

**THE ASSOCIATION BETWEEN
PHYSICAL ACTIVITY PARTICIPATION
AND SOCIAL CAPITAL, PHYSICAL SELF
PERCEPTIONS AMONG ADOLESCENTS**

**Günay YILDIZER
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*The Association Between Physical Activity Participation And Social Capital,
Physical Self Perceptions Among Adolescents*

LIST OF ABBREVIATIONS

BMI	: Body Mass Index
CFA	: Confirmatory Factor Analyses
CFI	: Comparative Fit Index
CI	: Confidence Interval
df	: Degrees of Freedom
EFA	: Exploratory Factor Analyses
GFAK	: Genel Fiziksel Aktiviteye Katılım
GFI	: Goodness of Fit
IFI	: Incremental Fit Index
IPAQ	: International Physical Activity Questionnaire
MET	: Metabolic Energy
MVPAP	: Moderate to Vigorous Physical Activity Participation
NNFI	: Non-Normed Fit Index
OECD	: Organisation for Economic Co-operation and Development
OPAP	: Overall Physical Activity Participation
OR	: Odds Ratio
OYŞFAK	: Orta Yüksek Şiddetli Fiziksel Aktiviteye Katılım
p	: Probability Value
R ²	: R-Squared
RMSEA	: Root Mean Square of Error of Approximation
SC	: Social Capital
TLI	: Tucker-Lewis Index
VIF	: Variance Inflation Factor
WHO	: World Health Organization
x ²	: Chi-Square
β	: Beta

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Contents

1. INTRODUCTION

1.1. Purpose of the Study	3
1.2. The Significance of the Study	3
1.3. Assumptions of the Study	4
1.4. Limitations of the Study	5

2. LITERATURE

2.1. The Association between Physical Activity and Healthw.....	7
2.2 The Association between Physical Activity and Health in Adolescence.....	10
2.3. Physical Activity Promotion Model for Youth.....	13
2.3.1. Social capital as a determinative factor on physical activity participation	15
2.3.1.1. The association between social capital and physical activity	22
2.3.2. Physical self-concept as a determinative factor on physical activity participation.....	24
2.3.1.2. The association between physical self-concept and physical activity participation	25

3. METHOD

3.1. Research Model.....	29
3.2. Research Group and Sampling	30
3.3. Data Collection Tools.....	31
3.3.1. Personal information form	31
3.3.2. Social capital scale for adolescents	31
3.3.2.1. Psychometric properties of the social capital scale for adolescents.....	32
3.3.2.1.1. Pilot study.....	32
3.3.2.1.2. Results of exploratory factor analysis of social capital scale for adolescents.....	32
3.3.2.1.3. Results of confirmatory factor analysis of social capital scale for	36
3.3.2.1.1. Pilot study.....	32
3.3.2.1.2. Results of exploratory factor analysis of social capital scale for adolescents.....	32
3.3.2.1.3. Results of confirmatory factor analysis of social capital scale for adolescents	36

3.3.3. Short form of physical self-concept.....	38
3.3.4. International physical activity questionnaire.....	40
3.3.5. Body mass index measurement	41
3.4. Data Collection Protocol.....	43
3.5. Statistical Analyses	43
 4. RESULTS	
4.1. Results of Descriptive Statistics and Physical Activity Participation Differences between Genders.....	47
4.2. The Association of Social Capital and Physical Self-Concept with Overall Physical Activity Participation	49
4.2.1. The association of social capital and physical self-concept with overall physical activity participation for females	49
4.2.2. The association of social capital and physical self-concept with overall physical activity participation for males	50
4.2. The Association of Social Capital and Physical Self-Concept with Overall Physical Activity Participation	50
4.3.1. The association of social capital and physical self-concept with overall physical activity participation for females	50
4.3.2. The association of social capital and physical self-concept with overall physical activity participation for males	51
 5. DISCUSSION, CONCLUSION, AND RECOMMENDATIONS	
5.1. Discussion	55
5.2. Conclusion.....	67
5.3. Recommendations.....	69
REFERENCES.....	73

REFERENCES

- Adler, N.E., Boyce, T., Chesney, M.A., Cohen, S., Folkman, S., Kahn, R.L., Syme, S.L. (1994). Socio-economic status and health: The challenge of the gradient. *American Psychologist*, 49(1), 15-24.
- Ahn, T.K. and Ostrom, E. (2008). Social capital and collective action. D. Castiglione, J. van Deth, and G. Wolleb (Eds.) in *The handbook of social capital*, (p.70-100). Oxford: Oxford University Press.
- Ainsworth, B. and Matthews, C.E. (2005). Physical Activity Epidemiology Research. J.R. Thomas, J.K. Nelson and S.J. Silverman (Eds.) in *Research Methods in Physical Activity* (p.301-320). Illinois: Human Kinetics.
- Akıncı, Y. (2014). *Effect of health related physical education intervention on 9th grade students' health related fitness knowledge, physical activity and physical fitness levels*. Unpublished PhD Dissertation. Ankara: Orta Doğu Teknik University, Institute of Social Sciences.
- Alheit, P. (2006). Research and innovation in contemporary adult education. S. Papaioannou, P. Alheit, J.F. Lauridsen and H.S. Olsen (Eds.), *Community, education and social change*, (p.19). Roskilde: Roskilde University Centre, quoted by J. Field, *Sosyal sermaye*. İstanbul: İstanbul Bilgi Üniversitesi Yayınları.
- Ali, S.M. and Lindström, M. (2006). Socioeconomic, psychosocial, behavioural, and psychological determinants of BMI among young women: differing patterns for underweight and overweight/obesity. *European Journal of Public Health*, 16(3), 324-330.
- Alper, Y., Pündük, Z., Akçakoyun, F., Göktaş, Z. (2017). Balıkesir Fen Lisesi Öğrencilerinde Beslenme ve Fiziksel Aktivite Alışkanlıklarının İncelenmesi. *Sportif Bakış: Spor ve Eğitim Bilimleri Dergisi*, 4(2), 101-110.
- Altıntaş, A., Çağlar, E., Aşçı, F., Güven Karahan, B., Uygurtaş, M. (2009). "Çocuklar ve gençler için fiziksel benlik algısı envanteri" nin yapı ve ölçüt bağıntılı geçerliğinin test edilmesi. *Gazi Beden Eğitimi ve Spor Bilimleri Dergisi*, 14 (2), 3-12.
- Altunışık, R., Coşkun, R., Bayraktaroğlu, S., Yıldırım, E. (2005). *Sosyal bilimlerde araştırma yöntemleri*. Sakarya: Sakarya Kitabevi.
- Ammouri, A.A., Neuberger, G., Nashwan, A.J., Al-Haj, A.M. (2007). Determinants of self-reported physical activity among Jordanian adults. *Journal of Nursing Scholarship*, 39(4), 342-348.
- Arabacı, R. (2009). Atitudes toward physical education and class preferences of Turkish secondary and high school students. *İlköğretim Online*, 8(1), 2-8.
- Ardahan F. (2012). Sosyal Sermaye Ölçeği geçerlilik, güvenirlik çalışması. *International Journal of Human Sciences*, (9)2, 773-789.
- Arem, H., Moore, S.C., Patel, A., Hartge, P., de Gonzalez, A.B., Visvanathan, K., Campbell, P.T., Freedman, M., Weiderpass, E., Adami, H.O., Linet, M.S., Lee, M., Matthews, C.E. (2015). Leisure time physical activity and mortality: a detailed pooled analysis of the dose-response relationship. *Jama*, 175(6), 959-967.
- Aşçı, F.H. (2003). The effects of physical fitness training on trait anxiety and physical self-concept of female university students. *Psychology of Sport and Exercise*, 4(3), 255-264.
- Aşçı, F.H. (2004). Fiziksel benlik algısının cinsiyete and fiziksel aktivite düzeyine göre karşılaştırılması. *Spor Bilimleri Dergisi*, 15(1), 39-48.
- Aşçı, F.H., Maiano, C., Morin, A.J., Çağlar, E., Bilgili, N. (2017). Validity and reliability of the Very Short form of the Physical Self-Inventory among Turkish adolescents. *Journal of Sports Sciences*, 35(21), 2060-2066.
- Aune, D., Norat, T., Leitzmann, M., Tonstad, S., Vatten, L. J. (2015). Physical activity and the risk of type 2 diabetes: a systematic review and dose-response meta-analysis. *European Journal of Epidemiology*, 30(7), 529-542.
- Babic, M.J., Morgan, P.J., Plotnikoff, R.C., Lonsdale, C., White, R.L., Lubans, D.R. (2014). Physical activity and physical self-concept in youth: systematic review and meta-analysis. *Sports Medicine*, 44(11), 1589-1601.
- Ballard-Barbash, R., Friedenreich, C.M., Courneya, K.S., Siddiqi, S.M., McTiernan, A., Alfano, C. M. (2012). Physical activity, biomarkers, and disease outcomes in cancer survivors: a systematic

