Archives of Psychiatric Nursing

Supports *open access*

3.4	2.242
CiteScore	Impact Factor

Editorial board by country

23 editors and editorial board members in 2 countries/regions

1 United States of America (22)
2 Canada (1)

Editorial board

Editor

Edilma L. Yearwood, PhD, PMHCNS-BC, FAAN

Georgetown University, Washington, District of Columbia, United States of America

Associate Editors

Emily J. Hauenstein, PhD, LCP, MSN, FAAN

University of Delaware, Newark, Delaware, United States of America

Sally Raphel, MS, APRN-PMH, FAAN

Baltimore, Maryland, United States of America

Victoria Soltis-Jarrett, PhD, PMHCNS/NP-BC, FAANP, FAAN

The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, United States of America

Editorial Board

Kunsook Bernstein, RN, PhD, PMHNP-BC, FAAN

Elizabeth Bonham, PhD, RN, PMHCNS-BC, FAAN

Bonham Associates LLC, English, Indiana, United States of America

Christopher Lance Coleman, PhD, MPH, FAAN, PMHCNS-BC

Indiana University Fort Wayne School of Nursing, Fort Wayne, Indiana, United States of America

Nancy Crowell, PhD

Georgetown University, Washington, District of Columbia, United States of America

Janiece DeSocio, PhD, RN, PMHNP-BC, FAAN

Seattle University, Seattle, Washington, United States of America

Joyce J. Fitzpatrick, PhD, RN, FAAN

Case Western Reserve University Frances Payne Bolton School of Nursing, Cleveland, Ohio, United States of America

Cheryl Forchuk, PhD, RN

Western University, London Ontario, Canada

Pamela Galehouse, PhD, RN, CNL

Seton Hall University, South Orange, New Jersey, United States of America

Melissa M. Gomes, PhD, APRN, PMHNP-BC, FNAP, FAAN

Hampton University, Hampton, Virginia, United States of America

Liam Hein, PhD, RN, FAAN

University of South Carolina, Columbia, South Carolina, United States of America

Vicki P. Hines-Martin, PhD, RN, CNS, FAAN

University of Louisville, Louisville Kentucky, United States of America

Catherine Kane, PhD, RN, FAAN

University of Virginia, Charlottesville, Virginia, United States of America

Emma Kurnat-Thoma, PhD, MS, RN, FAAN

Georgetown University, Washington, District of Columbia, United States of America

Andrea Kwasky, DNP, PMHNP-BC, PMHCNS-BC

University of Detroit Mercy, Detroit, Michigan, United States of America

All members of the Editorial Board have identified their affiliated institutions or organizations, along with the corresponding country or geographic region. Elsevier remains neutral with regard to any jurisdictional claims.

ARCHIVES OF PSYCHIATRIC NURSING

Publisher: **W B SAUNDERS CO-ELSEVIER INC , 1600 JOHN F KENNEDY BOULEVARD, STE 1800, PHILADELPHIA, USA, PA, 19103-2899**

ISSN / eISSN: **0883-9417 / 1532-8228**

Web of Science Core Collection: **Science Citation Index Expanded | Social Sciences Citation Index**

Additional *Web of Science* Indexes: **Current Contents Social And Behavioral Sciences | Essential Science Indicators**

2021 Journal Performance Data for: ARCHIVES OF PSYCHIATRIC NURSING

ISSN
0883-9417

EISSN
1532-8228

JCR ABBREVIATION
ARCH PSYCHIAT NURS

ISO ABBREVIATION
Arch. Psychiatr. Nurs.

Journal Information

EDITION
Social Sciences Citation Index (SSCI)
Science Citation Index Expanded (SCIE)

CATEGORY
PSYCHIATRY - SSCI
NURSING - SCIE
PSYCHIATRY - SCIE
NURSING - SSCI

LANGUAGES
English

REGION
USA

1ST ELECTRONIC JCR YEAR
1997

Publisher Information

PUBLISHER
W B SAUNDERS CO-ELSEVIER INC

ADDRESS
1600 JOHN F KENNEDY BOULEVARD, STE 1800, PHILADELPHIA, PA 19103-2899

PUBLICATION FREQUENCY
6 issues/year

Journal's Performance

Journal Impact Factor

The Journal Impact Factor (JIF) is a journal-level metric calculated from data indexed in the Web of Science Core Collection. It should be used with careful attention to the many factors that influence citation rates, such as the volume of publication and citations characteristics of the subject area and type of journal. The Journal Impact Factor can complement expert opinion and informed peer review. In the case of academic evaluation for tenure, it is inappropriate to use a journal-level metric as a proxy measure for individual researchers, institutions, or articles.

2021 JOURNAL IMPACT FACTOR	2021 JOURNAL IMPACT FACTOR WITHOUT SELF CITATIONS
2.242	2.157

Journal Impact Factor Trend 2021

Journal Impact Factor is calculated using the following metrics

$$\frac{\text{Citations in 2021 to items published in 2019 (203) - 2020 (196)}}{\text{Number of citable items in 2019 (86) + 2020 (92)}} = \frac{399}{178} = 2.242$$

Journal Impact Factor without self cites is calculated using the following metrics

$$\frac{\text{Citations in 2021 to items published in 2019 (203) + 2020 (196) - Self Citations in 2021 to items published in 2019 (6) + 2020 (9)}}{\text{Number of citable items in 2019 (86) + 2020 (92)}} = \frac{399 - 15}{178} = 2.157$$

Journal Impact Factor Contributing Items

Citable Items (178)

TITLE	CITATION COUNT
Psychological effects of nurses and midwives due to COVID-19 outbreak: The case of Turkey Authors: Aksoy, Yasemin Erkal;Kocak, Vesile Volume: 34 Accession number: WOS:000581796800024 Document Type: Article	32
Mental health and risk perception among Italian healthcare workers during the second month of the Covid-19 pandemic Authors: Gorini, Alessandra;Fiabane, Elena;Sommaruga, Marinella;Barbieri, Simone;Sottotetti, Federico;La Rovere, Maria Teresa;Tremoli, Elena;Gabanelli, Paola Volume: 34 Accession number: WOS:000598651900017 Document Type: Article	21
Beyond the ACE score: Examining relationships between timing of developmental adversity, relational health and developmental outcomes in children Authors: Hambrick, Erin P.;Brawner, Thomas W.;Perry, Bruce D.;Brandt, Kristie;Hofmeister, Christine;Collins, Jen O. Volume: 33 Accession number: WOS:000473375500005 Document Type: Article	15
Perinatal depression and infant mental health Authors: Goodman, Janice H. Volume: 33 Accession number: WOS:000473375500002 Document Type: Article	12
Prevalence of verbal and physical workplace violence against nurses in psychiatric hospitals in China Authors: Lu, Li;Lok, Ka-In;Zhang, Ling;Hu, Ailing;Ungvari, Gabor S.;Bressington, Daniel T.;Cheung, Teris;An, Feng-Rong;Xiang, Yu-Tao Volume: 33 Accession number: WOS:000498333400012 Document Type: Article	12

Showing 1-5 rows of 178 total (use export in the relevant section to download the full table)

Journal Impact Factor Contributing Items

Citing Sources (250)

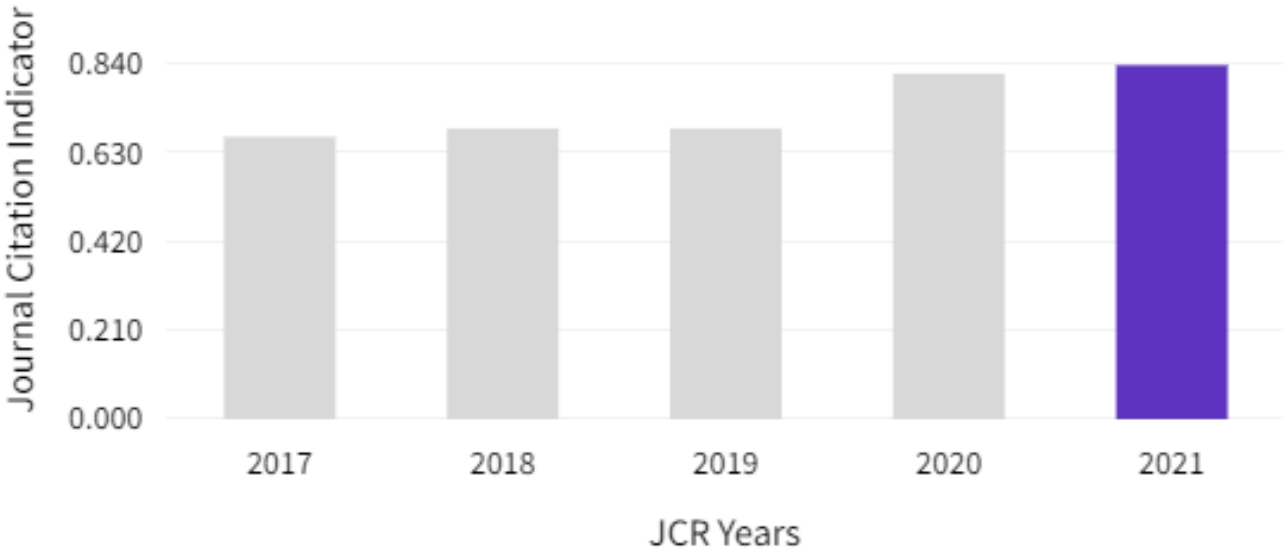
SOURCE NAME	COUNT
INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH	15
ARCHIVES OF PSYCHIATRIC NURSING	15
FRONTIERS IN PSYCHOLOGY	12
PERSPECTIVES IN PSYCHIATRIC CARE	11
JOURNAL OF CLINICAL NURSING	8
FRONTIERS IN PSYCHIATRY	7
INTERNATIONAL JOURNAL OF MENTAL HEALTH NURSING	6
MINERVA PSYCHIATRY	6
BMC PSYCHIATRY	5
PLOS ONE	5
NURSING OPEN	4
JOURNAL OF PSYCHOSOCIAL NURSING AND MENTAL HEALTH SERVICES	4
ADDICTIVE DISORDERS & THEIR TREATMENT	4
CHILDREN AND YOUTH SERVICES REVIEW	4
PAKISTAN JOURNAL OF MEDICAL & HEALTH SCIENCES	4
HELIYON	4
ISSUES IN MENTAL HEALTH NURSING	3
PUBLIC HEALTH	3
JOURNAL OF NERVOUS AND MENTAL DISEASE	3
BMC PREGNANCY AND CHILDBIRTH	3

Showing 1-20 rows of 250 total (use export in the relevant section to download the full table)

Journal Citation Indicator (JCI)

0.84

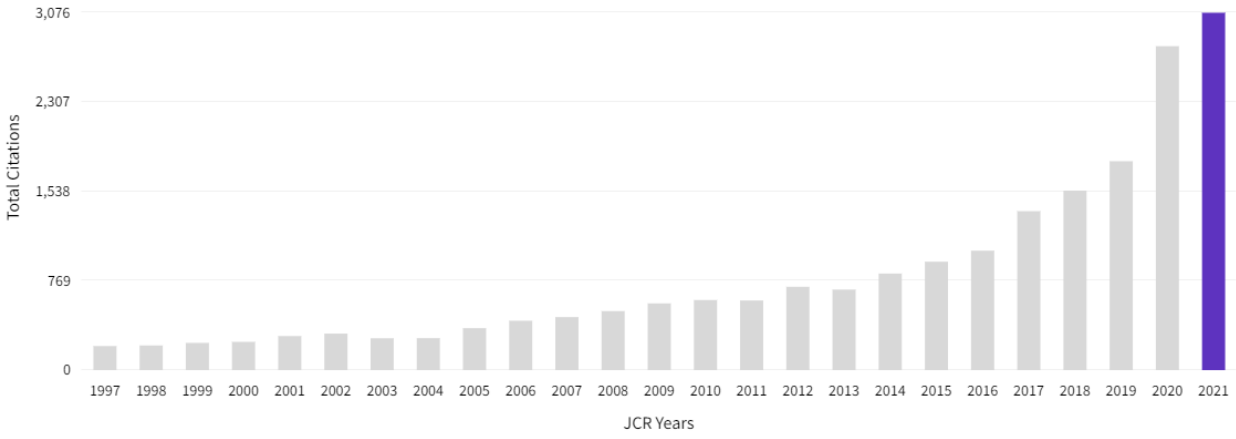
The Journal Citation Indicator (JCI) is the average Category Normalized Citation Impact (CNCI) of citable items (articles & reviews) published by a journal over a recent three year period. The average JCI in a category is 1. Journals with a JCI of 1.5 have 50% more citation impact than the average in that category. It may be used alongside other metrics to help you evaluate journals.



