

Development and Initial Validation of the Social Competency Inventory for Tertiary Level Faculty Members

Glenn M. Calaguas and Carmela S. Dizon

Abstract— This study aimed to develop and initially validate an instrument that measures social competency among tertiary level faculty members. A review of extant literature on social competence was done. The review of extant literature led to the writing of the items in the initial instrument which was evaluated by 11 Subject Matter Experts (SMEs). The SMEs were either educators or psychologists. The results of the evaluations done by the SMEs served as bases for the creation of the pre-try-out instrument used in the first trial-run. Insights from the first trial-run participants led to the development of the main try-out instrument used in the final test administration. One Hundred Forty-one participants from five private Higher Education Institutions (HEIs) in the National Capital Region (NCR) and five private HEIs in Central Luzon in the Philippines participated in the final test administration. The reliability of the instrument was evaluated using Cronbach's Coefficient Alpha formula and had a Cronbach's Alpha of 0.92. On the other hand, Factor Analysis was used to evaluate the validity of the instrument and six factors were identified. The development of the final instrument was based on the results of the evaluation of the instrument's reliability and validity. For purposes of recognition, the instrument was named "Social Competency Inventory for Tertiary Level Faculty Members (SCI-TLFM)."

Keywords—development, initial validation, social competency, tertiary level faculty members

I. INTRODUCTION

MAN is a social being and therefore constantly deals with others. Upon dealing with others, it is but necessary to be socially competent. But exactly, what is meant by social competence? "Social competence is an oft-studied, little understood construct that nonetheless remains a hallmark of positive, healthy functioning across the lifespan" [1, p. 23]. Most notable descriptions of social competence are as follows: acting wisely [2] and appropriately in human interactions [3], effectiveness or success in social/interpersonal interactions [4]-[6] and success in social functioning [7], ability to take another's perspective or understand the perspectives of others [8]-[9], a construct that requires context specific definitions that varies with the age, the demands of particular situations [10]-[11], and requires complex system of cognition [12].

Dr. Glenn Medallon Calaguas, RGC is an Assistant Professor in the Institute of Arts and Sciences of Pampanga Agricultural College (PAC), Magalang, Pampanga, Philippines. He is also the Director of the PAC Guidance and Testing Center (e-mail: glenn_calaguas@yahoo.com).

Dr. Carmela S. Dizon is the Dean of the College of Arts and Sciences of Angeles University Foundation (AUF), Angeles City, Philippines. She is also a professor in the Graduate School of AUF (e-mail: dizoncs@auf.edu.ph).

Other notable descriptions of social competence are the emphasis on the use of appropriate social skills [13], ability to make adjustments [11], ability to apply what has been learned from past experiences [8], and having intrapersonal, interpersonal, and societal dimensions [14].

A. Social Competence in the Teaching Profession

It is important to acknowledge that teachers are important resources in the educational process and it has been said countless times that education plays an essential role in the lives of people. Education is a global priority [15] because education is "one of the principal means available to foster a deeper and more harmonious form of human development and thereby to reduce poverty, exclusion, ignorance, oppression and war" [16, p. 182]. In line with the different descriptions given by several authors (e.g. 1-14), it can be said that being socially competent is important. And relating the concept of social competence in the classroom can mean that teachers' social incompetency can be silent barriers in delivering quality instruction to students and not being able to get along well with colleagues and superiors. Generally, "being socially incompetent translates into a basic inability to relate to others and interact appropriately with the types of relationships and interactions in which the society is based" [13, para. 21]

Although much has changed in the educational process in particular and the system in general which can be attributed to the advent of new technologies, one thing is still obvious and for sure remains, schools are not simply concrete structures and computer-controlled entities. Instead, schools are haven of lifelong learning where teachers, students, and other personnel are part and parcel. And as ever, teachers are not merely confined in the teaching of their respective subjects alone but also in forming necessary and unavoidable social relationships. With all the social relationships being carried out by teachers whether inside or outside the classrooms, it is but imperative for teachers to be socially competent.

