The Turkish Adaptation of the Friendship Qualities Scale: A Validity and Reliability Study[*]

Zeynep ERKAN ATİK[a]
Vocational Qualification Agency

Figen ÇOK[b]
TED University

Aysel ESEN ÇOBAN[c]
Başkent University

Türkan DOĞAN[d]
Hacettepe University

Neslihan GÜNEY KARAMAN[e]
Başkent University

Abstract

In this study, the authors have aimed to adapt the Friendship Qualities Scale (FQS) in order to determine friendship relation levels among adolescents. A total of 603 high school students from Ankara Turkey, were selected using convenient sampling to participate in this study. During the course of this study, the FQS was first translated into Turkish and then its psychometric properties were examined. The construct validity of the FQS was tested using a confirmatory factor analysis (CFA). Before performing the CFA, the assumption of missing values, outliers, normality, and collineriaty were checked. According to the results, the 22-item FQS consisting of 5 dimensions had acceptable goodness of fit indexes $(S\text{-}Bx^2/df = 669.12/199$, $p= .00$, RMSEA = .063, CFI = .97, GFI = .88, NNFI = .96). The Cronbach alpha coefficients of the subscales ranged between .66 and .86. The internal consistency for the entire scale was α = .85. In conclusion, an instrument consisting of 22 items and 5 subscales was prepared for future researchers.

Key Words

Adolescence, Confirmatory Factor Analysis, Friendship, Friendship Qualities Scale, Peer Relationship, Scale Adaptation.

a **M.Sc. Zeynep ERKAN ATİK** is working at the Vocational Qualification Agency. Her subjects of study include peer relations, school counselor self-efficacy, and supervision in counseling. *Correspondence:* Mesleki Yeterlilik Kurumu, Sınav ve Belgelendirme Dairesi, Ziyabey Cad. 1420. Sok. No:12 Balgat, Ankara, Turkey. Email: zeyneperkanatik@gmail.com

b Figen ÇOK, Ph.D., is a professor of Educational Psychology. Contact: Department of Educational Sciences, Guidance and Psychological Counseling Program, TED University, Ankara, Turkey. Email: figen.cok@tedu.edu.tr

c Aysel ESEN ÇOBAN, Ph.D., is an associate professor of Guidance and Psychological Counseling. Contact: Department of Educational Sciences, Guidance and Psychological Counseling Program, Başkent University, Ankara, Turkey. Email: cobana@baskent.edu.tr

d Türkan DOĞAN, Ph.D., is an associate professor of Guidance and Psychological Counseling. Contact: Department of Educational Sciences, Psychological Counseling and Guidance Program, Hacettepe University, Ankara, Turkey. Email: dogant@hacettepe.edu.tr

e Neslihan GÜNEY KARAMAN, Ph.D., is an assistant professor of Guidance and Psychological Counseling. Contact: Department of Educational Sciences, Guidance and Psychological Counseling Program, Başkent University, Ankara, Turkey. Email: nguney@baskent.edu.tr

As soon as an individual enters this world, s/he is in need of social connections, and this need continues throughout life. Over the course of one's life, peer relationships and friendships are two basic elements of healthy development. The importance of relationships in people's life have been underlined in various theories. Adler (1964), in his theory, explained the importance of relationships through the concept of "social interest." Similarly, Sullivan (1953) highlighted the contribution of close relationships to an individual's development. Close relationships are crucial throughout one's entire life, whose value becomes even more critical during adolescence, at a time when it becomes an integral element in an individual's identity formation process (Marcia, 1980). During adolescence, not only do friendships both facilitate social interaction and prevent against negative affect (Vitaro, Boivin, & Bukowski, 2011), they are also one of the most important features of personal development during this specific period of life (Waterman, 1982).