Total Citations

3,076

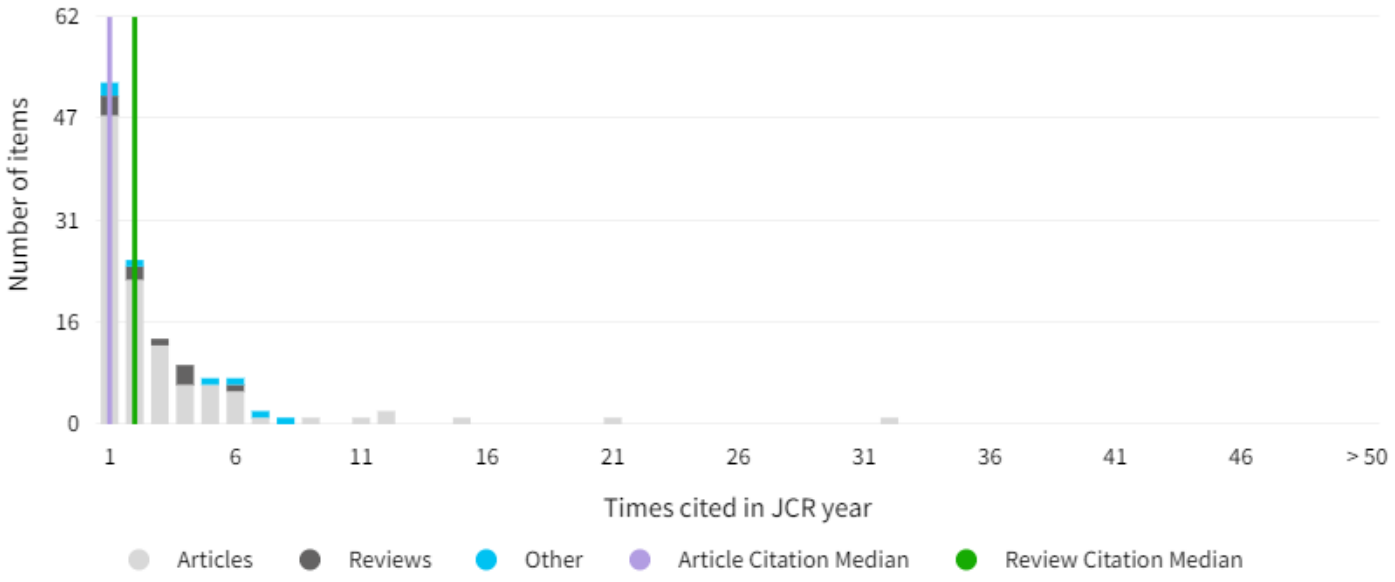
The total number of times that a journal has been cited by all journals included in the database in the JCR year. Citations to journals listed in JCR are compiled annually from the JCR years combined database, regardless of which JCR edition lists the journal.



Citation Distribution

The Citation Distribution shows the frequency with which items published in the year or two years prior were cited in the JCR data year (i.e., the component of the calculation of the JIF). The graph has similar functionality as the JIF Trend graph, including hover-over data descriptions for each data point, and an interactive legend where each data element's legend can be used as a toggle. You can view Articles, Reviews, or Non-Citable (other) items to the JIF numerator.

ARTICLE CITATION MEDIAN	REVIEW CITATION MEDIAN	UNLINKED CITATIONS
1	2	11



0 times cited

ARTICLES	REVIEWS	OTHER
60	2	13

Open Access (OA)

The data included in this tile summarizes the items published in the journal in the JCR data year and in the previous two years. For example, in the 2020 JCR data, released in June 2021, the Open Access (OA) data show the publication model (Gold OA or subscription) of materials published in 2018, 2019 and 2020, and citations in 2020 to these items. This three-year set of published items is used to provide descriptive analysis of the content and community of the journal.

Items

TOTAL CITABLE
279

% OF CITABLE OA
4.66%

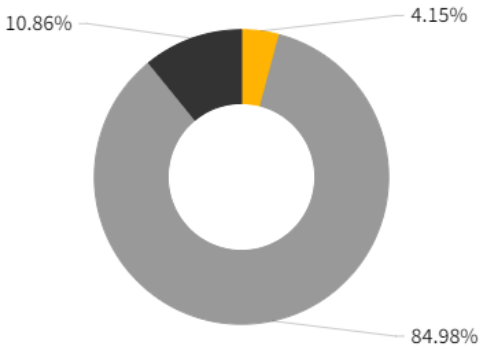
CITABLE

GOLD OPEN ACCESS
13 / 4.15%

SUBSCRIPTION OR BRONZE
266 / 84.98%

NON-CITABLE

OTHER (NON-CITABLE ITEMS)
34 / 10.86%



Citations*

TOTAL CITABLE
402

% OF CITABLE OA
3.73%

CITABLE

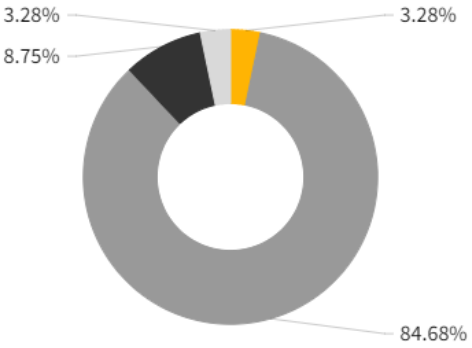
GOLD OPEN ACCESS
15 / 3.28%

SUBSCRIPTION OR BRONZE
387 / 84.68%

NON-CITABLE

OTHER (NON-CITABLE ITEMS)
40 / 8.75%

UNLINKED CITATIONS
15 / 3.28%



* Citations in 2021 to items published in (2019-2021)

Rank by Journal Impact factor

Journals within a category are sorted in descending order by Journal Impact Factor (JIF) resulting in the Category Ranking below. A separate rank is shown for each category in which the journal is listed in JCR. Data for the most recent year is presented at the top of the list, with other years shown in reverse chronological order.

EDITION

Science Citation Index Expanded (SCIE)

CATEGORY

NURSING

52/125

JCR YEAR	JIF RANK	QUARTILE	JIF PERCENTILE
2021	52/125	Q2	58.80
2020	44/124	Q2	64.92
2019	73/123	Q3	41.06
2018	60/120	Q2	50.42
2017	69/118	Q3	41.95
2016	56/116	Q2	52.16
2015	44/116	Q2	62.50
2014	67/111	Q3	40.09
2013	45/107	Q2	58.41
2012	48/106	Q2	55.19
2011	47/99	Q2	53.03
2010	44/89	Q2	51.12
2009	40/72	Q3	45.14
2008	46/62	Q3	26.61
2007	31/46	Q3	33.70
2006	32/36	Q4	12.50
2005	25/32	Q4	23.44
2004	25/33	Q4	25.76
2003	24/31	Q4	24.19
2002	23/32	Q3	29.69
2001	N/A	N/A	N/A
2000	N/A	N/A	N/A
1999	N/A	N/A	N/A
1998	N/A	N/A	N/A
1997	N/A	N/A	N/A

EDITION

Social Sciences Citation Index (SSCI)

CATEGORY

NURSING

49/123

JCR YEAR	JIF RANK	QUARTILE	JIF PERCENTILE
2021	49/123	Q2	60.57
2020	42/122	Q2	65.98
2019	71/121	Q3	41.74
2018	58/118	Q2	51.27
2017	66/115	Q3	43.04
2016	53/114	Q2	53.95
2015	40/114	Q2	65.35
2014	64/109	Q3	41.74
2013	42/105	Q2	60.48
2012	45/104	Q2	57.21
2011	43/97	Q2	56.19
2010	42/87	Q2	52.30
2009	36/70	Q3	49.29
2008	42/59	Q3	29.66
2007	27/42	Q3	36.90
2006	27/32	Q4	17.19
2005	21/29	Q3	29.31
2004	23/32	Q3	29.69
2003	25/31	Q4	20.97
2002	24/33	Q3	28.79
2001	31/42	Q3	27.38
2000	22/43	Q3	50.00
1999	10/42	Q1	77.38
1998	14/41	Q2	67.07
1997	15/41	Q2	64.63

EDITION

Science Citation Index Expanded (SCIE)

CATEGORY

PSYCHIATRY

124/155

JCR YEAR	JIF RANK	QUARTILE	JIF PERCENTILE
2021	124/155	Q4	20.32
2020	117/156	Q3	25.32
2019	128/155	Q4	17.74
2018	117/146	Q4	20.21
2017	114/142	Q4	20.07
2016	110/142	Q4	22.89
2015	108/142	Q4	24.30
2014	116/140	Q4	17.50
2013	100/136	Q3	26.84
2012	104/135	Q4	23.33
2011	98/130	Q4	25.00
2010	96/128	Q3	25.39
2009	91/117	Q4	22.65
2008	89/101	Q4	12.38
2007	80/94	Q4	15.43
2006	79/94	Q4	16.49
2005	80/94	Q4	15.43
2004	80/90	Q4	11.67
2003	81/87	Q4	7.47
2002	76/88	Q4	14.20
2001	N/A	N/A	N/A
2000	N/A	N/A	N/A
1999	N/A	N/A	N/A
1998	N/A	N/A	N/A
1997	N/A	N/A	N/A

EDITION

Social Sciences Citation Index (SSCI)

CATEGORY

PSYCHIATRY

106/143

JCR YEAR	JIF RANK	QUARTILE	JIF PERCENTILE
2021	106/143	Q3	26.22
2020	97/144	Q3	32.99
2019	103/142	Q3	27.82
2018	101/142	Q3	29.23
2017	106/142	Q3	25.70
2016	98/139	Q3	29.86
2015	95/139	Q3	32.01
2014	106/133	Q4	20.68
2013	89/124	Q3	28.63
2012	91/121	Q4	25.21
2011	86/117	Q3	26.92
2010	81/110	Q3	26.82
2009	73/94	Q4	22.87
2008	72/86	Q4	16.86
2007	66/82	Q4	20.12
2006	60/78	Q4	23.72
2005	65/77	Q4	16.23
2004	70/76	Q4	8.55
2003	68/77	Q4	12.34
2002	63/78	Q4	19.87
2001	65/77	Q4	16.23
2000	63/78	Q4	19.87
1999	51/79	Q3	36.08
1998	56/82	Q3	32.32
1997	63/80	Q4	21.88

Rank by Journal Citation Indicator (JCI)

Journals within a category are sorted in descending order by Journal Citation Indicator (JCI) resulting in the Category Ranking below. A separate rank is shown for each category in which the journal is listed in JCR. Data for the most recent year is presented at the top of the list, with other years shown in reverse chronological order.

Only journals which have a calculated JCI value are included in the JCI ranking. The total number of journals displayed in this ranking may be less than the category overall.

CATEGORY

NURSING

67/182

JCR YEAR	JCI RANK	QUARTILE	JCI PERCENTILE
2021	67/182	Q2	63.46
2020	74/181	Q2	59.39
2019	90/180	Q2	50.28
2018	90/175	Q3	48.86
2017	87/175	Q2	50.57

CATEGORY

PSYCHIATRY

96/258

JCR YEAR	JCI RANK	QUARTILE	JCI PERCENTILE
2021	96/258	Q2	62.98
2020	103/252	Q2	59.33
2019	124/251	Q2	50.80
2018	124/250	Q2	50.60
2017	120/243	Q2	50.82

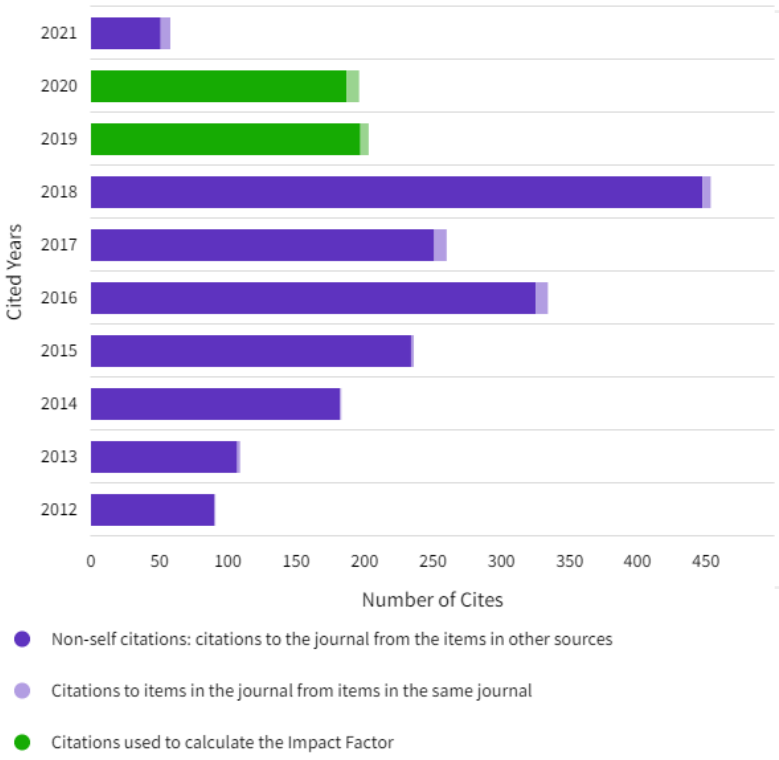
Citation network

Cited Half-life

6.1 years

The Cited Half-Life is the median age of the items in this journal that were cited in the JCR year. Half of a journal's cited items were published more recently than the cited half-life.