B. The Need to Develop an Instrument that Focuses on Social Competency

The cornerstones of all professional development are self-awareness and self-observations [17] and "people only change for a good reason. Awareness is a key and a critical condition required to change any behavior. Without awareness, behavior change is random, maybe it will meet the needs of others and maybe it won't" [18, p. 3]. Among teachers, any self-reflection practice that facilitates sense of autonomy can be a valuable self-defense strategy [19]. The good thing is that "once teachers are made aware of their inappropriate interpersonal behavior, the vast majority are willing and eager

to change” [20]. Being socially competent is not easy especially when one does not know how to be one and where to start. There may be several conceptualizations of social competence but may not necessarily hold true in the Philippine setting or even in other settings. This very reason encouraged the development and the initial validation of an instrument that measures social competency of tertiary level faculty members. The developed and initially validated instrument can serve as an objective checklist and a source of valuable insights which can serve as bases for introducing changes where they are needed the most.

II. CONCEPTUAL FRAMEWORK

A review of extant literature on social competence was carried out. Based on the review conducted, the following descriptions of social competence were determined: (a) acting wisely [2] and appropriately in human interactions [3], (b) effectiveness or success in social and interpersonal interactions [4]-[6] and successful social functioning [7], (c) ability to take another's perspective or understand the perspectives of others [8]-[9], (d) requires context specific definitions that varies with the age, the demands of particular situations [10]-[11] and requires complex system of cognition [12], (e) use of appropriate social skills [13], (f) ability to make adjustments [11] and learning from past experiences and to apply such learning to the ever-changing social landscape [8], and (g) has intrapersonal, interpersonal, and societal dimensions [14].

Regarding the possible components of social competence, the following were noted: (a) self-awareness, social awareness, responsible decision-making, self-management and relationship management [21], (b) perceptiveness of other's feelings and perspectives, knowledge about social rules and social life, and insight in social situations, ability to interact successfully with other people, to be generous and thoughtful, and to use accepted social techniques when attempting to influence other's behaviors [22], (c) effectiveness of behavior in close interpersonal relationships, social exposure, assertiveness [23], (d) expressiveness, empathy, self defense, social acceptance, competitiveness, stimulation-pleasure, approval, self-improvement, and social impact [24].

III. STATEMENT OF OBJECTIVES

This study generally aimed to develop and initially validate an instrument that measures social competency among tertiary level faculty members. Specifically, this study had the following objectives:

1. To develop an instrument that measures social competency;
2. To evaluate the reliability of the developed instrument; and
3. To evaluate validity of the developed instrument.

IV. METHOD

A. Search for Content Domain

The study started with the review of extant literature on social competence. Such undertaking provided the much-needed information to thoroughly understand the nature and possible components of social competence.

B. Item Writing and Review

The review of extant literature on social competence led to the writing of the 120 items in the initial instrument. The items in the initial instrument were evaluated and reviewed by 11 Subject Matter Experts (SMEs) who were either psychologists or educators. The SMEs were asked to rate each item in the instrument for relevance in measuring social competency and because the SMEs based their ratings on opinion, the SMEs rated the initial instrument separately. The Lawshe Method [25] was used to gauge agreement among the SMEs.

The review of items was done because of the need to make sure that all items to be included in the pre-tryout instrument will represent the entire range of possible items.

C. Development of the Pre Try-Out Instrument

Originally, 45 items rated as “essential” by at least nine SMEs were considered. However, 24 items more which were rated as “essential” by eight SMEs were added since all the items were still to be evaluated in terms of reliability and validity with the responses of the participants in the final test administration as bases. Thus, the total number of items included in the pre-try-out instrument was 69.

D. First Trial-Run

The first trial-run of the instrument was conducted with eight Arts and Sciences professors as participants. After the trial-run, the instrument was further reviewed in terms of grammar by two English professors.

