

Article History Received: 13.01.2021 Received in revised form: 02.05.2021 Accepted: 06.05.2021 Available online: 03.09.2021

International Journal of Contemporary Educational Research (IJCER)

www.ijcer.net

The Scale of Teachers' Self- Disclosure Through Social Media: Validity And Reliability Studies

Mustafa Demir¹, Okay Demir² ¹Bayburt University, ORCID ID: 0000-0002-0159-8986 ²Republic of Turkey Ministry of National Education, ORCID ID: 0000-0001-8033-3355

To cite this article:

Demir, M. & Demir, O. (2021). The scale of teachers' self- disclosure through social media: validity and reliability studies. *International Journal of Contemporary Educational Research*, 8(3), 165-177. DOI: https://doi.org/10.33200/ijcer.860534

This article may be used for research, teaching, and private study purposes.

Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

Authors alone are responsible for the contents of their articles. The journal owns the copyright of the articles.

The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of the research material.



The Scale of Teachers' Self- Disclosure through Social Media: Validity and Reliability Studies

Mustafa Demir^{1*}, Okay Demir² ¹ Bayburt University ² Republic of Turkey Ministry of National Education

Abstract

The purpose of this study was to develop a valid and reliable scale that can be used to identify the perceptions of teachers on their self-disclosure to their students in their interactions with them through social media. This study was designed as a sequential exploratory mixed method. So validity and reliability studies were conducted for this purpose. Data from 301 teachers for EFA and 422 teachers CFA were used pyschometric properties of "The Scale of Teachers' Self-disclosure through Social Media" (STSSM). The exploratory factor analysis yielded four-factor model with 21 items. As a result of the analyses of confirmatory FA, it was found that the scale produced sufficient goodness of fit values. Finally, the findings on the reliability proved that "The Scale of Teachers' Self-disclosure through Social Media" can reliably measure the perceptions of teachers on self-disclosure to their students on social media.

Keywords: Teachers' self-disclosure, Social media, Self-disclosure on social media

Introduction

In the twenty-first century, which is characterized by the transformation of communication and technology, developments reached incredible dimensions, and social environments and communication have been transferred to computers and the internet with Web 2.0 technology (Günaydın, 2017). Although there is a one-side interaction based on the presentation in classical web-based education, Web 2.0 and, based on this, social networks offer shared and multilateral interaction (Barış, 2011). Web 2.0 technology provided its users with the ability to create and share content. The power of social media, whose contents are created by its users, comes from the fact that communication allows more common interaction compared to one-way dissemination, giving users the opportunity to interact in a multifaceted way, communicate democratically and simultaneously, and to socialize (Aküzüm & Saracoğlu, 2017). There was a change in the way we communicate with the increase in the use of social media, and this changing communication form became a habit and a part of everyday life (Tutgun Ünal, 2015). All these changes also affected education systems and teachers.

It can be argued that the implementation of social networks in educational environments will provide more effective communication between students and teachers, as well as increased opportunities for teachers and students to know each other (Özturk & Talas, 2015). Indeed, the active role of social networks in education strengthened communication between both teachers and students effectively, offering the opportunity to know each other individually (Konuk & Güntaş, 2019). Teachers use many methods and techniques in this communication and recognition process. When these methods and techniques are examined, it will be noticed that education with computers, the internet, and social media has an important place in ensuring the cognitive and emotional learning of students (Diverniero & Hosek, 2011). One of the methods used to make the teaching process more effective is "self-disclosure" (Demir, 2020). Basically, self-disclosure is "the process of sharing personal information, thoughts and feelings with other people" (Derlega, Metts, Petronio, & Margulis, 1993, narrated by Qian & Scott, 2007; Foubert & Sholley, 1996), and might encompass any human relation, including student-teacher interaction (Saylag, 2012). Teachers' self-disclosure can be in different ways in different classes. For example, when a mathematics teacher at an elementary school creates a problem, s/he may attract the attention of students by mentioning his/her frequent walks, memories of the mountains climbed, etc. Based on

^{*} Corresponding Author: Mustafa Demir, mustafademir@bayburt.edu.tr

their own story and experience, teachers can help students benefit from this content. Another example is a teacher teaching the subject of war in history class by sharing photos and memories of relatives participating in one of these wars, associating his personal information with the course, and bringing this event to students (Zhang, Shi, Luo & Ma, 2009). Sorensen (1989) emphasized the self-disclosure of teachers as sharing information about him/her that students cannot learn from other sources, and described this as a unique means of teaching. In this way, the information described by the teacher, whether directly related to the teaching content or not, affects the academic learning, teacher-student relation, student participation, and communication of students significantly (Cayanus & Martin, 2009; Mazer, Murphy & Simonds, 2007; Sorensen, 1989). Cayanus & Martin (2016) also considered it important for the teacher to reveal himself/herself in teacher-student interaction and described the self-disclosure of the teacher as the high school of disclosure of personal information and the development of strong ties between teacher-student, in the teaching process or during the student interaction. A limited number of scale development studies measuring the status of "self-disclosure" in the literature (Cayanus & Martin, 2004; Cağ & Yıldırım, 2017; Oral, 1994; Selçuk, 1989; Topkaya, 2011; Wheeless & Grotz, 1976); however, a scale study on teachers' self-disclosure on social media was not been detected. In line with the above explanations, it was seen that self-disclosure to students with social media has a positive effect on student development. This study intended to develop a valid and reliable scale that can be used to measure the status of teachers' self-disclosure to their students on social media. It is considered that the data obtained from the implementation of the scale will give significant feedbacks to both the implementers and researchers and the resulting feedbacks will contribute to the literature.

Method

In this study, in order to develop a valid and reliable scale that can be used to identify the perceptions of teachers on self-disclosure to their students in their interactions with their students through social media, a sequential exploratory mixed method was used. The main purpose of sequential exploratory mixed method design is to explore a phenomenon with quantitative analysis and interpretation, following the priority given to qualitative methods (Creswell, 2003). This design is "especially advantageous when a researcher is building a new instrument" (Creswell, 2003, p. 216). For this purpose, first qualitative methods (literature review and expert analyses) were used to build a draft item pool and next quantitative methods were used to test the psychometric properties of STSSM

Study Groups

Study Group for EFA

In order to determine the participants in line with the purpose of the research, in the first semester of the 2019-2020 academic years, within the scope of the development of the trial scale form, the sample was determined by criterion sampling method, one of the purposeful sampling methods. In this regard, the use of social media was taken as the criterion. In this direction, teachers were contacted through social media groups where teachers were members, and a study group was created with 301 teachers who volunteered to participate (refined from 235 teachers after initial analysis). As a result, 301 teachers were included in the study. The data of the teachers included in the study are given in Table 1.

