenberg's self-esteem scale (Rosenberg, 1965), and the Persistent Academic Possible Selves scale (Lee et al, 2015) were used to measure global self-esteem and students' academic possible selves respectively. Items of the measure of persistent academic possible selves include three theoretical components i.e., social identity, personal identity, and self-regulation. Results showed significant gender differences in the measures of persistent academic possible selves among university students. Moreover, female research participants had higher persistent academic possible selves based on social identity and self-regulation than male research participants. However, significant gender differences were not found in self-esteem.

Keywords: Persistent academic possible selves, self-esteem, gender differences

University students are at the stage of the life where they can plan their future and can make their decision in reference to their academic capability (Lens et al., 2012; Cadely et al., 2011). Literature suggested that academic possible selves facilitate students in managing their motivation and self-regulation for better future academic performance (Hoyle & Sherrill, 2006).

Therefore, it is an interesting subject matter for researchers to investigate how these individuals attain persistent academic possible selves. A persistent academic possible self is the academic accommodation of possible self, where one's focus is on the objectives in a future state. We can describe it as one's distinctive descriptions of academic future potential outcomes (Altschul, Oyserman & Bybee, 2008).

In this context, Oyserman's identity-based model for persistent academic possible self covers three major areas related to self-concept: social identity, personal identity and self-regulation. These three internal indicators of persistent academic self give complete awareness to students about their perception of academic self (Lee et al 2016). *Social identity* is described as one's sense of belonging to social groups, which guides one's choices of life objectives (Oyserman, 2007). *Personal identity* refers to the ideas and the aspirations that one has for oneself. It is observed that people have their own personal identity, which is greatly influenced by their social identity (Oyserman, 2007). *Self-regulation* is defined as self-regulative strategies that one can adopt to achieve certain goals (Schunk, 2008). When one uses self-regulated learning strategies actively to attain academic goals, that is known as academic self-regulation (Zimmerman & Martinez-Pons, 2007).

Oyserman and Fryberg (2006) found that girls self-regulate better than boys. Mattox (1997) reported females performed better than males in academia and it has also been demonstrated females scored more on academic tasks than their male partners (Ismail & Othman, 2006). Similarly, in another study, female research participants reported having higher qualifications than males (Barrow, Reilly & Woodfield, 2009). A few studies have given other results, where, for instance, researchers found no gender differences in academic achievement and success (Khwaileh & Zaza, 2011). Similarly, no gender difference was reported in having balanced academic possible selves (Oyserman, Gant & Ager, 1995). Likewise, research in Pakistan has revealed no gender difference but a positive association between academic self-concept and achievement (Ahmad, Zeb, Ullah & Ali, 2012). Educational psychology has stressed the distinctive relationship between academic possible selves and self-esteem (Marsh & Yeung, 1997).

Self-esteem is defined as the worth and the value that is given by a person to her/himself; it can be either positive or negative (Rosenberg, 1965). It can be considered as the conscious experiences (particularly self-awareness) of students that lead them to build their self-concept. This self-awareness will help a student to weigh himself/herself on the basis of his/her academic performance, which in turn affects his/her self-esteem (Rogers, Smith & Coleman, 1978).

On general grounds, literature advocates people with low self-esteem have a poor psychological wellbeing (Tennen, Hall & Affleck, 1995) compared to those people who had high self-esteem (Branden, 1994). Thus, self-esteem affects the pleasure of life, so it does have a considerable effect on career, productivity, and other related dynamic events (Lopez & Synder, 2003). A good description of self-worth is that it is based on our appraisal of our personal accomplishments, merits, attributes and the way we perceive ourselves in normal life, as well as in transitioning life events (Carr, 2004). It can be either negative or positive, depending on how we feel about ourselves (Smith, Seger & Mackie, 2007). According to Lans et al (2010), high self-esteem increase the confidence level in

individuals and as a result, they can deal efficiently with all types of situations.

Self-esteem is closely related with academic possible self as the more a student is aware of his academic accomplishment, fears or hopes, the more clearly he or she will be able to evaluate him/herself academically (Pullmann & Allik, 2008; Sheard, 2009; Komarraju, Swanson & Nadler, 2014). Research suggests a distinct relationship between academic possible selves and self-esteem among genders (Marsh & Yeung, 1997). For example, few studies suggest that boys have better self-esteem than girls (Leondari, Syngollitou & Kiosseoglou, 1998; Schwalbe & Staples, 1991; Hawi & Samaha, 2017). Similarly, if girls had negative possible selves this would be reflected in low self-esteem (Knox et al., 2000). Besides, no gender differences have been reported in various studies (see Sue and Abe, 1988; Young, 2001; Downing et al., 2008). Pakistan is confronting issues related to gender difference as research has demonstrated high self-esteem among male university students than female university students (Niazi, Adil & Malik, 2013).