Yet, peer relationships, while being both facilitative and preventive, also entail specific risks (Lansford, Criss, Pettit, Dodge, & Bates, 2003) with the benefits of forming and maintaining close peer relationships, especially in terms of mental health, being widely documented, groups formed based on such friendships may contain risks both for individuals within and without a specific group (Steinberg, 2007). Such benefits and risks will be detailed below.

Regarding the benefits of adolescent peer relationships, studies have documented positive effects on adaptation (Demir & Urberg, 2004; Nangle, Erdley, Newman, Mason, & Carpenter, 2003; Swenson, Nordstrom, & Heiser, 2008), on development of self-esteem (Çevik Büyükşahin, 2007; Keefe & Berndt, 1996; Rice & Mulkeen, 1995), on achievement and level of happiness (Ladd, Kachenderfer, & Coleman, 1996), on school performance (Rabaglietti & Ciairano, 2008), on the facilitation of dating relationships (Demir, Baran, & Ulusoy, 2005), on parental relationships (Field, Diegoi, & Sanders, 2002), on attachment to one's mother (Doğan, G. Karaman, E. Çoban, & Çok, 2012), on socialization and supportive intimacy development (Hartup & Stevens, 1997), on the feeling of security and significance (Totan, 2008), on sexual identity development (Dinçer, 2008), on career development (Kram & Isabella, 1985), on development of humor (Kahraman, 2008), and on popularity (Bukowski, Hoza, & Boivin, 1993; Bukowski & Kramer, 1986; Bukowski, Sippola, & Newcomb, 2000).

As for the risks entailed, the following effects have been documented: the lack of peer relationships and relational aggression (Cillessen, Jiang, West, & Laszkowski, 2005), learned helplessness (Aydın, 1986), a display of antisocial behaviors (Lansford et al., 2003; Zettergen, 2005), delinquency (Capaldi, Dishion, Stoolmiller, & Yoerger, 2001), conflict (Rabaglietti & Ciairano, 2008), loneliness and social isolation (Bilgiç, 2000; Parker & Asher, 1993), peer victimization (Hodges, Boivin, Vitaro, & Bukowski, 1999), a display of pathologic features (Bagwell, Newcomb, & Bukowski, 1998), depression and increased contemplation of suicide (Demir et al., 2005), and substance use (Erdem, Eke, Ögel, & Taner, 2006; Field et al., 2002).

Various measurement scales have been used in research on adolescent peer relationships; such as, sociometric techniques (Cassidy & Asher, 1992; Poulin & Pedersen, 2007), scales for quality of peer relationships (Blyth & Foster-Clark, 1987; Bukowski, Hoza, & Boivin, 1994; Furman, 1996; Parker & Asher, 1993), questionnaires addressing the number of friendships, sorting friendship by degree of closeness (Demir & Urberg, 2004; Keefe & Bernth, 1996). In Turkey, two adolescent friendship scales are reported to be in use. The first scale was developed by Armsden and Greenberg (1987) and adapted into Turkish by Hortaçsu, Oral, and Yasak-Gültekin (1991) and the second is the Peer Relation Scale, developed by Kaner (2000) and whose limitations stem from the perspective of dimensions represented in the scale. Upon realizing the limitations present in Turkey, the need to study peer relationships from both perspectives, negative (competition, conflict) and positive (closeness, support) (Laursen & Bukowski, 1997), becomes clear.

It is maintained that the scales are useful tools because they measure the perception of individuals about their relations, allow for statistical analysis, are applicable to large groups, and allow more valid and reliable measurement (DeVellis, 2011). Since establishing and maintaining healthy friendship relationships is one of the important factors in adolescent development, related instruments should be developed and adapted. As a result, the Friendship Qualities Scale (FQS), developed by Bukowski et al. (1994) and adapted for use both with French adolescents (Alles-Jardel, Fourdrinier, Roux, & Schneider, 2002) and with Italian adolescents (Ponti, Guarnieri, Smorti, & Tani, 2010), has been chosen for adaptation and use in Turkey with the present study intending to be an adaptation study of this particular scale.

