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Major Depressive Episode among Adolescents: A National Study Examining the Impact of Parenting Behaviors

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Abstract

Major depressive episode (MDE) among adolescents is a significant public health issue. Approximately, 4.5 million adolescents have experienced an MDE in the past year. This study examined whether MDEs among adolescents differed based on specific parenting behaviors. A national sample of adolescents ages 12 to 17 years ($n = 11,572$) completed the 2023 National Survey of Drug use and Health. Univariate and multivariable logistic regression analyses were conducted to determine whether lifetime and past year MDE differed based on parenting behaviors. Results indicated that adolescents at highest risk for both lifetime and past-year MDE were female, older (14-15 or 16-17-years-old), and white. Regarding parenting behaviors, adolescents at highest risk for lifetime and past-year MDE were those who had parents never/seldom check their homework, never/seldom help with their homework, never/seldom limit the amount of TV, never/seldom tell them they did a good job, never/seldom tell them they were proud of them, and who argued/fought with them ten or more times in the past year. These findings show the intricate relationship between adolescent MDE and parenting behaviors. Public health educators should encourage parents to engage in authoritative parenting behaviors (defined as high levels of parental support, warmth, and clear expectations) to help prevent MDE among adolescents. Findings should be used to assist program developers in incorporating parenting components in MDE prevention and treatment efforts.

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Abstract

Major depressive episode (MDE) among adolescents is a significant public health issue. Approximately, 4.5 million adolescents have experienced an MDE in the past year. This study examined whether MDEs among adolescents differed based on specific parenting behaviors. A national sample of adolescents aged 12 to 17 years ($n = 11,572$) completed the 2023 National Survey of Drug Use and Health. Univariate and multivariable logistic regression analyses were conducted to determine whether lifetime and past year MDE differed based on parenting behaviors. Results indicated that adolescents at highest risk for both lifetime and past-year MDE were female, older (14-15 or 16-17-years-old), and white. Regarding parenting behaviors, adolescents at highest risk for lifetime and past-year MDE were those who had parents never/seldom check their homework, never/seldom help with their homework, never/seldom limit the amount of TV, never/seldom tell them they did a good job, never/seldom tell them they were proud of them, and who argued/fought with them 10 or more times in the past year. These findings show the intricate relationship between adolescent MDE and parenting behaviors. Public health educators should encourage parents to engage in authoritative parenting behaviors (defined as high levels of parental support, warmth, and clear expectations) to help prevent MDE among adolescents. Findings should be used to assist program developers in incorporating parenting components in MDE prevention and treatment efforts.

Keywords: major depressive episode, depression, adolescent, parenting

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Introduction

Major depressive episode (MDE) is a significant public health issue that deleteriously impacts many individuals throughout the U.S. MDE is based on diagnostic criteria from the DSM-5 which requires an individual to display at least five out of the following nine key symptoms for a period of two consecutive weeks: persistent sadness, loss of interest in daily activities, noticeable changes in weight or appetite, sleep disturbances (insomnia or hypersomnia), restlessness or slowed

movements, ongoing fatigue, excessive feelings of guilt or worthlessness, difficulty concentrating or making decisions, and recurring thoughts of death or suicide (American Psychiatric Association, 2013).

An estimated 21 million adults have experienced at least one MDE in their lifetime (National Institute of Mental Health, 2025). Greater than 50% of individuals who have had one MDE will have another within five years (Moriarty et al., 2022). Eaton et al. (2008) emphasizes that MDE is often recurrent and long-term, leading to significant disability and daily functioning

challenges. Globally, depression is a leading cause of disability and one of the top contributors to disease burden worldwide (World Health Organization, 2023).

Among adolescents aged 12 to 17, 20.9% (or 5.1 million people) have had an MDE in their lifetime (Bitsko, 2022) and 18.1% (or 4.5 million people) have had an MDE in the past year (Substance Abuse and Mental Health Services Administration [SAMHSA], 2024). In addition, an estimated 13.5% of adolescents aged 12 to 17 (or 3.4 million people) in 2023 had a past year MDE with severe impairment (Substance Abuse and Mental Health Services Administration [SAMHSA], 2024). The prevalence of adolescent depression has nearly doubled in the past decade, increasing from 8.1% in 2009 to 15.8% in 2019 (Wilson & Dumornay, 2022).

