High school students' achievement goal adoption: Evidence from neglected rural high schools in Iran

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ABSTRACT

The study aimed to examine rural high schoolers' achievement goal preferences and the potential gender variations in a neglected rural context in Iran. To this end, a sample of 252 high schoolers answered Elliott and Murayama's (2008) Achievement Goal Questionnaire-Revised (AGQ-R). Quantitative results indicated the prevalence of mastery approach (MAp) and performance approach (PAp) goals, followed by performance avoidance (PAv) and mastery avoidance (MAv) goals. Further, an examination of gender differences indicated no significant differences between male and female high schoolers in their adoption of MAp, PAp and MAv goals. However, a significant difference was observed between male and female students in their resort to PAv goal. Results may have implications for different individuals in educational settings such as educational authorities, teachers, and counselors as well as researchers.

1. Introduction

The notion of motivation is located in the heart of the educational enterprise [1], and for this reason it has attracted the attention of many researchers since its introduction. To shed light into individuals' motivation, researchers have formulated a host of theories, with achievement goal theory (AGT) being a prominent one particularly in achievement settings [2], [3]. A major element of AGT, which delves into the inherent purposes driving individuals to achieve, is the notion of goal orientation [4]. Since the inception of AGT, different achievement goal orientations have been introduced, with the most well-known comprising mastery approach (MAp), mastery avoidance (MAv), performance approach (PAp) and performance avoidance (PAv). As Elliot and Murayama [5] noted, students with MAp orientation seek to achieve competence which is task-centered or intrapersonal whereas those with PAp orientation seek to obtain competence that is normative. Likewise, students with MAv orientation try to refrain from incompetence with task-centered or intrapersonal nature while those with PAv orientation seek to refrain from incompetence with a normative nature [6]. Since the distant past, achievement goal orientations have been a concern of research studies both internationally [4], [6]–[10] and in Iran [11]–[13]. However, rural students' goal orientation development has been evidently overshadowed by their urban counterparts' [14] in previous research. This has been particularly true for the Iranian rural context where, in general, educational investigations of rural schools or students appear limited or have even sunk into oblivion. Not surprisingly, the extant previous research on goal orientations in Iranian context confirms this lack of research dedication to rural students' achievement goals.

Thus, the preset study seeks to shed more light on two issues in the literature, rural students' goal orientation preferences and the possible gender impact in the rural context. The few education-related studies in rural Iran [15] indicate the abundance of rural specific hassles with the potential to disrupt

education. Many rural specific problems such as the absence of professional teachers, economic problems [16], [17], social pressure, and absence of educational amenities reported in Iranian context may influence rural students' motivation negatively. Therefore, one's curiosity is aroused as to what goals the underserved rural high school students might adopt or prefer under the influence of such detrimental factors. Additionally, scrutinizing gender impact in rural contexts can be of great import. Despite the extant research on gender and goal orientations, several researchers [2], [18] acknowledge that the association of gender and goal orientations has been particularly inconclusive, requiring ongoing and extended analysis. Besides, taking into account the afore-mentioned unique features of rural contexts, it would not be politic to generalize non-rural research findings on gender to a rural context, with largely marginalized population with different concerns.