Variable	Group	f	%	Variable	Group	f	%
	Female	164	54,5		Faculty of Education	240	79,7
Gender	Male	137	45,5	Es sultas of	Faculty of Sci- Letters	38	12,6
	Total	301	100	Faculty of	Educational Institute	11	3,7
	Bachelor	247	82,1	Graduation	Other	12	4
Education	Master	46	15,3		Total	301	100
Status	PhD	8	2,7		1-60 minute	103	34,2
	Total	301	100	Daily Social Media Usage	61-120 minute	99	32,9
	Preschool	5	1,7		121-180 minute	53	17,6
School Level	Primary school	57	18,9		181 minute and above	46	15,3
Served	Secondary school	192	63,8		Total	301	100
Serveu	High school	47	15,6		1-10 years	109	36,2
	Total	301	100	Voora of	11-20 years	146	48,5
School Type Served	Public school	271	90	Years of Seniority	21-30 years	39	13
	Private	30	10	Semonty	31 years and more	7	2,3
	Total	301	100		Total	301	100

Table 1. Distribution of EFA Teacher Study	y Group according t	to Descriptive Ch	naracteristics (N=301)

Study Group for CFA

Since it would be more appropriate to apply the confirmatory factor analysis after the exploratory factor analysis on another sampling (Henson & Roberts, 2006), 422 teachers were included with the convenient sampling method.

Variable	Group	f	%	Variable	Group	f	%
	Female	242	57,3		Faculty of Education	324	76,8
Gender Education Status	Male	180	42,7		Faculty of Sci-Letters	61	14,5
	Total	422	100	Faculty of Graduation	Educational Institute	9	2,1
	Bachelor	334	79,1	Graduation	Other	28	6,6
	Master	82	19,4		Total	422	100
	PhD	6	1,5		1-60 minute	102	24,2
	Total	422	100		61-120 minute	143	33,9
	Preschool	17	4	Daily Social Media Usage	121-180 minute	82	19,4
School	Primary school	93	22	inicula Osage	181 minute and more	95	22,5
Level	Secondary school	225	53,4		Total	422	100
Served	High school	87	20,6		1-10 years	154	36,5
	Total	422	100	N/ C	11-20 years	201	47,6
School Type Served	Public school	389	92,2	Years of Seniority	21-30 years	57	13,5
	Private	33	7,8	Semonty	31 years and more	10	2,4
	Total	422	100		Total	422	100

Table 2. Distribution of CFA Teacher Study Group according to Descriptive Characteristics (N=422)

Development of the Data Collection Tool

In this study, it was planned to develop a scale for teachers to disclose themselves to their students through social media. In this respect, the literature on teachers' use of social media and teacher-student interaction on social media was reviewed (Acar & Yenmiş, 2014; Alican & Saban, 2013; Arthur & Bostedo-Conway, 2012; Atkins, 2010; Bridges, 2009; Cayanus, 2004; Cayanus & Martin, 2004; Cayanus & Martin, 2008; Cayanus, Martin & Goodboy, 2009; Çakmak & Arap, 2013; Dawson, 2008; Eke, Omekwu & Odoh, 2014; Eugenia & Wong, 2013; Farani & Fatemi, 2014; Ha & Shin, 2014; Haeger, Wang & Lorenz, 2014; Hassan & Landani, 2015; Hosek & Thompson, 2009; Hurt et al., 2012; Irwin, Desbrow & Leveritt, 2012; Ili, 2013; Junco, Heiberger & Loken, 2011; Kırksekiz, 2013; Kuzu, 2014; Lam, 2012; Lane, 2013; Lane & Lewis, 2013; Liccardi, 2007; Mazer, et al., 2007; Mazer & Hosek, 2012; Munoz & Towner, 2009; Nkhoma et al., 2015; Sang, 2014; Saylag, 2012; Smith, 2015; Tarantino, McDonough & Hua, 2013; Tarawneh, 2014; Tiryakioğlu & Erzurum, 2011; Togay et al., 2013; Tombuloğlu & Işman, 2014; Tucker, 2012; Weiler, 2006; Wheeless & Grotz, 1976; Zardeckaite-Matulaitiene & Paluckaite, 2013).

As a result of the rewiev of these studies, a question pool of 43 items was created on teachers' self-disclosure to their students through social media. During the process of creating the items, short and clear expressions were written in order not to have participants bored and distracted. Then, to pre-examine these items in terms of understandability, the opinions of one Turkish teacher and one field specialist were taken, and as a result of this process, an expert evaluation form with 40 items was created.

In order to ensure the content validity, the expert evaluation form with 40 items was sent to five experts who has written book chapters, articles in peer-reviewed journals, and books in this field and who had postgraduate studies on social media in Turkey and four of these experts returned feedbacks within the specified time period. In line with expert opinions, 6 items were excluded as not appropriate in terms of the scope, accessibility and understandability through social media. Also, the remaining items were examined again by a field specialist, items that expressed multiple tasks were limited to a single task, and items that performed similar tasks were eliminated, and trial form of the scale with 34 items was created. After the review of these studies and asking for views of an expert panel, content and face validity of the scale was secured. Then, the trial form of the scale was subjected to construct validity studies. On the other hand, the items in the trial form of the scale were rated as "1-I do not agree, 3-I partially agree, 4-I agree, 5-I absolutely agree", which would allow participants who would respond to the form to express their opinions in degrees.

Analysis of the Data

Exploratory and confirmatory factor analyzes was tested this study for the construct validity of the scale. In the factor analysis that is used to measure the validity of the construct, it is examined whether the scores obtained as a result of the implementation of the scale measures the characteristics that the test wants to measure (Büyüköztürk et al., 2011). Although there are many different techniques in factor analysis, the principal components analysis, which is often referenced as factoring technique, was used in the present study (Büyüköztürk, 2014, p.134). After the exploratory factor analysis (EFA), confirmatory factor analysis was tested. The purpose of confirmatory factor analysis (CFA) is to test a hypothesis or a theory regarding the structure obtained on the basis of interrelationships between variables (Büyüköztürk, 2014).