Some groups are more frequently affected by MDE than others. Female adolescents, Hispanic youth, and those of multiple racial backgrounds report higher rates of MDE, while African American adolescents tend to have lower rates (Fox & Hanes, 2023). Gender differences are particularly evident, with adolescent girls consistently reporting higher levels of depressive symptoms than boys (Malinauskiene & Malinauskas, 2021). In fact, females are nearly twice as likely as males to experience depression by late adolescence (Nolen-Hoeksema, 2001). Age also plays a role, with reproductive status and developmental stage influencing how depressive symptoms present (Brandon et al., 2013).

MDE in adolescence is associated with several concerning health issues. Early onset MDE significantly increases the risk of developing anxiety disorders, chronic depression, and substance use disorders in adulthood (Pelham et al., 2022). Many adolescents with MDE also experience co-occurring conditions such as PTSD or alcohol and drug misuse (Adams et al.,

2015). The link between MDE and suicide is particularly alarming. Adolescents diagnosed with MDE are at higher risk for suicidal thoughts and behaviors (Topalian et al., 2019; Ziobrowski et al., 2021). External factors, such as harmful alcohol use, further contribute to worsening depressive symptoms and risk-taking behaviors (Lima et al., 2020).

Parental influence plays a key role in adolescent mental health. Parenting behaviors which lack emotional support and exhibit low parental warmth significantly contribute to adolescent depressive symptoms (Brito et al., 2015). Research shows that negative parenting approaches, family-related stress and dysfunction, and poor parent mental health are among the strongest predictors of adolescent depression (Piechaczek et al., 2020; Urbańska-Grosz et al., 2024). High levels of parent-child conflict are associated with increased depression risk (Griffith et al., 2019). Conversely, parents spending quality time with youth and lending positive support have been linked to lower depressive symptoms (Manczak et al., 2019). In fact, interventions focusing on positive parenting practices have shown success in reducing depressive symptoms in both adolescents and parents (Husain et al., 2025).

Despite some existing research on depression and family factors, significant gaps remain, specifically with understanding how parenting behaviors impact adolescent MDE risk. The relationship between parenting behaviors and adolescent MDE across diverse populations needs further study (Pelham et al., 2022). More research is needed to explore how parent-adolescent relationships influence mental health (Kiuru et al., 2020). Roviš and colleagues (2021) stress the importance of understanding how positive parenting strategies can act as protective factors against depression. While MDE is often thought of as an adult disorder, evidence suggests that its roots frequently lie

in adolescence, underscoring the need for early identification and prevention strategies (King et al., 2015). Given the importance of more thoroughly understanding the relationship between adolescent MDE and parenting behaviors, this study was undertaken to examine the following questions:

1) Do adolescent lifetime and past-year MDE differ based on selected parenting behaviors?

2) What percent of the variance in lifetime and past-year MDE among adolescents is accounted for by sex, age, race, and parenting behaviors?

Methods

Participants

A national sample of adolescents aged 12 to 17 years ($n = 11,572$) who completed the 2023 National Survey on Drug Use and Health (NSDUH) served as the participants of the present study. The full 2023 NSDUH study included 14,305 interviews from adolescents aged 12-17. All participation was completely voluntary. If a child or parent elected not to participate, then they were not included in the study.

Instrument

The present study analyzed three sections of the 2023 NSDUH: 1) Personal/family information/demographics, 2) Youth major depressive episode, and 3) Parenting behaviors. Demographics included sex, age, and race/ethnicity. Detailed information regarding the MDE and parenting behavior sections are provided below. Missing variables were imputed to replace missing values with non-missing values using imputation-revised or logically assigned procedures by SAMHSA. For the imputation-revised variables, the levels within the variables were limited to the valid responses. Logically assigned values

corresponding to valid responses were converted to that associated valid response in the imputation-revised variable.

