Social Achievement Goal Theory in Education:
A Validity and Reliability Study

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Abstract: The objective of this study was to validate the Iranian version of the Social Achievement Goal Orientation Scale and test the Social Achievement Goal Orientation theory in the context of Iranian students. A total of 403 Iranian high school students completed a Social Achievement Goal Orientation Scale and an Achievement Goal Questionnaire. Exploratory and confirmatory factor analyses confirmed the hypothesized model of social achievement goals. The fit of the proposed three-factor model was promising and moderate support for the three factor structure of social goal orientation was found using scores from an abbreviated 13-item SAGOS. Graded Response Model showed an information function that was peaked at the upper end of the scale, indicating that severe social goal orientation is measured with most precision. Convergent validity for the new measure of social achievement goals was established. Findings generally supported the trichotomous framework of the social achievement goal orientation theory with Iranian students. Consistent with the academic goal orientation theory, findings indicated that social mastery and performance-approach and performance-avoidance goals had positive relationships with academic goals.

Keywords: Social Goals, Goal Orientation, Construct validity, Convergent validity, Confirmatory factor analysis, graded response model, Item response theory.

1- Introduction

Achievement goal theory helps in understanding student motivation and behavior in an academic achievement setting. Similarly, achievement goals reflect how students evaluate their own competence in achievement situations, and these goals lead to the different ways in which students participate in and manage such situations [1].

Achievement goal theory has been the subject of many studies. At first, in the theory, two goals — mastery and performance goals— are distinguished. According to [2 and 3] mastery goals refer to the desire to understand an assignment, to obtain new knowledge, and develop abilities. Performance goals refer to the desire to show ability or competence by trying to obtain positive judgments. Goals can also be divided into subgroups: approach and avoidance [4]. For example, performance approach goal is related to demonstrating high ability and performance avoidance goal is related to demonstrating low ability.

In addition to the academic domain, competence in other areas is to be used, such as social, emotional, cognitive, health, cultural and moral competence [5]. Many researchers claim that for understanding motivation, the social goals should be combined with the academic goals and considered together [6-12].

Social goal orientations are similar to the framework of achievement goal orientations [13 and 14]. For example, a social mastery goal orientation reflects a focus on the development of competence in relationships (e.g., the development of deep friendships) and focus on enjoyment, interest, understanding, as well as caring and respect in relationships, while social performance goal orientation reflects a focus on the demonstration of competence in social relationships (e.g., being socially accepted), using an interpersonal or normative standard of comparison [15 and 13].

Social performance goals can also be divided into approach and avoidance components. For example, students with a social performance-approach goal orientation focus on demonstrating behaviors that would result in positive social consequences [16].

The objective of this study was to investigate how achievement goal theory is related to the social domain. Iran's education system is characterized by specific demographic, cultural and economic aspects, some of which may affect social interactions and possibly goal orientations. There are several reasons that may cause Iranian students to select different goal orientations from western students. Less focus on doing group works, less social interactions among students in the classes, big classes, and weak economic status of families, teachers and schools can be the possible reasons for their selection. No previous study has examined the psychometric properties of an Iranian version of the SAGOS on high school students. However, this study was particularly focused on the Social Achievement Goal Orientation Scale (SAGOS) developed by Ryan to represent social achievement goal orientation, social mastery orientation, social

performance-approach orientation, and social performance-avoidance orientation [15 and 13].

2- Methods
2-1 Participants
All junior high school students of Saveh were considered as population in the academic year 2005-2006. The participants were 403 high school students from Saveh (159 girls and 244 boys). They were from sixth (39.5%), seventh (31.4%) and eight (28.8%) grades. Stratified random sampling method was used to recruit participants.

First, number of all of students was extracted, and then in every field was computed proportion of sampling. This proportion multiplied in number of the sample. Finally, all of participants were recruited by appropriate proportion.
Vague. Please rewrite.

2-2 Instruments
In order to meet the objective of this study, two instruments were used.

2.2.1 The Social Achievement Goal Orientation Scale (SAGOS; [15 and 13]): SAGOS is a 22-item measure designed to represent three social goal orientations: social mastery, social performance-approach, and social performance-avoidance. The items are rated on a likert scale of 1 (not at all true for me) to 5 (very true for me). The social mastery subscale consists of eight items with possible scores ranging from 8 to 40. Both of the social performance subscales consist of seven items with possible subscale scores ranging from 7 to 35. For each subscale, higher scores indicate stronger endorsement of that goal.