- review. *Journal of the National Cancer Institute*, 104(11), 815-840.
- Barkley, J.E., Salvy, S.J., Sanders, G.J., Dey, S., Von Carlowitz, K.P., Williamson, M.L. (2014). Peer influence and physical activity behavior in young children: an experimental study. *Journal of Physical Activity and Health*, 11(2), 404-409.
- Barnes, J.S. and Spray, C.M. (2013). Social comparison in physical education: An examination of the relationship between two frames of reference and engagement, disaffection, and physical self-concept. *Psychology in the Schools*, 50(10), 1060-1072.
- Barnett, L.M., Morgan, P.J., van Beurden, E., Beard, J. R. (2008). Perceived sports competence mediates the relationship between childhood motor skill proficiency and adolescent physical activity and fitness: a longitudinal assessment. *International Journal of Behavioral Nutrition and Physical Activity*, 5(1), 1-12.
- Beasley, E.K. and Garn, A.C. (2013). An investigation of adolescent girls' global self-concept, physical self-concept, identified regulation, and leisure-time physical activity in physical education. *Journal of Teaching in Physical Education*, 32(3), 237-252.
- Biddle, S.J., Gorely, T., Pearson, N., Bull, F.C. (2011). An assessment of self-reported physical activity instruments in young people for population surveillance: Project ALPHA. *International Journal of Behavioral Nutrition and Physical Activity*, 8(1), 1-9.
- Bircan, H. (2004). Lojistik regresyon analizi: Tip verileri üzerinde bir uygulama. *Kocaeli Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 2, 185-208.
- Blair, S.N., LaMonte, M.J. and Nichaman, M. Z. (2004). The evolution of physical activity recommendations: how much is enough? *The American Journal of Clinical Nutrition*, 79(5), 913-920.
- Bong, M. and Skaalvik, E.M. (2003). Academic self-concept and self-efficacy: How different are they really? *Educational Psychology Review*, 15(1), 1-40.
- Boreham, C. and Riddoch, C. (2001). The physical activity, fitness and health of children. *Journal of Sports Sciences*, 19(12), 915-929.
- Bouchard, C., Blair, S. N. and Haskell, W. (2012). *Physical activity and health*. Champaign IL: Human Kinetics.
- Bourdieu P. (1977). Cultural reproduction and social reproduction. J. Karabel and A.H. Halsey (Eds.), *Power and ideology in education* içinde (p.487-511). New York: Oxford University Press.
- Bourdieu P. (1986) The forms of capital. J. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* içinde (p.241-258). Westport, CT: Greenwood.
- Bowker, A. (2006). The relationship between sports participation and self-esteem during early adolescence. *Canadian Journal of Behavioural Science*, 38(3), 214-229.
- Brodersen, N.H., Steptoe, A., Boniface, D.R., Wardle, J., Hillsdon, M. (2007). Trends in physical activity and sedentary behaviour in adolescence: ethnic and socioeconomic differences. *British Journal of Sports Medicine*, 41(3), 140-144.
- Brosnahan, J., Steffen, L.M., Lytle, L., Patterson, J., Boostrom, A. (2004). The relation between physical activity and mental health among Hispanic and non-Hispanic white adolescents. *Archives of Pediatrics and Adolescent Medicine*, 158(8), 818-823.
- Burgess, G., Grogan, S. and Burwitz, L. (2006). Effects of a 6-week aerobic dance intervention on body image and physical self-perceptions in adolescent girls. *Body Image*, 3(1), 57-66.
- Büyükoztürk, Ş., Çakmak, E.K., Akgün, Ö.E., Karadeniz, Ş., Demirel, F. (2016). *Bilimsel araştırma yöntemleri*. Ankara: Pegem Akademi.
- Cairney, J. and Veldhuizen, S. (2017). Organized sport and physical activity participation and body mass index in children and youth: A longitudinal study. *Preventive Medicine Reports*, 6, 336-338.
- Carnethon, M.R., Jacobs Jr, D.R., Sidney, S., Sternfeld, B., Gidding, S.S., Shoushtari, C., Liu, K. (2005). A longitudinal study of physical activity and heart rate recovery: CARDIA, 1987-1993. *Medicine and Science in Sports and Exercise*, 37(4), 606-612.
- Carraro, A., Scarpa, S. and Ventura, L. (2010). Relationships between physical self-concept and physical fitness in Italian adolescents. *Perceptual and Motor Skills*, 110(2), 522-530.
- Carrel, A.L., Clark, R.R., Peterson, S.E., Nemeth, B.A., Sullivan, J., Allen, D. B. (2005). Improvement