Method

Participants

The convenient sampling method was used in this study (Fink, 2003). Six hundred three (603) high school students studying in Turkey's capital city of Ankara during the 2011-2012 academic year participated in this study. Of the total students, 353 (58.5%) were female and 250 (41.5%) were male, all of whose ages ranged between 14 and 19 ($\bar{x}$ =15.71; sd= 1.02). In addition, 12 students attending a local university's English Preparation School were included in the language equivalence study.

Instruments

The Friendship Qualities Scale was used and participants' gender, age, and school types were solicited.

Friendship Qualities Scale (FQS) aims to evaluate the quality of children's and adolescent' friendship qualities with their best friends. Draft items by Berndt and Perry (1983 as cited in Bukowski et al., 1994) were formulated as a scale by Bukowski et al. (1994). The final form of the scale consists of five factors and a total of 23 items. The factors are as follows by number of items included: Companionship (4 items), Conflict (4 items), Help (5 items), Security (5 items), and Closeness (5 items).

The scale used for analysis was a 5 point Likert type scale so that the factors could be analyzed separately and the total scores used individually. In order to test the construct validity, Confirmatory Factor Analyses were performed and the 5 factor structure was found to be valid (x^2/sd=19.83/12, p=.08, NNFI=.98) with its internal consistency found to be between .71 and .86 (Bukowski et al., 1994). As the scores obtained from the scale point increased, so did the quality of friendship.

Procedure

All necessary contacts were obtained prior to adapting the scale into Turkish. Firstly, for permission to begin adapting the scale, the scale's original author, Bukowski, was contacted. Then, in order to obtain permission to administer the scales in a real classroom setting, the Ministry of Education of Turkey was contacted. At all stages, acceptance was provided. During the actual implementation of the scale, researchers entered classes during instruction hours, asking for volunteer students to provide the requested information.

Analysis of Data

Before performing the CFA, the following assumptions were checked: missing value, outlier, normality, and multicollinearity assumptions. For reliability, internal consistency was calculated.

Results

Translation Procedure and Content Validity

During the translation stage, an expert group of 3 people was formed with all members being from either the domains of Educational Psychology or Counseling and Guidance. All members had obtained linguistic and cultural competency in English and Turkish and were familiar with the content of scale. The items and response template were translated from English into Turkish, and after necessary corrections were made, the scale was retranslated into English. Consistency between the two forms was compared, resulting in the Turkish version of the form to be formulated. The 16th item was decided to be excluded from the scale by the experts as it was thought to be unclear, resulting in the scale's final form to be administered with a total of 22 items.

In order to test the language equivalence of the Turkish version of the FQS, it was administered twice to the same 12 individuals with a two-week period between test and retest. The reliability coefficient of the test-retest was found to be between .40 and .86.

The Construct Validity of the FQS

The test of assumptions for CFA, Ullman (2001) suggests the need of missing value, outlier, normality and multicollinearity assumptions in order to test the CFA of 5 factor scales. No missing value was found in the data set when a detailed investigation was made based on each observed variable.

Since the CFA is sensitive to sample size, the number of participants necessary was investigated in order to ascertain whether it was sufficient to provide reliable results. In this study, there were a total of 22 observed variables and 603 participants. Since a total of 22 factor loadings, 22 covariance errors, and 15 correlations among the latent factors were found and a total of 59 free parameters were estimated, this study was found to meet the minimum criteria for reliability (Kline, 2005).

In order to perform the CFA, univariate and multivariate outliers were checked. Z values (outside the range of ±3.29) for univariate outliers and Mahalanobis distance values for the multivariate outliers were explored (Tabachnick & Fidell, 2001). In this study, sixty seven cases were identified as univariate and multivariate outliers. Fit indexes in the case of excluding outliers (Model 1) and fit indexes in the case of including outliers (Model 2) were compared and the CFA's for both models have been presented in Table 1.