Major Depressive Episode

Lifetime and past-year MDE were assessed. Participants were classified as having had an MDE in their lifetime if they had ever experienced five or more of nine symptoms for MDE in a two-week period, in which at least one of the symptoms was a depressed mood or loss of interest or pleasure in daily activities (Substance Abuse and Mental Health Services Administration [SAMHSA], 2024). The nine criteria included: (1) having ever had several days in which the individual felt sad, empty, or depressed; (2) having ever had part of the time when the participant felt discouraged or helpless; (3) having ever had loss of interest in enjoyable things; (4) having ever had a depressive period of time that lasted for two weeks or longer; (5) having ever felt totally worthless every day; (6) having a mood so severe that they could not do daily activities; (7) having ever had problems with sleep, eating, energy, ability to keep their mind on things, and feeling badly about themselves; (8) having ever had a time when sad or depressed feelings lasted every day for two weeks or longer; and (9) the score from their symptom indicator was taken in order to examine MDE risk. Participants were classified as having had an MDE in the past year if they met the same criteria as that for a lifetime MDE, but within the past 12 months.

Parenting Behaviors

Participants were requested to report how frequently in the past 12 months their parents engaged in eight parenting behaviors by using a four-point scale (1= always, 2= sometimes, 3= seldom, 4= never). Parenting behaviors included: (1) checked if their child had done their homework, (2) helped their child with homework, (3) made their child do

chores or work, (4) limited the amount of TV that the child was able to watch, (5) limited the amount of time their child spent out with friends, (6) let their child know that they had done a good job, (7) told their child that they were proud of them, and (8) number of times they fought/argued with their child in the past 12 months. Responses were subsequently dichotomized (0 = always/sometimes, 1 = never/seldom) to allow for univariate and multivariable logistic regression analyses to be conducted.

Procedures

Data from the 2023 NSDUH was secondarily analyzed for this study. The Substance Abuse and Mental Health Services Administration (SAMHSA) administers and manages the NSDUH to collect nationally representative data on the use of alcohol, tobacco, and other drugs; substance use disorders, mental health issues, and substance use and mental health treatment among US civilians aged 12 years or older. Samples for the NSDUH were based on national data and were proportional to the general population. Parents/guardians granted permission and informed consent for adolescents to participate in the study. Participants were informed of the voluntary and confidential nature of the study and received a monetary incentive for participation. A more detailed description of the sampling methods and data collection procedures can be obtained via the Substance Abuse and Mental Health Services Administration [SAMHSA] (2024) annual report. The authors' Institutional Review Board approved the present study.

Data Analyses

Data was analyzed using SPSS (Version 23.0). Descriptive statistics, including frequencies and valid percentages, were computed for sex, age, race/ethnicity, MDE, and parent behaviors. Variables were dichotomized to allow for logistic regression

analyses. Univariate logistic regression analyses were performed to compute unadjusted odds ratios and assess whether lifetime and past-year MDEs differed based on demographic and parenting variables. Variables that were significant in the univariate analyses were retained and entered into the final multivariable logistic regression. Multivariable logistic regression analyses were performed to compute adjusted odds ratios and determine whether the final model significantly predicted lifetime and past-year MDE. The alpha level was set at $p < .05$. The estimates yielded by NSDUH were based on sample survey data rather than on complete data for the entire population, which means the data was weighted to obtain unbiased estimates for survey outcomes in the population. The final analysis weight was interpreted as the number of sampling units in the NSDUH target population represented by respondents. The sum of the weights over all respondents was used to estimate the size of the total target population. In the subsampling step, a subsample was selected based on the probabilities obtained from the subsampling step for each record. The Chromy sampling method was used to sequentially draw a random subsample within each stratum. A detailed explanation of the sampling and stratification procedures used is available from the SAMHSA (2024) annual report.

Results

Adolescents aged 12 to 17 years ($n = 11,572$) participated in the study. Sex of adolescents was closely divided between male (51.6%) and female (48.4%). Age was trichotomized: 12 to 13 years old (31.5%), 14 to 15 years old (35.1%), and 16 to 17 years old (33.3%). Concerning race/ethnicity, 51.9% were white, 32.5% were Hispanic, and 15.6% were African American.