In the last decades, there has been an attempt among researchers to draw on a social cognitive approach in order to investigate the linkage between motivation and human behavior in achievement settings [19]. As many researchers [19], [20] highlighted, AGT has been one of the main frameworks within the social cognitive approach for researchers to utilize in scrutinizing achievement motivation. Likewise, Miller [4] underscored the centrality of AGT as a theory mainly drawn upon in educational settings and in various fields to shape studies targeting learner goals. The primary assumption endorsed by AGT is that in order to fathom out students' motivation and behaviors associated with achievement, one needs to probe into purposes for students' involvement in particular academic work [10]. Similarly, Papaioannou et al. [21] posited that the basic assumption in AGT is that individuals are organisms with planned and goal directed behavior, and function in a rational way. Thus, goal orientations, defined as the inclination to an achievement goal [22], play a significant role in AGT studies. Liu et al suggested that students' different purposes or goals (or their combinations) may result in different effects on the outcomes associated with their cognition, affect, and behavior [2]. In the AGT literature, various goal orientation models have been proposed. As Liu et al cited [2], there are four goal orientation models in the literature including the dichotomous model, trichotomous model, 2×2 model (or the four-factor model), as well as 3×2 model. Whereas the early studies involving AGT centered on the dichotomous model with two types of goal orientations, i.e. task (or mastery) and ego (or performance), the more recent models added other orientations as well. The dichotomous model was followed by a trichotomous one categorizing the ego/performance goal into performance approach and performance avoidance goals [2]. The 2×2 model [5], [23] took one more step and categorized mastery goals into mastery approach and mastery avoidance goals. A fourth one, the 3×2 model, varies from the 2×2 model in that it comprises the three standards of task, self, and other used to evaluate competence [2]. Among these models, the 2×2 model was selected for the present research. A glance at the literature across varying domains indicates that this model is nearly the most prevalent and trusted one among researchers [4], [24]. Further, it appeared logical to follow in the previous researchers' footsteps and capitalize on the 2×2 model since this could facilitate a reliable comparison of our findings with those in non-Iranian contexts. In the 2×2 model, four types of motivational orientation including mastery approach goals, mastery avoidance goals, performance approach goals, and performance avoidance goals were proposed.

Goal orientation has been the target of several research studies chiefly conducted in foreign contexts and at times in Iran, with a bulk of them examining the linkage between different goal orientations and other issues such academic achievement [7], [9], [25], and affective factors [26]–[28]. Likewise, a vast number of other studies, mainly in non-Iranian and urban contexts, have examined the link between goal orientations and other variables (chiefly psychological) that can probably shape or predict an individual's goal orientations. These studies have examined, inter alia, variables such as self-efficacy [29], the five-factor model of personality [30], [31], learning strategies [32], gender [2], [18] and family orientations [33]. Akin to the rich literature in foreign contexts, the studies on goal orientations in the Iranian context appear rather prolific in urban locales [11]–[13]. However, researchers have been somewhat oblivious to the rather unique rural settings and communities not only in Iran but also in the international context as well. Besides, the previous studies on gender have been inconclusive [2], [18] which leaves space for more research, especially in the unique rural context where gender differences might be more conspicuous than urban locale. Knowledge of rural students' achievement goal orientations can assist a host of individuals such as policy makers and educational authorities at the macro level, and other relevant individuals such researchers, teachers, principals and parents at the micro level. Through such information, these individuals can also ascertain the peculiarities in rural students' achievement goal adoption and help them toward the most beneficial

path. Taking into account the research gaps, the present research aimed to ascertain male and female rural high school students' preferred achievement goal orientations and the potential gender variations in their goal adoption preferences. As such, the following research questions were formulated for this research; (1) What goal orientations do Iranian rural high school students prefer? (2) Is there a significant variation between male and female rural high school students in their adoption of achievement goals? For the study, the following null hypothesis was formulated; There is no significant variation between male and female rural high school students in their adoption of achievement goals.

2. Method

2.1. Sample

A sample of 252 male and female rural high school students from seven high schools took part in the current study. The schools, which were located in a rather large county in Iran, were selected through cluster sampling. The county which had a large, primarily marginalized, rural population was selected purposively. Concerning the gender composition of the sample, 51% male (N=128) and 49% female (N =124) took part in the research. The respondents' mean age was 16.89. Eventually, regarding the respondents' ethnicity, they were Turkish.