TOTAL NUMBER OF CITES	NON-SELF CITATIONS	SELF CITATIONS
3,076	3,014	62



# OF CITES FROM 2021	CUMULATIVE %	# OF CITING SOURCES
3,076 citations	**100.00%**	**1,109 sources**
58 citations	1.89%	42 sources
196 citations	8.26%	123 sources
203 citations	14.86%	147 sources
453 citations	29.59%	281 sources
260 citations	38.04%	175 sources
334 citations	48.90%	229 sources
236 citations	56.57%	156 sources
183 citations	62.52%	146 sources
109 citations	66.06%	93 sources
91 citations	69.02%	70 sources
Previous years: 953 citations		

Citing titles in all years

ARCHIVES OF PSYCHIATRIC NURSING

	SOURCE NAME	COUNT
	All Others	643
1	International Journal of Environmental Research and Public Health	102
2	PERSPECTIVES IN PSYCHIATRIC CARE	73
3	Frontiers in Psychiatry	66
4	International Journal of Mental Health Nursing	65
5	ARCHIVES OF PSYCHIATRIC NURSING	62
6	Frontiers in Psychology	57
7	BMC Psychiatry	39
8	PLoS One	38
9	JOURNAL OF AFFECTIVE DISORDERS	36
10	JOURNAL OF CLINICAL NURSING	32
11	Journal of Psychiatric and Mental Health Nursing	28
12	BMJ Open	25
13	JOURNAL OF INTERPERSONAL VIOLENCE	23
14	JOURNAL OF PSYCHOSOCIAL NURSING AND MENTAL HEALTH SERVICES	23
15	CURRENT PSYCHOLOGY	20
16	JOURNAL OF ADVANCED NURSING	20
17	Journal of the American Psychiatric Nurses Association	20
18	Healthcare	19
19	INTERNATIONAL JOURNAL OF NURSING STUDIES	19
20	Issues in Mental Health Nursing	19

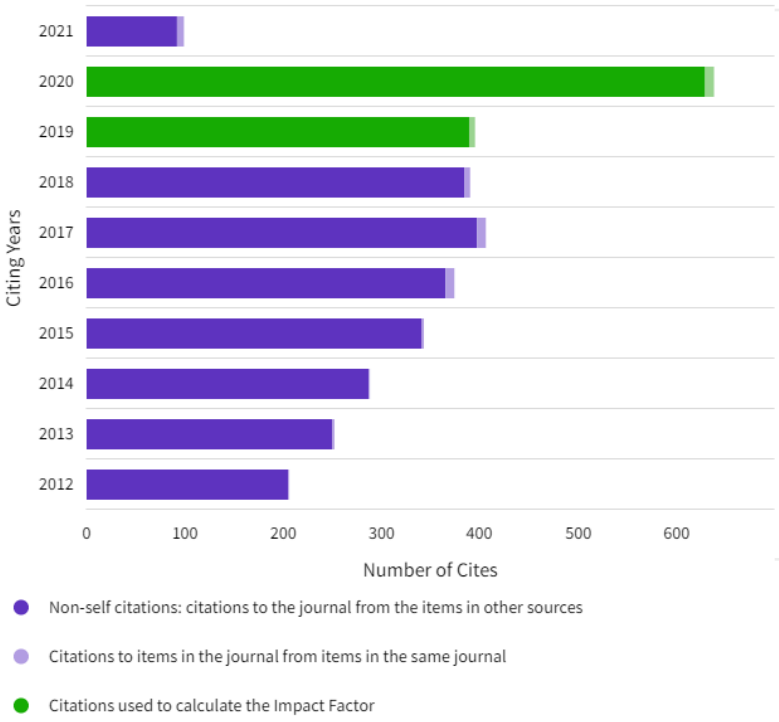
Showing 1 - 20 rows of 462 total (use export in the relevant section to download the full table)

Citing Half-life

6.3 years

The Citing Half-Life is the median age of items in other publications cited by this journal in the JCR year.

TOTAL NUMBER OF CITES	NON-SELF CITATIONS	SELF CITATIONS
4,798	4,736	62



# OF CITES FROM 2021	CUMULATIVE %	# OF CITED SOURCES
4,798 citations	**100.00%**	**2,275 sources**
99 citations	2.06%	76 sources
638 citations	15.36%	390 sources
395 citations	23.59%	308 sources
390 citations	31.72%	303 sources
406 citations	40.18%	311 sources
374 citations	47.97%	305 sources
343 citations	55.12%	278 sources
288 citations	61.12%	238 sources
252 citations	66.37%	204 sources
206 citations	70.66%	183 sources
Previous years: 1,407 citations		

Cited titles in all years

ARCHIVES OF PSYCHIATRIC NURSING

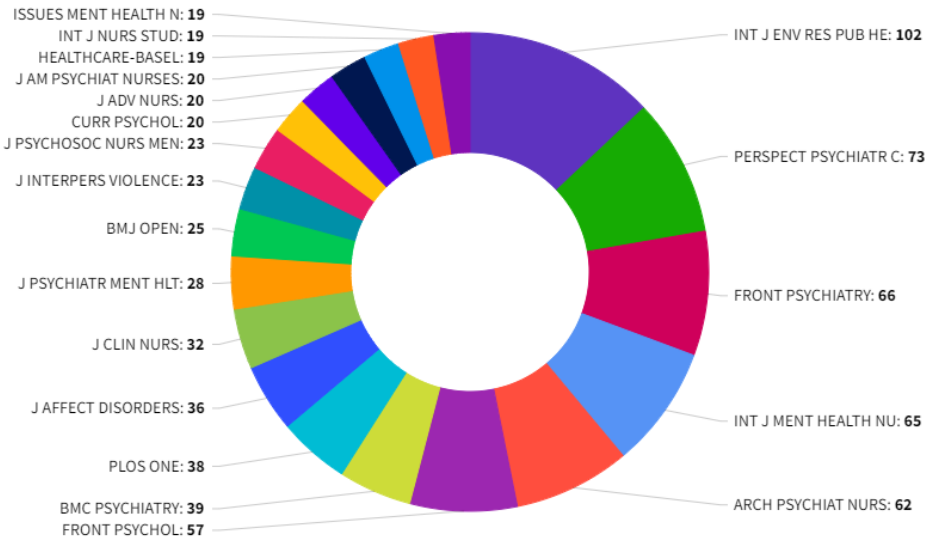
	SOURCE NAME	COUNT
	All Others	1,664
1	ARCHIVES OF PSYCHIATRIC NURSING	62
2	International Journal of Mental Health Nursing	54
3	JOURNAL OF ADVANCED NURSING	51
4	PLoS One	47
5	BMC Psychiatry	45
6	JOURNAL OF AFFECTIVE DISORDERS	43
7	Journal of Psychiatric and Mental Health Nursing	42
8	PSYCHIATRY RESEARCH	41
9	International Journal of Environmental Research and Public Health	38
10	PSYCHIATRIC SERVICES	37
11	JOURNAL OF CLINICAL NURSING	33
12	Journal of Nursing Management	33
13	BRITISH JOURNAL OF PSYCHIATRY	31
14	INTERNATIONAL JOURNAL OF NURSING STUDIES	31
15	SOCIAL SCIENCE & MEDICINE	28
16	NURSE EDUCATION TODAY	27
17	Issues in Mental Health Nursing	25
18	ACTA PSYCHIATRICA SCANDINAVICA	22
19	Frontiers in Psychiatry	22
20	Lancet Psychiatry	22

Showing 1 - 20 rows of 492 total (use export in the relevant section to download the full table)

Journal Citation Relationships

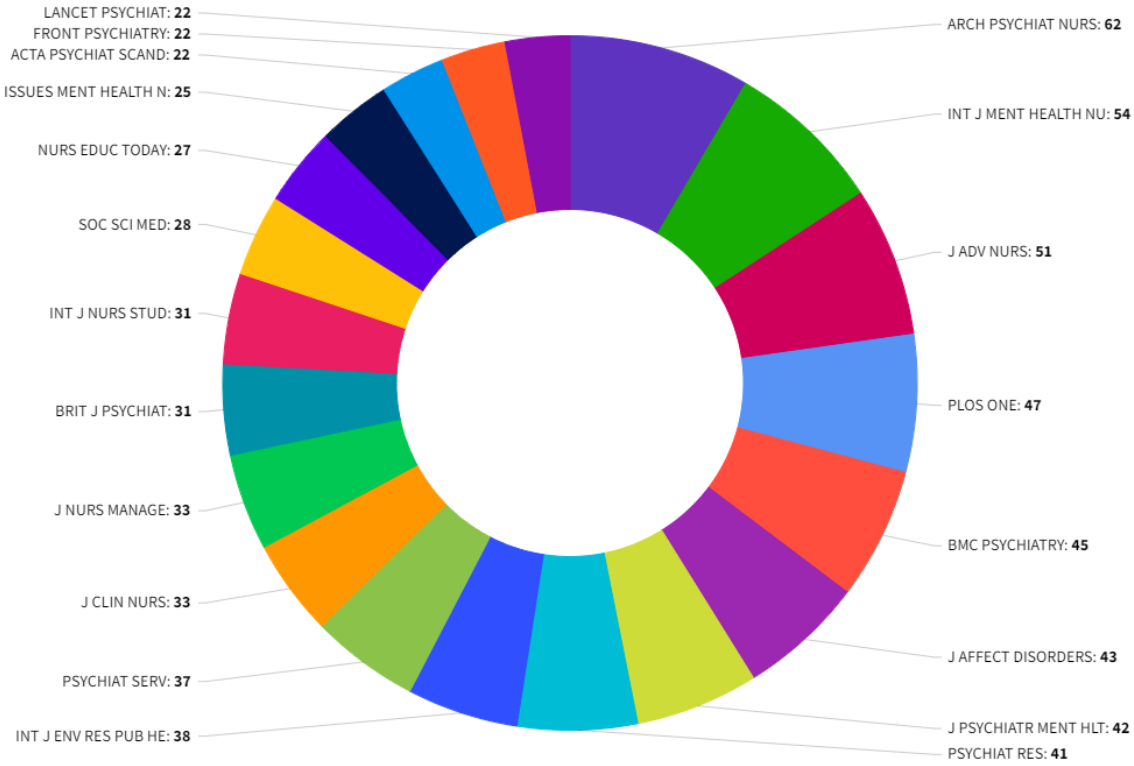
Cited Data

Top 20 journals citing ARCH PSYCHIAT NURS by number of citations



Citing Data

Top 20 journals cited by ARCH PSYCHIAT NURS by number of citations



Content metrics

Source data

This tile shows the breakdown of document types published by the journal. Citable Items are Articles and Reviews. For the purposes of calculating JIF, a JCR year considers the publications of that journal in the two prior years.

101 total citable items

	ARTICLES	REVIEWS	COMBINED (C)	OTHER DOCUMENT TYPES (O)	PERCENTAGE
NUMBER IN JCR YEAR 2021 (A)	97	4	101	14	88%
NUMBER OF REFERENCES (B)	4,154	351	4,505	293	94%
RATIO (B/A)	42.8	87.8	44.6	20.9	

Average JIF Percentile

The Average Journal Impact Factor Percentile takes the sum of the JIF Percentile rank for each category under consideration, then calculates the average of those values.

ALL CATEGORIES AVERAGE

41.48

EDITION

Science Citation Index Expanded

NURSING

58.80

PSYCHIATRY

20.32

EDITION

Social Sciences Citation Index

PSYCHIATRY

26.22

NURSING

60.57

Contributions by Organizations

Organizations that have contributed the most papers to the journal in the most recent three-year period.

RANK	ORGANIZATION	COUNT
1	UNIVERSIDADE DE SAO PAULO	15
2	UNIVERSITY OF NORTH CAROLINA	9
3	NATIONAL INSTITUTE OF MENTAL HEALTH & NEUROSCIENCES - INDIA	7
-	UNIVERSITY OF CALIFORNIA SYSTEM	7
5	JOHNS HOPKINS UNIVERSITY	6
-	PENNSYLVANIA COMMONWEALTH SYSTEM OF HIGHER EDUCATION (PCSHE)	6
-	STATE UNIVERSITY SYSTEM OF FLORIDA	6
-	WORLD HEALTH ORGANIZATION	6

Showing 1 - 8 rows of 535 total (use export in the relevant section to download the full table)

Contributions by country/region

Countries or Regions that have contributed the most papers to the journal in the most recent three-year period.

RANK	COUNTRY/REGION	COUNT
1	USA	122
2	Turkey	35
3	CHINA MAINLAND	22
-	South Korea	22
5	Brazil	18
6	Australia	15
7	Iran	12
8	Canada	11

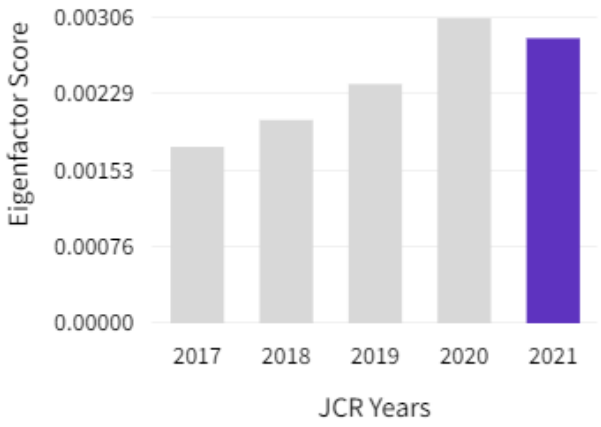
Showing 1 - 8 rows of 45 total (use export in the relevant section to download the full table)

Additional metrics

Eigenfactor score

0.00286

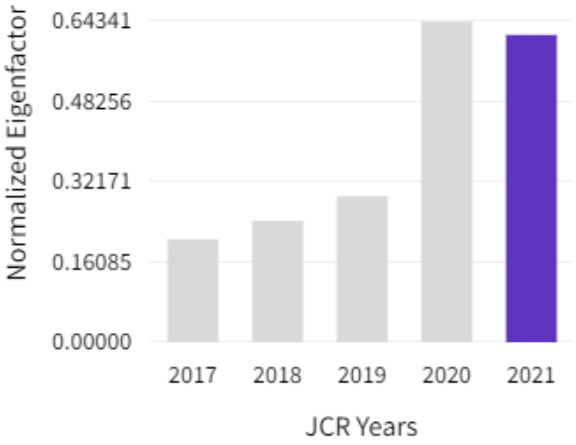
The Eigenfactor Score is a reflection of the density of the network of citations around the journal using 5 years of cited content as cited by the Current Year. It considers both the number of citations and the source of those citations, so that highly cited sources will influence the network more than less cited sources. The Eigenfactor calculation does not include journal self-citations.



Normalized Eigenfactor

0.61681

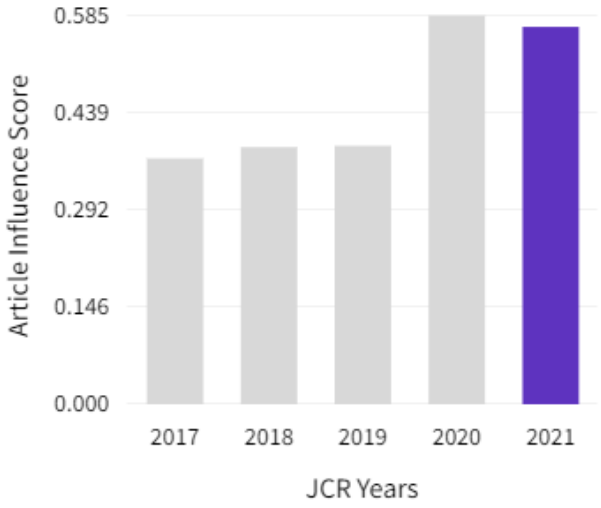
The Normalized Eigenfactor Score is the Eigenfactor score normalized, by rescaling the total number of journals in the JCR each year, so that the average journal has a score of 1. Journals can then be compared and influence measured by their score relative to 1.