- of fitness, body composition, and insulin sensitivity in overweight children in a school-based exercise program: a randomized, controlled study. *Archives of Pediatrics and Adolescent Medicine*, 159(10), 963-968.
- Carroll, W.N. (1997). *Effect of higher education on formation of social capital for young adults in the United States between 1971 and 1994*. Unpublished PhD Dissertation. Texas: Texas A&M University, Office of Graduate Studies.
- Caspersen, C. J., Powell, K. E. and Christenson, G. M. (1985). Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. *Public Health Reports*, 100(2), 126-131.
- Castiglione, D., Deth, J.W.V. and Wolleb, G. (2008). Social capital's fortune: An introduction. D. Castiglione, J.W. van Deth, G. Wolleb (Eds.) in *The handbook of social capital* (s. 1-10). New York: Oxford University Press.
- Çelik, H.E. and Yılmaz, V. (2013). *LISREL 9.1 ile yapısal eşitlik modellemesi*. İstanbul: Anı Yayınları.
- Centers for Disease Control and Prevention (CDC) (2011). School health guidelines to promote healthy eating and physical activity. *MMWR. Recommendations and reports: Morbidity and mortality weekly report. Recommendations and reports*, 60(RR-5), 1-71.
- Centers for Disease Control and Prevention. (2014). National diabetes statistics report: estimates of diabetes and its burden in the United States, 2014. Atlanta, GA: US Department of Health and Human Services.
- Cerhan, J.R., Potter, J.D., Gilmore, J.M., Janney, C.A., Kushi, L.H., Lazovich, D., Anderson, K.E., Sellers, T.A., Folsom, A.R. (2004). Adherence to the AICR cancer prevention recommendations and subsequent morbidity and mortality in the Iowa Women's Health Study cohort. *Cancer Epidemiology Biomarkers and Prevention*, 13(7), 1114-1120.
- Certain, L.K. and Kahn, R. S. (2002). Prevalence, correlates, and trajectory of television viewing among infants and toddlers. *Pediatrics*, 109(4), 634-642.
- Chan, R.K., Cheung, C.K. and Peng, I. (2004). Social capital and its relevance to the Japanese-model welfare society. *International Journal of Social Welfare*, 13(4), 315-324.
- Chomistek, A.K., Shiroma, E.J. and Lee, I.M. (2016). The relationship between time of day of physical activity and obesity in older women. *Journal of Physical Activity and Health*, 13(4), 416-418.
- Cohen, D. and Prusak, L. (2001). *In good company: How social capital makes organizations work*. Massachusetts: Harvard Business Press.
- Cohen, L., Manion, L. and Morrison, K. (2007). *Research methods in education*. London: Routledge.
- Cole, T.J., Bellizzi, M.C., Flegal, K.M., Dietz, W. H. (2000). Establishing a standard definition for child overweight and obesity worldwide: international survey. *BMJ*, 320(7244), 1-6.
- Coleman, J.S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 9(94), 95-120.
- Coleman, J.S. (1990). *Foundations of social theory*. Cambridge: Belknap Press.
- Collingwood, T.R., Sunderlin, J., Reynolds, R., Kohl III, H.W. (2000). Physical training as a substance abuse prevention intervention for youth. *Journal of Drug Education*, 30(4), 435-451.
- Corbin, C B., Pangrazi, R.P. and Masurier, G.C.L. (2004). Physical activity for children: Current patterns and guidelines. *Journal of Physical Activity and Health*, 1(13), 281.
- Craig, C.L., Marshall, A.L., Sjoström, M., Bauman, A.E., Booth, M.L., Ainsworth, B.E., Pratt, M., Ekelund, U., Yngve, A., Sallis, J.F. Oja, P. (2003). International physical activity questionnaire: 12-country reliability and validity. *Medicine and Science in Sports and Exercise*, 35(8), 1381-1395.
- Craven, R.G. and Marsh, H.W. (2008). The centrality of the self-concept construct for psychological wellbeing and unlocking human potential: Implications for child and educational psychologists. *Educational and Child Psychology*, 25(2), 104-118.
- Creswell, J.W. (2017). Karma yöntem araştırmalarına giriş. (Translation: Mustafa Sözbilir). Ankara: Pegem Akademi.
- Currie, C., Roberts, C., Morgan, A., Smith, R., Settertobulte, W., Samdal, O., Rasmussen, V.B. (2004). *Young people's health in context*. World Health Organization Regional Office for Europe. Geneva.

- va: World Health Organization.
- Dasgupta, K., O'Loughlin, J., Chen, S., Karp, I., Paradis, G., Tremblay, J., Hamet, P., Pilote, L. (2006). Emergence of sex differences in prevalence of high systolic blood pressure: analysis of a longitudinal adolescent cohort. *Circulation*, 114(24), 2663-2670.
- de Bruijn, G. J., Kremers, S.P., Lensvelt-Mulders, G., de Vries, H., van Mechelen, W., Brug, J. (2006). Modeling individual and physical environmental factors with adolescent physical activity. *American Journal of Preventive Medicine*, 30(6), 507-512.
- De Carolis, D.M. and Saparito, P. (2006). Social capital, cognition, and entrepreneurial opportunities: A theoretical framework. *Entrepreneurship Theory and Practice*, 30(1), 41-56.
- DiClemente, R.J., Santelli, J.S., and Crosby, R.A. (2009). *Adolescent health: Understanding and preventing risk behaviors*. San Francisco: John Wiley and Sons.
- Ding, D., Lawson, K. D., Kolbe-Alexander, T. L., Finkelstein, E. A., Katzmarzyk, P. T., van Mechelen, W., Pratt, M. (2016). The economic burden of physical inactivity: a global analysis of major non-communicable diseases. *The Lancet*, 388(10051), 1311-1324.
- Donnelly, J.E., Hillman, C.H., Castelli, D., Etnier, J.L., Lee, S., Tomporowski, P., Lambourne, K., Szabo-Reed, A.N. (2016). Physical activity, fitness, cognitive function, and academic achievement in children: a systematic review. *Medicine and Science in Sports and Exercise*, 48(6), 1197.
- Eather, N., Morgan, P.J. and Lubans, D.R. (2013). Social support from teachers mediates physical activity behavior change in children participating in the Fit-4-Fun intervention. *International Journal of Behavioral Nutrition and Physical Activity*, 10(68), 1-15.
- Eisenmann, J.C., Arnall, D.A., Kanuho, V., Interpretter, C., Coast, J. R. (2007). Obesity and pulmonary function in Navajo and Hopi children. *Ethnicity and Disease*, 17(1), 14-18.
- Ekelund, U., Luan, J.A., Sherar, L.B., Esliger, D.W., Griew, P., Cooper, A., International Children's Accelerometry Database (ICAD) Collaborators. (2012). Moderate to vigorous physical activity and sedentary time and cardiometabolic risk factors in children and adolescents. *JAMA*, 307(7), 704-712.
- Ekşi Uğuz, H. (2010). *Kişisel ve kurumsal gelişmeye farklı bir yaklaşım. Sosyal sermaye*. Ankara: Orion Kitabevi.
- Eli, K., Howell, K., Fisher, P.A., Nowicka, P. (2016). A question of balance: Explaining differences between parental and grandparental perspectives on preschoolers' feeding and physical activity. *Social Science and Medicine*, 154, 28-35.
- Erdogan, İ. (2012). *Pozitivizm metodoloji ve ötesi*. Ankara: Erk Yayınları.
- Erikson, E. H. (1959). Identity and the life cycle. *Psychological Issues*, 1, 18-164.
- Erikssen, G. (2001). Physical fitness and changes in mortality. *Sports Medicine*, 31(8), 571-576.
- Ersöz, A. (2008). *Sosyal sermayenin ortaöğretim kurumlarında görev yapan öğretmenlerin iş doyumuna etkisi (tokat ili örneği)*. Unpublished Master Thesis. Elazığ: Fırat University.
- Estabrooks, P.A., Lee, R.E. and Gyurcsik, N.C. (2003). Resources for physical activity participation: does availability and accessibility differ by neighborhood socioeconomic status? *Annals of Behavioral Medicine*, 25(2), 100-104.
- Fan, X. and Sivo, S.A. (2005). Sensitivity of fit indexes to misspecified structural or measurement model components: Rationale of two-index strategy revisited. *Structural Equation Modeling*, 12(3), 343-367.
- Farrow, C. (2014). A comparison between the feeding practices of parents and grandparents. *Eating Behaviors*, 15(3), 339-342.
- Ferlander, S. (2007). The importance of different forms of social capital for health. *Acta Sociologica*, 50(2), 115-128.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage, London.
- Field, J. (2006). *Sosyal sermaye*. İstanbul: İstanbul Bilgi Üniversitesi Yayınları.
- Fisher, K.J., Li, F., Michael, Y., Cleveland, M. (2004). Neighborhood-level influences on physical activity among older adults: a multilevel analysis. *Journal of Aging and Physical Activity*, 12(1), 45-63.
- Fleming, C.B., Catalano, R.F., Haggerty, K.P., Abbott, R.D. (2010). Relationships between level and