E. Development of the Main Try-Out Instrument

Improvements on the instrument were based on the feedback given by the participants in the first trial-run. This led to the development of the main try-out instrument. The main try-out instrument was in turn used in the final test administration.

F. Final Test Administration

The final test administration was performed to establish the initial psychometric properties of the instrument. A total of 141 Arts and Sciences professors from five private Higher Education Institutions (HEIs) in the National Capital Region (NCR) and five private HEIs in Central Luzon in the Philippines participated in the final test administration. All of the HEIs where the final test administration participants came from had at least Level II Accreditation.

G. Descriptive Statistics

With the responses of the participants in the final test administration as bases, the means and standard deviations of the items included in the main try-out instrument were computed. Also, item-total correlations were determined.

H.Evaluation of Instrument's Reliability

The reliability of the instrument was evaluated using Cronbach's Coefficient Alpha formula. This method examined the internal consistency of the items in the instrument.

J.Evaluation of the Instrument's Validity

Factor analysis was used to evaluate the instrument's validity. Specifically, Exploratory Factor Analysis was used with Principal Components Analysis and Varimax Rotation (with Kaiser Normalization).

K.Development of the Final Instrument

The items included in the final form of the instrument were based on the results of reliability and validity evaluations.

V. RESULTS

The purpose of this study was to develop and initially validate an instrument that measures the social competency of tertiary level faculty. Along this line, the study started with a search and review of extant literature on social competence. The ideas given by different authors served as bases in writing the 120 items in the initial instrument. The items in the initial instrument were reviewed and evaluated by 11 SMEs who were either psychologists or educators. All of the SMEs were connected with a university, private and government-owned. The Lawshe Method [25] was used to measure the content validity of each of the items in the initial instrument with reference to the reviews and evaluations of the SMEs.

The pre-try-out instrument was in the form of a self-report inventory (SRI) in a paper and pencil format. It had a four-point Likert scale from which participants could base their responses. Purposely, the forced-choice method was used in the scale of the pre-try-out instrument and there were an almost equal number of positively (N= 35) and negatively- (N= 34) worded statements. These decisions were made to minimize "faking" and "acquiescence" among the will be participants.

The first trial-run was conducted with eight Arts and Sciences professors as participants. The language suitability of the items included in the pre-try-out instrument and the ease of following the directions were analyzed based on the viewpoints of the participants. The average length of time required in completing the instrument was also determined and was said to be between 10 to 15 minutes. Concerns regarding test-taking and administration were also noted. After the first trial-run, the instrument was further reviewed as to grammar by two English professors.

The development of the main try-out instrument was based on the feedback and suggestions given by the participants in the first trial-run. The 69 items in the pre-try-out instrument were retained but minor changes were made. Minor changes include: (1) changing the word "tick" to "check" in the direction, (2) the use of the word "one" instead of "he/she" in some of the items, and (3) reflecting the scales where answers can be based in every page of the instrument. The average time needed in completing the instrument was also reflected in the main try-out instrument. Furthermore, it was concluded that it was possible for the instrument to be a self-administering instrument.

Final test administration was performed to initially establish the psychometric properties of the instrument. The final test administration was conducted among Arts and Sciences professors from private HEIs. A total of 141 professors agreed to participate in the final test administration. It should be noted however that the main basis for choosing the participants was that they were professors of Arts and Sciences of universities/colleges with at least Level II Accreditation. Accreditation given by the Philippine Accrediting Association of Schools, Colleges and Universities (PAASCU) and the Philippine Association of Colleges and Universities Commission on Accreditation (PACUCOA) served as bases.

Descriptive statistics come first whenever a data is examined and the most common of these are the mean and standard deviation. Generally, the higher the variability of the item and the more the mean of the item is at the center point of the distribution, the better the item will perform [26]. The items in the main try-out instrument with the highest and lowest means together with their standard deviations are presented in Tables I and II.