Article influence score

0.568

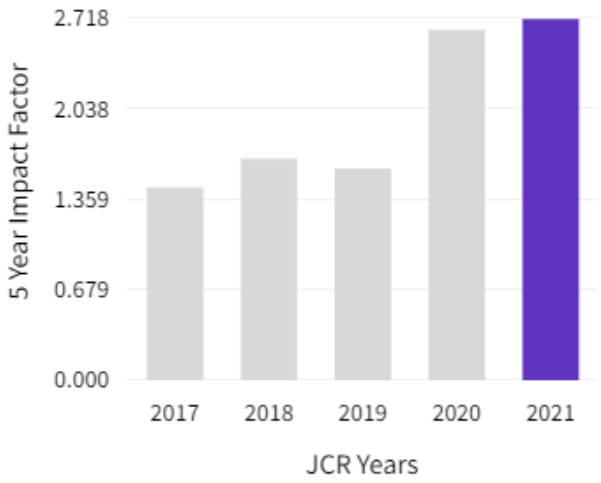
The Article Influence Score normalizes the Eigenfactor Score according to the cumulative size of the cited journal across the prior five years. The mean Article Influence Score for each article is 1.00. A score greater than 1.00 indicates that each article in the journal has above-average influence.



5 year Impact Factor

2.718

The 5-year Impact Factor is the average number of times articles from the journal published in the past five years have been cited in the JCR year. It is calculated by dividing the number of citations in the JCR year by the total number of articles published in the five previous years.



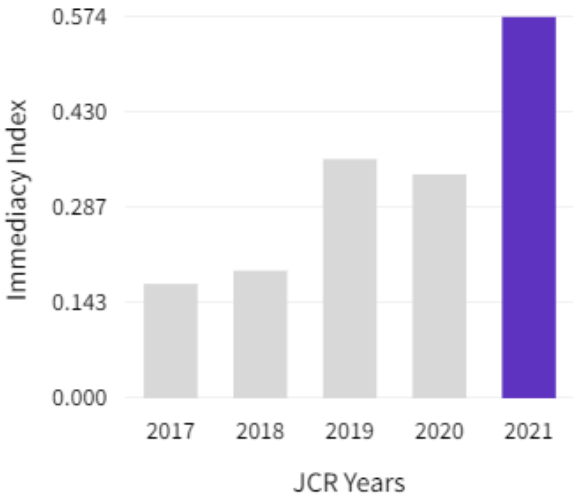
5 year Impact Factor calculation

$$\frac{\text{Citations in 2021 to items published in [2016-2020] (1,446)}}{\text{Number of citable items in [2016-2020] (532)}} = \frac{1{,}446}{532} = 2.718$$

Immediacy Index

0.574

The Immediacy Index is the count of citations in the current year to the journal that reference content in this same year. Journals that have a consistently high Immediacy Index attract citations rapidly.



Immediacy Index calculation

Cites in 2021 to items published in 2021	58	58 / 101 = 0.574
Number of items published in 2021	101	

Vol. 40, October 2022
www.psychiatricnursing.org

ELSEVIER

Archives of Psychiatric Nursing

Editor
Edilma L. Yearwood PhD, PMHCNS-BC, FAAN

ISPN

Official Journal of the
International Society of Psychiatric-Mental Health Nurses (ISPN)

Volume 36

Pages 1-84, A1-A4 (February 2022)

Download full issue

Previous vol/issue Next vol/issue

Archives of Psychiatric Nursing

Supports *open access*

Editorial Full text access

The best is yet to come…

Joyce J. Fitzpatrick, Edilma L. Yearwood
Page A1

Download PDF

Editorial Full text access

Strengthening the safety nets for child and adolescent mental health: Statement of the International Society for Psychiatric Mental Health Nurses

Pam Galehouse, Barbara Peterson, Andrea Kwasky, Sally Raphel
Pages A2-A4

Download PDF

Review article Full text access

Global prevalence of unmet need for mental health care among adolescents: A systematic review and meta-analysis

Mahin Ghafari, Tayebeh Nadi, Samira Bahadivand-Chegini, Amin Doosti-Irani
Pages 1-6

Download PDF Article preview

Research article Full text access

Bullying and coping with bullying among obese\overweight and normal weight children

Nevin Uslu, Derya Evgin
Pages 7-16

Download PDF Article preview

Research article Full text access

The meaning of life after a suicide attempt

Andréa Cristina Alves, Isadora Manfrinato Cunha, Manoel Antônio dos Santos, Adriana Inocenti Miasso, … Kelly Graziani Giacchero Vedana
Pages 17-23

Download PDF Article preview

Research article Full text access

Emotional intelligence of nurses caring for COVID-19 patients: A cross-sectional study

Seyed Tayeb Moradian, Mahmoud Movahedi, Mohammad Goudarzi Rad, Yaser Saeid
Pages 24-27

Download PDF Article preview

Archives of Psychiatric Nursing

Supports *open access*

Review article Full text access

A critical analysis of the Tidal Model of Mental Health Recovery

Sibel Kusdemir, Abe Oudshoorn, Jean Pierre Ndayisenga
Pages 34-40

Download PDF Article preview

Research article Full text access

Stress and depressive symptoms among Italian mental health nurses during the COVID-19 pandemic, a cross-sectional study

Giovanni Napoli
Pages 41-47

Download PDF Article preview

Research article Full text access

Post-traumatic stress disorder among victims of great march of return in the Gaza Strip, Palestine: A need for policy intervention

Mysoon Khalil Abu-El-Noor, Nasser Ibrahim Abu-El-Noor, Mohammad Alswerki, Fadel N. Naim, ... Tayseer Afifi
Pages 48-54

Download PDF Article preview

Research article *Open access*

A preliminary study of body image and depression among adults during COVID-19: A moderation model

Kamila Czepczor-Bernat, Adriana Modrzejewska, Justyna Modrzejewska, Martyna Pękała
Pages 55-61

Download PDF Article preview

Research article Full text access

The effect of a solution-oriented therapy on the depression levels and the perceived social support of depressive patients

Duygu Ayar, Selma Sabancioğullari
Pages 62-69

Download PDF Article preview

Review article Full text access

Psychological and social impact and lifestyle changes among pregnant women of COVID-19 pandemic: A qualitative study

Özlem Güner, Ruşen Öztürk
Pages 70-77

Archives of Psychiatric Nursing

Supports *open access*

Pages 78-84

ISSN: 0883-9417

Archives of Psychiatric Nursing 36 (2022) 7–16

Contents lists available at ScienceDirect

Archives of Psychiatric Nursing

journal homepage: www.elsevier.com/locate/apnu

Bullying and coping with bullying among obese\overweight and normal weight children

Nevin Uslu [a,*], Derya Evgin [b]

[a] Burdur Mehmet Akif Ersoy University, Department of Pediatric Nursing, Burdur, Turkey
[b] Akdeniz University Kumluca Faculty of Health Sciences, Department of Pediatric Nursing, Antalya, Turkey

ARTICLE INFO

Keywords:
Child
Obese/overweight
Bullying
Coping with bullying

ABSTRACT

This study aimed to determine the obese\overweight and normal weight children's status of encountering and coping with bullying and the correlational factors. This case-control study was conducted with 1.680 students in the second level (5th, 6th, 7th, 8th grades) from September 24, 2018 to May 31, 2019 in the Mediterranean Region in Turkey. The data were collected using a personal information form, the Traditional Peer Victimization Scale and the Coping with Bullying Scale. Data were analyzed using the Shapiro-Wilk test, Mann–Whitney *U* test, Binary Logistic Regression, Backward Wald Elimination, and Simple Linear and Backward Stepwise Multiple Linear Regression analyses. This study indicated that the risk of becoming victims, bullies or bully-victims increases among boys and 8th grade students. It also found that the risk of being victims and bully-victims increases among children whose father is illiterate. There was no significant difference between obese\overweight and normal weight children in terms of being victims, bullies and bully-victims. Grade level, academic performance, father's education level and awareness of reporting bullying were effective in coping with bullying among the children, while weight was not. Further studies are needed to determine different factors that affect children's coping strategies against bullying.

Introduction

Nearly 3 million people worldwide lose their lives every year due to overweight or obesity (Hingle & Kunkel, 2012). The increase in the prevalence of obesity among children and adolescents, especially in underdeveloped and developing countries, indicates that childhood obesity is potentially a global public health issue (World Health Organization, 2016a). In European Region, one-half of adults and one fifth of children are overweight and one third of children are obese, and this rate is increasing rapidly (European Congress on Obesity, 2018). In Turkey, of the 10-to-14-year-old children, 19.6% are overweight and 10.5% are obese (Action Plan for Prevention of Childhood Obesity, 2019–2023). Childhood obesity is particularly significant for children's health for two reasons: it can lead to many metabolic and chronic diseases in the early years of life, and psychological problems can cause obese children to experience lack of self-confidence and problems in adaptation to the environment even in older ages (TEMA, 2018). They also face other risks, including bullying.

Bullying is a problem that harms children physically, psychologically and socially, and its effects can persist not only during childhood, but throughout life (Moore et al., 2017; Wolke & Lereya, 2015). In 2018, 23.0% of the children in OECD countries and 24.0% of the children in Turkey experienced bullying at least five times a month (PISA, 2018). Although there is strong evidence that obese and overweight children are more likely to be bullied compared with their normal weight peers (Koyanagi et al., 2020; Lee et al., 2018; Lian et al., 2018; Van Geel et al., 2014; Waasdorp et al., 2018; Waasdorp et al., 2019; Wang et al., 2010), studies have shown that obese and overweight children also bully (Griffiths et al., 2006; Janssen et al., 2004; Kim et al., 2016). One study reported that obese and overweight 15–16-year-old children are more likely to continue to bully than their normal weight peers (Janssen et al., 2004).

Most of the studies conducted with obese and overweight children have examined the risks of being bullied and being perpetrators of bullying; however, few studies have addressed both (Jansen et al., 2014; Lee et al., 2018; Bacchini et al., 2015; Rupp & McCoy, 2019). Studies have examined a wide age range of children and young adolescents. Some studies have reported that the rates of bullying decrease toward the end of secondary school (Ashrafi et al., 2020; Moon et al., 2016; Pervanidou et al., 2019; PISA, 2018; Shaheen et al., 2018), while others

* Corresponding author.
E-mail addresses: nuslu@mehmetakif.edu.tr (N. Uslu), deryaevgin@akdeniz.edu.tr (D. Evgin).

https://doi.org/10.1016/j.apnu.2021.10.005

Available online 22 October 2021

have reported that victimization rates increase in parallel with age (Arslan et al., 2012; Atik & Güneri, 2013; Calıskan et al., 2019; Salmon et al., 2018; Turner et al., 2018). These results indicate that further studies are needed on the risk of being exposed to bullying and being perpetrators of bullying among obese and overweight children. Most of these studies were conducted in developed Western countries; however, studies have reported that children in non-Western countries have more positive attitudes in not participating in bullying. Therefore, further studies should be carried out in low- and middle-income countries and different cultures (Crystal et al., 2000; Kim et al., 2016; Koyanagi et al., 2020; Liu et al., 2016). In this regard, it is important to assess obese and overweight children's coping strategies for dealing with bullying. Most of the studies in the literature focus on obese and overweight children's coping strategies for dealing with mocking and stigmatization, while only a limited number of studies have directly examined these children's coping skills for dealing with peer bullying (Himmelstein & Puhl, 2019; Puhl & Luedicke, 2012). Studies have also reported that overweight and obese children mostly engage in avoidance behaviors toward mocking and stigmatization and cope with them by overeating and engaging in risky behaviors (Farhat et al., 2010; Himmelstein & Puhl, 2019; Lin, 2019; Puhl & Luedicke, 2012). No studies that compare the coping strategies of overweight and obese children with those of their normal weight peers were found in the literature. One study has reported that weight-oriented bullying has been ignored in school-based anti-bullying programs in the last 50 years, and that bullying related to weight is worrying and may require intervention (Aimé et al., 2017).

Among healthcare professionals, nurses play a key role in the prevention of bullying. School nurses in particular should take primary, secondary and tertiary measures for children by working in collaboration with teachers, families, and health professionals such as psychologists, psychological counselors and physicians (Coskun & Bebis, 2014; Galitz & Robert, 2014; Zych et al., 2015). Turkey is a middle-income country that bridges the cultural richness of Asia and Europe. In Turkey, the duties, powers and responsibilities of school health nurses are determined by nursing regulations; however, school nurses are not employed in public schools (Avsar & Alkaya, 2018). Therefore, bullying is an issue that all nurses who care for the child must handle.

The aim of this case-control study was to determine the obese/overweight and normal weight children's status of encountering and coping with bullying and the correlational factors by seeking answers to the following research questions:1) Is children's body weight a risk factor for being victims of bullying? 2) Is children's body weight a risk factor for bullying others? 3) Is children's body weight a risk factor for being bully/victim? 4) Are obese/overweight and normal weight children different in terms of coping with bullying? 5) What are the coping methods that obese/overweight and normal weight children use?

Methods

Sample

The sample size was calculated as 1.680 students (840 obese\overweight students for the experiment group and 840 normal weight students for the control group) by effect size f2 = 0.033, with 95% probability ($\alpha = 0.05$) and 90% power.

In Turkey, compulsory education is administered for 12 years by the Ministry of National Education, and the National Education Directorates affiliated with the Ministry of National Education are responsible for this education. Turkey's 12-year compulsory education has three levels in a 4 + 4 + 4 education system: a) primary school (the 1st, 2nd, 3rd and 4th grades), b) middle school (the 5th, 6th, 7th and 8th grades), and c) secondary school (the 9th, 10th, 11th and 12th grades) (Ministry of National Education, 2012).