- change in family, school, and peer factors during two periods of adolescence and problem behavior at age 19. *Journal of Youth and Adolescence*, 39(6), 670-682.
- Fox, K.R. (1997). *The physical self: From motivation to well-being*. Champaign, IL: Human Kinetics.
- Fox, K.R. and Wilson, P.M. (2008). Self-perceptual systems and physical activity in T.S. Horn (Ed.), *Advances in sport psychology* (3rd ed., p. 49-64). Champaign, IL: Human Kinetics.
- Fox, K.R.. (1990). The physical self-perception profile: Develeopment and preliminary validation. *Journal of Sport and Exercise Psychology*, 11(4), 408-430, quoted by Aşçı, H. (2004). Fiziksel Benlik Algısının Cinsiyete ve Fiziksel Aktivite Düzeyine Göre Karşılaştırılması, *Spor Bilimleri Dergisi*, 5(1), 39-48.
- Fraenkel, J.R., Wallen, N.E. and Hyun, H.H. (2011). *How to design and evaluate research in education*. (8th. ed.). New York: McGraw-Hill.
- Frintch, W.S. (2000). *A study of the organizational structures and processes that create and maintain social capital in selected private and public schools*. Unpublished PhD Dissertation. California: University of California.
- Frost, M.B., Forste, R. and Haas, D. W. (2005). Maternal education and child nutritional status in Bolivia: finding the links. *Social Science and Medicine*, 60(2), 395-407.
- Fu, C., Wang, C., Yang, F., Cui, D., Wang, Q., Mao, Z. (2018). Association between social capital and physical activity among community-dwelling elderly in Wuhan, China. *International Journal of Gerontology*, 12(2), 155-159.
- Furuta, M., Ekuni, D., Takao, S., Suzuki, E., Morita, M., Kawachi, I. (2012). Social capital and self-rated oral health among young people. *Community Dentistry and Oral Epidemiology*, 40(2), 97-104.
- Garn, A.C. (2016). Student physical self-concept beliefs in C. Ennis (Ed.). *Handbook on physical education pedagogies* (p. 503-517). New York: Routledge.
- Giles-Corti, B. and Donovan, R. J. (2002). Socioeconomic status differences in recreational physical activity levels and real and perceived access to a supportive physical environment. *Preventive Medicine*, 35(6), 601-611.
- Gilson, N.D., Cooke, C.B. and Mahoney, C. A. (2005). Adolescent physical self-perceptions, sport/ exercise and lifestyle physical activity. *Health Education*, 105(6), 437-450.
- Gomez, J.E., Johnson, B.A., Selva, M., Sallis, J. F. (2004). Violent crime and outdoor physical activity among inner-city youth. *Preventive Medicine*, 39(5), 876-881.
- Gordon-Larsen, P., Nelson, M.C., Page, P., Popkin, B. M. (2006). Inequality in the built environment underlies key health disparities in physical activity and obesity. *Pediatrics*, 117(2), 417-424.
- Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology* 78 (6), 1360-1380
- Grieser, M., Vu, M.B., Bedimo-Rung, A.L., Neumark-Sztainer, D., Moody, J., Young, D. R. and Moe, S. G. (2006). Physical activity attitudes, preferences, and practices in African American, Hispanic, and Caucasian girls. *Health Education and Behavior*, 33(1), 40-51.
- Grootaert, C., Narayan, D., Jones, V.N., Woolcock, M. (2003). *Integrated questionnaire for the measurement of social capital*. Washington D.C.: The World Bank Social Capital Thematic Group.
- Guillaume, M., Lapidus, L., Björntorp, P., Lambert, A. (1997). Physical activity, obesity, and cardiovascular risk factors in children. The Belgian Luxembourg Child Study II. *Obesity*, 5(6), 549-556.
- Gustafson, S.L. and Rhodes, R.E. (2006). Parental correlates of physical activity in children and early adolescents. *Sports Medicine*, 36(1), 79-97.
- Haerens, L., Cerin, E., Maes, L., Cardon, G., Deforche, B., De Bourdeaudhuij, I. (2008). Explaining the effect of a 1-year intervention promoting physical activity in middle schools: a mediation analysis. *Public Health Nutrition*, 11(5), 501-512.
- Hagger, M., Ashford, B. and Stambulova, N. (1998). Russian and British children's physical self-perceptions and physical activity participation. *Pediatric Exercise Science*, 10(2), 137-152.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson (2010). *Multivariate data analysis* (7.ed.). New York: Prentice-Hall.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.L. (1998). *Multivariate data analysis*.