2.2.2 The students' achievement goals were measured using the Achievement Goal Questionnaire (AGQ; [4]). The AGQ contains 18 items; 6 items used to assess each of the 3 separate goal orientations: mastery, performance-approach, and performance-avoidance. Students were instructed to simply indicate how true each item was for them using a 1 (Strongly Disagree) to 4 (Strongly Agree) likert scale. The possible subscale scores ranged from 6 to 24. Reliability and validity of the AGQ have been examined in numerous studies. Its reliability in the present study was .74 (approach goal), .57 (avoidance goal), and .81 (mastery goal).

2-3 Procedure
The subjects attended the research and completed all questionnaires. Order of administration of about 50% of the questionnaires was SAGOS and AGO, respectively. In the sense that first half of the participants were given SAGOS and the second half were given AGOS then this order of administration changed in a way that the first half of the participants were administered AGO and the second half were administered SAGOS. To minimize students' tendency to give socially desirable responses, the researcher had students spread out so that they could not see one another's responses. Students were told that there were no right or wrong answers and that they could skip any questions if they did not feel comfortable about answering. Students were also informed that information in the survey would be kept confidential and their teachers would not have access to their responses.

3- Results
The results of descriptive statistics are presented in **Table 1**. All achievement goals have an average score lower than the midpoint of the scale. The standard deviations range from .45 to .54. The correlations of the scores range from .43 to .44 for the SAGOS and .34 to .62 for the AGQ.

3-1 Reliability
Cronbach's alpha coefficients were calculated to examine internal consistency of test scores for each of the three social achievement goal subscales. The analyses of the total sample (n=403) yielded a Cronbach's alpha of .75, 0.67 and .66 for the social mastery, social performance-approach, and social performance-avoidance, respectively. In the social mastery, all corrected item-total correlations ranged between r=0.70 ("It is important to me to have friends who truly care about me") and r= 0.82 ("I feel successful when I learn something new about myself and how I relate to other people "), in the social performance-approach all corrected item-total correlations ranged between r=0.21 ("I feel successful when I impress others with my personality or social skills") and r= 0.54 ("I want to be seen as important by other people"), and in the social performance-avoidance, all corrected item-total correlations ranged between r=0.32 ("I am often concerned that others won't like me") and r=0.42 ("It is important to me that I avoid looking foolish").

Table 1 Means, Standard Deviations, Coefficient Alpha Reliability Estimates, and Pearson Correlations among Variables

Variable	M	SD	1	2	3	4	5	6
SAGOS								
1.social mastery orientation	1.52[a]	.45	.75[b]	.44	.43	.51	.48	.34
2.social performance-approach orientation	2.06	.53		0.67	.43	.25	.39	.29
3.social performance-avoidance orientation	1.87	.53			.66	.20	.37	.37
AGQ								
4.mastery orientation	1.54	.54				.81	.62	.34
5.performance-approach orientation	1.74	.53					.74	.47
6.performance-avoidance orientation	2.02	.53						.57

Note. N=403. All correlation was significance at level 0.01. SAGOS = Social Achievement Goal Orientation Scale; AGQ = Achievement Goal Questionnaire.
a. Subscale means ranged from 1 to 5 for the SAGOS and 1 to 4 the AGQ subscales.
b. Main diagonal is Coefficient Alpha Reliability Estimates.

3-2 Convergent Validity

As evidence of the convergent validity, Pearson correlation coefficients were computed with a measure of Achievement Goal Questionnaire (AGQ) on the total sample. The results are displayed in Table 1. As predicted, all the correlations were positive and significant.

3-3 Exploratory factor analyses

In order to determine the number of factors and investigate properties of the 22 SAGOS items, exploratory factor analysis was performed on the high school student sample. We initially conducted exploratory factor analyses of all 22 items of the SAGOS then we began with a principle component analysis to assess the number of factors in the SAGOS. Bartlett's Test of Sphericity was significant (Approx. X^2 =1624.55, df =231, p<.001), and Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) =.83. In this analysis, 6 factors emerged with eigenvalues greater than 1.0. However, inspection of the scree plot suggested one large initial component (lambda 5.05, percentage of total variance explained 22.97%) followed by a series of smaller components (e.g., component 2 lambda 1.83, 8.3%; component 3 lambda 1.53, 6.97%; component 4 Lambda 1.29, 5.9%, and etc.). Most of the SAGOS items all loaded positively on the first unrotated principle factor (loaded more than 0.24). In general, the scree plot suggested that one-to four-factor solutions were reasonable. Thus, we undertook a series of factor analyses to extract one-, two-, three-, and four-factor solutions. We orthogonally rotated (VARIMAX) these factors to simple structure prior to interpretation.