Table 1.
CFA Results of Data Sets with and without Outliers

	n	x^2	df	x^2/df	RMSEA	CFI	NNFI	GFI
Model 1	536	763	199	3.83	.071	.96	.95	.88
Model 2	603	803	199	4.03	.063	.97	.96	.88

With outliers, the model was adopted for the following analyses. While testing univariate normality, skewness kurtosis values were calculated for each item. For most of the scale items, significant values of skewness and kurtosis were found, indicating the absence of normality assumption. After performing a multivariate normality test, deviance from the multivariate normality was found (Skewness $z = 57.75$, $p < .001$; Kurtosis $z = 29.57$, $p < .001$; Skewness and Kurtosis $x^2 = 4210.33$, $p < .001$), indicating the absence of normality assumption. In the related literature, the robust maximum likelihood method is suggested to apply in the prediction of parameters Satorra-Bentler chi square $(S\text{-}Bx^2)$ value (Bentler, 1995; Brown, 2006; Satorra & Bentler, 1994).

Finally, before performing the CFA, multicollinearity was tested. No correlatation was found to exist between variables above .85. The Variance Inflation Factor (VIF) and tolerance values were calculated with the VIF values found to be between 1.226 and 2.786, and tolerance values to be between .359 and .815, indicating the lack of multicollinearity between values.

Construct Validity of the FQS through the CFA: In order to test the validity of the FQS, 22 item and 5 factor scale had been gone through the first level CFA. Using Robust Maximum Likelihood method, as the indicators of goodness of fit index $S\text{-}Bx^2/df$, *RMSEA, CFI, GFI* and *NNFI* values were calculated and conditions for acceptance were considered (Hu & Bentler 1999; Jöreskog & Sörbom, 1993; Sümer, 2000).

The values obtained are as follows: $S\text{-}Bx^2/df = 669.12/199$, $p = .00$, *RMSEA* = .063, *CFI* = .97, *GFI* = .88, *NNFI* = .96. After performing a CFA for the

22-item FQS, the relationships between latent and observed variables were determined and have been presented in Figure1.
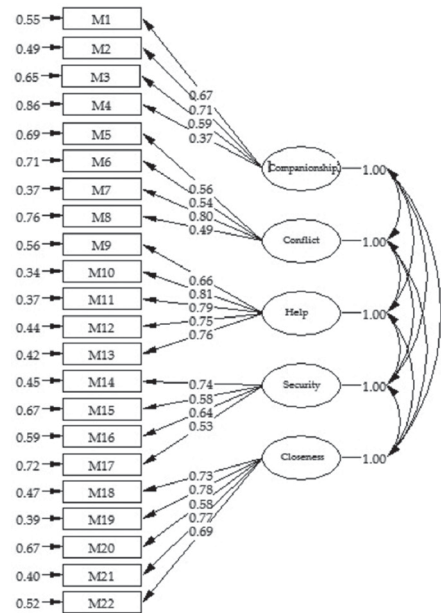
Figure 1.
Described Model for the 22-Item Turkish Version of the FQS

Factor loadings of the 22 items vary between .37 and .81 and no items were found to be lower than .30. Correlation values between the latent variables of the FQS are presented in Table 2. As seen in the table, all correlation coefficients show significant correlations between latent variables. The R^2 values of the items were also calculated. Bollen (1989) reported a cut-off value for R^2 at .49. According to this criteria, the R^2 values for 10 of the items were above .49, whereas the R^2 values for the other 12 items were below .49.