The above literature review indicates that mostly research on this topic is conducted in the West among which few of them were focus on South Asian population as well as it is noted that in indigenous studies, academic possible self and its relationship with self-esteem has been ignored. Therefore, the study sets out to find the relationship between academic possible self and self-esteem. Moreover, review indicates that academic possible selves and self-esteem may be different across gender. Pakistan has a patriarchal culture and because of this women thought more of gender discrimination in term of finding jobs later on; therefore, gender played a vital role for embracing the academic possible selves (Lips, 2004). Literature indicates that gender discrimination sometimes anticipated to affect the academic possible selves of university students (Steele, James & Barnett, 2002; Hartman & Hartman, 2002). Thus, the salient goal of this study is to assess the gender difference among the aforementioned variables. It explores which gender scored highest in achieving social-identity-based persistent academic possible selves, personal-identity-and-forethought-based persistent academic possible selves and performance-in-self-regulation-based persistent academic possible selves. These objectives are based on the literature review and they focus on investigating the gender differences in persistent academic possible selves (social identity, personal identity, self-regulation and self-esteem) among university students.

It was hypothesised that female university students were likely to have higher persistent academic possible selves than male university students. Based on the work of Oyserman & Fryberg (2006), it was hypothesised that female university students were likely to score highly on social-identity, personal-identity, and self-regulation-based persistent academic possible selves than male university students. Additionally, it was hypothesised that female university students were likely to have higher forethought-phase and performance-phase-based persistent academic possible selves than male university students. In relation to the previous literature related to self-esteem (Young, 2001; Downing et al., 2008), it was hypothesised that male university students were likely to have higher self-esteem than female university students.

Method

Participants

Between subject research design was used in this study. A sample comprising 176 students was taken from the University of the Punjab,

Lahore; the sample size was estimated by G power with a medium effect size of .30 (male=88, female=88). Research participants ages ranged from 18 and 25 years ($M=22.23$, $SD=2.09$). The data was collected through a convenient sampling technique. Precisely, 40 % of the data ($N=70$, 50 females and 20 males), 25% of the data ($N=44$, 10 females and 34 males), 20 % of the data ($N=35$, 15 females and 20 males) and 15 % of the data ($N=27$, 13 females and 14 males) was collected from Psychology, Sociology, Social work and English department respectively. Of the participants 116 were postgraduate (female= 60 and male= 56) and 60 were student of undergraduate (female= 28 and male= 32). Researchers approached total 250 students among which 27 did not give their consent, and 47 forms were incomplete; therefore, total 74 forms were excluded. Total response rate was 89%.

Instrumentations

Rosenberg scale for self-esteem (R-SES) was used in this study to measure self-esteem; it was developed by Rosenberg in 1965. The scale comprised of 10 items using a 4-point Likert-type scale where 1=strongly agree and 4=strongly disagree. Its score range falls between 10 and 40. The coefficient alpha for the scale was .82.

The Persistent Academic Possible Selves scale (PAPSS) was developed by Lee in 2015, and the items of the scale focus upon three theoretical components (social identity, personal identity, and self-regulation). It uses a seven-point Likert scale where 1=strongly disagree and 7=strongly agree. The reliability of the scale was .90.

Procedure

The research was started in an orderly manner by acquiring permission from the authors of the scales that were used for the purpose of data collection. As the students were bilingual, both scales were administered in English. The research was approved by the ethical research committee of the Institute of Applied Psychology, University of the Punjab, Lahore, Pakistan. The students were chosen on the basis of their availability and interest. They were informed about the purpose of the study through information sheet, and their written consent was taken on the consent form after dealing with their queries regarding the research purpose and the questionnaire. They were also assured about the confidentiality of all the obtained information.

Data Analysis

In order to test the hypotheses on the current foremost variables, analyses were carried out through SPSS version 22. Preliminary analysis was conducted in order to understand the data set and the test of reliability and test of normality were performed. Reliability analysis was conducted for each scale coefficient alpha, and for all the scales this ranged from .76 to .90. However, the data did not appear normally distributed on K-S test of normality as the p value of all scales was less than .05. The distribution of the scores for persistent academic possible selves, social identity, personal identity and self-esteem was negatively skewed. This might be due to most of the data was collected from the postgraduate students and they were well aware of their possible academic self, social and personal identity, and for most of the students postgraduation is considered the terminal degree in Pakistan which might also effect their self-esteem this is why they scored high on these variables. However, the distribution of the scores observed for self-regulation was positively

skewed. This might be because at this stage they considered themselves unable to plan their future higher studies right after the completion of postgraduation, so they scored low on this facet of academic possible selves.

In short, all variables were non normally distributed; therefore, non-parametric tests including Spearman's correlation coefficient and the Mann-Whitney U test were applied as the main analysis to explore the research questions (See, Field, 2013).

Results

As mentioned above, statistical analyses were conducted through SPSS version 22. Table 1 presents data on persistent academic possible selves and its components (social identity, personal identity and forethought phase in self-regulation, and performance phase in self-regulation), which had a positive relationship with self-esteem.

Table 1
Spearman Brown Correlation among Variables Studied in the Sample (N=176)

	1	2	3	4	5
1.PAPS	—	.85***	.92***	.90***	.434***
2.SI		—	.75***	.68***	.34***
3.PISR			—	.80***	.86***
4.PPSR				—	.20**
5.SE					—

Note. PAPS = Persistent Academic Possible Selves; SI = Social Identity; PISR = Personal Identity and Forethought phase in Self- Regulation; PPSR = Performance Phase in Self-Regulation; SE = Self-esteem *** $p < .001$, ** $p < .01$, * $p < .05$.