Table 2 SAGOS, three factor rotated solution with high school students

	Component		
	1	2	3
Item 14	**.664**	.279	-.065
Item 13	**.651**	.115	.143
Item 02	**.624**	.090	.128
Item 07	**.606**	.055	.152
Item 19	**.597**	.289	-.064
Item 22	**.563**	.184	-.048
Item 01	**.531**	-.123	.153
Item 08	**.515**	.144	.196
Item 05	.059	**.698**	.007
Item 04	.076	**.637**	.058
Item 16	.231	**.572**	.044
Item 17	.172	**.568**	.096
Item 09	.071	**.500**	.118
Item 10	.077	.051	**.726**
Item 18	.096	.371	**.668**
Item 06	.115	-.021	**.663**
Item 03	.014	-.001	**.571**
Item 20	.283	.292	**.482**

For the two-factor solution, most of the highest loading items on the first factor were from the social mastery subscale (except for item 15). Factor one was comprised of eight of the original social mastery items, five items that were originally on social performance-avoidance subscale (4, 5, 9, 16 and 17) and two items that were originally on social performance-approach subscale (items 11 and 15). Item two loaded on both factors equally. There was substantially less evidence to support the first factor as reflecting the original social mastery scale. Factor two was comprised of five of the original social performance-approach items (3, 6, 10, 18 and 20) and two items that were originally on the social performance-avoidance subscale (12 and 21). Item 20 loaded on both factors equally.

For the three-factor solution, factor one still emerged as a social mastery factor, eight of the

original items loaded on this factor and similarly two items that were originally on social performance-approach subscale (11 and 15) loaded on this factor. Item 15 loaded on both factors (.47 and .42 on factor one and two, respectively). Factor two was similar to performance-avoidance orientation in this solution, five of the original items loaded on this factor. Two of the original items (12 and 21) loaded more on performance-approach factor. Item 21 loaded on both factors (.36 and .40 on factor two and three, respectively). Factor three emerged as performance-approach factor; five of the original items loading on this factor. Two of the original items (11 and 15) loaded more on social mastery factor.

The following items seemed to be problematic for each subscale: items 11, and 15 (social performance-approach subscale), items 12 and 21 (social performance-avoidance subscale).When they were removed, a clear solution was gained. Eight of the original social mastery items loaded on this factor clearly, and five of the original social performance- approach items (3, 6, 10, 18 and 20) and, also, five of the original social performance–avoidance items (4, 5, 9, 16 and 17) loaded clearly on their factors. There was substantially more evidence to support for the three-factor solution (see, **Table2**). In sum, four items were removed from the original 22-item scale that resulted in a reduced 18-item version of the SAGOS [abbreviated 18-items scale (A18IS-3FAC)]; eight mastery items, five performance-approach items, and five performance-avoidance items.

For the four-factor solution, factor one emerged as a personal mastery factor. Factor one was comprised of three of the original social mastery items (14, 19 and 22), one item that was originally on social performance-avoidance subscale (17) and one item that was originally on social performance-approach subscale (15). Factor two was consistent with performance-approach orientation in this solution. Factor two was comprised of five of the original social performance- approach items (3, 6, 10, 18 and 20), one item that was originally on social performance-avoidance subscale (21). Factor three appeared as a social mastery factor. Factor three was comprised of five of the original social mastery items (1, 2, 7, 8 and 13), and one item that was originally on social performance-approach subscale (11). Factor four emerged as an avoidance performance factor. This factor was comprised of five of the original items on the social performance-avoidance subscale items (4, 5, 9, 12 and 16).

In the four-factor solution, the social mastery factor was divided to two subscales. First subscale included items 8, 14, 19 and 22. While examining, it was found that they may be representing constructs related to personal mastery as opposed to

social mastery. Second subscale included items 1, 2, 7 and 13. In the solution, the following items seemed to be problematic for each subscale: items 11, and 15 (social performance-approach subscale), items 17 and 21 (social performance-avoidance subscale).

In sum, four items were diagnosed for removal from the original 22-item scale, resulting in a reduced 18-item version of the SAGOS [abbreviated 18-items scale (A18IS-4FAC)]; four personal mastery items, four social mastery items, five performance-approach items, and five performance-avoidance items.

To summarize, the exploratory factor analyses indicated that a three-factor or four-factor solution would be acceptable. The four-factor solution explained more variance than the three-factor solution (48% versus 41%, respectively).

3-4 Item analysis of the three- and four-factor model

Later, we evaluated the internal consistency (coefficient alpha) and corrected item-to-total correlations for the three-factor model (A18IS-3FAC): the social mastery, social performance-approach, and social performance-avoidance subscales. For the model, Coefficient alpha for the 8 items on the social mastery subscale was 0.75. All the corrected item-to-total correlations were acceptable. All corrected item-total correlations ranged between $r = 0.33$ and $r = 0.55$. Coefficient alpha for the 5 items on the social performance-approach subscale was 0.66, and all corrected item-total correlations ranged between $r = 0.29$ and $r = 0.54$. Coefficient alpha for the 5 items on the social performance-avoidance subscale was 0.62, and all corrected item-total correlations ranged between $r = 0.31$ and $r = 0.43$.