Table 2.
Correlation Coefficients between Latent Variables of the FQS

Latent Variables	1	2	3	4	5
1. Companionship	1.00				
2. Conflict	-.12*	1.00			
3. Help	.55*	-.34*	1.00		
4. Security	.74*	-.23*	.83*	1.00	
5. Closeness	.57*	-.34*	.79*	.82*	1.00

*Note. N = 603. *$p < .01$*

Reliability Analyses

After having calculated the values of the Cronbach alpha coefficients, it was investigated as to whether the FQS met appropriate levels of reliability. All coefficients were found to be between .66 and .86 with their exact values as follows: *Companionship:* .66, *Conflict:* .66, *Help:* .86, *Security*: .71, and *Closeness:* .83. The total internal consistency for the scale was found to be .85. While only the Cronbach alpha values for Companionship and Conflict were found to be below the acceptable border, the rest were found to be above the level required for acceptance (Kline, 1999).

Discussion

Since the FQS attempts to investigate both children's and adolescents' friendship qualities and is the most widely used instrument in the related literature used to test validity and reliability evidences and since this scale had already been adapted into different languages, it was thought that its adaption into Turkish would contribute greatly to peer relations research in Turkey.

During research, the translation of the scale from its original English into Turkish and evidences for language equalization were obtained first. Then, in order to test for content validity, the scale was presented to a group of experts composed of three individuals with the 16th item found to be problematic. For this reason it was decided to be excluded from the Turkish form, resulting in the final form consisting of only 22 items.

To check for construct validity, all assumptions were tested. After the data set was made ready for the CFA, the evidences for construct validity were investigated. The present study's CFA was compared with the results of the FQS's adaptation study into Italian and French (Alles-Jardel et al., 2002; Ponti et al., 2010). Although the fit indexes for some of the measures in the present study were found to be lower than those in other cultures, they were still within acceptable limits.

The Cronbach alpha coefficients were calculated for the internal consistency of the scale and its sub-dimensions. The Cronbach alpha coefficients for the entire scale and its sub-dimensions (except for two sub-dimensions) were found above .70. These values are very similar to the values obtained in the original scale development study (Bukowski et al., 1994).

Psychological Counseling and Guidance studies are mostly preventive in nature and are conducted in order to increase the overall well-being of an individual (Myers, Sweeney, & Witmer, 2000), with an individual's personal well-being being closely related to peer relations and friendships. It is believed that the Turkish form of the scale will be a useful tool for adolescent research and preventive studies within both fields of educational psychology and guidance and psychological counseling.

References/Kaynakça

Adler, A. (1964). *Social interest: A challenge to mankind.* New York: Capricorn Books.

Alles-Jardel, M., Fourdrinier, C., Roux, A., & Schneider, B. H. (2002). Parents' structuring of children's daily lives in relation to the quality and stability of children's friendships. *International Journal of Psychology, 37*(2), 65-73. doi: 10.1080/00207590143000289

Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence, 16*, 427-454. doi: 10.1007/BF02202939

Aydın, G. (1986). Çocuklarda arkadaş ilişkilerinde başarısızlık ve öğrenilmiş çaresizlik ilişkisi. *Psikoloji Dergisi, 5*(20), 313-325.

Bagwell, C. L., Newcomb, A. F., & Bukowski, W. M. (1998). Preadolescent friendship and peer rejection as predictors of adult adjustment. *Child Development, 69*, 140-153. doi: 10.1111/j.1467-8624.1998.tb06139.x

Bentler, P. M. (1995). *EQS structural equations program manual.* Encino, CA: Multivariate Software.

Bilgiç, N. (2000). *Arkadaşlık becerisi eğitiminin ilköğretim ikinci kademe öğrencilerinin yalnızlık düzeylerine etkisi* (Yüksek lisans tezi, Gazi Üniversitesi, Sosyal Bilimler Enstitüsü, Ankara). http://tez2.yok.gov.tr/ adresinden edinilmiştir.

Blyth, D. A., & Foster-Clark, F. S. (1987). Gender differences in perceived intimacy with different members of adolescents' social networks. *Sex Roles, 17*, 689-718. doi: 10.1007/BF00287683

Bollen, K. A. (1989). *Structural equations with latent variables.* Canada: Wiley & Sons, Inc.