Item No.	Statement	Mean	Standard Deviation
1	Values personal worth and dignity.	3.84	0.36
50	Respects the ideas and opinions of others.	3.69	0.54
21	Appreciates the idea that people have different views and opinions.	3.65	0.52
25	Recognizes that people in the society have distinct personalities.	3.63	0.50
64	Values individual and cultural differences.	3.61	0.49
47	Open to the ideas or opinions of others.	3.60	0.56
12	Recognizes individual differences.	3.59	0.56
3	Sets goals to achieve for oneself.	3.56	0.51
34	Knows when to speak and to listen.	3.55	0.54
8	Examines own attitudes and their impact on others.	3.54	0.54
16	Recognizes the cultural values of another person.	3.53	0.60
57	Explores own values, standards and assumptions.	3.48	0.53
63	Respects diverse ethnic and socio-economic considerations when making important decisions.	3.48	0.52
6	Participates in collaborative efforts.	3.46	0.58
46	Appreciates the innate differences in people.	3.45	0.65

It can be observed in Table I that the first five items with the highest means pertain to the valuing of personal worth and dignity, respecting of ideas and opinions of others, appreciating of the idea that people have different views and opinions, recognizing that people have distinct personalities, and valuing individual and cultural differences. Among these 15 items, 10 were accepted in the final form of the instrument. These were items 6, 8, 12, 16, 21, 25, 34, 46, 63, and 64.

On the other hand, it can be observed in table ii that the items that obtained the lowest means pertain to believing that people have similar perspective of social or political issues

TABLE II
ITEMS IN THE MAIN TRY-OUT INSTRUMENT WITH THE LOWEST MEANS

Item No.	Statement	Mean	Standard Deviation
24	Believes that people have similar perspectives in any social or political issue.	2.50	1.05
29	Establishes and lives by a value system based on partial understanding of one's self.	2.26	0.92
2	Thinks haphazardly the pros and cons of an action before it is done.	2.20	1.05
22	Cautious of the ideas of other people.	2.20	1.05
35	Considers the views and perspectives of other people as unequally valuable and legitimate.	2.09	0.95

and cons of an action, being cautious of the ideas of others, and considering the views and perspective of others as unequally important.

After testing the descriptive properties of the 69 items included in the main try-out instrument, an internal consistency was performed to determine how each item could contribute to the variance of the instrument. The item-total correlation using Cronbach's Alpha was utilized. This process determined the individual item reliability index and is presented in Table III while the reliability of the instrument is shown in Table IV which provided further evidence for high internal consistency.

TABLE III
ITEM-TOTAL CORRELATIONS OF ITEMS IN THE MAIN TRY-OUT INSTRUMENT

Item No.	Item-total Correlation	Cronbach's Alpha if Item is Deleted	Item No.	Item-total Correlation	Cronbach's Alpha if Item is Deleted	Item No.	Item-total Correlation	Cronbach's Alpha if Item is Deleted
1	0.36	0.92	24	0.15	0.93	47	0.51	0.92
2	0.15	0.93	25	0.56	0.92	48	0.55	0.92
3	0.35	0.92	26	0.20	0.93	49	0.41	0.92
4	0.40	0.92	27	0.39	0.92	50	0.52	0.92
5	0.37	0.92	28	0.43	0.92	51	0.47	0.92
6	0.37	0.92	29	0.18	0.93	52	0.55	0.92
7	0.44	0.92	30	0.41	0.92	53	0.35	0.92
8	0.40	0.92	31	0.58	0.92	54	0.33	0.92
9	0.40	0.92	32	0.36	0.92	55	0.31	0.92
10	0.51	0.92	33	0.58	0.92	56	0.33	0.92
11	0.29	0.92	34	0.50	0.92	57	0.52	0.92
12	0.36	0.92	35	-0.02	0.93	58	0.42	0.92
13	0.53	0.92	36	0.43	0.92	59	0.24	0.92
14	0.44	0.92	37	0.52	0.92	60	0.44	0.92
15	0.47	0.92	38	0.64	0.92	61	0.45	0.92
16	0.40	0.92	39	0.55	0.92	62	0.02	0.93
17	0.44	0.92	40	0.53	0.92	63	0.59	0.92
18	0.32	0.92	41	0.52	0.92	64	0.54	0.92
19	0.39	0.92	42	0.29	0.92	65	0.41	0.92
20	0.34	0.92	43	0.59	0.92	66	0.38	0.92
21	0.42	0.92	44	0.57	0.92	67	0.41	0.92
22	-0.20	0.93	45	0.37	0.92	68	0.50	0.92
23	0.41	0.92	46	0.48	0.92	69	0.05	0.93