For the four factor model (A18IS-4FAC), Coefficient alpha for the 4 items on the personal mastery subscale was 0.66. All corrected item-total correlations ranged between $r = 0.33$ and $r = 0.51$. Coefficient alpha for the 4 items on the social mastery subscale was 0.64. All corrected item-total correlations ranged between $r = 0.39$ and $r = 0.54$.

However, it was not clear which of the models is justified. In order to find out, we modeled the structure of the inter-item correlations using confirmatory factor analyses.

3-5 Confirmatory factor analyses

All CFA's were performed using LISREL 8.54 [17]. Several fit indices were used to assess model fit: the root mean square error of approximation (RMSEA), the standardized root mean square residual (SRMR), the comparative fit index (CFI), Goodness of Fit Index (GFI) and Adjusted

Goodness of Fit Index (AGFI). It is suggested that cutoffs at or below .05 for the RMSEA, at or above .96 for the CFI, and at or below .07 for the SRMR indicate adequate fit [18]. The GFI and AGFI indices should fall between 0 and 1 with larger values indicating a better data-model fit [19]. We used cutoffs at or above .95 for the GFI and AGFI.

3.5.1 Assessing Model Fit: Table 3 presents the fit indices for each of the hypothesized models. Data-model fit was poor for the one-factor solution in the sample: $X^2 = 798.27$, df = 209, P = .00, CFI = .66, SRMR = .076, RMSEA = .091, GFI = .83, AGFI = .80. Inspection of the residual matrix indicated that substantial variance was not accounted for in the

one-factor solution. For the two-factor solutions, data-model fit was not high and good enough. For the four-factor solution, data-model fit has been presented in Table 3. Although, model G is an alternate model, the researchers don't consider the model for theoretical purposes. For the three-factor solution, data-model fit was better than the two-factor solutions, specially, data-model fit for the three-factor solution mastery/approach/avoid [18-item version of the SAGOS (A18IS-3FAC)] was improved considerably. For the model (model E), $X^2 = 372.47$, df = 132, P = .00, CFI = .84, SRMR = .057, RMSEA = .067, GFI = .91, AGFI = .88. However, the fit statistics did not suggest fit; for the model E, we examined the instrument

Table 3 Fit statistics for the various hypothesized models (N=403)

Model	X^2	CFI	RMSEA	RMSEA 90%CONFIDENCE INTERVAL	SRMR	GFI	AGFI
(A) One-factor	798.27	0.66	0.091	0.084-0.097	0.076	0.83	0.80
(B)Two-factor mastery/perform	757.62	0.72	0.081	0.075-0.087	0.071	0.85	0.82
(C)Two-factor approach/avoid	819.49	0.70	0.086	0.079-0.092	0.073	0.84	0.81
(D)Three-factor mastery/approach/avoid	664.16	0.76	0.074	0.068-0.081	0.072	0.87	0.84
(E) Three-factor Mastery/approach/avoid(A18IS-3FAC)	372.47	0.84	0.067	0.059-0.075	0.057	0.91	0.88
(F) Four-factor Per mastery/Soc mastery/ approach/avoid	589.78	0.78	0.069	0.062-0.075	0.072	0.88	0.85
(G) Four-factor Per mastery/Soc mastery/ approach/avoid (A18IS-4FAC)	310.29	0.87	0.059	0.051-0.068	0.059	0.92	0.90

Note. X^2ML maximum likelihood; CFI= comparative fit index; RMSEA = root mean square error of approximation; SRMR= standardized root mean square residual; GFI= goodness of fit index; AGFI= adjusted goodness of fit index; Per = personal; soc= social; A18IS-3FAC= Abbreviated 18-items scale-3 factor; A18IS-4FAC= Abbreviated 18-items scale-4 factor

Theoretical aspects of SAGOS for the diagnosis of the problems. We took the results that items 8, 14, 19, and 22 from the mastery subscale should be eliminated. Item 14 "I like friendships that challenge me to learn something new about myself" was the measure of personal mastery not social mastery.

Furthermore, the first phrase of item 19 ("I feel successful when I learn something new about myself") was related to personal mastery not social mastery. Item 22 ("I would be successful if I had friends who accepted me for who I am") was the measure of fear of disapproval. Item 8 ("It is important to me that I feel that I have friends I enjoy spending time with.") was ambiguous and irrelevant. Probably, "enjoy spending time" is not related to social mastery necessarily.

