Lampiran 1. Jadwal Kegiatan Pembuatan *Literature Review*

HUBUNGAN DUKUNGAN SOSIAL TERHADAP KEJADIAN DEPRESI PADA REMAJA

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5	Ujian Skripsi												■		
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7	Pendaftaran Wisuda													■	
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Lampiran 2.

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Lampiran 3.

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JURNAL CMHP

(Journal Of Community Mental Health And Public Policy)

KEJADIAN DEPRESI PADA REMAJA MENURUT DUKUNGAN SOSIAL DI KABUPATEN JEMBER

Depression Incidence in Adolescents According to Social Support in Jember Regency

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ABSTRACT

Depression is a mental health problem that mostly occurs during adolescence. Physical, cognitive and emotional changes experienced during adolescence can cause stress. The prevalence of depression in adolescence has a very high increase compared to the age of children and adults. The main factor in being able to cure depression in adolescents is social support (Depkes, 2007). This study aims to identify depressive symptoms in adolescents and to find out the relationship between social support factors and depression incidence. This research is a quantitative research, with the type of observational analytic research with a cross sectional approach involving students at SMA XY in Jember Regency in May 2020. The analytical method uses the Chi Square test to see the relationship between independent and dependent variables with a significance level of α ≤ 0, 05. Data collection tool using google form. Determination of respondents by random sampling with a total of 158 respondents. The results of this study indicate that the distribution of women is 76.58% more than that of men. Based on the distribution of social support, 56.96% received good social support, while based on the incidence of depression, 54.43% did not experience depression. From the statistical test, the significance value of <0.05 indicates that there is a relationship between social support factors and the incidence of depression. Social support plays an effective role in overcoming depression experienced by adolescents.

***Keywords**: Depression, Teens, social support.*

ABSTRAK

Depresi merupakan salah satu masalah kesehatan mental yang sebagian besar terjadi pada masa remaja. Perubahan fisik, kognitif dan emosional yang dialami pada masa remaja dapat menimbulkan stress. Prevalensi depresi pada usia remaja memiliki peningkatan yang sangat tinggi dibandingkan dengan usia anak-anak dan usia dewasa. Faktor utama untuk dapat menyembuhkan depresi pada remaja yaitu dukungan sosial (Depkes, 2007). Penelitian bertujuan untuk mengidentifikasi gejala depresi pada remaja dan mengetahui mengenai Hubungan Faktor Dukungan Sosial dengan Kejadian Depresi. Penelitian ini adalah penelitian kuantitatif, dengan jenis penelitian analitik observasional dengan pendekatan cross sectional yang melibatkan siswa di SMA XY di Kabupaten Jember pada Bulan Mei tahun 2020. Metode analisis menggunakan uji Chi Square untuk melihat hubungan variabel independen dan dependen dengan tingkat kemaknaan α ≤ 0,05. Alat pengumpulan data menggunakan google form. Penentuan responden secara random sampling dengan jumlah 158 reponden. Hasil penelitian ini menunjukan distribusi perempuan 76,58% lebih banyak daripada laki-laki, berdasarkan distribusi dukungan sosial sebesar 56,96% mendapatkan dukungan sosial yang baik, sedangkan berdasarkan kejadian depresi sebesar 54,43% tidak mengalami depresi. Dari uji statistik nilai signifikansi sebesar < 0,05 menunjukkan bahwa ada hubungan antara faktor dukungan sosial dengan kejadian depresi. Dukungan sosial berperan efektif dalam mengatasi depresi yang dialami remaja.

Kata Kunci: Depresi, Remaja, Dukungan Sosial.