Brown, T. (2006). *Confirmatory factor analysis for applied research*. New York: Guilford Publications, Inc.

Bukowski, W. M., Hoza, B., & Boivin, M. (1993). Popularity, friendship, and emotional adjustment during early adolescence. *New Directions for Child Development, 60*, 23-37. doi: 10.1002/cd.23219936004

Bukowski, W. M., Hoza, B., & Boivin, M. (1994). Measuring friendship quality during pre and early adolescence: The development and psychometric properties of the Friendship Qualities Scale. *Journal of Social and Personal Relationships, 11*, 471-84. doi: 10.1177/0265407594113011

Bukowski, W. M., & Kramer, T. L. (1986). Judgments of the features of friendship among early adolescent boys and girls. *The Journal of Early Adolescence, 6*, 331-338. doi: 10.1177/0272431686064004

Bukowski, W. M., Sippola, L., & Newcomb, A. F. (2000). *Pages from a sociometric notebook: An analysis of nomination and rating scale measures of acceptance, rejection and social preference.* In A. Cillessen & W. Bukowski (Eds.), *Recent advances in the measurement of acceptance and rejection in the peer system* (pp. 11-26), San Francisco: Jossey-Bass.

Capaldi, D. M., Dishion, T. J., Stoolmilier, M., & Yoerger, K. (2001). Aggression toward female partners by at-risk young men: The contribution of male adolescent friendships. *Developmental Psychology, 37*, 61-73. doi: 10.1037/0012-1649.37.1.61

Cassidy, J., & Asher, S. R. (1992). Loneliness and peer relations in young children. *Child Development, 63*, 350-365. doi: 10.1111/j.1467-8624.1992.tb01632.x

Cillesen, A. H. N., Jiang, X. L., West, T. V., & Laszkowski, D. K. (2005). Predictors of dyadic friendship quality in adolescence. *International Journal of Behavioral Development, 29*(2), 165-172. doi: 10.1080/01650250444000360

Çevik Büyüksahin, G. (2007). *Lise 3. sınıf öğrencilerinin arkadaş ilişkileri ve benlik saygılarının bazı değişkenler açısından incelenmesi* (Yüksek lisans tezi, Çukurova Üniversitesi, Adana). http://tez2.yok.gov.tr/ adresinden edinilmiştir.

Demir, M., & Urberg, K. A. (2004). Friendship and adjustment among adolescents. *Journal of Experimental Child Psychology, 88*, 68-82. doi: 10.1016/j.jecp.2004.02.006

Demir, N. Ö., Baran, A. G. ve Ulusoy, D. (2005). Türkiye'de ergenlerin arkadaş-akran grupları ile ilişkileri ve sapmış davranışlar: Ankara Örneklemi. *Bilig, 32*, 83-108.

DeVellis, R. F. (2011). *Scale development: Theory and applications.* Newbury Park, CA: Sage.

Dinçer, B. (2008). *Alt ve üst sosyo-ekonomik düzeyde lise ikinci sınıfa devam eden ergenlerin anne baba tutumlarını algılamaları ile arkadaşlık ilişkilerinin incelenmesi* (Yüksek lisans tezi, Ankara Üniversitesi, Ankara). http://tez2.yok.gov.tr/ adresinden edinilmiştir.

Doğan, T., G. Karaman, N., E. Çoban, A. ve Çok, F. (2012). Ergenlerde arkadaşlık ilişkilerinin yordayıcısı olarak cinsiyet ve aileye ilişkin değişkenler. *İlköğretim Online, 11*(3), 845-855.

Erdem, G., Eke, C. Y., Ögel, K. ve Taner, S. (2006). Lise öğrencilerinde arkadaş özellikleri ve madde kullanımı. *Bağımlılık Dergisi, 7*(3), 111-116.