TABLE IV
RELIABILITY EVALUATION OF THE INSTRUMENT

	Cronbach's Alpha	Verbal Interpretation
Before Factor Analysis (69 items)	0.92	Excellent
After Factor Analysis (45 items)	0.92	Excellent

Based on Table IV, whether the original number of items (N= 69) were retained or the accepted items (N= 45) after factor analysis were chosen, the Cronbach's alpha remained the same at 0.9 levels. The verbal interpretation was based on this rule of thumb: Cronbach's alpha greater than 0.9 can be interpreted as "excellent," greater than 0.8 as "good," greater than 0.7 as "acceptable," greater than 0.6 as "questionable," greater than 0.5 as "poor," and less than 0.5 as "unacceptable." While increasing the value of alpha is partially dependent upon the number of items in the scale, this has diminishing returns. An alpha of 0.8 is probably a reasonable goal [27].

After evaluating the reliability of the instrument, Factor Analysis (FA) was used to evaluate the instrument's validity. Specifically, Exploratory Factor Analysis was used with Principal Component Analysis as the extraction method and

Varimax Rotation with Kaiser Normalization as the rotation method and 0.40 correlations were considered.

Based on the Factor Analysis conducted on the responses of 141 participants during the final test administration, it was decided that the instrument had six factors. Only items with 0.40 correlations and above which at the same time loaded on a single factor were retained. The decided factors together with, corresponding item loadings, number of items, eigenvalues, percentage of variance, and cumulative percentage of variance are presented in Table V to X. These six factors accounted for 41.55% of variance in the data. It must be noted however that in determining the number of factors, not only the eigenvalues, percentage of variance, and scree plot were considered but also the comprehensibility of the items that loaded on the identified factors, although, comprehensibility is not a strictly mathematical criterion. Also, several factor solutions were done to be able compare the results.

TABLE V
ITEM LOADINGS OF FACTOR 1

Item Number	Statement	Item Loading
4	Comfortable when asking or expressing what one thinks.	0.54
17	Respects the lifestyles of people.	0.50
18	Aware of the barriers that prevents one's self and another from working harmoniously.	0.43
31	Sensitive to the needs and aspirations of others.	0.50
32	On time for appointments.	0.46
38	Alert at responding to cultural differences.	0.48
39	Mindful of one's language and actions.	0.42
43	Sends and receives messages accurately with strong consideration to cultural cues when dealing with another.	0.53
44	Willing to listen and learn from others.	0.50
48	Encourages the free flow of ideas.	0.55
49	Deals with conflicts in non-defensive manner.	0.43
51	Knows one's heritage.	0.47
52	Holds an accurate picture of one's self.	0.60
53	Firm and not easily persuaded by others.	0.58
61	Notifies the moods of persons dealing with.	0.55
65	Plans actions with consideration of others.	0.58
67	Accepts the differences that exist between one's self and other people openly.	0.61
68	Good at managing conflicts with other people.	0.61
Total Number of Items= 18		Eigenvalue=7.28
Percentage of Variance=10.55		Cumulative Percentage of Variance= 10.55