2.2. Instruments

In this study, a translated version of Elliott and Murayama's [5] 12-itemed Achievement Goal Questionnaire-Revised (AGQ-R) was used to measure students' goal orientation. The questionnaire is a revised version of Elliott and McGregor's [23]. Achievement Goal Questionnaire (AGQ) and similarly it gauges the four subscales of MAp, MAv, PAp, and PAv. In AGQ-R, many of the criticisms leveled at AGQ have been dealt with [5]. The modifications have been made in both the content of the items (e.g. wording) and the Likert scale (five Likert scales instead of the original 7 scales). Sample items in this scale include 'My goal is to learn as much as possible' for MAp, 'My aim is to perform well relative to other students' for PAp, 'My goal is to avoid learning less than it is possible to learn' for Mav, and 'My aim is to avoid doing worse than other students' for Pav. The participants in this study indicated their agreement on a 5-point Likert scale (ranging from 1= strongly disagree to 5=strongly agree). Further, to establish the MAp, PAp, MAv, and PAv indexes, the researchers averaged the items [5]. The reliability of the MAp, MAv, PAp, and PAv subscales were reported by Eliot and Murayama [5] to be 0.84, 0.88, 0.92, and 0.94, respectively. In Iran the questionnaire was translated by Moshtaghi et al. [34] and its validity was assessed via (exploratory and confirmatory) factor analysis. In their research, the CFI and RMSEA indices were found to be 0.98 and 0.04, respectively, indicating acceptable validity. The researchers reported Cronbach's alpha coefficient to be 0.79, 0.75, 0.75 and 0.65 for the subscales of MAp, MAv, PAp and PAv, respectively. The Cronbach's alpha coefficient reliability of the four subscales of MAp, MAv, PAp, and PAv in the current study was 0.84, 0.79, 0.85, and 0.88, respectively.

2.3. Data Collection Procedure

Prior to conducting the research, the researchers met with school principals to inform them about the research and solicit their permission. Before approaching the schools, the researcher traveled to the target villages and found local friends. The presence of locals could facilitate the process of gaining respondents' and principals' cooperation and trust. The potential respondents were told about the voluntary nature of the research and given instructions on how to fill in the questionnaire. Next, the AGQ-R -12 was distributed. Prior to the administration of the scale, the researchers explained the instructions to the volunteering high school respondents, highlighting the confidentiality of their responses, and their privacy. At the end of the study, rewards were granted to the respondents. In this study, no institutional review board was involved. However, the researchers conducted the study according to established ethical guidelines such as anonymity, privacy and participant's consent. In the study, the researchers utilized SPSS 23 for the quantitative analysis. Specifically, descriptive statistics was carried out for the first research question and Mann Whitney U Test for second one.

3. Results and Discussion

3.1. Goal Orientation Preferences

The initial question of the present research sought to elucidate the rural respondents' goal orientations. As Table 1 indicates, descriptive statistics revealed that the respondents adopted MAP, PAP, PAV, and MAV goals, respectively. The descriptive statistics comprising mean, standard deviation, skewness, and kurtosis are presented in Table 1.

Table 1. Descriptive Statistics for Rural High Schoolers' Goal Adoption

Goal Type	Mean	Standard Deviation	Skewness	Kurtosis
MAp	3.83	0.73	-0.54	-0.026
MAv	3.43	0.70	-0.22	-0.297
PAp	3.62	0.74	-0.21	-0.411
PAv	3.50	0.79	-0.11	-0.494

As Table 1 demonstrates, the male and female high school students' mean values indicate their highest tendency for MAp (M=3.83) and PAp (M=3.62) orientations, followed by PAv (M=3.50) and MAv (M=3.43). What is more, statistics for standard deviation, skewness and kurtosis appear to be either acceptable or moderate.

3.2. Gender Variations in Goal Orientation Preferences

Secondly, the present research aimed to ascertain any potential gender-based variations with regard to goal orientation adoption. Considering the violation of normality assumption, the researchers drew on the Mann-Whitney U test. Mann Whitney U Test outcomes indicated the absence of significant gender-based variations in MAp, MAv, and PAp goals, with the exception of PAv goal orientation. Table 2 illustrates the male and female high schoolers' insignificant variation in MAp, MAv and PAp achievement goals.

Table 2. Mann Whitney U Test Outcomes for Gender-Based Variations in MAp, MAv and PAp Goals

Goal Type	Group	N	Rank Average	Sum of Ranks	U	Z	P
MAp	Male	128	133.30	17062.50	7065.50	-1.529	.126*
	Female	124	119.48	14815.50			
MAv	Male	128	123.45	15801.50	7545.50	-.686	.493*
	Female	124	129.65	16076.50			
PAp	Male	128	123.93	15863.00	7607.00	-.576	.565*
	Female	124	129.15	16015.00			

* The difference is insignificant since p>.05.