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PENDAHULUAN

Depresi merupakan kondisi emosional yang biasanya dapat ditandai dengan adanya kesedihan atau perasaan yang tidak berarti dan memiliki rasa bersalah, menjauhkan diri dari lingkungan, kehilangan selera makan, tidak dapat tidur dengan tenang ataupun gelisah (Division, 2016). Selain itu juga depresi merupakan kondisi emosional yang biasanya ditandai dengan kesedihan yang amat sangat, perasaan tidak berarti dan bersalah seperti menarik diri, tidak dapat tidur, kehilangan selera, minat dalam aktivitas sehari-hari (Aries Dirgayunita, 2016). Depresi dapat terjadi saat seseorang mengalami stres yang berkelanjutan dan berhubungan dengan kejadian yang baru saja terjadi atau menimpa seseorang. Depresi adalah gangguan mental umum dengan gejala meliputi: mood depresif, kehilangan minat atau kesenangan, perasaan bersalah atau rendah diri, tidur atau nafsu makan terganggu, energi menurun, dan hilang konsentrasi. (Harista, R. A., & Lisiswanti, R, 2017). Menurut Radityo, W. E., (2012) depresi merupakan gangguan mood yang dikarakteristikkan dengan kesedihan yang intens, berlangsung dalam waktu lama, dan mengganggu kehidupan normal.

American Psychiatric Association, (2013) mendefinisikan depresi sebagai gangguan suasana perasaan dimana seseorang diliputi perasaan depresi seperti sedih, hampa, dan putus asa atau kehilangan minat dalam berbagai aktivitas selama dua minggu atau lebih. Depresi ini terjadi disebabkan oleh beberapa faktor baik faktor genetik, biologi, lingkungan dan faktor psikologis. (Dianovinina, 2018). Depresi pada remaja bukan hanya sekedar perasaan stress ataupun sedih seperti hal yang datang dan pergi begitu saja, namun sebuah keadaan yang serius yang dapat mempengaruhi perilaku, emosi dan cara berfikir remaja serta sifatnya yang permanen sehingga membutuhkan penanganan yang serius untuk mengatasinya. Jika dibiarkan berlarut membebani pikiran, dapat mengganggu sistem kekebalan tubuh, hal ini terjadi dikarenakan individu berada dalam emosi yang negatif seperti halnya rasa sedih, benci, putus asa, iri, cemas, dan kurang bersyukur, maka sistem kekebalan tubuh menjadi lemah (Dirgayunita, 2016).

Permasalahan kesehatan mental dan psikososial pada anak remaja memerlukan lebih banyak perhatian salah satunya dari pihak keluarga, masyarakat dan sekolah. Kejadian depresi banyak dialami oleh remaja. WHO menyebutkan bahwa depresi merupakan penyebab utama terjadinya penyakit dan kecacatan pada remaja usia 10-19 tahun (WHO, 2015). Hal tersebut akan menjadi masalah kesehatan nomor dua dari berbagai macam penyakit pada tahun 2020 (WHO, 2012). Menurut data pelaporan bahwa ada sejumlah 800,000 kasus bunuh diri merupakan dampak dari depresi (WHO, 2015). Selain itu, depresi mayor dinobatkan sebagai kasus tertinggi dalam penyakit mental di dunia dan selalu meningkat setiap tahunnya dalam 10 tahun terakhir (Richards, 2011). Negara Amerika Serikat pada tahun 2010 ditemukan 10 juta penduduk yang mengalami permasalahan depresi dan 20% nya dialami oleh remaja. Indonesia belum memiliki data yang pasti tentang jumlah remaja yang mengalami depresi. Berdasarkan data dari Dinas Kesehatan di salah satu kota di Indonesia pada tahun 2010 ditemukan terdapat 91.700 (63,84%) dari 143.635 remaja yang memerlukan perawatan permasalahan kejiwaan yang salah satunya masalah kesehatan mental atau depresi. (Haryanto, 2015).

Menurut catatan Riset Kesehatan Dasar (Riskesdas) dari Kementrian Kesehatan Republik Indonesia (2018), prevalensi gangguan emosional pada penduduk berusia 15 tahun ke atas, meningkat dari 6% di tahun 2013 menjadi 9,8% di tahun 2018. Prevalensi penderita depresi ditahun 2018 sebesar 6,1%. Riset Kesehatan Dasar tahun 2013 menunjukkan bahwa prevalensi bunuh diri pada penduduk