- Upper Saddle River, NJ: Prentice hall.
- Halfon, N. and M. Hochstein (2002). Life Course Health Development: An Integrated Framework for Developing Health, Policy, and Research." *Milbank Quarterly*, 80 (3): 433– 479.
- Hallal, P.C., Andersen, L.B., Bull, F.C., Guthold, R., Haskell, W., Ekelund, U., Lancet Physical Activity Series Working Group. (2012). Global physical activity levels: surveillance progress, pitfalls, and prospects. *The Lancet*, 380(9838), 247-257.
- Hallal, P.C., Wells, J.C., Reichert, F.F., Anselmi, L., Victora, C.G. (2006). Early determinants of physical activity in adolescence: prospective birth cohort study. *BMJ*, 332(7548), 1002-1007.
- Hamid, P.N. and Lok, D.P. (2000). Loneliness in Chinese adolescents: a comparison of social support and interpersonal trust in 13 to 19 year olds. *International Journal of Adolescence and Youth*, 8(1), 45-63.
- Hanifan, L. J. (1920). *The community center*. Boston: Silver Burdett, quoted by M.F. Arezzo and C. Giudici, (2017). Social Capital and self-perceived health among European older adults. *Social Indicators Research*, 130(2), 1-21, s.4.
- Harper, R. (2001). *Social capital: A review of the literature*. Social Analysis and Reporting Division. London: UK Office for National Statistics.
- Harter, S. (1978), Effectance motivation reconsidered: toward a developmental model. *Human Development*, 21, 34-64
- Heitzler, C., Lytle, L.A., Erickson, D.J., Sirard, J.R., Barr-Anderson, D.J., Story, M. (2011). Physical activity and sedentary activity patterns among children and adolescents: a latent class analysis approach. *Journal of Physical Activity and Health*, 8(4), 457–467.
- Hohepa, M., Scragg, R., Schofield, G., Kolt, G.S., Schaaf, D. (2007). Social support for youth physical activity: Importance of siblings, parents, friends and school support across a segmented school day. *International Journal of Behavioral Nutrition and Physical Activity*, 4(1), 1-9.
- Hosmer, D.W. and Lemeshow, S. (1989). Applied regression analysis. New York, John Wiley, quoted by Field, A. (2013, p.296). Discovering statistics using IBM SPSS statistics. Sage, London.
- http1, <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=27620> (Erişim Tarihi: 05.05.2018)
- http2, <http://www.turkis.org.tr/dosya/6nbAHWZlaKe2.pdf> (Erişim Tarihi: 30.05.2017).
- Humbert, M.L., Chad, K E., Spink, K.S., Muhajarine, N., Anderson, K.D., Bruner, M. W. Girolami, T.M., Odnokon, P., Gryba, C. R. (2006). Factors that influence physical activity participation among high-and low-SES youth. *Qualitative Health Research*, 16(4), 467-483.
- Jago, R., Anderson, C.B., Baranowski, T., Watson, K. (2005). Adolescent patterns of physical activity: Differences by gender, day, and time of day. *American Journal of Preventive Medicine*, 28(5), 447-452.
- Jago, R., Jonker, M.L., Missaghian, M., Baranowski, T. (2006). Effect of 4 weeks of Pilates on the body composition of young girls. *Preventive Medicine*, 42(3), 177-180.
- Janić, S.R., Jurak, G., Milanović, I., Lazarević, D., Kovač, M., Novak, D. (2014). Physical self-concept of adolescents in western Balkan countries: a pilot study. *Perceptual and motor skills*, 119(2), 629-649.
- Janssen, I. and LeBlanc, A.G. (2010). Systematic review of the health benefits of physical activity and fitness in school-aged children and youth. *International Journal of Behavioral Nutrition and Physical Activity*, 7(40), 1-16.
- Jekauc, D., Wagner, M.O., Kahlert, D., Woll, A. (2013). Reliability and validity of momo-physical-activity-questionnaire for adolescents (MoMo-AFB). *Diagnostica*, 59, 100-111
- Jonker, J.T., De Laet, C., Franco, O.H., Peeters, A., Mackenbach, J., Nusselder, W. J. (2006). Physical activity and life expectancy with and without diabetes life table analysis of the Framingham heart study. *Diabetes Care*, 29(1), 38-43.
- Kantomaa, M.T., Tammelin, T.H., Demakakos, P., Ebeling, H. E., Taanila, A. M. (2010). Physical activity, emotional and behavioural problems, maternal education and self-reported educational performance of adolescents. *Health Education Research*, 25(2), 368-379.
- Kantomaa, M.T., Tammelin, T.H., Näyhä, S., Taanila, A.M. (2007). Adolescents' physical activity in relation to family income and parents' education. *Preventive Medicine*, 44(5), 410-415.

- Karagöz, Y. (2016). *SPSS and AMOS 23 uygulamalı istatistiksel analizler*. Ankara: Nobel Yayıncılık.
- Katz, P., Julian, L., Tonner, M.C., Yazdany, J., Trupin, L., Yelin, E., Criswell, L.A. (2012). Physical activity, obesity, and cognitive impairment among women with systemic lupus erythematosus. *Arthritis Care and Research*, 64(4), 502-510.
- Katzmarzyk, P.T., Church, T.S., Craig, C.L., Bouchard, C. (2009). Sitting time and mortality from all causes, cardiovascular disease, and cancer. *Medicine & Science in Sports & Exercise*, 41(5), 998-1005.
- Kawachi, I., Kennedy, B.P. and Glass, R. (1999). Social capital and self-rated health: a contextual analysis. *American Journal of Public Health*, 89(8), 1187-1193.
- Kawachi, I., Kennedy, Lochner, K., Prothrow-Stith, D. (1997). Social capital, income inequality, and mortality. *American Journal of Public Health*, 87(9), 1491-1498.
- Kawachi, I., Subramanian, S.V. and Kim, D. (2010). *Social capital and health*. New York: Springer.
- Kayı, İ. (2012). *İstanbul'da bir aile sağlığı merkezine kayıtlı nüfusta sosyal sermaye ve sağlık davranışlarının araştırılması*. Unpublished Master Thesis. İstanbul: İstanbul University.
- Kelecioğlu, H. and Bilge, F. (2009). Akademik beklentilere ilişkin stres envanterinin uyarlanması: Geçerlik ve güvenilirlik çalışması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 36(36), 148-157.
- Kim, I.G. and So, W.Y. (2014). The relationship between household income and physical activity in Korea. *Journal of Physical Therapy Science*, 26(12), 1887-1889.
- Kim, J.-R., Jeong, B., Park, K.-S., & Kang, Y.-S. (2016). Association of social capital at the individual level with physical activity in communities with high mortality in Korea. *Health Promotion International*, 32(5), 850-859.
- Kimm, S.Y.S., Glynn, N.W., Kriska, A.M., Barton, B.A., Kronsberg, S.S., Daniels, S.R., Crawford, P.B., Sabry, Z.I., Liu, K. (2002). Decline in physical activity in black girls and white girls during adolescence. *New England Journal of Medicine*, 347(10), 709-715.
- Kin-İşler, A., Asci, F.H., Altintas, A., Guven-Karaban, B. (2009). Physical activity levels and patterns of 11-14 year-old Turkish adolescents. *Adolescence*, 44(176), 1005-1015.
- Kirby, J., Levin, K.A. and Inchley, J. (2011). Parental and peer influences on physical activity among Scottish adolescents: a longitudinal study. *Journal of Physical Activity and Health*, 8(6), 785-793.
- Klomsten, A.T., Skaalvik, E.M. and Espnes, G.A. (2004). Physical self-concept and sports: Do gender differences still exist? *Sex Roles*, 50(1-2), 119-127.
- Koca, C. and Demirhan, G. (2004). An examination of high school students' attitudes toward physical education with regard to sex and sport participation. *Perceptual and Motor Skills*, 98(3), 754-758.
- Koca, C., Aşçı, F.H. and Demirhan, G. (2005). Attitudes toward physical education and class preferences of Turkish adolescents in terms of school gender composition. *Adolescence*, 40(158), 365-375.
- Köksal, F., Koruç, Z. and Kocaekşi, S. (2006). Step-aerobik dansına katılımın kadınlarda fiziksel benlik algısı üzerine etkisi. *Spor Hekimliği Dergisi*, 41(2), 45-51.
- Koutra, K., Orfanos, P., Roumeliotaki, T., Kritsotakis, G., Kokkevi, A., Philalithis, A. (2012). Psychometric validation of the youth social capital scale in Greece. *Research on Social Work Practice*, 22(3), 333-343.
- Kritsotakis, G., Koutis, A.D., Alegakis, A.K., Philalithis, A.E. (2008). Development of the social capital questionnaire in Greece. *Research in Nursing and Health*, 31(3), 217-225.
- Kruk, J. (2007). Physical activity in the prevention of the most frequent chronic diseases: an analysis of the recent evidence. *Asian Pacific Journal of Cancer Prevention*, 8(3), 325-338.
- Kyu, H.H., Bachman, V.F., Alexander, L.T., Mumford, J.E., Afshin, A., Estep, K., Veerman, J.L., Delwiche, K., Llanore, M., Moyer, M.L., Cercy, K., Vos, T., Murray, C.L., Forouzanfar, M.H. (2016). Physical activity and risk of breast cancer, colon cancer, diabetes, ischemic heart disease, and ischemic stroke events: systematic review and dose-response meta-analysis for the Global Burden of Disease Study 2013. *BMJ*, 354, 1-10.
- Laerd Statistics (2015). Binomial Logistic Regression. Statistical tutorials and software guides. Laerd

Statistics.