As Table 2 indicates, there was no evidence to support a significant variation in male and female students' MAp (Z= -1.529; p=.126>.05), MAv (Z= -.686; p=.493>.05), and PAp (Z= -.576; p=.565>.05) adoption. For instance, regarding MAp goal, male students obtained the mean rank of 133.30 whereas their female counterparts obtained the mean rank of 119.48, indicating a resemblance of the two groups. Similar trivial mean rank variations between male and female students also hold true for MAv and PAp goals. Nevertheless, as Table 3 illustrates, there was a significant gender-based difference in PAv goal adoption.

Table 3. Mann Whitney U Test Outcomes for Gender-Induced Variations in PAv Goal Adoption

Goal Type	Groups	N	Rank Average	Sum of Ranks	U	Z	P
PAv	Male	128	112.83	14442.00	6186.00	-3.069	.002*
	Female	124	140.61	17436.00			

* The difference is significant since p<.01.

As Table 3 demonstrates, there was a statistically significant variation (Z= -3.069; p=.002) in male and female high schoolers' PAv goal adoption. Whereas male students' rank average was 112.83, females' was 140.61. Thus, the variation in PAv goal adoption attested to the only significant gender-based variation indicating how male and female students varied. The present research aimed at shedding light on male and female rural high schoolers' achievement goal preferences in a rural setting in Iran, as well as the potential gender variations in their achievement goal preferences. Initially, results from the first research disclosed MAp as the most significant goal adopted by the high schoolers, followed by PAp, PAv and MAv, respectively. The results on MAp goal predominance in

rural contexts are consistent with those of Freeman and Anderman [14] who reported MAp as the quintessential goal orientation in rural settings. However, unlike their study, the normative goal of PAp was also reported as a rather highly dominant goal orientation. The salience of MAp might be understood through a reflection on the role of various factors (especially, psychological). For instance, from a psychological perspective, rural students might be perfectionistic in such a manner that they may wish to master lessons (MAp) rather than just be content with limited learning (MAv).

This possible perfectionism can be considered along with their need for learning and education. Rural students who are usually deprived of opportunities for learning might value education and the significance of learning to a high extent. Additionally, such a tendency toward MAp may also come from the encouragements of other significant individuals in family or school such as siblings or rural school teachers who may encourage students toward learning. The prevalence of PAp goal might be viewed from various perspectives (particularly economic or social). Perhaps rural students adopt such a goal primarily because of the influence of the rural society, and to gain social value. Economically, rural students might have to compete (resort to PAv) to land a job. Due to competitive job markets, students may have to outperform others to be qualified for better jobs. The outcomes demonstrated no significant variation in male and female high schoolers' MAp, PAp and MAv goal adoptions, with the exception of PAv. As previous researchers [2], [18], [35] have reported, gender impact on goal development is yet not clear-cut or conclusive. However, in the present study, the variation in PAv adoption appears to be of huge import. Such an outcome might be justified with a view to female high schooler's potentially higher susceptibility/vulnerability to peer pressure. Of course, pressure from other rural context individuals such as family members and rural community can also be considered a potential reason for the higher frequency of PAv goal among female high schoolers. Such pressure may lead female students toward the effort to avoid failure or embarrassment, hence the adoption of PAv.

4. Conclusion

Overall, the outcomes indicate the salience of MAp as a mastery goal and PAp as a normative goal in rural high schools. Further, given the potential pressure in rural locale leading to PAv adoption, it appears logical to find this goal more salient among the more vulnerable female high schoolers. The findings may have practical implications for different related individuals in educational settings as well as researchers. The results may encourage key decision makers and key related individuals in educational contexts such as teachers and counselors to pay more attention to female rural students, providing them with pressure-free atmosphere where they can choose their own achievement goals rather than those imposed (e.g., PAv). To reduce social pressure on rural students, particularly female ones, the key stakeholders, and decision makers may need to collaborate more with parents, family members or even other community members in rural settings, raising their awareness of student motivation. Researchers may also want to conduct more research on the underserved and marginalized rural high schoolers' goal orientations, especially by drawing on other motivational theories to shed more light on rural students' underlying motivation. Certain limitations might diminish the generalizability of the present research. Some of these limitations may include the rather small rural sample (that may scale back generalizability), a lack of comparison between urban and rural students, a lack of observation as well as qualitative analysis, and the employment of self-report measures susceptible to social desirability. Irrespective of such limitations, the study offers unique insight into the under-investigated rural population's goal orientation preferences.

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