Since relationship between item 17 and all of the remaining performance-avoidance items were not

represented well by the model, item 17 was removed from the performance-avoidance subscale. Finally, the proposed model gained a reduced 13-item version of the SAGOS (see, Figure1).

3.5.2 Assessing Model Fit: Abbreviated 13-item SAGOS. Fit indices for the three-factor model of social goal orientation as measured by scores from the abbreviated 13-item scale indicated an acceptable overall data-model fit (see Table 4). In the model, $x^2 = 110.04$ and df =62; thus $x^2/df = 1.77$, that is lower than 2.0, CFI = .94, SRMR = .048, RMSEA = .044, GFI = .96, AGFI = .94. Expected Cross-Validation Index (ECVI) = 0.42 [90 Percent Confidence Interval for ECVI = (0.35 - 0.50)], ECVI for Saturated Model = 0.45 and ECVI for Independence Model = 2.15. Comparing the ECVI value for the hypothesized
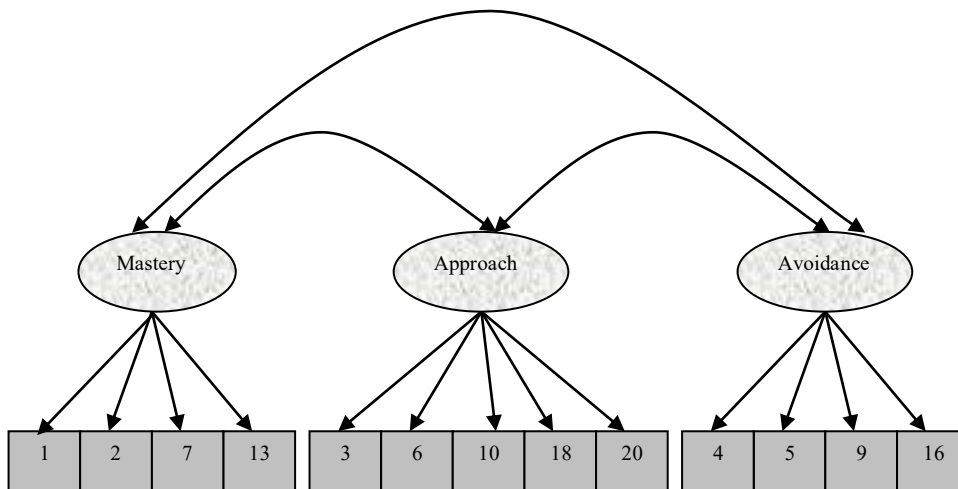
Figure 1 Final model for confirmatory factor analysis of the social achievement goal items

model to the values obtained for the independence and saturated models shows that $ECVI_h < ECVI_s$, which leads to the conclusion that the hypothesized model has better predictive validity than the saturated model.

3.5.3 Parameter estimates. Given the adequate fit of the three-factor model to the 13-item SAGOS, the standardized coefficients, error terms, and variance explained (R^2) were examined (see Table 4). All standardized paths were significant (p<.05). Some of the standardized error terms were high suggesting random variation (i.e., unreliability or CIV).

In the social mastery subscale, item 2 has moderate and acceptable reliability (R^2 =0.56), while the reliabilities estimates for the items 1, 7 and 13 seem somewhat low (and R^2 =0.23, R^2 =0.31 and R^2 =0.27, respectively). Here, item 2 seems to be the most reliable and strongest indicator of the latent social mastery orientation construct

($\hat{\lambda}_{11(s\tan d)} = 0.75$), followed by item 7 ($\hat{\lambda}_{21} = 0.56$), item 13 ($\hat{\lambda}_{41(s\tan d)} = 0.52$) and item 1 ($\hat{\lambda}_{31(s\tan d)} = 0.48$). In the social performance-approach subscale, item 18 has moderate and acceptable reliability (R^2 =0.54) while the reliability estimates for the items 3, 6, 10 and 20 seem somewhat low (R^2 =0.12, R^2 =0.19, R^2 =0.33, and R^2 =0.34, respectively). Item 18 seems to be most reliable and strongest indicator of the latent social performance-approach orientation construct ($\hat{\lambda}_{82(s\tan d)} = 0.74$). In the social performance-avoidance subscale, item 4 has moderate and acceptable reliability (R^2 =0.42), while the reliabilities estimates for the items 5, 9 and 16 seem somewhat low (R^2 =0.33, R^2 = .18, and R^2 =0.20, respectively). Item 4 seems to be most reliable and strongest indicator of the latent

Table 4 Fit indices, standardized parameter estimates, and subscale characteristics for high school students (N=403)