Table 2
Analysis of Mann-Whitney U Test Difference in Persistent Academic Possible Selves and Self-Esteem between Males and Females (N=176)

Variables	U	P	Mean ranks	
			Males	Females
PAPS	3101.50	.02	79.74	97.26
SI	2631.50	.00	74.40	102.60
PISR	3287.50	.08	81.86	95.14
PPSR	3007.00	.01	78.67	98.33
SE	3423.00	.17	83.40	93.60

Note PAPS = Persistent Academic Possible Selves; SI = Social Identity; PISR = Personal identity and Forethought phase in Self-Regulation; PPSR = Performance phase in Self-Regulation; SE = Self-esteem

The results of the Mann-Whitney test are presented in Table 2. This reveals significant gender differences in measures of persistent academic possible selves among university students ($U=3101.50$, $p=.02$). Mean score on persistent academic possible selves of female participants (Mean Rank=97.26) was higher than male participants (Mean Rank=79.74), suggesting that females were more likely to have higher persistent academic possible selves than males. Similarly, females tend to have higher persistent academic possible selves based on social identity (Mean Rank=102.60) than males (Mean Rank=74.40). There is no significant gender difference found in personal identity and the forethought phase in self-regulation, but female participants scored higher in the performance phase in self-regulation (Mean Rank=98.33) than male participants (Mean Rank=78.67). Moreover, no significant gender difference was found in self-esteem ($U=3423.00$, $p=.17$).

Discussion

In line with previous research findings, the results of the study revealed that female participants had higher persistent academic possible selves than males (Ismail & Othman, 2006). Indigenous research also shows that female students have a higher ability to achieve and perform in an academic setting than male students (see Akram & Ghazzanfar, 2014; Farid & Akhter, 2013). These findings can also be defined in terms of the recent focus on women's empowerment schemes by the government of Pakistan, where a special focus has been given to women's education and enhancing education-related identity in females in order to address gender discrimination in society.

The results also support the hypothesis that females have higher social-identity-based persistent academic possible selves than males. Some previous studies have reported that females have a better awareness and utilisation of self-concept within the context of social identity than males (Ismael & Othman, 2006; Sheard, 2009). Therefore, this can be explained in reference to the Pakistani culture, where females are living in a society of gender inequality.

The next hypothesis was related to gender difference in personal identity and the forethought phase; this was rejected in this study. Previous research has reported findings in line with those of this study (Sue & Abe, 1988; Mattox, 1997). Another hypothesis, that female university students have higher persistent academic possible selves in the performance phase of self-regulation, was accepted. Previous research provides evidence that girls achieve high performance in personal endowments and achievements (Barrow et al 2009; Sheard, 2009). The final hypothesis was rejected as no significant gender differences were found in self-esteem among the research participants. However, this finding is in line with previous literature that advocated that male and female students do not differ in self-esteem (Alavi & Askaripur, 2003; Zafar et al., 2014; Coelho, Marchante & Jimerson, 2017). It can be explained in term of their student identity, which conveys to them a sense of self-worth and in turn increases their self-esteem (e.g., Hogan & Roberts, 2004; Chung et al., 2014).

Based on these results, it can be concluded that the female research participants in this study had higher persistent academic possible selves based on social identity and self-regulation than the male research participants. However, no significant gender difference was found in terms the self-esteem of the research participants. These findings can be explained in terms of the female participants' student identity, which give them a sense of worth and helped them to develop an education-related identity. However, it is possible that the male participants did not find it a challenge to achieve a sense of worth because they were living in a patriarchal culture.

The findings of the study must be considered by keeping in view the following limitations. The present study used a small sample size, and most of the data was collected only from the departments of social sciences which constrained the representation of the entire university student population. Therefore, future researchers should collect data from a large sample size and equal representation should be given to all studied disciplines in the university. Moreover, in this study most of the research participants were postgraduate students which might be one of the cause to create skewness in the data; therefore, in future studies data should also be collected from undergraduate students in order to get a better understanding of possible academic selves in university students. As, violation of normality was observed in the data which cannot make the analysis

invalid, but makes it weaker; therefore, caution is required to generalize the results (Field, 2013). The measures used in the current study were self-reported, which might cause social desirability bias in their replies, so it is suggested that future researchers add some measures to control this element.

Furthermore, the study carries several implications for research and practice. The findings can be used in academic settings for the development of different programmes to motivate students to develop possible academic selves and seek possible strategies to achieve them. The present study might attract researchers to research the concept of persistent academic possible selves and its effect upon one's self, which in return helps to develop effective strategies to achieve academic possible selves in educational settings (Bi & Oyserman, 2015; Oyserman *et al.*, 2006; Iyer *et al.*, 2017). It may provide a guideline to teachers to understand the concept of persistent academic possible self in a more scientific way and it will help to motivate students to develop possible selves and enhance their performance through self-regulation.

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Received: 29th May, 2019

Revisions Received: 14th Jan, 2021