Based on these, the answers of the 301 teachers for EFA and 422 teachers for CFA who participated in this study given to the items in the pre-application form were scored and the data obtained were analyzed by using the SPSS 18.0 Package Program and Lisrel Program respectively; and the level of significance was considered as 0.05 in interpreting the results.

Results

In this part of the study, the details of the validity and reliability studies of the scale and the findings obtained as a result of the analyses are included.

Findings on Construct Validity

The Exploratory Factor Analysis Results:

Before the Exploratory Factor Analysis (EFA), the Kaiser Meyer Olkin (KMO), which is used to test the suitability of sampling size, and the Bartlett Sphericity Test, which is used to determine whether the data come from normal multivariable distribution or not (Akdağ, 2011), were applied firstly. According to the results of these tests (Kaiser Meyer Olkin = .936, Bartlett Sphericity Test = 5483.192, df = 210, p = .000), it was determined that the data were suitable for factor analysis (Büyüköztürk, 2014; Sencan, 2005), and then EFA was initiated. The resulting factors obtained after the analysis were subjected to axis rotation. In this study, Varimax, which is a common orthogonal rotation technique revealing which items are in a higher relation with the factors, was preferred in order to ensure maximum factor variances with fewer variables (Büyüköztürk, 2014, p. 136; Özdamar, 1999, p.247). As a result of successive exploratory factor analysis, 13 items that did not meet the criteria were eliminated, and the analyses were done again on the remaining 21 items. Also, the scree plot was examined to confirm the number of factors of the scale.





As shown in Figure 1, the slope of the line moved to a horizontal direction after the 5th point, and when the point ranges until to this point were counted, the scale appeared to have 4 factors. Also, the distribution of the items to factors was named by subjecting them to the content analysis:

The 9 items in the first factor (1, 2, 3, 4, 5, 6, 7, 8, 9) made up the *Communication and Confidence* [CC], the 5 items (15, 16, 17, 21 and 22) in the second factor made up the *reason for Self-Disclosure* [RSD], the 4 items in the third factor (23, 25, 26 and 27) made up the *Tendency to Self-Disclosure* [TSD], and the 3 items in the fourth and final factor (32, 33 and 34) made up the *Frequency of Self-Disclosure* [FSD]. The results regarding the scale after the Exploratory Factor Analyses are shown in Table 3:

Table 3. Exploratory Factor Analysis results for			Self-dis	closure t	hrough S	ocial Media"
Items	Communalities	CC	RSD	TSD	FSD	Corrected item-total correlation
Item 1	.772	.813				.779
Item 2	.735	.830				.711
Item 3	.786	.800				.808
Item 4	.802	.851				.773
Item 5	.835	.870				.792
Item 6	.763	.807				.758
Item 7	.767	.823				.758
Item 8	.807	.852				.780
Item 9	.770	.826				.761
Item 15	.870		.832			.736
Item 16	.846		.842			.698
Item 17	.847		.820			.728
Item 21	.709		.747			.672
Item 22	.665		.740			.621
Item 23	.626			.702		.486
Item 25	.669			.796		.407
Item 26	.773			.815		.471
Item 27	.657			.730		.489
Item 32	.750				.822	.345
Item 33	.696				.776	.347
Item 34	.754				.785	.399
KMO= .936						
Bartlett Sphericity Test= 5483,192; p= .000						
Eigenvalue		10,075	3,140	1,683	1,004	
Variance exploratory rate (%)= 75.721 (Total)		33,073	18,820	13,365	10,463	
Cronbach Alpha= 0,942 (Total)		0,964	0,930	0,835	0,803	
Guttman Split-Half Coefficent		0,92	0,84	0,80	0,74	

Note.: Factor load values below .30 have not been shown here.

As seen in Table 3, factor loads of items varied between ".702" and ".870". As a result of the Exploratory Factor Analysis, it was determined that the scale, which consisted of a total of 21 items and which had a four-factor structure, had 75.721% explanatory level on the total variance. The explanatory level being over 40% is considered to be one of the important indicators for construct validity (Kline, 1994; Narrated by Özer & Dönmez, 2013). In this respect, it has been revealed that the construct validity of "The Scale of Teachers' Self-Disclosure through Social Media" is ensured.

Confirmatory Factor Analysis

Since it might be misleading to analyze the confirmatory factor analysis following the exploratory factor analysis with the same dataset (Çokluk, Şekercioğlu and Büyüköztürk, 2012; Henson & Roberts, 2006). The four-factor and 21-item structure of the STSSM was tested by using the Lisrel Program with a new sampling group consisting of 422 people. It was seen that the *t* values for explaining the observed variables of the hidden variables were observed to be significant at the level of .01 for the 4-factor model (Çokluk et al., 2012). In the 4-factor 21-item model, the error variances of the observed variables were between 0.13 and 0.63, and the standardized parameter values defined from the hidden variables towards the observed variables were between .61 and .93. These values indicate that there were no serious problems for the model tested (Çokluk et al., 2012). In Table 4, the goodness of fit values obtained before and after the modification for the model are presented comparatively. The values presented in the table about the goodness of fit were described as "excellent" and "acceptable" by complying with the generally accepted criteria in the relevant literature (Çokluk et al., 2012; Seçer, 2013; Şimşek, 2007).

Goodness of	Perfect	Acceptable (K)	Pre-modification	Post- modification
fit values	(M)			
P^{a}	>0,05 ^b	$< 0,05^{b}$	0,000 (K)	0,000 (K)
X^2/sd	\leq 3	3-5	665,40/183=3,63(K)	528,71/181=2,92 (M)
RMSEA	$\le 0,05$	\leq 0,08	0,079 (K)	0,068 (K)
RMR	$\le 0,05$	\leq 0,08	0,056 (K)	0,055 (K)
SRMR	$\le 0,05$	\leq 0,08	0,051 (K)	0,05 (M)
GFI	$\geq 0,95$	$\geq 0,90$	0,87	0,90 (K)
AGFI	$\geq 0,95$	$\geq 0,90$	0,83	0,87
CFI	$\geq 0,95$	$\geq 0,90$	0,98(M)	0,98(M)
NFI	$\geq 0,95$	$\geq 0,90$	0,97(M)	0,97(M)
NNFI	$\geq 0,95$	$\geq 0,90$	0,97(M)	0,98 (M)

Table 4. Results of CFA for	nra modification and	nost modification (final	M2ZTS ho alebom
Table 4. Results of CFA 101	pre-mounication and	post-mounication (IIIIaI,	

^aThe fact that the p was not significant shows that there were no differences between the observed and expected covariance matrices; in other words, the model was confirmed. In the case of significance, other criteria are considered (Çokluk, Şekercioğlu and Büyüköztürk, 2012: 307). ^bThe level of significance (p) was taken as 0.05 for this study.