TABLE VI
ITEM LOADINGS OF FACTOR 2

Item Number	Statement	Item Loading
8	Examines own attitudes and their impact on others.	0.40
14	Understands the different personal crises one goes through.	0.69
15	Attentive to the range of emotions one experiences.	0.78
16	Recognizes the cultural values of another person.	0.69
19	Alert in deciphering actions that can offend another.	0.50
21	Appreciates the idea that people have different views and opinions.	0.46
25	Recognizes that people in the society have distinct personalities.	0.42
30	Knows the fact that decisions affect one and also others.	0.42
58	Examines the purpose of one's life.	0.64
Total Number of Items= 9		Eigenvalue= 6.15
Percentage of Variance= 8.91		Cumulative Percentage of Variance= 19.45

TABLE VII
ITEM LOADINGS OF FACTOR 3

Item Number	Statement	Item Loading
6	Participates in collaborative efforts.	0.60
12	Recognizes individual differences.	0.44
27	Accepts one's limitations and strengths.	0.61
45	Accepts and mingles with people from other cultural or ethnic background.	0.63
46	Appreciates the innate differences in people.	0.45
63	Respects diverse ethnic and socio-economic considerations when making important decisions.	0.58
64	Values individual and cultural differences.	0.48
Total Number of Items= 7		Eigenvalue= 5.33
Percentage of Variance= 7.72		Cumulative Percentage of Variance= 27.18

TABLE VIII
ITEM LOADINGS OF FACTOR 4

Item Number	Statement	Item Loading
33	Assesses the impact of one's role in group interactions.	0.50
36	Empathizes with people who are considered to be victims of discrimination.	0.47
40	Understands and communicates effectively in verbal and non-verbal ways.	0.40
54	Responsive to the reactions of others.	0.62
55	Holds general knowledge and information about persons one works with.	0.71
Total Number of Items= 5		Eigenvalue= 3.88
Percentage of Variance= 5.63		Cumulative Percentage of Variance= 32.88

TABLE IX
ITEM LOADINGS OF FACTOR 5

Item Number	Statement	Item Loading
24	Believes that people have diverse perspectives in any social or political issue.	0.62
26	Believes that people in the society have different tolerance and patience levels.	0.57
28	Has a clear picture in mind of what one wants.	0.57
37	Avoids prejudices, unwarranted labeling and stereotyping.	0.47
Total Number of Items= 4		Eigenvalue=3.33
Percentage of Variance= 4.82		Cumulative Percentage of Variance= 37.62

TABLE X
ITEM LOADINGS OF FACTOR 6

Item Number	Statement	Item Loading
11	Pays close attention to what people say when conversing.	0.46
34	Knows when to speak and to listen.	0.48
Total Number of Items= 2		Eigenvalue=2.71
Percentage of Variance= 3.92		Cumulative Percentage of Variance= 41.55

Ultimately, the items included in the final form of the instrument were chosen based on the results of Cronbach's alpha (reliability evaluation) and factor analysis (validity evaluation). The 45 items that loaded with the determined factors (N= 6) after factor analysis had a Cronbach's alpha of 0.92 which was verbally interpreted as "excellent." Twenty-four items were worded positively and twenty-one were worded negatively. A forced choice scale was also retained. The direction in answering the instrument was written in the instrument per se, thus, retaining its nature as a self-administering instrument. For the purposes of recognition, the final instrument was named "Social Competency Inventory for Tertiary Level Faculty Members (SCI-TLFM)."