berusia 15 tahun ke atas (N=722.329) sebesar 0,8% pada perempuan dan 0,6% pada laki-laki dan depresi merupakan salah satu gangguan yang paling umum terjadi. Riskesdas pada tahun 2013 menunjukan bahwa prevalensi gangguan mental emosional termasuk depresi pada individu usia 15 tahun keatas di DKI Jakarta adalah sebesar 5.7% (Balitbang Kementrian Kesehatan, 2013). Sebagai salah satu kota terbesar di Indonesia dengan penduduk terpadat yaitu berkisar 10 juta jiwa (Badan Pusat Satatistik, 2017), maka jumlah yang dapat diperkirakan memiliki gangguan mental emosional di DKI Jakarta, termasuk depresi yaitu kurang lebih 500 hingga 600 ribu remaja (Balitbang Kementrian Kesehatan, 2013). Menurut data kesehatan kabupaten jember jumlah kunjungan pasien depresi yang datang ke puskesmas mulai bulan januari sampai dengan bulan desember 2016 tercatat sebanyak 76.224 kunjungan (Dinkes Jember,2016). Menurut (Departemen Kesehatan, 2008) menunjukan bahwa data angka rata-rata untuk depresi pada penduduk usia diatas 15 tahun di Kabupaten Jember yaitu 8,2%.

Dampak negatif yang dapat diakibatkan dari depresi yaitu seperti sulit berkonsentrasi, terbatasnya interaksi sosial, terganggunya penyesuaian diri bahkan munculnya risiko bunuh diri (Nevid et al., 2006). Depresi yang tidak diatasi pada masa remaja akan berdampak negatif pada beberapa hal dalam kehidupan sekolah, keluarga, kesulitan hubungan sosial dan kesehatan mental di masa dewasa (Seimeon dalam Milin, Walker, & Chow, 2003; Thorsteinsson, Ryan, & Sveinbjornsdottir, 2013), seperti perilaku bunuh diri, penggunaan narkoba, penurunan prestasi belajar, perilaku agresif dan perilaku merusak lainnya (Aditomo & Retnowati, 2004).

Remaja adalah masa peralihan dari kanak-kanak ke dewasa. Seorang remaja sudah tidak lagi dapat dikatakan sebagai anak-anak, namun ia masih belum cukup matang untuk dapat dikatakan dewasa (Sumara, D. S., Humaedi, S., & Santoso, M. B., 2017). Masa remaja merupakan salah satu masa yang dilewati dalam setiap perkembangan individu. Masa perkembangan remaja adalah periode dalam perkembangan individu yang merupakan masa mencapai kematangan mental, emosional, sosial, fisik dan pola peralihan dari masa anak-anak menuju dewasa (Fitri, E., Zola, N., & Ifdil, I., 2018).

Remaja menurut WHO memberikan batasan mengenai siapa remaja secara konseptual, remaja ditandai dari tiga aspek yaitu biologis yang meliputi ada karakteristik seksual seperti pembesaran buah dada, perkembangan pinggang untuk anak perempuan sedangkan anak laki-laki tumbuhnya kumis, jenggot serta perubahan suara yang semakin dalam (Diananda, A., 2019), psikologi (meliputi cara berpikir dan pengolaha emosional dari anak-anak menuju dewasa), dan yang terakhir sosial ekonomi remaja cenderung lebih mandiri. Menurut Erikson (1998) Remaja dibedakan menjadi tiga tahapan yaitu remaja awal, remaja pertengahan, remaja akhir. Remaja awal merupakan masa transisi seorang anak-anak menjadi dewasa. Perkembangan emosi remaja pada tahap memasuki remaja awal akan menunjukan emosi yang sensitif dan temperamental seperti mudah tersinggung (Baron dan Byrne,2005). Masa remaja adalah masa dimana seorang individu banyak menghadapi peristiwa penuh stresor dalam kehidupan sehari-hari. Masalah-masalah tersebut menyebabkan remaja menjadi rentan mengalami gangguan psikologis seperti stres, ketakutan, kecemasan, agresivitas dan melarikan diri (Julianto.V & Subandi. S, 2015).

Berdasarkan paparan terkait dampak negatif dari depresi terhadap kehidupan remaja, membuat remaja perlu memiliki kemampuan untuk menghadapi berbagai kesulitan. Kualitas pribadi yang memungkinkan seseorang untuk berkembang dalam menghadapi kesulitan disebut sebagai resiliensi (Connor & Davidson, 2003). Ketika remaja memiliki kemampuan resiliensi maka remaja mampu

mengatasi tekanan kehidupan yang dihadapi sehari-hari. serta dapat mengatasi masalah dalam masa perkembangannya (Crump et.al., 2015). Oleh karena itu, dengan adanya resiliensi remaja akan terbantu dalam meningkatkan faktor pelindung untuk menghadapi suatu tantangan dan meminimalkan dampak dari faktor risiko seperti depresi (Wilks, 2008; Pinquart, 2009).