In the Confirmatory Factor Analysis, it was observed that there were significant differences between the expected and observed covariance matrix for the 4-factor model (p < .05), and other parameter values other than "GFI = .87, AGFI= .83" were at acceptable or excellent levels in terms of criteria. It is important to try the modification processes suggested in the Confirmatory Factor Analysis, to contribute significantly to the fit indexes and to achieve better fit values (Karagöz, 2017; Seçer, 2013). At this stage, modification recommendations were examined to improve the model. After these two modifications, X^2 decreased significantly [the Chi-square 1 free-frame difference = 136.69 (p = 0.000)]. It was seen that the goodness of fit values for the 4-factor model after the modification were at excellent levels (p=0.000; X^2 /sd=2.92; SRMR=0.05; CFI=0.968; NFI= 0.97 and NNFI=0.98), or at acceptable limits (RMSEA= 0.068; RMR = 0.055 and GIF= 0.90), and only the AGFI value was lower than expected; however, according to Çelik and Yilmaz (2013), this value can be considered to be "Acceptable" at "AGFI \geq 0.86" level. For this reason, it can be argued that the structure of the 4-factor measuring model, which was tested again in the scope of the second pilot application, was confirmed at an adequate level. The path diagram of the standardized factor loads, error variances, and modifications of the 4-factor model is shown below.



Figure 2. The path diagram of the 4-dimension model after the modification

The Findings and Comments on the Reliability of the STSSM

After the Confirmatory Factor Analyses of the pilot applications, the reliability of the final 4-factor model was tested by calculating the Cronbach Alpha, Internal Consistency Coefficient, with Guttmann two semi-reliability coefficients, with corrected item total correlations, and t values for comparing the lower- and upper group averages of 27%. For this purpose, the datasets employed in pilot applications were combined, and the data set of 723 (301 + 422) people was used in the analysis.

The Cronbach Alpha and Guttmann two-half reliability coefficients for the reliability of the data coming from the scale in terms of internal consistency of 0.96 and 0.92 for *Communication and Confidence Factor*, respectively; 0.93 and 0.84, for the *Reason for Self-Disclosure Factor*, respectively; 0.83 and 0.80 for the *Tendency to Self-Disclosure Factor*, respectively and finally 0.80 and 0.74 for the *Frequency of Self-disclosure Factor*, respectively (see Table 3). It can be argued that the scales with the reliability values of .70 and above have adequate reliability in the scale development processes (Büyüköztürk, 2014; Seçer, 2013).

For all the items in the scale, the total correlations of the items were between .391 and .784, and the *t* values were significant (p<.001). These results can be interpreted as having high validity in items of the scale, and items for measuring the same behavior (Büyüköztürk, 2014). The Cohen's *d* formula was used, and it was determined that the effect of the significant difference between the lower and upper groups for all items was at "wide (\geq .8)" effect size (Cohen *d*= 0.86-3.33). Based on these, it can be argued that the items tend to measure the same behavior with the factors in which they are included, and their discrimination level is high (Büyüköztürk, 2014).

STSSM was prepared in 5-point Likert design, and the options were 1 to 5 from "I do not agree at all" to "I absolutely agree". There are a total of four factors and 21 items in the scale. The lowest score in the scale is 21, and the highest score is 105.

Discussion and Conclusion

One of the important factors in healthy interpersonal relations is the self-disclosure behavior, which also contributes significantly to the ability of individuals to know and understand each other more in interpersonal relations, also playing very effective roles in establishing relations more easily, developing these relations more quickly, and sustaining them more safely (Çetinkaya, 2005). Considering that communication occurs with social networks as well as face-to-face at significant levels in this age, the importance of "social media" is seen in teacher and student interaction. Many studies were detected that examined the importance of teachers' self-disclosure to their students in terms of student development (Cayanus & Martin, 2004; Cayanus, Martin & Goodboy, 2009; Cayanus & Martin, 2016; Demir, 2020; Downs, Javudi & Nussbaum, 2009; Fusani, 1994; Goldstein & Benassi, 1994; Lannutti & Strauman, 2006; Mazer et al., 2007; Rouse & Bradley, 1989; Song, Kim & Park, 2019; Zhang et al, 2009); however, no scale development studies were detected measuring the status of teachers' self-disclosure to their students on social media. In this study, it was especially intended to develop a valid and reliable measurement tool that can be used to determine the status of teachers' self-disclosure status to their students on social media.

As a result of the literature review, the item pool was presented primarily for the approval of an expert group in the context of content and face validity studies. After the construct validity of the scale was tested with Exploratory Factor Analysis with a dataset of 301 people, the 4-factor model was subjected to Confirmatory Factor Analysis based on the data obtained from a new group of 422 people.

The initial construct validity analyses showed a 4-factor measuring model with acceptable goodness of fit values (X²/sd=665.40/183=3.63; p=0.000; RMSEA= 0.079; GFI= 0.87; AGFI= 0.83; SRMR=0.051; CFI=0.98; NFI= 0.9 and NNFI=0.97). There is the Communication and Confidence [CC], which consists of 9 items (1, 2, 3, 4, 5, 6, 7, 8, 9) in the first dimension in this 4-factor model that consisted of a total of 21 items, the Reason for Self-Disclosure [RSD], which was formed by 5 items (15, 16, 17, 21 and 22) in the second dimension, the Tendency to Self-Disclosure [TSD] that consisted of 4 items (23, 25, 26 and 27) in the third dimension, and the Frequency of Self-disclosure [FSD] consisting of 3 items (32, 33 and 34) in the fourth and final dimension. According to the results of the Exploratory Factor Analysis, this model explained 75.721% of the total variance. As a second result of the study, confirmatory analysis, conducted in line with the modification recommendations with an independent group, a significant decrease was detected in X^2 value [the Chi-Square difference at 1 freedom level] = 136.69 (p = 0.000)]. It was also found that the goodness of fit value was at excellent level for the 4-factor model after the modification (p=0.000; X^2 /sd=2.92; SRMR=0.05; CFI=0.968; NFI= 0.97, and NNFI=0.98) or was within acceptable levels (RMSEA= 0.068; RMR = 0.055 and GIF= 0.90), and only AGFI scores were below the expected levels. When the average variance explanatory rates of the items was considered, it was calculated to be approximately 77% for Communication and Confidence factor, approximately 78% for the Reason for Self-Disclosure factor, approximately 65% for the Tendency to Self-Disclosure factor, and approximately 72% for the Frequency of Self-Disclosure factor.