MDE based on Sex, Age, and Race/Ethnicity

MDE differed significantly based on sex, age, and race/ethnicity. Females were significantly more likely than males to have experienced lifetime MDE (OR = 3.341, 95% CI [2.993, 3.730], $p < .001$) and past-year MDE (OR = 3.328, 95% CI [2.935, 3.744], $p < .001$) (Table 1). Compared to 12- to 13-year-olds, 14- to 15-year-olds were significantly more likely to have experienced MDE in their lifetime (OR = 1.420, 95% CI [1.236, 1.631], $p < .001$) and within the past year (OR = 1.383, 95% CI [1.184, 1.616], $p < .001$). Similarly, 16- to 17-year-olds were significantly more likely than 12- to 13-year-olds to have experienced MDE in their lifetime (OR = 1.869, 95% CI [1.627, 2.148], $p < .001$) and within the past year (OR = 1.672, 95% CI [1.432, 1.953], $p < .001$). African American adolescents were significantly less likely than white adolescents to have experienced MDE in their lifetime (OR = .658, 95% CI [.555, .780], $p < .001$) and within the past year (OR = .706, 95% CI [.584, .854], $p < .001$). Hispanic adolescents and white adolescents did not significantly differ in lifetime or past year MDE.

MDE based on Parenting Behaviors

Univariate logistic regression analyses revealed that adolescents at highest risk for lifetime MDE were those who reported that their parents never/seldom: checked if they had done their homework, helped them with homework, made them do chores or work, limited the amount of TV they watched, let them know that they had done a good job, told them that they were proud of them, and fought/argued with them nine or fewer times in the past 12 months (Table 2). Adolescents at highest risk for past-year MDE were those who reported that their parents never/seldom: checked if they had done their homework, helped them with homework, limited the

amount of TV they watched, let them know that they had done a good job, told them that they were proud of them, and fought/argued with them nine or fewer times in the past 12 months (Table 2). Variables that were significant in these analyses were included in the final multivariable logistic regression.

Final Multivariable Logistic Regression Model for MDE

Multivariable logistic regression analyses were conducted for lifetime and past-year MDE based on sex, age, race/ethnicity, and parenting behaviors. The final model significantly predicted lifetime MDE (omnibus $\chi^2 = 1496.338$, $df = 12$, $p < .001$) and accounted for 16.3% to 23.6% of the variance in lifetime MDE (Table 3). Variables significant in the final lifetime MDE model were sex, age, race/ethnicity, parents check homework, parents help with homework, parents limit the amount of TV, parents let adolescent know that they had done a good job, parents tell adolescent that they were proud of them, and number of times parents-adolescent fought/argued in the past 12 months. The final model also significantly predicted past-year MDE (omnibus $\chi^2 = 1,173.336$, $df = 12$, $p < .001$) and accounted for 13.2% to 20.8% of the variance in past-year MDE (Table 4). Variables significant in the final past-year MDE model were sex, age, race/ethnicity, parents check homework, parents help with homework, parents limit the amount of TV, parents let adolescent know that they had done a good job, parents tell adolescent that they were proud of them, and number of times parents-adolescent fought/argued in the past 12 months.

Table 1*Unadjusted Odds Ratios for Adolescent Major Depressive Episode (MDE) based on Demographics*

Variable	Major Depressive Episode (lifetime)					Major Depressive Episode (past 12 months)				
	No <i>n</i> (%)	Yes <i>n</i> (%)	OR	(95% CI)	<i>p</i>	No <i>n</i> (%)	Yes <i>n</i> (%)	OR	(95% CI)	<i>p</i>
Sex										
Male ^a	4923 (85.4)	842 (14.6)	1.000			5198 (90.6)	541 (9.4)	1.000		
Female	3327 (61.6)	2072 (38.4)	3.341	(2.993, 3.730)	< .001	3795 (71.2)	1534 (28.8)	3.328	(2.935, 3.744)	< .001
Age										
12-13 years old ^a	2823 (81.8)	626 (18.2)	1.000			2972 (87.0)	443 (13.0)	1.000		
14-15 years old	2893 (73.2)	1061 (26.8)	1.420	(1.236, 1.631)	< .001	3151 (80.4)	767 (19.6)	1.383	(1.184, 1.616)	< .001
16-17 years old	2534 (67.4)	1227 (32.6)	1.869	(1.627, 2.148)	< .001	2870 (76.8)	865 (23.2)	1.672	(1.432, 1.953)	< .001
Race										
White ^a	3529 (72.4)	1344 (27.6)	1.000			3863 (79.9)	971 (20.1)	1.000		
African American	1175 (81.3)	271 (18.7)	0.658	(0.555, 0.780)	< .001	1241 (86.5)	193 (13.5)	0.706	(0.584, 0.854)	< .001
Hispanic	2158 (72.1)	836 (27.9)	0.985	(0.875, 1.109)		2395 (80.9)	567 (19.1)	0.919	(0.806, 1.049)	

Note. *N* = 11,572; ^a indicates referent; % refers to valid percent.