VI. DISCUSSION

Results suggest that the SCI-TLFM had six factors. Items under Factor 1 resemble characteristics and traits of being perceptive, sensitive, insightful, observant, understanding, discerning, keen, aware, and sharp. Items under Factor 2 resemble characteristics and traits of being reflective, deep, thoughtful, philosophical, and weighty. Items under Factor 3 resemble characteristics and traits of being accommodating, helpful, willing to help, cooperative, compliant, and accepting. Items under Factor 4 resemble characteristics and traits of being receptive, responsive, open, and reactive. Items under Factor 5 resemble characteristics and traits of being

considerate, sympathetic, kind, indulgent, appreciative, supportive, and tolerant. Items under Factor 6 resemble characteristics and traits of being attentive, caring, dutiful, conscientious, courteous, polite, assiduous, and devoted.

Furthermore, the numbers of items in each factor were observed to be not equal. Factor 1 yielded the most number of items (N= 18). Factor 2 yielded the second most number of items (N= 9) followed by Factor 3 (N= 7), Factor 4 (N= 5), Factor 5 (N= 4), and Factor 6 (N= 2) respectively. The identified factors were given specific labels based on the common themes of items that loaded on them. Factor 1 was named "Perception," Factor 2 as "Reflection," Factor 3 as "Accommodation," Factor 4 as "Reception," Factor 5 as "Consideration" and Factor 6 as "Attention."

The six factors of SCI-TLFM, which were empirically constructed using factor analysis, may be used as an objective checklist in determining characteristics that are considered to be manifestations of social competency in the Philippine setting. SCI-TLFM was proven reliable (Cronbach's Alpha of 0.92 indicating high internal consistency) and initially valid (reviewed by experts and factor loadings that range from 0.40 to 0.78 based on the 0.40 cut-off for screening of items).

VII. LIMITATIONS OF THE STUDY

This study was limited to the development and initial validation of an instrument that measures the social competency of tertiary level faculty members. It should also be noted that the instrument developed and validated was in the form of a self-report and administering inventory. As to the participants of the study, only full-time professors of Arts and Sciences of HEIs in NCR and Central Luzon in the Philippines with at least Level II Accreditation were considered in the instrument's trial-run and final administration.

VIII. RECOMMENDATIONS

Further studies must be conducted on the reliability and validity of the SCI-TLFM to reveal its more detailed properties. This can be done by administering the SCI-TLFM to a larger number of respondents whose responses can be used to really confirm the six identified factors via Confirmatory Factor Analysis. Furthermore, since the items in SCI-TLFM are generic in nature, it is recommended that the SCI-TLFM be administered to professors of other disciplines, basic education teachers, and other professions where social competency is deemed necessary like that of administrators, counselors, salespersons, medical practitioners, and the like. Specific norms can be developed for these professions.