- Laird, Y., Fawcner, S., Kelly, P., McNamee, L., Niven, A. (2016). The role of social support on physical activity behaviour in adolescent girls: a systematic review and meta-analysis. *International Journal of Behavioral Nutrition and Physical Activity*, 13(1), 79.
- Last, J.M. (1988). *A dictionary of epidemiology*. New York: Oxford University Press.
- Lazarević, D., Radisavljević-Janić, S., Milanović, I. and Lazarević, L.B. (2011). Physical self-concept of normal-weight and overweight adolescents: Gender specificities. *Zbornik Instituta za Pedagogoska Istrazivanja*, 43(2), 347-365.
- Lee, I.M., Shiroma, E.J., Lobelo, F., Puska, P., Blair, S.N., Katzmarzyk, P.T., Lancet Physical Activity Series Working Group. (2012). Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. *The Lancet*, 380(9838), 219-229.
- Lee, J., Árnason, A., Nightingale, A., Shucksmith, M. (2005). Networking: social capital and identities in European rural development. *Sociologia Ruralis*, 45(4), 269-283.
- Levin, S., Lowry, R., Brown, D.R., Dietz, W.H. (2003). Physical activity and body mass index among US adolescents: youth risk behavior survey, 1999. *Archives of Pediatrics and Adolescent Medicine*, 157(8), 816-820.
- Lin, N. (1999). Building a network theory of social capital. *Connections*, 22(1), 28-51.
- Lindström, M. (2008). Social capital and health-related behaviors içinde *Social capital and health* (s. 215-238). New York: Springer.
- Lindström, M., Hanson, B. S. and Östergren, P. O. (2001). Socioeconomic differences in leisure-time physical activity: the role of social participation and social capital in shaping health related behaviour. *Social Science and Medicine*, 52(3), 441-451.
- Lindström, M., Hanson, B.S. and Östergren, P.O. (2001). Socioeconomic differences in leisure-time physical activity: the role of social participation and social capital in shaping health related behaviour. *Social Science and Medicine*, 52(3), 441-451.
- Lindström, M., Moghaddassi, M. and Merlo, J. (2003). Social capital and leisure time physical activity: a population based multilevel analysis in Malmö, Sweden. *Journal of Epidemiology and Community Health*, 57(1), 23-28.
- Lindwall, M. and Lindgren, E. C. (2005). The effects of a 6-month exercise intervention programme on physical self-perceptions and social physique anxiety in non-physically active adolescent Swedish girls. *Psychology of Sport and Exercise*, 6(6), 643-658.
- Lu, Y., Hajifathalian, K., Ezzati, M., Woodward, M., Rimm, E.B., Danaei, G. (2014). Metabolic mediators of the effects of body-mass index, overweight, and obesity on coronary heart disease and stroke: a pooled analysis of 97 prospective cohorts with 1.8 million participants. *The Lancet*, 383(9921), 970-983.
- Mackenbach, J.D., Lakerveld, J., van Lenthe, F.J., Kawachi, I., Mckee, M., Rutter, H., Glonti, K., Compernelle, S., De Bourdeaudhuij, I., Feuillet, T., Oppert J.M., Nijpels, G., Brug, J. (2016). Neighbourhood social capital: Measurement issues and associations with health outcomes. *Obesity Reviews*, 17(S1), 96-107.
- Mahalik, J.R., Levine, C.R., McPherran, L.C., Doyle, L.A., Markowitz, A. J., Jaffee, S. R. (2013). Changes in health risk behaviors for males and females from early adolescence through early adulthood. *Health Psychology*, 32(6), 685-694.
- Maïano, C., Morin, A. J., Ninot, G., Monthuy-Blanc, J., Stephan, Y., Florent, J. F., Vallée, P. (2008). A short and very short form of the physical self-inventory for adolescents: Development and factor validity. *Psychology of Sport and Exercise*, 9(6), 830-847.
- Maïano, C., Ninot, G. and Bilard, J. (2004). Age and gender effects on global self-esteem and physical self-perception in adolescents. *European Physical Education Review*, 10(1), 53-69.
- Markus, H. and Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology*, 38(1), 299-337.
- Marmot, M. (2007). Achieving health equity: from root causes to fair outcomes. *The Lancet*, 370(9593), 1153-1163.

- Marques, A., Ekelund, U. and Sardinha, L.B. (2016). Associations between organized sports participation and objectively measured physical activity, sedentary time and weight status in youth. *Journal of Science and Medicine in Sport*, 19(2), 154-157.
- Marsh, H.W. (1996). Physical Self-Description Questionnaire: stability and discriminant validity. *Research Quarterly for Exercise and Sport*, 67(3), 249-264.
- Marsh, H.W. (1998). Age and gender effects in physical self-concepts for adolescent elite athletes and nonathletes: A multicohort-multioccasion design. *Journal of Sport and Exercise Psychology*, 20(3), 237-259.
- Marsh, H.W. and Redmayne, R.S. (1994). A multidimensional physical self-concept and its relations to multiple components of physical-fitness. *Journal of Sport and Exercise Psychology*, 16(1), 43-55.
- Marsh, H.W., Richards, G.E., Johnson, S., Roche, L., Tremayne, P. (1994). Physical Self-Description Questionnaire: Psychometric properties and a multitrait-multimethod analysis of relations to existing instruments. *Journal of Sport and Exercise psychology*, 16(3), 270-305.
- Marshall G. (2009). *Sosyoloji sözlüğü* (Translation: O. Akınhay ve D. Kömürçü). Ankara: Bilim Sanat Yayınları.
- McNeill, L.H., Kreuter, M.W. and Subramanian, S.V. (2006). Social environment and physical activity: a review of concepts and evidence. *Social Science and Medicine*, 63(4), 1011-1022.
- Menard, S. (1995). *Applied logistic regression analysis: Sage university series on quantitative applications in the social sciences*. Thousand Oaks, CA: Sage, quoted by Field, A. (2013). Discovering statistics using IBM SPSS statistics. Sage, London, s.297.
- Merkur, S., Sassi, F. and McDaid, D. (2013). *Promoting health, preventing disease: is there an economic case?*. Copenhagen: World Health Organization.
- Meydan, C.H. and Şeşen, H. (2015). *Yapısal eşitlik modellemesi AMOS uygulamaları*. Ankara : Detay Yayıncılık.
- Meyer, A.A., Kundt, G., Lenschow, U., Schuff-Werner, P., Kienast, W. (2006). Improvement of early vascular changes and cardiovascular risk factors in obese children after a six-month exercise program. *Journal of the American College of Cardiology*, 48(9), 1865-1870.
- Miles, L. (2007). Physical activity and health. *Nutrition Bulletin*, 32(4), 314-363.
- Mokdad, A.H., Marks, J.S., Stroup, D.F., Gerberding, J. L. (2004). Actual causes of death in the United States, 2000. *JAMA*, 291(10), 1238-1245.
- Monninkhof, E.M., Elias, S.G., Vlems, F.A., van der Tweel, I., Schuit, A.J., Voskuil, D.W., van Leeuwen, F.E. (2007). Physical activity and breast cancer: a systematic review. *Epidemiology*, 18(1), 137-157.
- Morrow, V. (1999). Conceptualising social capital in relation to the well-being of children and young people: a critical review. *The Sociological Review*, 47(4), 744-765.
- Myers, R. (1990). *Classical and modern regression with applications*. Boston: Duxbury, quoted by Field, A. (2013). Discovering statistics using IBM SPSS statistics. Sage, London, s.297.
- Nader, P.R., Bradley, R.H., Houts, R.M., McRitchie, S.L. O'Brien, M. (2008). Moderate-to-vigorous physical activity from ages 9 to 15 years. *JAMA*, 300(3), 295-305.
- Napoli, N., Shah, K., Waters, D.L., Sinacore, D.R., Qualls, C., Villareal, D.T. (2014). Effect of weight loss, exercise, or both on cognition and quality of life in obese older adults. *The American Journal of Clinical Nutrition*, 100(1), 189-198.
- Narayan, D. and Cassidy, M.F. (2001). A dimensional approach to measuring social capital: development and validation of a social capital inventory. *Current Sociology*, 49(2), 59-102.
- Newell, S., Tansley, C. and Huang, J. (2004). Exploring knowledge integration in project teams: the importance of social networks. *British Journal of Management*, 15(1), 43-57.
- Novak, D. and Kawachi, I. (2015). Influence of different domains of social capital on psychological distress among Croatian high school students. *International Journal of Mental Health Systems*, 9(1), 1-7.
- Novak, D., Doubova, S.V. and Kawachi, I. (2016). Social capital and physical activity among Croatian high school students. *Public Health*, 135, 48-55.