Telah ada penelitian-penelitian sebelumnya terkait hubungan dampak sosial terhadap depresi pada remaja (Nurhaeni dkk 2011; Rahmawati dkk, 2015; Fitria dan Maulidia, 2018), namun belum banyak data secara spesifik yang menyebutkan faktor-faktor dukungan sosial apa saja dan bagaimana hubungan faktor dukungan sosial tersebut terhadap depresi. Maka, untuk dapat mengurangi dan mencegah terjadinya depresi pada kalangan remaja perlu adanya informasi mengenai gejala depersi yang ditimbulkan oleh remaja, faktor-faktor dukungan sosial apa saja yang mempengaruhinya dan seberapa besar dampak dari buruknya dukungan sosial terhadap ramaja. Penelitian ini bertujuan untuk mengidentifikasi gejala depresi pada remaja di Sekolah Menengah Atas (SMA) dan mengetahui hubungan faktor dukungan sosial dengan kejadian depresi.

METODE PENELITIAN

Penelitian ini dilakukan selama satu bulan pada bulan Mei tahun 2020. Pengambilan data diperoleh dari salah satu SMA Negri XY di Kabupaten Jember. Populasi pada penelitian ini sebanyak 350 responden yaitu siswa kelas 12 SMA XY di Kabupaten Jember tahun 2020. Penentuan responden pada penelitian ini ditentukan dengan cara random sampling di Sekolah Menegah Atas di Kabupaten Jember, dimana dari 350 responden tersebut ada beberapa siswa yang menolak dan keberatan untuk menjadi responden sehingga jumlah yang didapat untuk menjadi responden yaitu sebanyak 158 responden. Sampel penelitian ini didapatkan dengan menggunakan perhitungan rumus slovin (Sugiyono, 2011:87) sehingga seluruh siswa kelas 12 SMA XY memiliki kesempatan untuk menjadi responden. Jumlah sampel pada penelitian ini yaitu sejumlah 158 responden. Penelitian ini adalah penelitian kuantitatif, dengan jenis penelitian analitik observasional dengan pendekatan *cross sectional*.

Pada penelitian ini terdapat dua variabel yaitu vairabel bebas dan terikat. Variabel bebas pada penelitian ini adalah faktor dukungan sosial dan jenis kelamin pada siswa kelas 12 SMA Negeri XY di Kabupaten Jember. Variabel terkait pada penelitian ini adalah tingkat depresi pada siswa kelas 12 SMA Negeri XY di Kabupaten Jember. Teknik pengumpulan data dalam penelitian ini menggunakan *google form online*. *Google form online* ini digunakan untuk mendapatkan data dari responden. Responden harus menjawab pertanyaan sesuai dengan kondisi responden yang ada di *google form online* dan mengirim seluruh datanya sehingga terkumpul di server (Coper, 2003). Data penelitian merupakan data primer yang diperoleh lansung dari responden dengan cari membagikan kuesioner selama penelitian. Kuesioner Responden berisi kuesioner *The Social Provisios Scale* (SPS), kuesioner *The Pediatric Symptom* (PSC) dan kuesioner *Beck Depression Inventory* – II (BDI – II) serta pertanyaan mengenai kondisi genetik individu.

a) *The Social Provisios Scale* (SPS) ini merupakan salah satu instrument baku untuk mengukur persepsi terhadap dukungan sosial (Larasati, 2012). Alat ukur ini memiliki 6 dimensi antara lain *guidance* (bimbingan atau saran), *reliable alliance* (jaminan ada seseorang yang dapat membantu saat dibutuhkan), *opportunity of murturance* (kesempatan untuk mengasihi), *reassurance of worth* (penghargaan diri), *attachment* (kelekatan) dan *social integration*

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(intergrasi sosial). Jumlah item dalam alat ukut SPS yaitu sebanyak 24 item. Skor total SPS didapatkan dari penjumlahan skor setiap dimensi yang ada. Skor maksimal SPS adalah 96 dan skor minimal SPS adalah 67. Apabila dukungan sosial kurang maka skor dibawah 67.