This study was conducted from September 24, 2018 to May 31, 2019 in middle schools affiliated with the Provincial Directorate of Education in a city in Turkey's Mediterranean Region. The schools were categorized as low, middle and high income schools. Among them, two schools were randomly selected for each category. There were 4.213 students (in the 5th, 6th, 7th and 8th grades) in the city's middle schools at the time of the study. The researchers received the approval of the ethics committee and the Ministry of National Education for the study. Then, they visited the school administrators to explain the aim of the study and ask for their help. All administrators in these schools agreed to cooperate and gave their approval for data collection. A list of students in these schools were created. Students were identified using the table of random numbers from this list. A written informed consent form, which was prepared in accordance with the Declaration of Helsinki, was sent to the students and their parents in opaque envelopes. This form explained the purpose and gave an overview of the study, and explained that the children would be assigned to the case or control group according to their body weight. The consent form also included phone numbers that the parents and children could easily use to ask questions about the study. A total of 1.875 students were invited to participate in the study. All students who gives his/her assent to participate and whose his/her parents provided verbal and written consent were included in the study. None of the participants wanted to leave the study after the study started; however, 195 students who did not give their assent to participate in the study and who their parents did not give their consent were not included in the study. The children who did not have any physical, cognitive or psychological disabilities and who had similar sociodemographic characteristics were included in the study.

Ethical considerations

Prior to the study, ethical committee approval and written permission were obtained from the Ethics Committee (2017/61) and the Provincial Directorate of National Education. In addition, informed consent was obtained from the children and their parents.

Data collection

During the study, the researchers interviewed the students and took their measurements at their schools once a week without disrupting their education. The children completed the questionnaires in 20 to 25 min, and their height and body weight measurements were recorded separately. The completion of the data collection tools took about 40 min.

The students' body mass index (BMI) values were calculated using the kg/m^2 formula and evaluated according to the study of Neyzi et al. (2008). The students were assigned to the case and control groups according to their BMI. The students whose values were between 5% and 85% were assigned to the control (normal weight) group, and those whose values were over 85% were assigned to the case (obese\overweight) group. The participants in the case and control groups had similar sociodemographic characteristics, and no statistically significant difference was found between them.

Data collection tools

Personal information form

This form was developed by reviewing the literature and it includes items about the children's age, gender, height, weight, academic performance, and their classmates' characteristics as well as the parents' age, gender, education level, and employment status (Bacchini et al., 2015; Burnukara & Ucanok, 2012; Hong et al., 2018; Jansen et al., 2014; Jeong et al., 2016; Juvonen & Graham, 2014; Kim et al., 2016; Kovalskys et al., 2016; Kukaswadia et al., 2011; Lee et al., 2018; Lian et al., 2018; Puhl et al., 2017; Rigby & Johnson, 2016; Waasdorp et al., 2018; Zhang et al., 2016).

Traditional peer victimization scale (TPVS)

This scale was revised from the Multidimensional Peer-Victimization

Scale developed by Mynard and Joseph and adapted into Turkish by Gültekin and Sayıl (Burnukara & Ucanok, 2012). This self-report and 4-point Likert-type scale consists of 31 items. Each item has two options: 'a' for the adolescents' experiences as a victim and 'b' for their experiences as a bully. Total scores on the bully and victim forms in the TPVS determine children's status of being a bully, victim, or bully-victim. Adolescents who obtained a score one standard deviation above the mean on the bully form were considered bullies, those who obtained a score one standard deviation above the mean on the victim form were considered victims, and those who obtained a score one standard deviation above the mean on both the bully and the victim forms were considered bully-victims. The TPVS has 6 subscales: verbal victimization, relational victimization, physical victimization, attack on property, social exclusion, and threatening. The Cronbach's alpha coefficients for the victim and bully forms were 0.92 and 0.91, respectively (Burnukara & Ucanok, 2012). In the present study, the Cronbach's alpha coefficients for the victim and bully forms were 0.94 and 0.95, respectively.

Coping with bullying scale

This 4-point Likert-type scale was developed by Dölek (2002). The scale items are scored as 1: strongly disagree; 2: disagree; 3: agree; and 4: strongly agree. Higher scores indicate higher levels, and lower scores indicate lower levels of coping with bullying. The Coping with Bullying Scale has 24 items under 6 factors: awareness of preventing bullying, resistance to bullying, awareness of reporting bullying, awareness of asking for help, awareness of not remaining unresponsive, and awareness of self-defense. The scale's Cronbach's alpha internal consistency coefficient was 0.75 (Dölek, 2002). In the present study, the Cronbach's alpha coefficient was 0.76.

Statistical analysis

The data were analyzed using the IBM SPSS Statistics Standard Concurrent User Version 25 (IBM Corp., Armonk, New York, USA) software package. The data were presented in percentages (%), and mean and standard deviation ($\bar{x}\pm SD$). The Shapiro-Wilk test, histogram and Q-Q Plot were used to assess the normality of the data for numeric variables. Binary Logistic Regression models were used considering the independent variables of BMI status (obese, overweight, and normal weight children), age, grade level, gender, mother's education level, father's education level, mother's employment status, father's employment status, and academic performance from the previous year, which were the factors thought to affect children's experiences of being a victim, a bully, or a bully-victim. Independent variables were included in the model as univariate. The variables considered important in the univariate models were included in the multivariate models. Only the variable of grade level was included in the multivariate model because the variables of age and grade level that had strong correlations with each other in the three models were considered important. The Backward Wald Elimination method was used to determine the important variables in multivariate analyses. The $p < 0.10$ value was considered significant in the binary logistic regression analyses.

Simple Linear Regression Analysis was used to assess the independent variables of age, gender, grade level, academic performance, mother's education level, father's education level, mother's and father's employment status, economic status, status of living with parents, and reporting bullying, i.e. the factors which were thought to affect bullying. Categorical variables were analyzed as dummy variables. As a result of the Simple Linear Regression Analysis, the independent variables of age, gender, grade level, academic performance, mother's education level, father's education level, mother's and father's employment status, and reporting bullying were found to be significant and were included in the Backward Stepwise Multiple Linear Regression Analysis.

Results

Children's characteristics

Of the participants, 52.3% were male and 67.3% had good academic performance and received Certificate of Excellence, and their mean age was 12.3 ± 1.1 years. Of their mothers, 29.6% were high school graduates and 55.7% were unemployed. Of their fathers, 34.2% were university graduates and 7.9% were unemployed. The families of 69.6% of the participants had a good economic status.

Within the children's anthropometric characteristics, the characteristics of the case and control groups based on their status of being obese \overweight and normal weight were as follows: The weight, height, and BMI of the case group were 60.1 ± 10.9 kg, 154.9 ± 1.0 cm and 24.8 ± 2.3 (kg/m^2), respectively, while the weight, height and BMI of the control group were 44.7 ± 8.3 kg, 155.0 ± 1.1 cm and 18.4 ± 1.6 (kg/m^2), respectively.

The risk factors for being victims

Table 1 shows that age, grade level, gender, mother's education level, father's education level, and academic performance from the previous year influenced the victim based on the univariate analyses. These variables were included in the multivariate binary logistic regression model. Grade level, gender, and father's education level were found to be important in the final model. According to the multivariate analyses, 8th graders' risk of being a victim was 1.993 times higher compared with 5th graders, and boys' risk of being a victim was 1.495 times higher compared with girls. Considering grade level, children were exposed to threatening, physical victimization, verbal victimization, relational victimization, and attack on property ($p = 0.017$, $p = 0.021$, $p = 0.000$, $p = 0.000$, $p = 0.008$, respectively). Considering gender, boys were exposed to threatening, physical victimization, verbal victimization and attack on property ($p = 0.000$, $p = 0.000$, $p = 0.018$, $p = 0.001$, respectively). The risk of being a victim was 1.852 times higher among the participants whose fathers' education level was literate compared with those whose fathers were university graduates. The risk of being a victim was 1.541 (1/0.649) times lower among the participants whose fathers were high school graduates compared with those whose fathers were university graduates. Considering father's education level, children were exposed to threatening, physical victimization, attack on property, and social exclusion ($p = 0.040$, $p = 0.006$, $p = 0.002$, $p = 0.048$, respectively). It was found that bullying types did not differ between the groups according to weight, age, mother's education level, mother's and father's employment status and academic performance.

The risk factors for being bullies

Table 2 shows that according to the univariate analyses, age, grade level, gender, and academic performance from the previous year had an influence on bullies. These variables were included in the multivariate binary logistic regression model. Grade level and gender were found to be important in the final model. Of the participants, 7th graders' risk of being a bully was 1.556 times higher compared with that of 5th graders; 8th graders' risk of being a bully was 1.849 times higher compared with that of 5th graders; and boys' risk of being a bully was 2.106 times higher compared with that of girls. Considering grade level, children bullied in the forms of physical victimization and verbal victimization ($p = 0.008$, $p = 0.000$). Considering gender, male students bullied in the forms of threatening, physical victimization, verbal victimization, and relational victimization ($p = 0.000$, $p = 0.000$, $p = 0.009$, $p = 0.001$, respectively). Bullying types did not differ between groups according to weight, age, mother's education level, mother's and father's employment status and children's academic performances.

Table 1
The risk factors for being victims.

	Univariate analysis			Multivariate analysis		
	Odds ratio	95% CI for odds	p	Odds ratio	95% CI for odds	p
Constant	–	–	–	0.084	–	<0.001
Weight status						
Normal (Ref)				–	–	–
Obese\overweight	1.269	0.944–1.706	0.115			
Age						
11 (R ef)	-			–	–	–
12	1.009	0.663–1.535	0.967			
13	1.378	0.918–2.067	0.122			
14	1.573	1.040–2.380	0.032			
Grade						
5th Grade (Ref)	-					
6th Grade	1.058	0.675–1.656	0.807	1.086	0.691–1.709	0.720
7th Grade	1.276	0.812–2.007	0.291	1.310	0.829–2.070	0.247
8th Grade	1.784	1.169–2.725	0.007	1.993	1.294–3.070	0.002
Gender						
Female (Ref)	-			-		
Male	1.512	1.119–2.044	0.007	1.495	1.100–2.031	0.010
Mother's educational status						
University (Ref)	-			–	–	–
Illiterate	3.002	1.372–6.566	0.006			
Literate	1.567	0.769–3.191	0.216			
Primary school	1.430	0.946–2.161	0.089			
Middle school	0.930	0.553–1.562	0.782			
High school	0.982	0.647- –0.490	0.932			
Father's educational status						
University (Ref)	-					
Illiterate	2.274	0.878–5.887	0.091	2.051	0.785–5.361	0.143
Literate	1.766	0.916–3.404	0.089	1.852	0.950–3.608	0.070
Primary school	1.291	0.843–1.977	0.241	1.304	0.848–2.005	0.226
Middle school	1.000	0.634–1.578	1.000	0.976	0.616–1.545	0.917
High school	0.667	0.448–0.992	0.046	0.649	0.435–0.969	0.034
Mother's employment status						
Nonemployee (Ref)	-			–	–	–
Employee	1.120	0.834–1.506	0.451			
Father's employment status						
Nonemployee (Ref)	-			–	–	–
Employee	0.984	0.571–1.697	0.954			
Academic success from the previous year						
Certificate of Excellence (Ref)	-			–	–	–
Certificate of Merit	1.427	1.018–1.999	0.039			
Pass	1.751	1.019–3.009	0.043			
Conditional pass	2.771	1.222–6.283	0.015			

CI: Confidence Interval, Ref.: Reference category.

The risk factors for being bully-victims

Table 3 shows that according to the univariate analyses age, grade level, gender, mother's education level, father's education level, and academic performance from the previous year had an influence on the bully-victim experiences. These variables were included in the multivariate binary logistic regression model. Grade level, gender, and father's education level were found to be important in the final model. According to the multivariate analyses, 8th graders' risk of being a bully-victim was 1.918 times higher compared with that of 5th graders, and boys' risk of being a bully-victim was 1.801 times higher compared with that of girls. The risk of being a bully-victim was 1.712 (1/0.584) times lower among the participants whose fathers were high school graduates compared with those whose fathers were university graduates.

Obese\overweight children had lower mean scores on the Coping with Bullying Scale (obese\overweight: 73.6 ± 9.2, normal weight: 74.7 ± 8.6, $p = 0.005$) and the awareness of reporting bullying subscale (obese\overweight: 5.4 ± 1.7, normal weight: 5.6 ± 1.7, $p = 0.025$) compared with normal weight children. No differences were found between the groups' scores on the subscales of awareness of preventing bullying, resistance to bullying, awareness of asking for help, awareness of not remaining unresponsive, and awareness of self-defense ($p = 0.233$, $p = 0.118$, $p = 0.275$, $p = 0.381$, $p = 0.664$, respectively).

The factors that affect coping with bullying

Table 4 shows the final outcomes (final model). The coping score of the 5th graders was 2.131 points lower than that of the 8th graders. The score of the participants who received a Certificate of Excellence was 6.192 points higher than that of those who received a conditional pass. The score of the participants who received a Certificate of Merit was 2.909 points higher than that of those who received a conditional pass. The score of the participants whose fathers were illiterate was 3.054 points lower than that of those whose fathers were university graduates. The scores of the parents who were literate, middle school graduates, and high school graduates were 3.045, 1.557, and 1.303 points lower than those of the parents who were university graduates, respectively. A one-point increase in the reporting bullying score led to an increase of 2.234 points in the coping score.

Discussion

The study findings are discussed here under two subtitles: a) bullying and the coping strategies of obese\overweight and normal weight children, and b) the risk factors that affect bullying and coping with bullying.

Table 2
The risk factors for being bullies.