- Novak, D., Suzuki, E. and Kawachi, I. (2015). Are family, neighbourhood and school social capital associated with higher self-rated health among Croatian high school students? A population-based study. *BMJ open*, 5(6), 1-8.
- OECD (2001). *The well-being of nations: the role of human and social capital*. Paris: OECD.
- Ondrak, K.S. and Morgan, D.W. (2007). Physical activity, calcium intake and bone health in children and adolescents. *Sports Medicine*, 37(7), 587-600.
- Onyx, J., and Bullen, P. (2000). Measuring social capital in five communities. *The Journal of Applied Behavioral Science*, 36(1), 23-42.
- Ornelas, I.J., Perreira, K.M. and Ayala, G.X. (2007). Parental influences on adolescent physical activity: a longitudinal study. *International Journal of Behavioral Nutrition and Physical Activity*, 4(3), 1-10.
- Özdamar, K. (2013). *Paket programlar ile istatistiksel veri analizi* (9th ed). Eskişehir: Nisan Kitabevi.
- Öztaş, N. (2007). Sosyal sermayenin ağbağ kuramları: Dayanışmacı ve aracı sosyal sermaye. *Amme İdaresi Dergisi*, 40(3), 79-98.
- Paffenbarger, R.S., Hyde, R.T., Wing, A.L., Hsieh, C.C. (1986) 'Physical activity, all-cause mortality, and longevity of college alumni. *New England Journal of Medicine* 314(10) 605-613.
- Paiva, P.C.P., de Paiva, H.N., de Oliveira Filho, P.M., Lamounier, J.A., e Ferreira, E.F., Ferreira, R.C., Kawachi, I., Zarzar, P. M. (2014). Development and validation of a social capital questionnaire for adolescent students (SCQ-AS). *PloS one*, 9(8), 1-8.
- Pampel, F.C., Krueger, P.M. and Denney, J.T. (2010). Socioeconomic disparities in health behaviors. *Annual Review of Sociology*, 36(5), 349-370.
- Park, S. (2014). Associations of physical activity with sleep satisfaction, perceived stress, and problematic Internet use in Korean adolescents. *BMC Public Health*, 14(1143), 1-6.
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual review of sociology*, 24(1), 1-24.
- Pugliese, J.A. and Okun, M.A. (2014). Social control and strenuous exercise among late adolescent college students: Parents versus peers as influence agents. *Journal of Adolescence*, 37(5), 543-554.
- Putnam R. (1993). The Prosperous Community; Social Capital and Public Life. *The American Prospect*, Spring. Section: Mending The Social Fabric, quoted by İ. Kayı, (2012). *İstanbul'da bir aile sağlığı merkezine kayıtlı nüfusta sosyal sermaye ve sağlık davranışlarının araştırılması*. Unpublished Master Thesis. İstanbul: İstanbul University, p. 16.
- Putnam, R.D. (2000). *Bowling alone: the collapse and revival of American community*. New York: Simon and Schuster.
- Rea-Holloway, M. (2008). *Whats' the matter with social capital? an inductive examination*. Michigan: Proquest, Umi Dissertation Publishing.
- Reilly, J.J., Kelly, L., Montgomery, C., Williamson, A., Fisher, A., McColl, J.H., Lo Conte, R., Paton, J.Y., Grant, S. (2006). Physical activity to prevent obesity in young children: cluster randomized controlled trial. *BMJ*, 333(7577), 1041-1046.
- Rodriguez, D. and Audrain-McGovern, J. (2005). Physical activity, global physical self-concept, and adolescent smoking. *Annals of Behavioral Medicine*, 30(3), 251-259.
- Ross, R., Dagnone, D., Jones, P.J., Smith, H., Paddags, A., Hudson, R., Janssen, I. (2000). Reduction in obesity and related comorbid conditions after diet-induced weight loss or exercise-induced weight loss in men: a randomized, controlled trial. *Annals of Internal Medicine*, 133(2), 92-103.
- Saegert, S., Thompson, J. P. and Warren, M. R. (Eds.). (2002). *Social capital and poor communities*. New York: Russell Sage Foundation.
- Saglam, M., Arikan, H., Savci, S., Inal-Ince, D., Bosnak-Guclu, M., Karabulut, E., Tokgozoglu, L. (2010). International physical activity questionnaire: reliability and validity of the Turkish version. *Perceptual and Motor Skills*, 111(1), 278-284.
- Sallis, J.F., Prochaska, J.J. and Taylor, W. C. (2000). A review of correlates of physical activity of children and adolescents. *Medicine and Science in Sports and Exercise*, 32(5), 963-975.
- Salmon, J., Booth, M.L., Phongsavan, P., Murphy, N., Timperio, A. (2007). Promoting physical ac-