Table 2*Unadjusted Odds Ratios for Adolescent Major Depressive Episode (MDE) based on Parenting Behaviors*

Variable	Major Depressive Episode (lifetime)					Major Depressive Episode (past 12 months)				
	No n (%)	Yes n (%)	OR	(95% CI)	p	No n (%)	Yes n (%)	OR	(95% CI)	p
Parents check if homework is done										
Always/sometimes ^a	6148 (76.0)	1946 (24.0)	1.000			6659 (82.9)	1369 (17.1)	1.000		
Never/seldom	1247 (58.9)	871 (41.1)	2.207	(1.996, 2.440)	< .001	1456 (69.6)	637 (30.4)	2.128	(1.907, 2.375)	< .001
Parents help with homework										
Always/sometimes ^a	6093 (76.7)	1849 (23.3)	1.000			6584 (83.5)	1300 (16.5)	1.000		
Never/seldom	1307 (57.7)	959 (42.3)	2.418	(2.192, 2.668)	< .001	1533 (68.6)	702 (31.4)	2.319	(2.083, 2.582)	< .001
Parents make youth do chores										
Always/sometimes ^a	7140 (74.3)	2472 (25.7)	1.000			7785 (81.6)	1753 (18.4)	1.000		
Never/seldom	1038 (70.4)	437 (29.6)	1.216	(1.078, 1.372)	< .001	1136 (78.0)	321 (22.0)	1.255	(1.097, 1.435)	.116
Parents limit amount of TV										
Always/sometimes ^a	3154 (81.5)	715 (18.5)	1.000			3315 (86.2)	529 (13.8)	1.000		
Never/seldom	5012 (69.6)	2188 (30.4)	1.926	(1.750, 2.119)	< .001	5591 (78.4)	1540 (21.6)	1.726	(1.550, 1.922)	< .001
Parents limit time out on a school night										
Always/sometimes ^a	4247 (73.0)	1574 (27.0)	1.000			4623 (80.1)	1145 (19.9)	1.000		
Never/seldom	3030 (71.5)	1210 (28.5)	1.078	(0.986, 1.177)	.097	3366 (80.0)	841 (20.0)	1.009	(0.913, 1.114)	.863

Parents let you know you
did a good job

Always/sometimes ^a	7108 (78.2)	1981 (21.8)	1.000			7658 (84.8)	1371 (15.2)	1.000		
Never/seldom	1062 (53.5)	923 (46.5)	3.118	(2.818, 3.451)	< .001	1252 (64.1)	702 (35.9)	3.132	(2.809, 3.492)	< .001

Parents tell you they are
proud of you

Always/sometimes ^a	6997 (78.8)	1878 (21.2)	1.000			7517 (85.3)	1300 (14.7)	1.000		
Never/seldom	1168 (53.3)	1025 (46.7)	3.270	(2.964, 3.607)	< .001	1389 (64.3)	771 (35.7)	3.210	(2.887, 3.568)	< .001

Number of times
argued/fought with parents
in past year

0-9 ^a	6975 (78.3)	1931 (21.7)	1.000			7543 (85.2)	1307 (14.8)	1.000		
10 or more	1126 (54.3)	948 (45.7)	3.041	(2.752, 3.361)	< .001	1295 (63.3)	750 (36.7)	3.342	(3.002, 3.721)	< .001

Note. *N* = 11,572; ^a indicates referent; % refers to valid percent.