REFERENCES

- [1] K. N. Stump, J. M. Ratliff, Y. P. Wu, and P. H. Hawley, "Theories of social competence from the top-down to the bottom-up: A case for considering foundational human needs," in J. L. Matson (ed.), *Social behavior and skills in children*. New York, NY: Springer Science Business Media, LLC, 2009, pp. 23-37.
- [2] E. L. Thorndike, "Intelligence and its uses," *Harper's Magazine*, vol. 140, 1920, pp. 227-235.
- [3] H. S. Han and K. M. Kemple, "Components of social competence and strategies of support: Considering what to teach and how," *Early Childhood Education Journal*, vol. 34, no. 3, 2006, pp. 241-246. DOI: 10.1007/s10643-006-0139-2.
- [4] S. Bosacki and J. W. Astington, *Theory of mind in preadolescence: Relations between social understanding and social competence*. Malden, MA: Blackwell Publishers Ltd., 1999.
- [5] L. Rose-Krasnor, "The nature of social competence: A theoretical review," *Social Development*, vol. 6, no. 1, 1997, pp. 111-135.
- [6] C. Schneider, "On the construction and diagnostics of social competence," *Socmag.net*, 2008.
- [7] C. Howes and J. James, "Children's social development within the socialization context of childcare and early childhood education," in P. K. Smith and C. H. Hart (eds.), *Blackwell handbook of childhood social development*. Malden, MA: Blackwell Publishing, 2002, pp. 139-151.
- [8] M. Semrud-Clikeman, *Social competence in children*. New York, NY: Springer Science Business Media, LLC, 2007.
- [9] E. D. Warren and S. M. Sheridan, "A contextual approach to the assessment of social skills: Identifying meaningful behaviors for social competence," *Psychology in the Schools*, vol. 42, no. 2, 2005, pp. 173-187.
- [10] T. Davidson, J. Welsh, K. Bierman, and G. Thomson, "Social competence," in *Gale Encyclopedia of Children's Health*. Detroit: Gale, 2006.
- [11] I. Schoon, *Measuring social competencies*. German Council for Social and Economic Data. Working Paper no. 58. Federal Ministry of Education and Research, 2009.
- [12] Z. Babosik, "Social competences," *Practice and theory in systems of education*, vol. 3, no. 1, 2008, pp. 23-26.
- [13] E. Ruegg, "Social competence, transition plans and children with learning disabilities," *Essays in Education*, vol. 7, 2003.
- [14] G. Ten Dam and M. Volman, "Educating for adulthood or for citizenship: Social competence as an educational goal," *European Journal of Education*, vol. 42, no. 2, 2007, pp. 281-298.
- [15] J. Bose, "Education and the architecture of an inclusive society," *Peace Prints: South Asian Journal of Peacebuilding*, vol. 2, no. 1, 2009, pp. 2-4.
- [16] N. Burnett, N. (2008). "The Delors report: A guide towards education for all," *European Journal of Education*, vol. 43, no. 2, 2008, pp. 181-187.
- [17] K. M. Bailey, A. Curtis, and D. Nunan, *Pursuing professional development: The self as source*. Boston: TeacherSource, 2002.
- [18] K. M. Nowack and B. Heller, (2001), "Executive coaching: How to successfully change behavior," *Trainingmag.com*, 2001.
- [19] N. Graves and S. Vye, "Self-reflection for teacher autonomy: What's in it for us and why do we give valuable time?" Proceedings of the Independent Learning Association. Japan Conference: Exploring theory, enhancing practice: Autonomy across the disciplines. Kanda University of International Studies, Chiba, Japan, October 2007.
- [20] M. Xiang, "Comparison of teachers and students perceptions of interpersonal; Teacher behavior in the college English classroom," *Teaching English in China- CELEA Journal-Bimonthly*, vol. 32, no. 4, 2009, pp. 13-20.
- [21] P. Jennings and M. Greenberg, "The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes," *Review of Educational Research*, vol. 79, no. 1, 2009, pp. 491-525.
- [22] S. J. Blumberg, A. C. Carle, K. S. O'Connor, K. A. Moore, and L. H. Lippman, "Social competence: Development of an indicator for children and adolescents," *Child Indicators Research*, vol. 1, 2008, pp. 176-197. DOI 10.1007/s12187-007-9007-x
- [23] A. Kulikowska and M. Pokorski, "Self-injuries in adolescents: Social competence, emotional intelligence and stigmatization," *Journal of Physiology and Pharmacology*, vol. 59, no. 6, 2008, pp. 383-392.
- [24] C. K. Ewart, R. S. Jorgensen, S. Suchday, E. Chen, and K. A. Matthews, "Measuring stress resilience and coping in vulnerable youth: The social competence interview," *Psychological Assessment*, vol. 14, no. 3, 2002, pp. 339-352.
- [25] C. H. Lawshe, "A quantitative approach to content validity," *Personnel Psychology*, vol. 28, 1975, pp. 563-575.
- [26] T. J. B. Kline, *Psychological testing. A practical approach to design and evaluation*. Thousand Oaks, CA: SAGE Publications Inc, 2005.
- [27] D. George and P. Mallery, *SPSS for Windows step by step: A simple guide and reference. 11.0 update (4th Edition)*. Boston: Allyn & Bacon, 2003.