Abbreviated 13-item scale							
Model	X^2	CFI	RMSEA	RMSEA 90%CONFIDENCE INTERVAL	SRMR	GFI	AGFI
Three-factor Soc mastery/approach/avoid	110.04	0.94	0.044	0.030-0.057	0.048	0.96	0.94
Items	Path coefficients		Error variance		R^2 value		
Mastery							
1	0.48		0.77		0.23		
2	0.75		0.44		0.56		
7	0.56		0.69		0.31		
13	0.52		0.73		0.27		
Performance-approach							
3	0.35		0.88		0.12		
6	0.43		0.81		0.19		
10	0.57		0.67		0.33		
18	0.74		0.46		0.54		
20	0.59		0.66		0.34		
Performance-avoidance							
4	0.64		0.58		0.42		
5	0.58		0.67		0.33		
9	0.42		0.82		0.18		
16	0.45		0.80		0.20		
	Mastery		Performance-approach		Performance-avoidance		
Mastery	0.64[a]						
Performance-approach	0.38[b]		0.66				
Performance-avoidance	0.48		0.40		0.57		
Mean	1.49[c]		2.26		1.79		
Standard deviations	0.52		0.62		0.6		

Note. X^2 ML maximum likelihood; CFI= comparative fit index; RMSEA = root mean square error of approximation; SRMR= standardized root mean square residual; GFI= goodness of fit index; AGFI= adjusted goodness of fit index;
a reliability coefficient
b covariance
c range 1-5

social performance-avoidance orientation construct $(\hat{\lambda}_{103(s\tan d)} = 0.64)$.

3-6 Dimensionality of social and academic goal domains

Scores from the 13 SAGOS items and the 14 AGQ items (items 9, 10, 11 and 16 removed from AGQ) were simultaneously submitted to CFA in order to test their distinctiveness. Fit statistics for the six-factor model suggested acceptable fit (CFI=0.90; GFI=0.9; RMSEA=0.048; SRMR=0.054). These results suggest that social and academic goals are distinct and therefore cannot be combined into general mastery, performance-approach, and performance-avoidance goals.

3-7 Graded Response Model Analysis

The goal of this series of analyses is to obtain IRT-based item parameters for SAGOS.

Figure1. Matrix Plot of Item Characteristic Curves
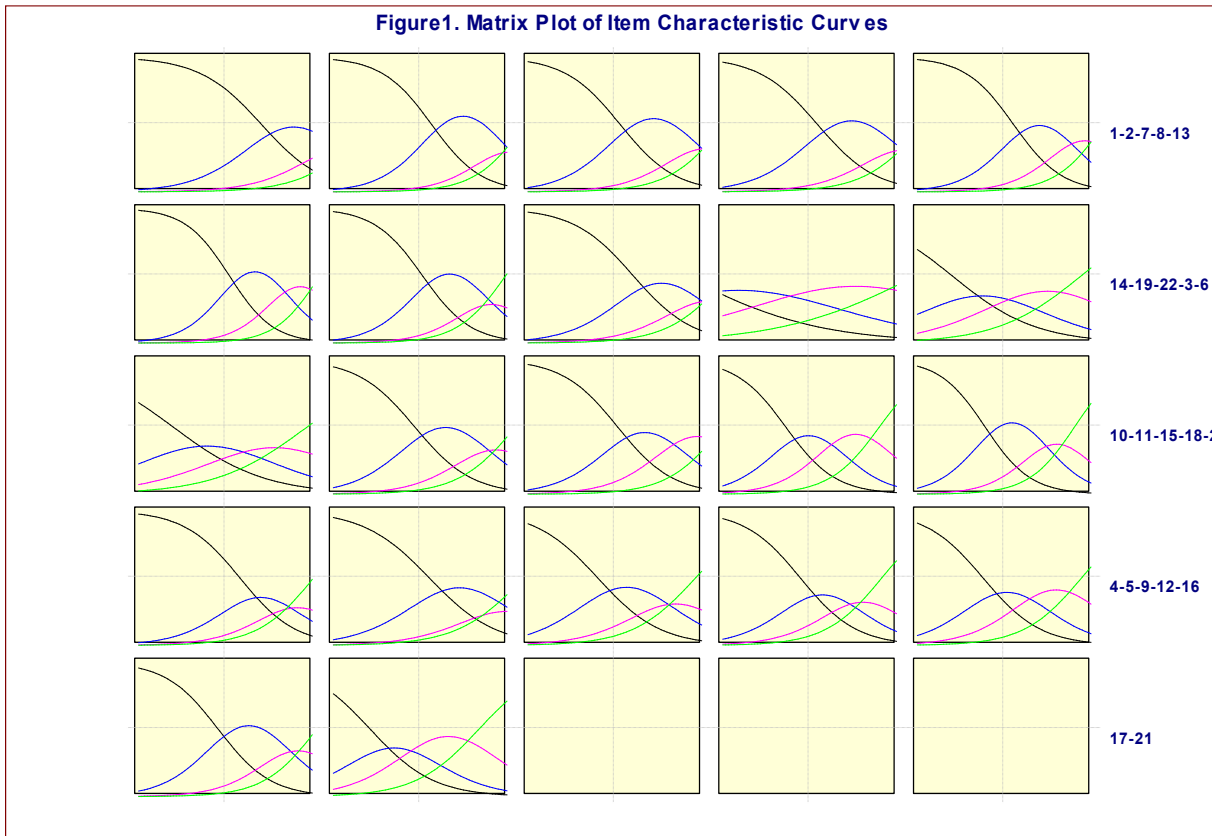
You have two Figure 1s.