Table 3

Final Multiple Logistic Regression Model for Adolescent Major Depressive Episode (lifetime) based on Demographic and Parenting Behaviors

Variable	Major Depressive Episode (lifetime)			
	B	SE	AOR	(95% CI)
Sex (Female)	1.206	0.056	3.341	(2.993, 3.730)***
Age (15-16 years old)	0.351	0.071	1.420	(1.236, 1.631)***
Age (17-18 years old)	0.626	0.071	1.869	(1.627, 2.148)***
Race (African American)	-0.418	0.087	0.658	(0.555, 0.780)***
Race (Hispanic)	-0.015	0.061	0.985	(0.875, 1.109)
Parents check homework (Never/seldom)	0.232	0.069	1.261	(1.101, 1.444)***
Parents help with homework (Never/seldom)	0.323	0.071	1.381	(1.201, 1.588)***
Parents make youth do chores (Never/seldom)	0.034	0.081	1.034	(0.882, 1.213)
Parents limit amount of TV (Never/seldom)	0.417	0.062	1.518	(1.345, 1.713)***
Parents let you know you did a good job (Never/seldom)	0.372	0.092	1.451	(1.210, 1.739)***
Parents tell you they are proud of you (Never/seldom)	0.550	0.088	1.733	(1.459, 2.058)***
Number of times argued/fought with parents in past year (10 or more)	0.754	0.064	2.125	(1.873, 2.410)***

Note. $N = 11,572$; *** $p < .001$. Referents were: sex (male); race (white); age (12-13 years old); parenting behaviors (always/sometimes). The model significantly predicted adolescent major depressive episode (lifetime) (omnibus $X^2 = 1,496.338$, $df = 12$, $p < .001$) and accounted for 16.3% to 23.6% of the variance in adolescent major depressive episode (lifetime).

Table 4

Final Multiple Logistic Regression Model for Adolescent Major Depressive Episode (past 12 months) based on Demographic and Parenting Behaviors

Variable	Major Depressive Episode (lifetime)			
	B	SE	AOR	(95% CI)
Sex (Female)	1.202	0.064	3.328	(2.935, 3.774)***
Age (15-16 years old)	0.324	0.079	1.383	(1.184, 1.616)***
Age (17-18 years old)	0.514	0.079	1.672	(1.432, 1.953)***
Race (African American)	-0.348	0.097	0.706	(0.584, 0.854)***
Race (Hispanic)	-0.084	0.067	0.919	(0.806, 1.049)
Parents check homework (Never/seldom)	0.231	0.075	1.260	(1.088, 1.459)**
Parents help with homework (Never/seldom)	0.272	0.078	1.313	(1.128, 1.528)***
Parents make youth do chores (Never/seldom)	0.097	0.088	1.102	(0.927, 1.309)
Parents limit amount of TV (Never/seldom)	0.301	0.069	1.351	(1.180, 1.547)***
Parents let you know you did a good job (Never/seldom)	0.385	0.099	1.470	(1.210, 1.787)***
Parents tell you they are proud of you (Never/seldom)	0.485	0.095	1.624	(1.347, 1.958)***
Number of times argued/fought with parents in past year (10 or more)	0.827	0.068	2.287	(2.002, 2.612)***

Note. $N = 11,572$; ** $p < .05$; *** $p < .001$. Referents were: sex (male); race (white); age (12-13 years old); parenting behaviors (always/sometimes). The model significantly predicted adolescent major depressive episode (past 12 months) (omnibus $X^2 = 1,173.336$, $df = 12$, $p < .001$) and accounted for 13.2% to 20.8% of the variance in adolescent major depressive episode (past 12 months).

Discussion

The present study revealed that females were three times more likely than males to have experienced lifetime and past-year MDE. Differences between females and males have been consistently reported regarding adolescent depression. Findings from the 2023 Youth Risk Behavior Survey revealed that female adolescents were twice as likely as male adolescents to feel persistently sad or hopeless (53% and 28%, respectively) (Centers for Disease Control and Prevention [CDC], 2024b). Even more concerning is the fact that the percent of female adolescents feeling sad or hopeless has consistently increased in the past decade (Centers for Disease Control and Prevention [CDC], 2024b). Researchers have offered several possible reasons for females having higher rates of MDE than males, including genetic and environmental variations (Hamilton et al., 2020), hormonal distinctions (Kuehner, 2017), differences in emotion regulation and rumination (Nolen-Hoeksema, 2012), social expectations, and social expectations and comparisons (Fardouly et al., 2015; Sampasa-Kanyinga et al., 2016). In light of such differences, targeted approaches to combat MDE among female adolescents are needed.