Field, T., Diego, M., & Sanders, C. (2002). Adolescents' parent and peer relationships. *Adolescence, 37*(145), 121-130. Retrieved from http://eric.ed.gov/?id=EJ644697

Fink, A. (2003). *How to sample in surveys* (2nd ed.). California: Sage.

Furman, W. (1996). The measurement of friendship perceptions: Conceptual and methodological issues. In W. M. Bukowski, A. F. Newcomb, & W. W. Hartup (Eds.), *The company they keep: Friendship in childhood and adolescence* (pp. 41-65). Cambridge, England: Cambridge University Press.

Hartup, W. W., & Stevens, N. (1997). Friendships and adaptation in the life course. *Psychological Bulletin, 121*(3), 355-370. doi: 10.1037/0033-2909.121.3.355

Hodges, E. V. E., Boivin, M., Vitaro, F., & Bukowski, W. M. (1999). The power of friendship: Protection against an escalating cycle of peer victimization. *Developmental Psychology, 35*(1), 94-101. doi: 10.1037/0012-1649.35.1.94

Hortaçsu, N., Oral, A., & Yasak-Gültekin, Y. (1991). Factors affecting relationships of Turkish adolescents with parents and same-sex friends. *Journal of Social Psychology, 131*(3), 13-14. doi: 10.1080/00224545.1991.9713867

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventionalcriteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1-55. doi: 10.1080/10705519909540118

Jöreskog, K., & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language.* Lincolnwood, IL: Scientific Software International.

Kahraman, F. (2008). *Ergenlerde arkadaşlık ilişkisi ile mizah duygusu arasındaki ilişkinin incelenmesi* (Yüksek lisans tezi, Gazi Üniversitesi, Sosyal Bilimler Enstitüsü, Ankara). http://tez2.yok.gov.tr/ adresinden edinilmiştir.

Kaner, S. (2000). Akran İlişkileri Ölçeği ve Akran Sapması Ölçeği geliştirme çalışması. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi, 33*(1-2), 67-75.

Keefe, K., & Berndt, T. J. (1996). Relations of friendship quality to self-esteem in early adolescence. *Journal of Early Adolescence*, *16*(1), 110-129. doi: 10.1177/0272431696016001007

Kline, P. (1999). *The handbook of psychological testing* (2nd ed.). London: Routledge

Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York: The Guilford Press.

Kram, K. E., & Isabella, L. A. (1985). Mentoring alternatives: The role of peer relationships in career development. *Academy of Management Journal, 28*(1), 110-132. doi: 10.2307/256064

Ladd, G. W., Kochenderfer, B. J., & Coleman, C. C. (1996). Friendship quality as a predictor of young children's early school adjustment. *Child Development*, *67*, 1103-1118. doi: 10.1111/j.1467-8624.1996.tb01785.x

Lansford, J. E., Criss, M. M., Pettit, G. S., Dodge, K. A., & Bates, J. E. (2003). Friendship quality, peer group affiliation, and peer antisocial behavior as moderators of the link between negative parenting and adolescent externalizing behavior. *Journal of Research Adolescence*, *13*(2), 129-238. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2832223/

Laursen, B., & Bukowski, W. M. (1997). A Developmental guide to the organisation of close relationships. *International Journal of Behavioral Development*, *21*, 747-770. doi: 10.1080/016502597384659

Marcia, J. E. (1980). Identity and adolescence. In J. Adelson (Ed.), *Handbook of adolescent psychology* (pp. 159-187). New York: Wiley.