The Graded Response Model [20] chosen for this data analysis estimated one item discrimination parameter and three threshold parameters to represent the location along the θ-scale where the probability exceeds 50 percent that the response is in the associated category or higher category. The item characteristic curves (ICC's) of 22 items of SAGOS were presented in Figure 1. First, the ICC's of eight items of social mastery goal orientation were showed in Figure1. People with very poor social mastery goal orientation (e.g. <−2.5) have a high probability of answering "not at all true for me". Item 1 had the lowest slope (a = 0.93).

Next, the ICC's of seven items of social performance-approach goal orientation were showed in Figure1. Item 3 had a very poor slope (a = 0.43) and standard error of their threshold parameters was very high (e.g. SEb_1=1.29).

Finally, the ICC's of seven items of social performance-avoidance goal orientation were showed in Figure1. In this subscale item 4 had the most slope (a= 1.03) (table 5).

Comparing the three methods of analysis of SAGOS showed that in the social mastery subscale EFA and IRT analyses are coordinate, while the results of CFA is somewhat different. For example,

Table 5 Item parameters for 22-item SAGOS

Item	A(S.E)	B1(S.E)	B2(S.E)	B3(S.E)
Mastery				
1	.930(.18)	1.24(.26)	3.48(.59)	4.95(.92)
2	1.16(.18)	.390(.14)	2.57(.39)	3.61(.55)
7	1.05(.16)	.180(.14)	2.50(.37)	3.77(.57)
8	.990(.16)	.270(.15)	2.64(.42)	3.94(.63)
13	1.20(.18)	.320(.13)	2.12(.30)	3.45(.51)
14	1.32(.19)	.130(.11)	1.91(.26)	3.26(.46)
19	1.19(.17)	.080(.12)	1.97(.28)	2.96(.44)
22	.970(.17)	.630(.17)	2.60(.45)	3.93(.66)
Performance-approach				
3	.430(.12)	-4.37(1.29)	-.500(.35)	3.69(1.14)
6	.690(.13)	-1.81(.40)	.310(.22)	2.67(.57)
10	.630(.14)	-1.82(.45)	.550(.25)	2.83(.64)
11	1.01(.17)	-.190(.15)	1.95(.33)	3.30(.54)
15	1.05(.17)	.090(.14)	1.98(.32)	3.72(.57)
18	1.16(.16)	-.830(.17)	.770(.16)	2.42(.33)
20	1.26(.17)	-.670(.14)	1.20(.18)	2.43(.33)
Performance-avoidance				
4	1.04(.17)	.500(.16)	1.94(.32)	3.04(.52)
5	.880(.15)	.320(.17)	2.40(.43)	3.57(.67)
9	.920(.14)	-.590(.18)	1.41(.26)	2.78(.47)
12	1.03(.15)	-.320(.15)	1.21(.21)	2.49(.39)
16	1.00(.15)	-.730(.18)	.920(.19)	2.67(.42)
17	1.10(.15)	-.250(.14)	1.87(.28)	3.15(.48)
21	.910(.14)	-1.73(.30)	-.070(.16)	2.03(.35)

items 14 and 19 were deleted by CFA, but the results of IRT with graded response model showed that these items have good parameters.

3.7.1 Information functions
Information functions indicate the range over θ where an item or scale is best at discriminating among individuals. Higher information denotes more precision (or reliability). The individual item information functions can be summed across all items in the scale to form the 'scale information function [21]. Figure 2 show information function for 22 items of SAGOS. The function is peaked at the upper end of the scale, indicating that severe social goal orientation is measured with the utmost precision. On base of IRT analyses, SAGOS have high information function and low measurement error at upper scale.