The Cronbach Alpha Internal Consistency Coefficient for the internal consistency reliability of the scale items was tested by calculating the Guttmann two semi-reliability coefficients, corrected item total correlations, and t values for comparing lower and upper group averages of 27%. For this purpose, the datasets that were used in pilot applications were combined, and the dataset of 723 (301 + 422) people was used in the analyses. The Cronbach Alpha and Guttmann two semi-reliability coefficients for internal consistency of the data of the scale were 0.96 and 0.92 for Communication and Confidence factor, respectively; 0.93 and 0.84, respectively, for the Reason for Self-Disclosure factor; 0.78 and 0.80 for the Tendency to Self-Disclosure factor and finally 0.79 and 0.74 for the Frequency of Self-Disclosure factor, respectively. It was also found that the total correlations of the item were determined to be between .391 and .784 for all items on the scale, and the t values were significant (p<.001). Cohen's d formula was used to determine the effect of the significant difference, and the difference between the lower and upper groups was found to be the at "wide (\geq .8)" effect size for all items (Cohen d= 0.86-3.33). Based on this, it was determined that the items tended to measure the same behavior as the factors in which they were included, and had high differentiation levels.

When the literature is examined, there are also studies in which different dimensions are used for teachers selfdisclosure on social media. Mazer, Murphy and Simonds (2009) examined teachers in terms of competence, honesty and sensitivity on Facebook, one of the social media platforms, and revealed the status of teachers at "low, medium and high". Snell, Miller and Belk (1988) also focused on the psychological dimension of selfdisclosure behavior, and in this direction, they created an emotional self-disclosure scale that includes the subdimensions of depression, happiness, jealousy, anxiety, anger, calmness, apathy, and fear. Cayanus & Martin (2008) also created a three-dimensional (amount, negativity, and relevance) Likert-type scale for teachers' selfdisclosure. In this scale, they also included items such as "I often talk about what I do on the weekends", "I reveal unwanted things about myself" and "I use personal examples to create content about students". In the scale study conducted by Zhang et al. (2009) about teachers' self-disclosure, it was seen that a dimensioning was made as "the subject that the teacher opened up to himself, his goals and the student's importance". As can be seen, the concept of "self-disclosure", which offers a multi-dimensional view, can be reflected in different dimensions and content. Unlike these studies on teachers' self-disclosure, it is seen that this study focuses on the level of teachers' self-disclosure to their students through social media rather than self-disclose to all social media users.

The concept of self-disclosure, which has a significant potential in the realization of student learning in the educational process (Cayanus & Martin, 2016; Clark, 1978; Zardeckaite-Matulaitiene & Paluckaite, 2013). In this study, the concept of self-disclosure, "communication and confidence, reason for self-disclosure, tendency to self-disclosure and frequency of self-disclosure", is discussed with its dimensions. Considering the reflection of self-disclosure in the educational environment, the importance of teachers' self-disclosure will emerge, especially in providing a positive learning environment and creating a safe space based on an effective communication between teacher and student (Cayanus, 2004; Mazer & Hosek, 2012). In this context, Dobransky & Bainbridge Frymier (2004), in their study examining the relationship between students and teachers in outdoor environments, determined that teachers who trust their students and communicate more effectively with their students make a difference and that these teachers' students have more learning opportunities. In addition to communication, trust and teacher-student closeness, teachers' tendency to open themselves up and the amount of self-disclosure are also very important (Cayanus & Martin, 2008). In this respect, Cayanus, Martin, and Weber (2003) conducted their research on teachers' self-disclosure and found that teachers who open themselves up to their students and tend to open themselves up to their students more ensure their participation in classes and communicate better with students.While affective features such as communication, trust, and disposition in teachers' disclosure to their students are under similar concepts in other scales, the "frequency" degree of selfdisclosure is also included in this study. According to Cayanus & Martin (2008), teachers' level of self-disclosure is also very important in quantitative terms. Apart from this, there are also studies that reveal the reasons for teachers' self-disclosure. For example, Zhang et al. (2009), in their research examining teachers' self-disclosure, determined that teachers listed the following reasons: "To present practical examples from the real world, to attract students' attention, to create positive teacher-student relationships, to create social role models, to create a comfortable classroom environment for students, to develop students' interests., entertaining students and satisfying themselves ".

Considering all these findings, in today's society where social media is used so frequently and widely, it is seen that the STSSM is a valid and reliable measuring tool that can be used to determine the status of teachers' self-disclosure to their students on social media. Teachers' self-disclosure in social media can be measured using other cognitive and affective concepts. In addition to quantitative measurements, the behavior of self-disclosure can also be examined with qualitative methods that enable in-depth understanding. It also needs to be tested with different universes and samplings to test whether the scale can make valid and reliable measurements.

References

- Acar, S. ve Yenmiş, A. (2014). Eğitimde sosyal ağların kullanımına ilişkin öğrenci görüşlerini belirlemeye yönelik bir araştırma: Facebook örneği. *Electronic Journal of Vocational Colleges*, 4(3).
- Akdağ, M. (2011). Spss' de İstatistiksel Analizler Ders Notları.
- Aküzüm, C. ve Saraçoğlu, M. (2017). Üniversite öğrencilerinin sosyal medyaya ilişkin tutumlarının incelenmesi. Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi, 32, 803-817.
- Alican, C. ve Saban, A. (2013). Ortaokul ve lise de öğrenim gören öğrencilerin sosyal medya kullanımına ilişkin tutumları: Ürgüp örneği, *Sosyal Bilimler Enstitüsü Dergisi, 35*, 1-14.
- Arthur, J. A., and Bostedo-Conway, K. (2012). Exploring the relationship between student-instructor interaction on Twitter and student perceptions of teacher behaviors. *International Journal of Teaching and Learning in Higher Education*, 24(3), 286–292.
- Atkins, A. (2010). It's complicated: Using Facebook to create emotional connections in student-professor relationships. *The Journal of the Assembly for Expanded Perspectives on Learning*. 16(1). 79–89.
- Bridges, L. M. (2009). Face-to-face on Facebook: students are there... should we be? In R. J. LAckie& V. B. Cvetkovic (Eds.), *Teaching generation M: A handbook for librarians and educators* (pp. 125–136). New York: Neal-Schuman Publishers.
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö.E., Karadeniz, Ş. ve Demirel, F. (2011). Bilimsel araştırma yöntemleri. Ankara: PegemA Yayıncılık.