	Univariate analysis			Multivariate analysis		
	Odds ratio	95% CI for odds	p	Odds ratio	95% CI for odds	p
Constant	–	–	–	0.045	–	<0.001
Weight status						
Normal (Ref)	-			–	–	–
Obese\overweight	1.098	0.777–1.553	0.596			
Age						
11 (Ref)	-			–	–	–
12	1.243	0.751–2.056	0.398			
13	1.589	0.971–2.601	0.065			
14	1.985	1.213–3.246	0.006			
Grade						
5th Grade (Ref)	-			-		
6th Grade	0.890	0.513–1.545	0.679	0.883	0.508–1.535	0.659
7th Grade	1.564	0.932–2.624	0.090	1.556	0.925 – 2.617	0.095
8th Grade	1.760	1.067–2.902	0.027	1.849	1.118–3.058	0.017
Gender						
Female (Ref)	-			-		
Male	2.041	1.412–2.950	<0.001	2.106	1.454–3.051	<0.001
Mother's Educational Status						
University (Ref)	-			–	–	–
Illiterate	1.941	0.709–5.314	0.197			
Literate	1.424	0.603–3.363	0.421			
Primary school	1.100	0.658–1.839	0.716			
Middle school	1.483	0.857–2.566	0.159			
High school	1.121	0.691–1.819	0.642			
Father's educational status						
University (Ref)	-			–	–	–
Illiterate	2.136	0.704–6.481	0.180			
Literate	1.330	0.575–3.077	0.505			
Primary school	0.767	0.426–1.380	0.376			
Middle school	1.382	0.839–2.277	0.203			
High school	0.911	0.585–1.418	0.680			
Mother's employment status						
Nonemployee (Ref)	-			–	–	–
Employee	1.099	0.777–1.555	0.594			
Father's employment status						
Nonemployee (Ref)	-			–	–	–
Employee	1.445	0.692–3.019	0.328			
Academic success from the previous year						
Certificate of Excellence (Ref)	-			–	–	–
Certificate of Merit	1.105	0.734–1.664	0.632			
Pass	1.357	0.701–2.627	0.365			
Conditional pass	2.631	1.058–6.543	0.037			

CI: Confidence Interval, Ref.: Reference category.

Bullying and the coping strategies of obese\overweight and normal weight children

Being obese or overweight can put children at risk for bullying. In the literature, being obese and overweight is generally associated with being a victim of traditional bullying. While some studies have reported that obese and overweight children were more likely to be bullied compared with their normal weight peers (Bacchini et al., 2015; Koyanagi et al., 2020; Lee et al., 2018; Lian et al., 2018; Van Geel et al., 2014; Waasdorp et al., 2018; Waasdorp et al., 2019; Wang et al., 2010), others have found that they were at a similar level of risk with their normal weight peers (Jeong et al., 2016; Kim et al., 2016; Liu et al., 2016). This study found no statistically significant difference between the two groups in terms of exposure to bullying. Children who do not have an ideal body type may experience prejudice, stigmatization, discrimination and weight-based bullying in the cultures and societies that generally attach great importance to having thin body types (Wang et al., 2010; Kim et al., 2016; Puhl et al., 2017; Kerr & Gini, 2017; Morales et al., 2019). This study's results suggest that weight-based discrimination and stigmatization among the children were not statistically significant, and that weight was not a cause of victimization.

Although most of the previous studies have focused on the victimization of overweight and obese children, some studies have addressed the possibility of them being perpetrators of bullying (Griffiths et al., 2006; Janssen et al., 2004; Kim et al., 2016). Studies have reported that obese and overweight boys were more likely to bully compared with normal weight children (Griffiths et al., 2006; Janssen et al., 2004; Kim et al., 2016). However, while no relationship was found between BMI and bullying at the ages of 11 to 14, it was reported that 15–16-year-old obese students were more likely to bully compared with their normal weight peers (Griffiths et al., 2006; Janssen et al., 2004). Similarly, this study found no statistically significant difference between bullying by obese and overweight children and bullying by normal weight children at the ages 11 to 14.

Obese and overweight children may engage in aggressive behaviors as a coping strategy or a defense mechanism against being bullied, and they may both be bullied and bully (Jansen et al., 2014; Lee et al., 2018). The literature reports that obese and overweight children are more likely to bully or to be victims of bullying (Jansen et al., 2014; Lee et al., 2018; Bacchini et al., 2015; Rupp & McCoy, 2019); however, this study's findings are not consistent with these results. This study found no difference between the two groups in terms of bullying and coping strategies. This may be due to the culture of tolerance and the collectivist cultural structure of Turkey, and the fact that Turkey serves as a bridge between the cultural richness of Asia and Europe (Arısoy & Taş, 2020; Hofstede, 2001). These cultural characteristics may make children display less exclusionary behaviors to their friends with different characteristics or ignore their differences. Further studies that compare the

Table 3
The risk factors for being bully-victims.

	Univariate analysis			Multivariate analysis		
	Odds ratio	95% CI for odds	p	Odds ratio	95% CI for odds	p
Constant	–	–		0.086	–	<0.001
Weight status						
Normal (Ref)	-			–	–	–
Obese\overweight	1.178	0.881–1.576	0.268			
Age						
11 (Ref)	-			–	–	–
12	1.009	0.663–1.535	0.967			
13	1.469	0.983–2.193	0.060			
14	1.762	1.175–2.644	0.006			
Grade						
5th Grade (Ref)	-			-		
6th Grade	0.953	0.610–1.489	0.832	0.965	0.614–1.515	0.876
7th Grade	1.384	0.894–2.142	0.145	1.394	0.896–2.168	0.140
8th Grade	1.745	1.152–2.644	0.009	1.918	1.255–2.931	0.003
Gender						
Female (Ref)	-			-		
Male	1.787	1.322–2.416	<0.001	1.801	1.326–2.446	<0.001
Mother's educational status						
University (Ref)	-			–	–	–
Illiterate	2.278	1.022–5.075	0.044			
Literate	0.947	0.430–2.087	0.893			
Primary school	1.173	0.781–1.760	0.442			
Middle school	1.004	0.620–1.627	0.987			
High school	0.932	0.625–1.390	0.730			
Father's Educational Status						
University (Ref)	-			-		
Illiterate	2.038	0.789–5.264	0.141	1.760	0.674–4.595	0.249
Literate	1.291	0.647–2.575	0.469	1.300	0.644–2.623	0.464
Primary school	1.051	0.683–1.616	0.822	1.062	0.687–1.641	0.788
Middle school	1.106	0.722–1.696	0.643	1.087	0.705–1.674	0.707
High school	0.598	0.404–0.884	0.010	0.584	0.394–0.867	0.008
Mother's employment status						
Nonemployee (Ref)	-			–	–	–
Employee	1.178	0.881–1.575	0.268			
Father's employment status						
Nonemployee (Ref)	-			–	–	–
Employee	1.118	0.640–1.953	0.696			
Academic success from the previous year						
Certificate of Excellence (Ref)	-			–	–	–
Certificate of Merit	1.167	0.831–1.639	0.373			
Pass	1.453	0.839–2.517	0.183			
Conditional pass	2.462	1.088–5.571	0.031			

CI: Confidence Interval, Ref.: Reference category

effects of cultural differences on bullying are needed to make correct interpretations.

The risk factors that affect bullying and coping with bullying

There are several factors that affect bullying by children. Gender is one of them, regardless of weight. There are conflicting study results on the subject in the literature. Some studies have reported that girls are victimized more than boys (Goldbach et al., 2018; Sampasa-Kanyinga et al., 2016; Seo et al., 2017; Shaheen et al., 2018), while some have reported that boys are victimized more (Programme for International Student Assessment (PISA), 2018; Turner et al., 2018, Smith et al., 2019). Others have reported that boys perpetrate bullying more (Arslan et al., 2012; Atik & Güneri, 2013; Callaghan et al., 2015; Yang et al., 2013), while some others have found that boys are both the victims and the perpetrators of bullying (Calıskan et al., 2019; Mohseny et al., 2019). In the present study, the reason why males were more likely to be at risk of being exposed to bullying, being a bully, and being a bully-victims may be the patriarchal structure of Turkish culture and child-rearing attitudes (Arslan, Savaser, & Yazgan, 2011; Bedel & Güler, 2020). In Turkey, males are taught to be more independent, controlling, strong and authoritative, while girls are taught to be kind, gentle and accommodating. These ideas and the patriarchal structure have traditionally led to gender inequality, which is often an important factor in reinforcing men's aggressive behaviors and violence (Global Gender Gap Report, 2020; World Health Organization, 2016b). On the other hand, bullying behaviors enable individuals to gain social dominance and popularity in peer groups, and aggression can be used by children to establish or maintain their dominance (Guy et al., 2019; Juvonen & Graham, 2014; Lee et al., 2017; Smith et al., 2019). Therefore, bullying can be both a reward and a source of motivation for men. Other studies have reported that men who are exposed to bullying tend to be more outgoing and aggressive (Bouffard & Koeppel, 2017; Le et al., 2019; Smith et al., 2019; Yang et al., 2013). Victimized males may be at risks of becoming bullies or victims and continuing the spiral of violence by creating a vicious circle of bullying among children.

Types of participation in bullying can also vary with gender. Females experience more emotional victimization and are generally exposed to verbal and relational bullying (Arslan et al., 2012; Jeong et al., 2016; Marengo et al., 2019). Males, on the other hand, are more likely to be exposed to physical, relational, verbal, cyber- and cultural-based bullying, intimidation, physical bullying, and attacks on personal belongings (Calıskan et al., 2019; Jeong et al., 2016; Marengo et al., 2019; Seo et al., 2017; Shaheen et al., 2018). In line with the literature, the present study found that the boys were exposed to intimidation, physical and verbal bullying, and attacks on personal belongings, and that they practiced intimidation, physical, verbal and relational bullying.

Individually, age and grade can be a risk or a protective factor for

Table 4
The factors that affect coping with bullying.

Model summary	F=61.312, p<0.001, R^2=0.306, Adjusted R^2=0.301			
	Unstandardized coefficient			
Variables	β	Std. error	t	p
Grade				
5th Grade	−2.131	0.528	−4.040	<0.001
6th Grade	−0.750	0.502	−1.495	0.135
7th Grade	0.616	0.528	1.168	0.243
8th Grade (Ref)	-			
Academic performance				
Certificate of Excellence	6.192	1.353	4.578	<0.001
Certificate of Merit	2.909	1.368	2.126	0.034
Pass	0.617	1.505	0.410	0.682
Conditional pass (Ref)	-			
Father's educational status				
Illiterate	−3.054	1.556	−1.963	0.049
Literate	−3.045	1.003	−3.035	0.002
Primary school graduate	−0.227	0.601	−0.378	0.705
Middle school graduate	−1.557	0.592	−2.630	0.009
High school graduate	−1.303	0.461	−2.827	0.005
University graduate (Ref)	-			
Reporting bullying	2.234	0.108	20.670	<0.001

Usage characteristics in Table 4 explained a significant proportion of variance in the name of the independent variable, $R^2 = 0.306$, $F = 61.312$, $p < 0.001$, β: standardized regression coefficient, Ref: Reference category

bullying. Some previous studies have reported that bullying rates are higher during the middle school years, and the rates of being exposed to bullying decreased toward the end of middle school (Ashrafi et al., 2020; Moon et al., 2016; Pervanidou et al., 2019; PISA, 2018; Shaheen et al., 2018). Other studies have found that the rates of victimization increase as age and grade level increased (Arslan et al., 2012; Atik & Güneri, 2013; Calıskan et al., 2019; Salmon et al., 2018; Turner et al., 2018). Marengo et al. (2019) found that age and verbal victimization were positively correlated with physical victimization. The present study found that age was not a factor in being exposed to bullying, being a bully, or being a bully-victim; however, grade level was an important factor in bullying participation and coping with bullying. In addition, the 8th grade students were at a higher risk of being exposed to bullying, being bullies, or being bully-victims than the 5th grade students. However, the 5th grade students' levels of coping with bullying were lower than those of the 8th grade students. Although the 5th graders were at a lower risk of being exposed to bullying, the transition from primary school to middle school was found to be a period when students are more vulnerable. These findings indicate the necessity of implementing programs related to coping with bullying, which should start in the 5th grade.

Another important factor associated with bullying is academic success. Low academic achievement can not only be a factor that poses a risk for exposure to and perpetrating bullying, but also be a result of bullying (Hemphill et al., 2012; Hemphill et al., 2014; PISA, 2018; Seo et al., 2017; Yang et al., 2013). A study of school life from the perspective of children conducted in Turkey reported that academic success was important, and that in terms of social acceptance, being unsuccessful leads children to feel ridiculous and embarrassed in front of their friends (Sarıısık & Duskun, 2016). Although it did not affect bullying participation in the present study, the high coping levels of the children with high academic success may be due to high social acceptance among their friends. These results suggest that programs for coping with bullying should be planned to increase the social acceptance of children with low academic success.

Parents' education levels are also associated with bullying and coping with bullying. They are reflected in children's socioeconomic statuses, behaviors and lifestyles. They can be a risk factor for bullying as well as a supportive factor for coping with bullying (Galal et al., 2019; Shaheen et al., 2018). Some studies have found that low maternal education levels are associated with bullying and increase the risk of exposure to bullying (Calıskan et al., 2019; de Oliveira et al., 2015; Galal et al., 2019; Jansen et al., 2012; Mercan & Yıldırım-Sarı, 2018; Pervanidou et al., 2019); however, no difference was observed compared with parental education levels (Galal et al., 2019; Mercan & Yıldırım-Sarı, 2018; Pervanidou et al., 2019; Shaheen et al., 2018). The present study found that the role of fathers, who have at least as much of a role as mothers in the development of children, is important in being exposed to bullying, being a bully, being a bully-victim, and coping with bullying. The relevant literature reports that parents' democratic and tolerant attitudes toward their children are important in preventing them from being exposed to bullying and perpetrating bullying, and that parents display these attitudes more as their education levels increase (Gómez-Ortiz et al., 2019; Plexousakis et al., 2019). Other studies have found that as fathers' education levels increase, they become more concerned with their children, their empathy levels increase, and they establish better communication with their children. They also experience less conflict and display more democratic attitudes toward their children, and their children's emotional regulation skills increase (Flouri & Buchanan, 2003; Tezel-Şahin & Cevher, 2007; Nkwake, 2009; Dereli & Dereli, 2017; Liman, 2020). Considering the patriarchal nature of Turkish culture, increasing fathers' education levels may be a protective factor in children's being exposed to bullying, being a bully, being a bully-victim, and coping with bullying.