Older adolescents (14-15 and 16-17) were more likely than younger adolescents (12-13) to have experienced lifetime and past-year MDE. This finding is consistent with previous research which shows that older adolescents are at higher risk than younger adolescents for depression (Costello et al., 2003). Increased age may play a role due to how developmental stage and reproductive status influences the display of depressive symptoms (Brandon et al., 2013). In addition, older adolescents have had more opportunities to experience traumatic events which are linked to MDE (Opara et al., 2021).

African American adolescents were significantly less likely than white adolescents to have experienced lifetime and past-year MDE. Previous research has revealed similar results (Flores et al., 2023). Reasons for such differences are complex and multifactorial. Recently, researchers have recommended moving away from identifying disparities and instead identifying equity comparisons based on race/ethnicity (Gaskin, 2021). In fact, according to Healthy People 2030, adolescents of all races and ethnicities fall below the established goal for mental health treatment for adolescent depression (Office of Disease Prevention and Health Promotion, 2020).

Regarding parenting behaviors, adolescents who had parents who never/seldom check or help with their homework were at elevated risk for lifetime and past-year MDE. Research has shown that authoritative parenting, that which involves high levels of emotional responsiveness and demandingness, tends to serve as a protective factor against adolescent risky behaviors (Bowers et al., 2014; Demuth & Brown, 2004; King et al., 2015). Research has shown that parents frequently checking homework tends to protect against adolescent suicide (Cheng et al., 2016; King et al., 2018). By checking and helping with homework, parents are displaying key components of authoritative parenting. Checking homework establishes clear expectations for academic achievement, while helping with homework involves parents showing support, care, and emotional investment in their child. Spending time helping adolescents to complete academic projects may increase adolescent self-esteem, self-worth, and self-confidence while subsequently resulting in decreased MDE. The key point is parental quality time being spent with the child, which is associated with reduced depression (Manczak et al., 2019).

In the present study, adolescents whose parents never/seldom limited their TV time were significantly more likely to experience both lifetime and past-year MDE. Extensive screen time may contribute to elevated emotional distress during adolescence. Previous research has shown that screen time was positively correlated with depression severity (Maras et al., 2015). Primack et al. (2009) found that each additional hour of TV viewing predicted an increase in the odds of adolescent depression (Boers et al., 2019). Adolescents who view four or more hours of daily screen time have nearly 2 ½ times more depressive symptoms than those who view less than four hours (Centers for Disease Control and Prevention [CDC], 2024a). Findings from the present study suggest that parental behavior, specifically the absence of screen regulation, may play a critical role. Similarly, Padilla-Walker et al. (2012) observed that when parents were more involved in monitoring media use, their adolescents experienced fewer internalizing symptoms. Findings support the view that screen management is not simply about time, but about active parenting. Helping families establish boundaries around screen use may offer a practical, low-cost strategy to reduce adolescent MDE.

The present study also found that adolescents who rarely received praise or verbal encouragement from their parents were more likely to report lifetime and past-year MDE. These findings support the protective role of parental warmth and validation. Adolescents who have parents who engage in authoritative parenting tend to be involved in healthy behaviors (Bowers et al., 2014). Jiang et al. (2024) found that parental praise significantly predicted lower depressive symptoms and positive communication between parents and children had a protective effect. Pelham et al. (2022) similarly found that consistent parental monitoring and involvement were associated

with better mood outcomes in teens. Findings from Silk et al. (2017) showed that depressed adolescents were more sensitive to criticism. Poor parent–child communication has been identified as a contributing factor to adolescent depression, self-harm, and suicide (Ewing et al., 2015; Fortune et al., 2016). Conversely, stronger communication with both fathers and mothers has been linked to fewer depressive symptoms and lower rates of suicidality in adolescents (Zapf et al., 2023; Zhang et al., 2021). Together, these findings offer strong support for the role of verbal affirmation and supportive communication as key protective factors during adolescence. Even when youth are already struggling with depressive symptoms, consistent praise and encouragement may buffer the impact and promote emotional recovery.