4- Discussion
Overall, the results of this study support the reliability, and the construct and convergent validity of an abbreviated 13-item SAGOS. The SAGOS was an internally consistent, multidimensional measure with a three-factor structure. Factor analyses provided support for the three-factor model. The factor one of the SAGOS suggests a social mastery orientation that is focused on developing social competence. The factor is related to learning new things, growth, and improvement. This finding is in accordance with the view that social abilities lead to the formation of friendships.

Figure2. Test Information and Measurement Error
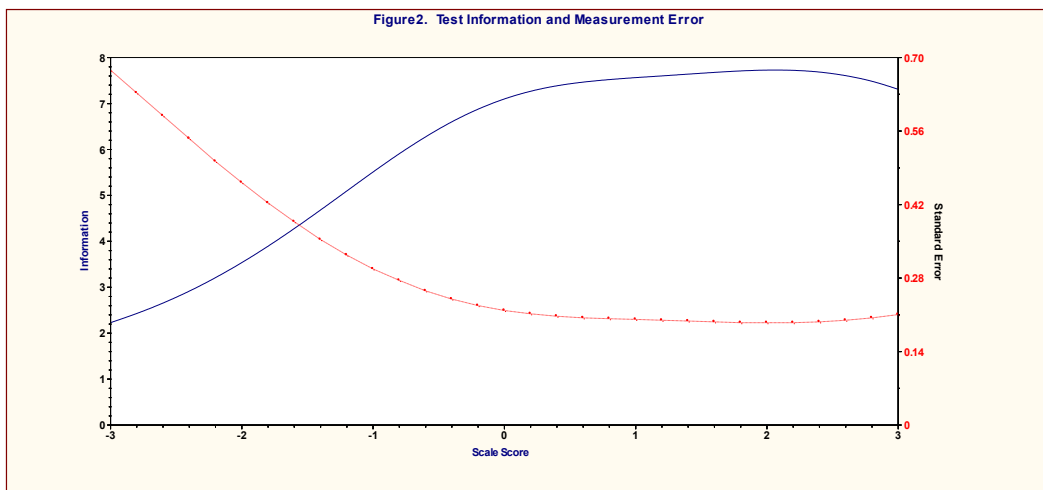
Social performance goals can also be divided into approach and avoidance components [16]. The factor two of the SAGOS is related to a social performance-approach orientation and shows the social competence and positive judgment others emphasize. Factor three of the SAGOS covers a social performance-avoidance orientation. In social performance-avoidance orientation, the person avoids showing that he/she does not have social competence.

In social performance-avoidance orientation, the focus is on avoiding doing something that indicates social undesirability. These results are harmonious with [22 and 23]. In sum, confirmatory factor analysis results provided support for expanding achievement goal theory into the social domain. Results indicated that achievement goals are distinct factors.

In terms of convergent validity, the SAGOS was significantly correlated in the expected direction with measures of theoretically related constructs, specifically those that scored high on the SAGOS tended to score high on measures of Achievement Goal Questionnaire (AGQ). Correlations among the social achievement goals were similar to those typically found among academic achievement goals. The results of this study further confirmed the validity of the SAGOS.

However, despite this initial support for the SAGOS, further studies are needed. Several additional lines of research are needed to clarify the SAGOS's utility as an assessment instrument. For example, in concurrent validity it can be asked whether the SAGOS is related with other criteria?

Additional studies of the criterion-related validity of the SAGOS are also needed to determine whether the SAGOS can be associated with observing student behavior in real-life settings (e.g. quality of interpersonal interactions).

Consistent with the findings reported by [24] in the academic and university settings, the existence of the four-factor social goal model in high school should be studied: the Mastery-Approach, Mastery-Avoidance, Performance-Approach, and Performance-Avoidance factors [24].

Since social mastery, social performance-approach and social performance-avoidance subscales showed the positive relationship, perhaps a line of research is needed to clarify the social multiple goals. Students can hold multiple goals at one time [25 and 26]. For example, a high social need student simultaneously could be social mastery oriented (this is an interesting relationship that I want to establish) and social performance–approach oriented (I want the others to see how good I am establishing relationship). Another student could be social mastery oriented (this is an interesting relationship that I want to establish) and social performance–avoid oriented (if I can't establish this relationship then I'm going to look immature).

First limitation of the study, as previously noted, was that the sample was high school students. Hence, the findings may be limited in their generalizability to other populations. A second limitation of the current study was its reliance on the use of self-report measures to collect validity evidence. The third limitation was that this study was conducted only in Saveh, therefore; conceivably the findings may not be generalized to students in other regions of Iran. The last limitation of the current research was that it was conducted on only one sample. As a result, it is recommended that validity results to be examined on other samples.

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