An important way of dealing with bullying is to share the experience with someone else because doing so reduces the likelihood of recurrence (Iossi Silva et al., 2013). However, although children who are bullied say that the experience is unpleasant, a vast majority of them do not seek help (Calıskan et al., 2019; Thomas et al., 2017). Therefore, children's awareness about bullying should be raised. In the present study, awareness of bullying was determined to be an important factor in coping with bullying.

This study found that BMI had no influence on bullying and coping with bullying but variables such as gender, grade level and father's educational status were important factors in bullying incidents. The fact that bullying types differed by gender contributes to literature, based on the finding that boys were exposed to and used other bullying types in addition to physical victimization compared with girls. In addition, variables such as gender, grade level, father's educational status, academic performance and consciousness of reporting bullying were reported to be important in coping with bullying.

Limitations

One limitation of this study is that it cannot be used to make causal inferences since it was conducted within a certain time frame. In addition, only children's self-reporting about bullying and coping with bullying were evaluated. The opinions of their parents and teachers could have also been included in the study. Both longitudinal and qualitative studies are needed to determine the true causal pathways between sociodemographic risk factors, bullying and coping with bullying. These studies should investigate the variables and mechanisms that explain the links between children's and parents' sociodemographic characteristics, bullying and coping with bullying. In particular, fathers' education levels and roles in bullying and coping with bullying should be explained. This information can serve as a guide for programs to help children with the issue of bullying. Another limitation of the study was that, although its findings indicated the importance of cultural differences in coping with bullying and bullying both for obese and overweight children and for normal weight children, it did not include any variables related to cultural characteristics. Cultural factors can be a protective factor against bullying for obese and overweight children. It should be determined which cultural features can serve as protective factors. Future studies should include variables related to the characteristics of the societies in which they are conducted and the relationships between them should be explained. Furthermore, multi-center

studies should be conducted to evaluate and compare the effects of different cultural characteristics on bullying for normal, obese and overweight children.

Implications for practice

This study provides valuable information about the factors associated with bullying and coping with bullying not only for nurses, but also for school counselors, school staff, students and parents. This study's findings show that bullying and coping with bullying are affected by factors other than weight. The male eighth graders and the children whose fathers' education levels were low were at risk of engaging in bullying. Fifth graders with low academic success and whose fathers' education levels were low were found to be at risk of coping with bullying. Nurses should take these factors into account when conducting risk screening and developing intervention programs for bullying and coping with bullying. The World Health Organization recommends INSPIRE strategies that it has developed based on evidence to prevent violence against children. Strategies for norms and values and strategies for parents and caregivers should be utilized (World Health Organization, 2016b). The norms and values of the society should be determined, and training programs should be developed.

Two findings are striking in this study: males are at risk of engaging in bullying, and paternal education is important in coping with bullying. Boys today are the fathers of the future, so emphasis should be placed on teaching them about gender equality, communication, problem solving and anger management. This can contribute to the prevention of all forms of violence, not just against bullying. Training programs for fathers should also be developed to prevent bullying. Finally, since school health nurses are not employed in schools in Turkey, establishing school health nursing will help nurses to reach and support children more readily.

Funding

This study has not been financed by any institution or organization.

CRediT authorship contribution statement

NU: Conceptualization, Data curation, Formal analysis, Methodology, Writing – original draft. **DE:** Methodology, Writing – original draft.

Declaration of competing interest

There are no conflicts of interest.

Acknowledgment

We would like to thank all school staff, children and their families.

References

Action Plan for Prevention of Childhood Obesity. (2019–2023). Retrieved from: https://hsgm.saglik.gov.tr/depo/birimler/saglikli-beslenme-hareketli-hayat-db/TSBHHP_2019-2023_Cocukluk_Cagi/Cocuk_Eylem_Plani_2019-_16.12.2019.pdf.

Aimé, A., LeBlanc, L., & Maïano, C. (2017). Is weight-related bullying addressed in school-based anti-bullying programs? *European Review of Applied Psychology, 67*(3), 163–169. https://doi.org/10.1016/j.erap.2017.02.001

Arısoy, A., & Taş, M. (2020). The effect of cultural dimensions on the attitude of home care services: A case of Burdur city. *Journal of Social Policy Conferences, 78*, 333–359. https://doi.org/10.26650/jspc.2019.78.004

Arslan, S., Hallett, V., Akkas, E., & Akkas, O. A. (2012). Bullying and victimization among Turkish children and adolescents: Examining prevalence and associated health symptoms. *European Journal of Pediatrics, 171*(10), 1549–1557. https://doi.org/10.1007/s00431-012-1782-9

Arslan, S., Savaser, S., & Yazgan, Y. (2011). Prevalence of peer bullying in high school students in turkey and the roles of socio-cultural and demographic factors in the bullying cycle. *Indian Journal of Pediatrics, 78*, 987–992. https://doi.org/10.1007/s12098-010-0350-4

Ashrafi, A., Feng, C. X., Neudorf, C., & Alphonsus, K. B. (2020). Bullying victimization among preadolescents in a community-based sample in Canada: A latent class analysis. *BMC Research Notes, 13*(1), 1–6. https://doi.org/10.1186/s13104-020-04989-4

Atik, G., & Güneri, O. Y. (2013). Bullying and victimization: predictive role of individual, parental, and academic factors. *School Psychology International, 34*(6), 658–673. https://doi.org/10.1177/0143034313479699

Avsar, F., & Alkaya, A. S. (2018). The role of school health nurses in the prevention of peer bullying. *Journal of Hacettepe University Faculty of Nursing, 5*(1), 78–84. https://doi.org/10.31125/hunhemsire.431134

Bacchini, D., Licenziati, M. R., Garrasi, A., Corciulo, N., Driul, D., Tanas, R., … Maltoni, G. (2015). Bullying and victimization in overweight and obese outpatient children and adolescents: An Italian multicentric study. *PLoS One, 10*(11), Article e0142715. https://doi.org/10.1371/journal.pone.0142715

Bedel, A., & Güler, G. (2020). The role of coping strategies in explaining middle school students' bullying and aggression. *Electronic Journal of Social Sciences, 19*(73), 105–121. https://doi.org/10.17755/esosder.447474

Bouffard, L. A., & Koeppel, M. D. (2017). Sex differences in the health risk behavior outcomes of childhood bullying victimization. *Victims & Offenders, 12*(4), 549–565. https://doi.org/10.1080/15564886.2015.1118420

Burnukara, P., & Ucanok, Z. (2012). Bullying in early and middle adolescence: Where does it take place and coping strategies. *Turkish Psychological Articles, 15*(29), 68–82.

Calıskan, Z., Evgin, D., Bayat, M., Caner, N., Kaplan, B., Oztürk, A., & Keklik, D. (2019). Peer bullying in the preadolescent stage: Frequency and types of bullying and the affecting factors. *Journal of Pediatric Research, 6*(3), 169–179. https://doi.org/10.4274/jpr.galenos.2018.26576

Callaghan, M., Kelly, C., & Molcho, M. (2015). Exploring traditional and cyberbullying among Irish adolescents. *International Journal of Public Health, 60*(2), 199–206. https://doi.org/10.1007/s00038-014-0638-7

Coskun, S., & Bebis, H. (2014). The effect of violence to the school health and nursing. *Cumhuriyet Nurs J, 3*, 15–23. https://dergipark.org.tr/tr/pub/cumunuj/issue/4320/57819.

Crystal, D., Watanabe, H., & Chen, R. (2000). Reactions to morphological deviance: A comparison of Japanese and American children and adolescents. *Social Development, 9*, 40–61. https://doi.org/10.1111/1467-9507.00110

Dereli, E., & Dereli, B. M. (2017). The prediction of parent-child relationship on psychosocial development in preschool children. *YYU Journal of Education Faculty, 14*(1), 227–258. https://doi.org/10.23891/efdyyu.2017.9

Dölek, N. (2002). *Researching Bullying Behavior of Student and a Model for a Prevention Program.* Doctoral dissertation. Marmara University. Theses and Dissertations Archive https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp.

European Congress on Obesity. (2018). Retrieved from: https://eco2018.easo.org/eco-highlights/. Retrieved date: 12.03.2019.

Farhat, T., Iannotti, R. J., & Simons-Morton, B. G. (2010). Overweight, obesity, youth, and health-risk behaviors. *American Journal of Preventive Medicine, 38*(3), 258–267. https://doi.org/10.1016/j.amepre.2009.10.038

Flouri, E., & Buchanan, A. (2003). The role of father involvement in children's later mental health. *Journal of Adolescence, 26*(1), 63–78. https://doi.org/10.1016/s0140-1971(02)00116-1

Galal, Y. S., Emadeldin, M., & Mwafy, M. A. (2019). Prevalence and correlates of bullying and victimization among school students in rural Egypt. *Journal of the Egyptian Public Health Association, 94*(1), 18. https://doi.org/10.1186/s42506-019-0019-4

Galitz, T., & Robert, D. (2014). Governing bullying through the new public health model: A foucaultian analysis of a school anti-bullying programme. *Critical Public Health, 24*, 182–195.

van Geel, M., Vedder, P., & Tanilon, J. (2014). Are overweight and obese youths more often bullied by their peers? A meta-analysis on the correlation between weight status and bullying. *International Journal of Obesity, 38*(10), 1263–1267. https://doi.org/10.1038/ijo.2014.117, 2005.

Global Gender Gap Report. (2020). Retrieved from: http://www3.weforum.org/docs/WEF_GGGR_2020.pdf. Retrieved date: 04.11.2020.

Goldbach, J. T., Sterzing, P. R., & Stuart, M. J. (2018). Challenging conventions of bullying thresholds: exploring differences between low and high levels of bully-only, victim-only, and bully-victim roles. *Journal of Youth and Adolescence, 47*(3), 586–600. https://doi.org/10.1007/s10964-017-0775-4

Gómez-Ortiz, O., Apolinario, C., Romera, E. M., & Ortega-Ruiz, R. (2019). The role of family in bullying and cyberbullying involvement: examining a new typology of parental education management based on adolescents' view of their parents. *Social Sciences, 8*, 25. https://doi.org/10.3390/socsci8010025

Griffiths, L. J., Wolke, D., Page, A. S., Horwood, J. P., & ALSPAC Study Team. (2006). Obesity and bullying: different effects for boys and girls. *Archives of Disease in Childhood, 91*(2), 121–125. https://doi.org/10.1136/adc.2005.072314

Guy, A., Lee, K., & Wolke, D. (2019). Comparisons between adolescent bullies, victims, and bully-victims on perceived popularity, social impact, and social preference. *Frontiers in Psychiatry, 10*, 868. https://doi.org/10.3389/fpsyt.2019.00868

Hemphill, S. A., Kotevski, A., Tollit, M., Smith, R., Herrenkohl, T. I., Toumbourou, J. W., & Catalano, R. F. (2012). Longitudinal predictors of cyber and traditional bullying perpetration in Australian secondary school students. *The Journal of Adolescent Health: Official Publication of The Society for Adolescent Medicine, 51*(1), 59–65. https://doi.org/10.1016/j.jadohealth.2011.11.019

Hemphill, S. A., Tollit, M., & Herrenkohl, T. I. (2014). Protective factors against the impact of school bullying perpetration and victimization on young adult externalizing and internalizing problems. *Journal of School Violence, 13*(1), 125–145. https://doi.org/10.1080/15388220.2013.844072

Himmelstein, M. S., & Puhl, R. M. (2019). Weight-based victimization from friends and family: Implications for how adolescents cope with weight stigma. *Pediatric Obesity, 14*(1). https://doi.org/10.1111/ijpo.12453

Hingle, M., & Kunkel, D. (2012). Childhood obesity and the media. *Pediatric Clinics of North America, 59*(3), 677–ix. https://doi.org/10.1016/j.pcl.2012.03.021

Hofstede, G. (2001), 1980 & 1984 &. *Culture's consequences: International differences in work related values*. Newbury Park: Sage Publications.