Büyüköztürk, Ş. (2014). Sosyal bilimler için veri analizi el kitabı. Ankara: PegemA Yayıncılık.

- Cayanus, J. L. (2004). Effective instructional practice: Using teacher self-disclosure as an instructional tool. *Communication Teacher*, 18(1), 6-9.
- Cayanus, J. & Martin, M.M. (2004). An instructor self-disclosure scale, *Communication Research Reports*, 21 (3), 252-263, DOI: <u>10.1080/08824090409359987</u>.
- Cayanus, J. L., & Martin, M. M. (2008). Teacher self-disclosure: Amount, relevance, and negativity. *Communication Quarterly*, 56(3), 325-341.
- Cayanus, J. & Martin, M.M. (2016). Teacher self-disclosure, P.L.Witt (Ed.), *Communication and Learning*. (p.241-258). Berlin: CPI Books.
- Cayanus, J. L., Martin, M. M., & Goodboy, A. K. (2009). The relation between teacher self-disclosure and student motives to communicate. *Communication Research Reports*, 26(2), 105-113.
- Cayanus, J. L., Martin, M. M., & Weber, K. D. (2003, April). *The relationships between teacher self-disclosure with out-of-class communication, student interest, and cognitive learning.* Paper presented at the annual meeting of the Southern States Communication Association, Birmingham, Alabama
- Clark, J. D. (1978). *The impact of teacher self-disclosure on student perceptions of the teacher*. Doctoral Dissertations. 1199. https://scholars.unh.edu/dissertation/1199.
- Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches (2nd ed.). Thousand Oaks, CA: Sage.
- Çağ, P. ve Yıldırım, İ. (2017). Eşe kendini açma ölçeği: geçerlik ve güvenirlik çalışması. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 7 (47), 99-111.
- Çakmak, F., & Arap, B. (2013). Teachers' perceptions of the appropriateness of teacher self-disclosure: a case study from Turkey. *Journal of Teacher Education and Educators*, 2(2), 275-288.
- Çelik, H.E. ve Yılmaz, V. (2013). Lisrel 9.1 ile yapısal eşitlik modellemesi. Ankara: Anı Yayıncılık.
- Çeçen, A. R. (2006). Duyguları yönetme becerileri ölçeğinin geliştirilmesi: Geçerlik ve güvenirlik çalışmaları. *Türk Psikolojik Danışma ve Rehberlik Dergisi. 3*(26). 101–113.
- Çetinkaya, B. (2005). Üniversite öğrencilerinin kendini açma davranışları ile bağlanma stilleri arasındaki ilişki. (Yayınlanmamış Doktora Tezi). Atatürk Üniversitesi, Erzurum.
- Çokluk, Ö., Şekercioğlu, G. ve Büyüköztürk, Ş. (2012). Sosyal bilimler için çok değişkenli istatistik: Spss ve Lisrel uygulamaları. Ankara: PegemA Akademi.
- Dawson, S. (2008). A study of the relationship between student social networks and sense of community. *Journal of educational technology & society*, 11(3), 224.
- Demir, M. (2020). The examination of teachers' opinions about self-disclosure of themselves on social media, Inonu University Journal of the Faculty of Education, 21(1), 225-240. DOI: 10.17679/inuefd.509492
- Dobransky, N.D. & Bainbridge Frymier, A. (2004). Developing teacher-student relationships through out of class communication, *Communication Quarterly*, 52 (3), 211-223, DOI: 10.1080/014633704 09370193.
- Downs, V.C., Javidi, M.M. & Nussbaum, J. F. (2009). An analysis of teachers' verbal communication within the college classroom: Use of humor, self-disclosure, and narratives, *Communication Education*, 37 (2), 127-141, DOI:<u>10.1080/03634528809378710</u>.
- Eke, Helen N. Miss; Omekwu, Charles Obiora Prof; and Odoh, Jennifer Nneka Miss (2014). The Use of Social Networking Sites among the Undergraduate Students of University of Nigeria, Nsukka. *Library Philosophy and Practice (e-journal)*, 1195.
- Eugenia. M., and Wong, H.C. (2013). Facebook: More than social networking for at-risk students. *Procedia-Social and Behavioral Sciences*, 73, 22-29.
- Farani, S. T., & Fatemi, A. H. (2014). The impact of teacher's self-disclosure on students' attitude towards language learning in a foreign language context. *Theory & Practice in Language Studies, 4*(11).
- Foubert, J. D., & Sholley, B. K. (1996). Effects of genders, gender role, and indivitualized trust on selfdisclosure. *Journal of Social Behaivior & Personality*, 11, 2777-289.
- Fusani, D.S. (1994) "Extra-class" communication: Frequency, immediacy, self-disclosure, and satisfaction in student-faculty interaction outside the classroom, *Journal of Applied Communication Research*,22(3), 232-255, DOI: <u>10.1080/00909889409365400</u>
- Goldstein, G. S., & Benassi, V. A. (1994). The Relation between Teacher Self-Disclosure and Student Classroom Participation. *Teaching of Psychology*, 21 (4), 212-217. https://doi.org/10.1207/s15 328023top2104_2
- Günaydın, S. (2017). Öğretmenlerin sosyal medya kullanım endişeleri ve farkındalıkları. (Yayınlanmamış Yüksek Lisans Tezi). Ege Üniversitesi, İzmir.
- Ha, J., and Shin, D. H. (2014). Facebook in a standard college class: an alternative conduit for promoting teacher-student interaction. *American Communication Journal*, 16(1), 36-52.