Myers, J. E., Sweeney T. J., & Witmer, J. M. (2000). The wheel of wellness counseling for wellness: A holistic model for treatment planning. *Journal of Counseling and Development, 78*(3), 251-266. Retrieved from http://libres.uncg.edu/ir/uncg/f/J_Myers_Wheel_2000.pdf

Nangle, D. W., Erdley, C. A., Newman, J. E., Mason, C. A., & Carpenter, E. M. (2003). Popularity, friendship quantity, and friendship quality: Interactive influences on children's loneliness and depression. *Journal of Clinical Child & Adolescent Psychology*, *32*(4), 546-555. doi: 10.1207/S15374424JCCP32047

Parker, J. G., & Asher, S. R. (1993). Friendship and friendship quality in middle childhood: Links with peer group acceptance and feeling s of loneliness and social dissatisfaction. *Developmental Psychology*, *29*(4), 611-621. doi: 10.1037/0012-1649.29.4.611

Ponti, L., Guarnieri, S., Smorti, A., & Tani, F. (2010). A measure for the study of friendship and romantic relationship quality from adolescence to early-adulthood. *The Open Psychology Journal, 3*, 76-87. Retrieved from http://www.benthamscience.com/open/topsyj/articles/V003/76TOPSYJ.pdf

Poulin, F., & Pedersen, S. (2007). Developmental changes in gender composition of friendship networks in adolescent girls and boys. *Developmental Psychology, 43*(6), 1484-1496. doi: 10.1037/0012-1649.43.6.1484

Rabaglietti, E., & Ciairano, S. (2008). Quality of friendship relationships and developmental tasks in adolescence. *Cognition, Brain, Behavior*, *12*, 183-203. Retrieved from http://www.ascred.ro/images/attach/Quality%20of%20friendship%20relationships%20and%20developmental%20tasks%20in%20adolescence.pdf

Rice, K. G., & Mulkeen, P. (1995). Relationships with parents and peers: A longitudinal study of adolescent intimacy. *Journal of Adolescent Research*, *10*(3), 338-357. doi: 10.1177/0743554895103003

Satorra, A., & Bentler, P. M. (1994). Corrections to test statistics and standard errors in covariance structureanalysis. In A. von Eye & C. C. Clogg (Eds.), *Latent variable analysis: Applications for developmentalresearch* (pp. 399-419). Thousand Oaks, CA: Sage.

Steinberg, L. (2007). *Ergenlik* (çev. F. Çok). Ankara: İmge Kitapevi Yayınları.

Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: Norton.

Sümer, N. (2000). Yapısal eşitlik modelleri. *Türk Psikoloji Yazıları, 3*(6), 49-74.

Swenson, L. M., Nordstrom, A., & Hiester, M. (2008). The role of peer relationships in adjustment to college. *Journal of College Student Development*, *49*(6), 551-567. Retrieved from http://muse.jhu.edu/journals/csd/summary/v049/49.6.swenson.html

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Needham Heights, MA: Allyn and Bacon.

Totan, T. (2008). *Ergenlerde zorbalığın anne, baba ve akran ilişkileri açısından incelenmesi* (Yüksek lisans tezi, Abant İzzet Baysal Üniversitesi, Sosyal Bilimler Enstitüsü, Bolu). http://tez2.yok.gov.tr/ adresinden edinilmiştir.

Ullman, J. B. (2001). Structural equation modeling. In B. G. Tabachnick & L. S. Fidell (Eds.), *Using multivariate statistics* (4th ed., pp. 653-771). Needham Heights, MA: Allyn & Bacon.

Vitaro, F., Boivin, M., & Bukowski, W. M. (2011). The role of friendship in child and adolescent psychosocialdevelopment. In K. H. Rubbin, W. M. Bukowski, & B. Laursen (Eds.), *Handbook of peer interactions, relations, and groups* (pp. 570-571). NY: The Guilford Press.

Waterman, A. S. (1982). Identity development from adolescence to adulthood: An extension of theory and a review of research. *Developmental Psychology*, *18*(3), 341-358. doi: 10.1037/0012-1649.18.3.341

Zettergren, P. (2005). Childhood peer status as predictor of midadolescence peer situation and social adjustment. *Psychology in the Schools*, *42*(7), 745-757. doi: 10.1002/pits.20121