Hong, J. S., Peguero, A. A., & Espelage, D. L. (2018). Experiences in bullying and/or peer victimization of vulnerable, marginalized, and oppressed children and adolescents: An introduction to the special issue. *American Journal of Orthopsychiatry, 88*(4), 399. https://doi.org/10.1037/ort0000330

Iossi Silva, M. A., Pereira, B., Mendonça, D., Nunes, B., & de Oliveira, W. A. (2013). The involvement of girls and boys with bullying: an analysis of gender differences. *International Journal of Environmental Research and Public Health, 10*(12), 6820–6831. https://doi.org/10.3390/ijerph10126820

Jansen, P. W., Verlinden, M., Dommisse-van Berkel, A., Mieloo, C., van der Ende, J., Veenstra, R., … Tiemeier, H. (2012). Prevalence of bullying and victimization among children in early elementary school: Do family and school neighbourhood socioeconomic status matter? *BMC Public Health, 12*, 494. https://doi.org/10.1186/1471-2458-12-494

Jansen, P. W., Verlinden, M., Dommisse-van Berkel, A., Mieloo, C. L., Raat, H., Hofman, A., … Tiemeier, H. (2014). Teacher and peer reports of overweight and bullying among young primary school children. *Pediatrics, 134*(3), 473–480. https://doi.org/10.1542/peds.2013-3274

Janssen, I., Craig, W. M., Boyce, W. F., & Pickett, W. (2004). Associations between overweight and obesity with bullying behaviors in school-aged children. *Pediatrics, 113*(5), 1187–1194. https://doi.org/10.1542/peds.113.5.1187

Jeong, S., Davis, J., Rodriguez, J., & Han, Y. (2016). What makes them more vulnerable than others? obesity, negative emotions, and peer bullying victimization. *International Journal of Offender Therapy and Comparative Criminology, 60*(14), 1690–1705. https://doi.org/10.1177/0306624X15587906

Juvonen, J., & Graham, S. (2014). Bullying in schools: The power of bullies and the plight of victims. *Annual Review of Psychology, 65*, 159–185. https://doi.org/10.1146/annurev-psych-010213-115030

Kerr, D., & Gini, G. (2017). Prospective associations between peer teasing in childhood and young men's obesity. *Obesity Research & Clinical Practice, 11*(6), 640–646. https://doi.org/10.1016/j.orcp.2017.07.005

Kim, S. G., Yun, I., & Kim, J. H. (2016). Associations between body weight and bullying among South Korean adolescents. *The Journal of Early Adolescence, 36*(4), 551–574. https://doi.org/10.1177/0272431615577204

Kovalskys, I., Rausch Herscovici, C., Indart Rougier, P., Anez, E. V., Zonis, L. N., & Orellana, L. (2016). Childhood obesity and bullying in schools of Argentina: Analysis of this behaviour in a context of high prevalence. *Journal of Childhood Obesity, 1*(3), 1–9. https://doi.org/10.21767/2572-5394.100011

Koyanagi, A., Veronese, N., Vancampfort, D., Stickley, A., Jackson, S. E., Oh, H., … Smith, L. (2020). Association of bullying victimization with overweight and obesity among adolescents from 41 low- and middle-income countries. *Pediatric Obesity, 15*(1), Article e12571. https://doi.org/10.1111/ijpo.12571

Kukaswadia, A., Craig, W., Janssen, I., & Pickett, W. (2011). Obesity as a determinant of two forms of bullying in Ontario youth: A short report. *Obesity Facts, 4*(6), 469–472. https://doi.org/10.1159/000335215

Le, H., Tran, N., Campbell, M. A., Gatton, M. L., Nguyen, H. T., & Dunne, M. P. (2019). Mental health problems both precede and follow bullying among adolescents and the effects differ by gender: A cross-lagged panel analysis of school-based longitudinal data in Vietnam. *International Journal of Mental Health Systems, 13*, 35. https://doi.org/10.1186/s13033-019-0291-x

Lee, B., Jeong, S., & Roh, M. (2018). Association between body mass index and health outcomes among adolescents: The mediating role of traditional and cyber bullying victimization. *BMC Public Health, 18*(1), 674. https://doi.org/10.1186/s12889-018-5390-0

Lee, K., Guy, A., Dale, J., & Wolke, D. (2017). Does psychological functioning mediate the relationship between bullying involvement and weight loss preoccupation in adolescents? A two-stage cross-sectional study. *The International Journal of Behavioral Nutrition and Physical Activity, 14*(1), 38. https://doi.org/10.1186/s12966-017-0491-1

Lian, Q., Su, Q., Li, R., Elgar, F. J., Liu, Z., & Zheng, D. (2018). The association between chronic bullying victimization with weight status and body self-image: A cross-national study in 39 countries. *Peer J, 6*, e4330. https://doi.org/10.7717/peerj.4330

Liman, B. (2020). The effect of 66-77 months old preschool children's sex and parental education levels on emotion recognition and emotion regulation skills. *Turkish Journal of Social Research, 24*(1), 209–222.

Lin, C. Y. (2019). Weight stigma, coping strategies, and mental health among children with overweight. *Social Health and Behavior, 2*(4), 133. https://doi.org/10.4103/SHB.SHB_26_19

Liu, X., Chen, G., Yan, J., & Luo, J. (2016). Weight status and bullying behaviors among Chinese school-aged children. *Child Abuse & Neglect, 52*, 11–19. https://doi.org/10.1016/j.chiabu.2015.12.010

Marengo, D., Settanni, M., Prino, L. E., Parada, R. H., & Longobardi, C. (2019). Exploring the dimensional structure of bullying victimization among primary and lower-secondary school students: ıs one factor enough, or do we need more? *Frontiers in Psychology, 10*, 770. https://doi.org/10.3389/fpsyg.2019.00770

Mercan, H., & Yıldırım-Sarı, H. (2018). Peer bullying and relationship between sociodemographic characteristics of high school students. *Florence Nightingale Journal of Nursing, 26*(1), 21–29. https://doi.org/10.26650/FNJN.387176

Ministry of National Education. (2012). 12 Years Compulsory Education, Questions - Answers, Turkey. Retrieved from: http://www.meb.gov.tr/duyurular/duyurular2012/12Yil_Soru_Cevaplar.pdf?CHK=01402264464c3ac021307baed3a38ab1. Retrieved date: 01.11.2020.

Mohseny, M., Zamani, Z., Basti, S. A., Sohrabi, M. R., Najafi, A., Zebardast, J., & Tajdini, F. (2019). Bullying and victimization among students bears relationship with gender and emotional and behavioral problems. *Iranian Journal of Psychiatry, 14*(3), 211. PMCID: PMC6778606.

Moon, S. S., Kim, H., Seay, K., Small, E., & Kim, Y. K. (2016). Ecological factors of being bullied among adolescents: A classification and regression tree approach. *Child Indicators Research, 9*(3), 743–756. https://doi.org/10.1007/s12187-015-9343

Moore, S. E., Norman, R. E., Suetani, S., Thomas, H. J., Sly, P. D., & Scott, J. G. (2017). Consequences of bullying victimization in childhood and adolescence: A systematic review and meta-analysis. *World Journal of Psychiatry, 7*(1), 60–76. https://doi.org/10.5498/wjp.v7.i1.60

Morales, D. X., Prieto, N., Grineski, S. E., & Collins, T. W. (2019). Race/ethnicity, obesity, and the risk of being verbally bullied: a national multilevel study. *Journal of Racial and Ethnic Health Disparities, 6*(2), 245–253. https://doi.org/10.1007/s40615-018-0519-5

Neyzi, O., Günöz, H., Furman, A., Bundak, R., Gökcay, G., Darendeliler, F., & Bas, F. (2008). Weight, height, head circumference and body mass index references for Turkish children. *Turkish Journal of Pediatric Disease, 51*, 1–14.

de Oliveira, W. A., Silva, M. A., de Mello, F. C., Porto, D. L., Yoshinaga, A. C., & Malta, D. C. (2015). The causes of bullying: Results from the National Survey of School Health (PeNSE). *Revista Latino-Americana de Enfermagem, 23*(2), 275–282. https://doi.org/10.1590/0104-1169.0022.2552

Nkwake, A (2009). Maternal employment and fatherhood: What influences paternal involvement in child-care work in Uganda? *Gender&Development, 17*(2), 255–267. https://doi.org/10.1080/13552070903009726

Pervanidou, P., Makris, G., Bouzios, I., Chrousos, G., Roma, E., & Chouliaras, G. (2019). Bullying victimization: Associated contextual factors in a Greek sample of children and adolescents. *Psychiatrike=Psychiatriki, 30*(3), 216–225. https://doi.org/10.22365/jpsych.2019.303.216

Plexousakis, S. S., Kourkoutas, E., Giovazolias, T., Chatira, K., & Nikolopoulos, D. (2019). School bullying and post-traumatic stress disorder symptoms: The role of parental bonding. *Frontiers in Public Health, 7*, 75. https://doi.org/10.3389/fpubh.2019.00075

Programme for International Student Assessment (PISA). (2018). Retrieved from: https://www.oecd.org/pisa/PISA%202018%20Insights%20and%20Interpretations%20FINAL%20PDF.pdf. Retrieved date: 15.06.2020.

Puhl, R. M., & Luedicke, J. (2012). Weight-based victimization among adolescents in the school setting: Emotional reactions and coping behaviors. *Journal of Youth and Adolescence, 41*(1), 27–40. https://doi.org/10.1007/s10964-011-9713-z

Puhl, R. M., Wall, M. M., Chen, C., Bryn Austin, S., Eisenberg, M. E., & Neumark-Sztainer, D. (2017). Experiences of weight teasing in adolescence and weight-related outcomes in adulthood: A 15-year longitudinal study. *Preventive Medicine, 100*, 173–179. https://doi.org/10.1016/j.ypmed.2017.04.023

Rigby, K., & Johnson, K. (2016). *The prevalence and effectiveness of anti-bullying strategies employed in Australian schools*. Adelaide: University of South Australia. Retrieved from: https://www.unisa.edu.au/siteassets/episerver-6-files/global/eass/eds/184856-anti-bullying-report-final-3large.pdf. Retrieved date: 16.06.2020.

Rupp, K., & McCoy, S. M. (2019). Bullying perpetration and victimization among adolescents with overweight and obesity in a nationally representative sample. *Childhood Obesity, 15*(5), 323–330. https://doi.org/10.1089/chi.2018.0233

Salmon, S., Turner, S., Taillieu, T., Fortier, J., & Afifi, T. O. (2018). Bullying victimization experiences among middle and high school adolescents: Traditional bullying, discriminatory harassment, and cybervictimization. *Journal of Adolescence, 63*, 29–40. https://doi.org/10.1016/j.adolescence.2017.12.005

Sampasa-Kanyinga, H., Chaput, J. P., Hamilton, H. A., & Larouche, R. (2016). School bus travel is associated with bullying victimization among Canadian male, but not female, middle and high school students. *Child Abuse & Neglect, 58*, 141–148. https://doi.org/10.1016/j.chiabu.2016.06.021

Sarıısık, Y., & Duskun, Y. (2016). Life at school through children's eyes research report. *Imak Ofset*, 22–62. Istanbul, Retrived from: http://www.egitimreformugirisimi.org/wp-content/uploads/2017/03/ERG.TEGV_.%C3%87GOY.Ara%C5%9Ft%C4%B1rmaRaporu.09.08.16.pdf. Retrieved date: 03.05.2020.

Seo, H. J., Jung, Y. E., Kim, M. D., & Bahk, W. M. (2017). Factors associated with bullying victimization among Korean adolescents. *Neuropsychiatric Disease and Treatment, 13*, 2429–2435. https://doi.org/10.2147/NDT.S140535

Shaheen, A. M., Hammad, S., Haourani, E. M., & Nassar, O. S. (2018). Factors affecting jordanian school adolescents' experience of being bullied. *Journal of Pediatric Nursing, 38*, e66–e71. https://doi.org/10.1016/j.pedn.2017.09.003

Smith, P. K., López-Castro, L., Robinson, S., & Görzig, A. (2019). Consistency of gender differences in bullying in cross-cultural surveys. *Aggression and Violent Behavior, 45*, 33–40. https://doi.org/10.1016/j.avb.2018.04.006

https://www.ayk.gov.tr/wp-content/uploads/2015/01/TEZEL-%C5%9EAH%C4%B0N-Fatma-CEVHER-Fatma-Nilg%C3%BCn-T%C3%9CRK-TOPLUMUNDA-A%C4%B0LE-%C3%87OCUK-%C4%B0L%C4%B0%C5%9EK%C4%B0LER%C4%B0NE-GENEL-B%C4%B0R-BAKI%C5%9E.pdf.

Thomas, H. J., Connor, J. P., Lawrence, D. M., Hafekost, J. M., Zubrick, S. R., & Scott, J. G. (2017). Prevalence and correlates of bullying victimisation and perpetration in a nationally representative sample of Australian youth. *The Australian and New Zealand Journal of Psychiatry, 51*(9), 909–920. https://doi.org/10.1177/0004867417707819

Turkish Endocrinology and Metabolism Association (Turkish Endocrinology and Metabolism Association (TEMA)). (2018). Retrieved date: 25.02.2020. Retrieved from: http://temd.org.tr/admin/uploads/tbl_kilavuz/OBEZITE2017_web.pdf.

Turner, S., Taillieu, T., Fortier, J., Salmon, S., Cheung, K., & Afifi, T. O. (2018). Bullying victimization and illicit drug use among students in Grades 7 to 12 in Manitoba, Canada: A cross-sectional analysis. *Canadian Journal of Public Health, 109*(2), 183–194. https://doi.org/10.17269/s41997-018-0030-0

Waasdorp, T. E., Mehari, K., & Bradshaw, C. P. (2018). Obese and overweight youth: Risk for experiencing bullying victimization and internalizing symptoms. *The American Journal of Orthopsychiatry, 88*(4), 483–491. https://doi.org/10.1037/ort0000294

Waasdorp, T. E., Mehari, K. R., Milam, A. J., & Bradshaw, C. P. (2019). Health-related risks for involvement in bullying among middle and high school youth. *Journal of Child and Family Studies, 28*(9), 2606–2617. https://doi.org/10.1007/s10826-018-1260-8

Wang, J., Iannotti, R. J., & Luk, J. W. (2010). Bullying victimization among underweight and overweight U.S. youth: Differential associations for boys and girls. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine, 47*(1), 99–101. https://doi.org/10.1016/j.jadohealth.2009.12.007

Wolke, D., & Lereya, S. T. (2015). Long-term effects of bullying. *Archives of Disease in Childhood, 100*(9), 879–885. https://doi.org/10.1136/archdischild-2014-306667

World Health Organization. (2016a). *Report of the commission on ending childhood obesity*. Geneva, Switzerland: World Health Organization (WHO). Retrieved date: 13.10.2020. Retrieved from: https://www.who.int/end-childhood-obesity/en/ (Accessed date: 13.10.2020).

World Health Organization. (2016b). INSPIRE. In *Seven Strategies for Ending Violence Against Children*. Retrieved from: https://www.who.int/publications/i/item/inspire-seven-strategies-for-ending-violence-against-children. Retrieved date: 13.10.2020.

Yang, S. J., Stewart, R., Kim, J. M., Kim, S. W., Shin, I. S., Dewey, M. E., … Yoon, J. S. (2013). Differences in predictors of traditional and cyber-bullying: a 2-year longitudinal study in Korean school children. *European Child & Adolescent Psychiatry, 22*(5), 309–318. https://doi.org/10.1007/s00787-012-0374-6

Zhang, A., Musu-Gillette, L., & Oudekerk, B. A. (2016). *Indicators of school crime and safety: 2015 (NCES 2016-079/NCJ 249758)*. Washington, DC: National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice.

Zych, I., Ortega-Ruiz, R., & Del Rey, R. (2015). Systematic review of theoretical studies on bullying and cyberbullying: Facts, knowledge, prevention, and intervention. *Aggression and Violent Behavior, 23*, 1–21. https://doi.org/10.1016/j.avb.2015.10.001