- Haeger, H., Wang, R., and Lorenz, A. (2014). Bridge or Barrier: The Impact of Social Media on Engagement for First-generation College Students. *The Power of Education Research for Innovation in Practice and Policy: American Educational Research Association Annual Meeting. 2014.*
- Henson, R.K. ve Roberts, J.K. (2006). Use of exploratory factor analysis in published research: Common errors and some comment on improved practice. *Educational and Psychological Measurement*, 66, 393-416.
- Hassan, S. S. S., and Landani, Z. M. (2015). The Use of Social Networks Sites (SNSs) among University Students: How Far do They Learn. *International Journal of Social Science and Humanity*, 5(5), 436– 439.
- Hosek, A. M., & Thompson, J. (2009). Communication privacy management and college instruction: Exploring the rules and boundaries that frame instructor private disclosures. *Communication Education*, 58(3), 327-349.
- Hurt, N. E., Moss, G. S., Bradley, C. L., Larson, L. R. and Lovelace, M. (2012). The 'Facebook'effect: college students' perceptions of online discussions in the age of social networking. *International Journal for* the Scholarship of Teaching and Learning, 6(2), 10.
- Irwin, C., Ball, L., Desbrow, B. and Leveritt, M. (2012). Students' perceptions of using Facebook as an interactive learning resource at university. *Australasian Journal of Educational Technology*, 28(7), 1221–1232.
- İli, K. (2013). Sosyal Medya Ortam Ve Araçlarının Öğrenci Davranışlarına Etkisi (Gaziçiftliği Anadolu Lisesi Örneği). Yayımlanmamış yüksek lisans tezi, Hacettepe Üniversitesi, Sosyal Bilimler Enstitüsü, Ankara.
- Junco, R., Heiberger, G. and Loken, E. (2011). The effect of Twitter on college student engagement and grades. *Journal of computer assisted learning*, 27(2), 119-132.
- Karagöz, Y. (2017). SPSS ve AMOS uygulamalı nitel-nicel-karma bilimsel araştırma yöntemleri ve yayın etiği. Ankara: Nobel Yayınları.
- Kırksekiz, A. (2013). Sosyal Ağlardan Facebook'un Kullanımına İlişkin Öğretim Elemanlarının Görüşleri. Yayınlanmamış yüksek lisans tezi, Sakarya Üniversitesi, Eğitim Bilimleri Enstitüsü, Sakarya.
- Konuk, N., ve Güntaş, S. (2019). Sosyal medya kullanımı eğitimi ve bir eğitim aracı olarak sosyal medya kullanımı. *International Journal of Entrepreneurship and Management Inquiries*, 3(4), 1-25.
- Kuzu, E. B. (2014). Bilişim Teknolojileri Öğretmen Adayları Arasında Çevrimiçi Sosyal Ağların Öğretim Amaçlı Kullanımı. Yayınlanmamış doktora tezi, Anadolu Üniversitesi, Eğitim Bilimleri Enstitüsü, Eskişehir.
- Lam, L. (2012). An Innovative Research on the Usage of Facebook in the Higher Education Context of Hong Kong. *Electronic Journal of E-learning*, *10*(4), 378-386.
- Lane, S. D. (2013). Social Media & Communication Outcomes in Higher Ed. Academic Exchange Quarterly, 17(3).
- Lane, S. D. and Lewis, T. N. (2013). The" digital divide", social media, and education-related outcomes. *The Online Journal of New Horizons in Education*, 3(2), 39–50.
- Lannutti, P.J. & Strauman, E.C. (2006). Classroom communication: The influence of instructor self-disclosure on student evaluations, *Communication Quarterly*, 54(1), 89-99, DOI: <u>10.1080/01463370500270496</u>.
- Liccardi, I., Ounnas, A., Pau, R., Massey, E., Kinnunen, P., Lewthwaite, S., Midy, M. and Sarkar, C. (2007). The role of social networks in students' learning experiences. In ACM Sigcse Bulletin, 39(4), 224–237.
- Mazer, J. P., Murphy, R. E., & Simonds, C. J. (2007). I'll see you on "Facebook": The effects of computermediated teacher self-disclosure on student motivation, affective learning, and classroom climate. *Communication Education*, 56(1), 1-17.
- Mazer, J. P., Murphy, R. E., & Simonds, C. J. (2009). The effects of teacher self-disclosure via Facebook on teacher credibility. *Learning, Media and Technology, 34*(2), 175–183. doi:10.1080/17439880902923655.
- Mazer, J. P., & Hosek, A. M. (2012). *Translating research into instructional practice: Instructor self-disclosure*. National Communication Association Website:http://natcom.org/uploadedFiles/Teaching_and_ Learning/Virtual_Faculty_Lounge/TRIP%20instr uctor%20self-disclosure.pdf
- Munoz, C. and Towner, T. (2009). Opening Facebook: How to use Facebook in the college classroom. In *Society* for information technology & teacher education international conference (pp. 2623-2627). Association for the Advancement of Computing in Education (AACE).
- Nkhoma, M., Cong, H. P., Au, B., Lam, T., Richardson, J., Smith, R. and El-Den, J. (2015). Facebook as a tool for learning purposes: Analysis of the determinants leading to improved students' learning. *Active Learning in Higher Education*, *16*(2), 87-101.
- Oral, E. A. (1994). İntihar girişimi olan kadınların duygularını açma davranışı ile kaygı durumları arasındaki ilişki (Yayınlanmamış Yüksek lisans tezi). Hacettepe Üniversitesi, Ankara.
- Özdamar, K. (1999). Paket programlar ile istatistiksel veri analizi (2. Baskı). Eskişehir: Kaan Kitabevi.