The present study indicated that adolescents who had parents who argued/fought with them 10 or more times in the past year were at elevated risk for lifetime and past-year MDE. Research has demonstrated that frequent levels of parent-child conflict are associated with increased youth depression (Griffith et al., 2019). The more intense the conflicts, the higher the likelihood for adolescent depression (Zhang et al., 2022). Frequently arguing and verbal abuse may be viewed as an adverse childhood experience which can significantly alter how the adolescent views and interacts with individuals (Freeny et al., 2021). However, frequent positive communication between parents and children is associated with decreased likelihood for depression and suicide (Mark et al., 2013).

Implications for Health Behavior Research

This study advances the understanding of the link between specific parenting behaviors and adolescent MDE. While previous research has shown an association between

parent factors and youth depression, this study provides a more thorough conceptualization of detailed, individual parenting practices that are associated with MDE. Such information is significant for those working with families to address mental health issues in adolescents. Health behavior researchers, public health educators, mental health professionals, and practitioners in family systems disciplines are encouraged to share the findings of this study with parents and families. Professionals should discuss with parents the specific parenting behaviors that they can engage in to assist in decreasing the odds of MDE in their children. In various community, school, and family settings, parents will often inquire as to what specific actions they can undertake to help their children. This study provides national data which highlights important and concrete parental behaviors. Thus, the findings can and should be easily set into practice by parents.

Researchers and practitioners from multiple disciplines are encouraged to build upon these findings as a means to continue moving the fields of parent-child research and adolescent mental health behavior forward. Future research is needed to further investigate additional parent behaviors and their potential connection with adolescent mental health. More specifically, research is called upon to answer the following questions: 1) What other specific parenting behaviors are linked to MDE? 2) How does perceived parent-child emotional closeness relate to adolescent MDE? 3) How should emotional closeness and quality parent-child interactions be more effectively measured on national survey instruments? 4) Does strength of relationship between parenting and adolescent MDE differ between fathers and mothers? 5) What specific parenting behaviors are linked with other adolescent mental health issues (e.g., anxiety, suicide, substance use)? 6) How can the findings of

the present study be built upon and incorporated into novel health behavior theories examining parenting and youth mental health? These research questions are not all inclusive but would greatly help researchers and professionals in the field to more fully understand the relationship between parenting and adolescent mental health.

Limitations

The limitations of this study should be noted. First, this study was cross-sectional and therefore no causal relationships could be determined. Thus, only associations between variables can be ascertained. Second, the sample was delimited to 12- to 17-year-olds and thus results are not generalizable to other populations. Third, the study relied on self-report measures which could have resulted in some participants responding in socially desirable manners. Fourth, the study was limited due to the accurate recall and honest reporting by participants. Such limitations could have impacted the overall responses and findings of this study. Thus, caution should be taken in interpreting these results.

Conclusions

The present study found that one in four (26.1%) adolescents had experienced an MDE in their lifetime and one in five (18.7%) had experienced an MDE in the past 12 months. Those at highest risk were female, older (14-15 or 16-17-years-old), and white. Regarding parenting behaviors, adolescents at highest risk for lifetime and past-year MDE were those who had parents who never/seldom: check and help with homework, limit the amount of TV, and tell them they did a good job and that they are proud of them. In addition, those who had parents who frequently argued/fought with them were more likely to experience MDE. These findings underscore the intricate relationship between adolescent MDE and

parenting behaviors. Public health educators should encourage parents to engage in authoritative parenting behaviors as a means to help prevent MDE among adolescents. Findings should be used to assist program developers in incorporating parenting components in MDE prevention and treatment efforts. Future research studies should examine the impact of other parenting factors on adolescent MDE, including parent MDE, parent-child emotional closeness, and parenting differences between fathers and mothers. Results may be beneficial in directing family-based efforts aimed at reducing adolescent MDE.

Discussion Questions

The findings of this study indicate the importance of considering a parent-child model in describing and predicting adolescent MDE. With this stated, a population-based model would lead to a larger effect on the adolescent population. How can these findings and the parent-child model be incorporated with a population-based model to impact the broader population of adolescents experiencing MDE?

Bandura's Social Cognitive Theory asserts that individuals with high levels of self-efficacy are more likely to view difficult situations, events, or tasks as challenges to be overcome rather than threats to be avoided. This, in turn, leads to lower vulnerability to stress and depression. Based on the findings of the present study, how can parenting behaviors fit into this theory and impact adolescent self-efficacy, self-esteem, and subsequent MDE?

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