- tivity participation among children and adolescents. *Epidemiologic Reviews*, 29(1), 144-159.
- Schneider, M., Dunton, G.F., Bassin, S., Graham, D.J., Eliakim, A., Cooper, D.M. (2007). Impact of a school-based physical activity intervention on fitness and bone in adolescent females. *Journal of Physical Activity and Health*, 4(1), 17-29.
- Shavelson, R.J., Hubner, J.J. and Stanton, G.C. (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research*, 46(3), 407-441.
- Slater, A. and Tiggemann, M. (2011). Gender differences in adolescent sport participation, teasing, self-objectification and body image concerns. *Journal of Adolescence*, 34(3), 455-463.
- Solar, O., and Irwin, A. (2010). *A conceptual framework for action on the social determinants of health. Social determinants of health discussion paper 2 (policy and practice)*. Geneva: World Health Organization.
- Sonstroem, R.J. and Potts, S.A. (1996). Life adjustment correlates of physical self-concepts. *Medicine and Science in Sports and Exercise*, 28(5), 619-625.
- Stamakis, E., Ekelund, U., Ding, D., Hamer, M., Bauman A.E., Lee I.M. (2018). Is the time right for quantitative public health guidelines on sitting? A narrative review of sedentary behaviour research paradigms and findings. *British Journal of Sports Medicine*, ahead of print.
- Standage, M., Gillison, F.B., Ntoumanis, N., Treasure, D.C. (2012). Predicting students' physical activity and health-related well-being: A perspective cross-domain investigation of motivation across physical education and exercise settings. *Journal of Sport and Exercise Psychology*, 34(1), 37-60.
- Stevens, P., Lupton, R., Mujtaba, T., Feinstein, L. (2007). *The development and impact of young people's social capital in secondary schools*. London: Centre for Research on the Wider Benefits of Learning.
- Stodden, D.F., Goodway, J.D., Langendorfer, S.J., Robertson, M.A., Rudisill, M.E., Garcia, C., Garcia, L.E. (2008). A developmental perspective on the role of motor skill competence in physical activity: An emergent relationship. *Quest*, 60(2), 290-306.
- Strong, W.B., Malina, R.M., Blimkie, C.J., Daniels, S.R., Dishman, R. K., Gutin, B., Hergenroeder, A.C., Must, A., Nixon, P.A., Pivarnik, J.M., Rowland, T., Trost, S., Trudeau, F. (2005). Evidence based physical activity for school-age youth. *The Journal of Pediatrics*, 146(6), 732-737.
- Sümer, N. (2000). Yapısal eşitlik modelleri: temel kavramlar and örnek uygulamalar. *Türk Psikoloji Yazıları*, 3(6), 49-74.
- Tate, N.H., Dillaway, H.E., Yarandi, H.N., Jones, L.M., Wilson, F.L. (2015). An examination of eating behaviors, physical activity, and obesity in African American adolescents: gender, socioeconomic status, and residential status differences. *Journal of Pediatric Health Care*, 29(3), 243-254.
- Tavşancıl, E. (2002). *Tutumların ölçülmesi ve SPSS ile veri analizi*. Ankara: Nobel Yayıncılık.
- Telford, R.M., Telford, R.D., Olive, L.S., Cochrane, T., Davey, R. (2016). Why Are girls less physically active than boys? Findings from the LOOK longitudinal study. *PloS one*, 11(3), 1-11.
- Tremblay, M.S., Warburton, D.E., Janssen, I., Paterson, D.H., Latimer, A.E., Rhodes, R.E., Kho, M.E., Hicks, A., Leblanc, A.G., Zehr, L., Murumets, K., Duggan, M. (2011). New Canadian physical activity guidelines. *Applied Physiology, Nutrition, and Metabolism*, 36(1), 36-46.
- Trost, S.G., Kerr, L.M., Ward, D.S., Pate, R.R. (2001). Physical activity and determinants of physical activity in obese and non-obese children. *International Journal of Obesity*, 25(6), 822-829.
- Trost, S.G., Pate, R.R., Sallis, J.F., Freedson, P.S., Taylor, W.C., Dowda, M., Sirard, J. (2002). Age and gender differences in objectively measured physical activity in youth. *Medicine and Science in Sports and Exercise*, 34(2), 350-355.
- U.S. Department of Health and Human Services (2008). *2008 Physical Activity Guidelines for Americans*. Washington D.C.: The Secretary of Health and Human Services
- U.S. Department of Health and Human Services. (1996). *Physical activity and health: A report of the Surgeon General*. Pittsburgh: Diane Publishing.
- Uçar, E. (2016). Sosyal sermaye ölçeğinin geçerlik and güvenilirlik çalışması. *İhlara Eğitim Araştırmaları Dergisi*, 1(1) 1-23.
- Ueshima, K., Fujiwara, T., Takao, S., Suzuki, E., Iwase, T., Doi, H., Subramanian, S.V., Kawachi, I.

- (2010). Does social capital promote physical activity? A population-based study in Japan. *Plos One*, 5(8), 1-6.
- Ungefroren, H., Gieseler, F., Flidner, S., Lehnert, H. (2015). Obesity and cancer. *Hormone Molecular Biology and Clinical Investigation*, 21(1), 5-15.
- Van Der Gaag, M. and Snijders, T.A. (2005). The Resource Generator: social capital quantification with concrete items. *Social Networks*, 27(1), 1-29.
- Vásquez, E., Batsis, J.A., Germain, C.M., Shaw, B.A. (2014). Impact of obesity and physical activity on functional outcomes in the elderly: data from NHANES 2005-2010. *Journal of Aging and Health*, 26(6), 1032-1046.
- Warburton, D.E., Nicol, C.W. and Bredin, S.S. (2006). Health benefits of physical activity: the evidence. *Canadian Medical Association Journal*, 174(6), 801-809.
- Welk, G. J. and Schaben, J. A. (2004). Psychosocial correlates of physical activity in children-A study of relationships when children have similar opportunities to be active. *Measurement in Physical Education and Exercise Science*, 8(2), 63-81.
- Welk, G.J. (1999). The youth physical activity promotion model: a conceptual bridge between theory and practice. *Quest*, 51(1), 5-23.
- Welk, G.J., Eisenmann, J.C. and Dollman, J. (2006). Health-related physical activity in children and adolescents: a bio-behavioral perspective. D. Kirk, D. Macdonald, M. O'Sullivan (Eds.), *The Handbook of Physical Education* (665-684). London: SAGE.
- Whitehead, M. (2010) *Physical literacy: Throughout the lifecourse*. 1st ed.. London, UK: Routledge.
- Wilson, D. K., Williams, J., Evans, A., Mixon, G., Rheume, C. (2005). Brief report: a qualitative study of gender preferences and motivational factors for physical activity in underserved adolescents. *Journal of Pediatric Psychology*, 30(3), 293-297.
- Winter, I. (2000). *Towards a theorised understanding of family life and social capital*. Working Paper 21. Southbank: Australian Institute of Family Studies, quoted by Ekşi Uğuz, H. (2010). *Kişisel ve kurumsal gelişmeye farklı bir yaklaşım. sosyal sermaye*, Ankara, Orion Kitabevi, s. 40.
- Woolcock M. (2001). The place of social capital in understanding social and economic outcomes. *Isuma Canadian Journal of Policy Research*, 2(1),11-17. Paris: OECD, quoted by İ. Kayı, (2012). *İstanbul'da bir aile sağlığı merkezine kayıtlı nüfusta sosyal sermaye ve sağlık davranışlarının araştırılması*. Yayımlanmamış Unpublished Master Thesis. İstanbul: İstanbul University, s. 24.
- World Health Organization(2008). *Commission on social determinants of health. closing the gap in a generation: health equity through action on the social determinants of health. final report of the commission on social determinants of health*. Geneva: World Health Organization.
- World Health Organization(2010). *Global recommendations on physical activity for health*. Geneva: World Health Organization.
- World Health Organization(2014). *Global status report on noncommunicable diseases 2014*. Geneva: World Health Organization.
- Yıldız, G., Bilgin, E., Korur, E.N., Novak, D., Demirhan, G. (2018). The association of various social capital indicators and physical activity participation among Turkish adolescents. *Journal of Sport and Health Science*, 7(1), 27-33.
- Yoshimoto, S., Loo, T.M., Atarashi, K., Kanda, H., Sato, S., Oyadomari, S., Iwakura, Y., Oshima, K., Morita, H., Hattori, M., Honda, K., Ishikawa, Y., Hara, E., Ohtani, N. (2013). Obesity-induced gut microbial metabolite promotes liver cancer through senescence secretome. *Nature*, 499(7456), 97-101.