- Özer, N., ve Dönmez, B. (2013). Güvenlik kameraları ve okul güvenliği: Bir ölçek geliştirme çalışması. *Turkish Studies- International Periodical For The Languages, Literature and History of Turkish or Turkic.* 8(3). 437–448.
- Öztürk, M. F., ve Talas, M. (2015). Sosyal Medya ve Eğitim Etkileşimi. Zeitschrift Für Die Welt Der Türken/Journal Of World Of Turks, 7(1), 101-120.
- Rouse, R.E. & Bradley, D. (1989). Personally shared reading: How teacher self-disclosure effects student selfdisclosure, *Middle School Journal*, 20 (3), 34-38 DOI: <u>10.1080/00940771.1989.11495013</u>.
- Sang, W. (2014). The criteria of students' and teachers' comminication privacy management in Facebook and their effect on teacher- student relationship. Unpublished master's thesis, University of Lapland, Finland
- Saylag, R. (2012). Facebook as a tool in fostering efl teacher's establishment of interpersonal relations with students through self-disclosure. *Social and Behavioral Sciences*, 82, 680-685.
- Seçer, İ. (2013). Spss ve lisrel ile pratik veri analizi. Ankara : Anı Yayıncılık.
- Selçuk, Z. (1989). Üniversite Öğrencilerinin Kendini Açma Davranışları. (Yayınlanmamış Doktora Tezi). Hacettepe Üniversitesi, Ankara.
- Smith, B. E. (2015). Enhancing Motivation through Student-teacher Facebook Relationships. *People: International Journal of Social Sciences*, 1(1), 34-41.
- Song, H., Kim, J. & Park, N. (2019). I know my professor: teacher self-disclosure in online education and a mediating role of social presence, *International Journal of Human–Computer Interaction*, 35 (6), 448-455, DOI: <u>10.1080/10447318.2018.1455126</u>.
- Sorensen, G. (1989). The relationships among teachers' self-disclosive statements, students' perceptions, and affective learning. *Communication Education*, *38*, 259-276.
- Snell, W. E., Miller, R. S., & Belk, S. S. (1988). Development of the emotional self-disclosure scale. *Sex Roles*, 18(1-2), 59–73. doi:10.1007/bf00288017.
- Şencan, H. (2005). Sosyal ve davranışsal ölçümlerde güvenilirlik ve geçerlilik. Ankara: Seçkin Yayıncılık.
- Şimşek, Ö. F. (2007). Yapısal eşitlik modellemesine giriş: Temel ilkeler ve LISREL uygulamaları. Ankara: Ekinoks Yayıncılık.
- Tarantino, K., McDonough, J. and Hua, M. (2013). Effects of student engagement with social media on student learning: A review of literature. *The Journal of Technology in Student Affairs*, 1(8), 1-8.
- Tarawneh, H. A. (2014). The influence of social networks on students' performance. Journal of Emerging Trends in Computing and Information Sciences, 5(3), 200-205.
- Tiryakioğlu, F. ve Erzurum, F. (2011, April). Bir eğitim aracı olarak ağların kullanımı. In 2nd International Conference on New Trends in Education and Their Implications (pp. 27-29).
- Togay, A., Akdur, T. E., Yetişken, İ. C. ve Bilici, A. (2013). Eğitim süreçlerinde sosyal ağların kullanımı: Bir MYO deneyimi. *XIV. Akademik Bilişim Konferansı*, 28-30.
- Tonbuloğlu, İ. ve İşman, A. (2014). Öğretmenlerin Sosyal Ağları Kullanım Profillerinin İncelenmesi (Exploring Teachers' Social Network Usage). *Bartın Üniversitesi Eğitim Fakültesi Dergisi*, 3(1), 320-338.
- Topkaya, N. (2011). Psikolojik yardım alma niyetinin sosyal damgalanma, tedavi korkusu, beklenen yarar, beklenen risk ve tutum faktörleriyle modellenmesi (Doktora Tezi). Ege Üniversitesi, İzmir.
- Tucker, B. G. (2012). Instructor self-disclosure as a classroom strategy. The Official Journal of the Georgia Communication Association, 82, 9-23.
- Qian, H. & Scott, C.R. (2007). Anonymity and self-disclosure on weblogs. *Journal of Computer-Mediated Communication*, 12, 1428–1451.
- Wheeless, L. R., & Grotz, J. (1976). Conceptualization and measurement of reported self-disclosure. Human communication research, 2(4), 338-346.
- Weiler, R. A. (2006). The effects of teacher self-disclosure of political views and opinions (Unpublished master's thesis). *University of Central Florida, Orlando, FL*.
- Zardeckaite-Matulaitiene, K. & Paluckaite, U. (2013). The relation between teacher's self-disclosure and student's motivation to learn. *European Scientific Journal*, 9(28), 456-470. doi:10.1080/08824090902 861523
- Zhang, S., Shi, Q., Tonelson, S.&Robinson, J. (2009). Pre-service and in-service teachers' perceptions of appropriateness of teacher self-disclosure. *Teaching and Teacher Education*, 29, 1117-1124.

Appendix: The Scale of Teachers' Self- Disclosure through Social Media- STSSM Personal Information Form:

- 1) Gender
- **3**) Education Status:
- 5) School Level Served:
- 7) Faculty of Graduation:

:

2) Years of Seniority

:

- 4) School Type Served:
- 6) Social Media Usage:

No	ITEMS	1	2	3	4	5
1	Interacting with my students over the SM help me communicate more strongly with my students.					
2	Interacting with my students on the SM increase my students' commitment to me.					
3	When add my students to my SM account and self-disclose information about my personal and/or professional life to them over the SM, my students know me better, and increase the trust they have in me.					
4	Interacting with my students over the SM, it allowed my students to know me better and express themselves more comfortably in the classroom.					
5	As a result of my interactions with my students over the SM, they know me better, which makes my students more confidence in the classroom.					
6	Knowing me better as a result of my interactions with my students over the SM increases engagement of my students in the class.					
7	My posts on SM and positive interactions with my students (e.g. messages, likes about their shares, making positive and supportive comments, and celebrating special days) make my students more careful and attentive to me in class.					
8	Seeing that my students have common interests with me on SM makes my students feel closer to me.					
9	The interactions with my students over the SM have positive effects on the motivation of my students for the class.					
	I add					
10	my students to my SM account and interact with them to attract their attention.					
11	my students to my SM account and interact with them to establish relations with them.					
12	my students to my SM account and interact with them to be a role model for them.					
13	my students to my SM account and interact with them to ensure that they receive information about various subjects related to school and/or classes.					
	I share					
14	information about myself over the SM so that students can share their information more comfortably.					
15	my thoughts on topics on the daily agenda on SM.					
16	information about my personal life and relations over the SM.					
17	information about my emotional high school over the SM.					
18	information about things I like and/or do not like over the SM.					
	I often					
19	share information about my personal problems over the SM.					
20	share information about my beliefs and thoughts over the SM.					
21	share information that reflects my emotional high school over SM.					

Note:(SM=Social Media)