b) *Beck Depression Inventory* – II (BDI – II) ini merupakan salah satu instrument baku untuk menilai derajat gejala depresi. *Beck Depression Inventory* – II (BDI – II) ini telah teruji valid dan reliable bagi populasi di Indonesia dengan nilai *cut-off optimal* 73% (Bdi - Ii, n.d.). *Beck Depression Inventory* – II (BDI – II) berisi dari 21 pertanyaan. Jumlah skor *Beck Depression Inventory* – II (BDI – II) memberikan petunjuk mengenai tingkatan depresi pada responden. Skor minimal BDI-II adalah 16. Apabila skor lebih dari 16 maka terjadi depresi pada responden. Kuesioner responden juga berisi mengenai kondisi responden yang berhubungan faktor lingkungan responden, faktor psikososial responden dan faktor genetik responden.

Terdapat pengukuran dengan beberapa varibel yang digunakan dalam penelitian ini yaitu, Jenis kelamin untuk membedakan sifat dan karakteristik biologis yang membedakan laki-laki dan perempuan yang diukur melalui kuesioner online identitas responden dan Status Faktor Lingkungan / Persepsi Dukungan Sosial. Status faktor lingkungan adalah kondisi lingkungan responden pada saat sekarang yang dialami oleh responden. Persepsi dukungan sosial ini diukur menggunakan *The Social Provisios Scale* (SPS) yang terdiri dari 24 item pertanyaan dengan skala pengukuran Persepsi dukungan sosial buruk $\leq$ 67 dan Persepsi dukungan sosial baik > 67.

Pengolahan data pada penelitian ini menggunakan program SPSS, Metode analisis yang digunakan adalah analisis univariat untuk mengetahui distribusi frekuensi, analisis bivariat menggunakan *chi square* untuk melihat hubungan variabel independen dan dependen dengan tingkat kemaknaan $\alpha \leq 0{,}05$. Uji *chi squre* merupakan salah satu pengujian untuk mengetahui hubungan atau kebebasan antar variabel yang bersifat kategori. Uji univariat dilakukan untuk mengetahui karakteristik responden meliputi jenis kelamin, dukungan sosial, dan tingkat depresi. Sedangkan uji bivariat dilakukan untuk mengetahui hubungan faktor dukungan sosial dengan tingkat depresi.

HASIL

Berikut merupakan penyajian data hasil penelitian yang meliputi data umum dan khusus diantaranya distribusi jenis kelamin, faktor dukungan sosial, distribusi kejadian depresi dan hubungan faktor dukungan sosial dengan kejadian depresi.

Tabel 1. Distribusi Karakteristik Responden.

Karakteristik Responden	n	Persentase (%)
Jenis Kelamin		
Laki-laki	37	23,42
Perempuan	121	76,58
Dukungan Sosial		
Baik	90	56,96
Buruk	68	43,04
Tingkat Depresi		
Tidak Depresi	86	54,43
Depresi	72	45,57

Sumber: Data Primer 2020.

Hasil analisis variabel jenis kelamin dapat dilihat melalui Tabel 1 dimana distribusi jenis kelamin dari jumlah 158 responden, 121 responden perempuan atau sebesar 76,58% dan diperoleh 37 responden laki-laki atau sebanyak 23,42%. Hasil distribusi depresi berdasarkan jenis kelamin diperoleh dari 121 responden perempuan sebanyak 55 mengalami depresi dan yang tidak mengalami depresi sebanyak 66. Berdasarkan responden berjenis kelamin

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laki-laki diperoleh dari 37 responden sebanyak 17 mengalami depresi dan 21 tidak mengalami depresi.

Hasil analisis variabel faktor dukungan sosial dapat dilihat dimana distribusi faktor dukungan sosial ini dari jumlah 158 responden, diperoleh 68 responden atau sebanyak 43,04% responden yang memiliki persepsi buruk terhadap dukungan sosialnya sedangkan 90 responden atau sebanyak 56,96% responden memiliki persepsi baik terhadap dukungan sosialnya. Hasil identifikasi dukungan sosial yang buruk seperti merasa sedih sepanjang waktu dan tidak dapat menghilangkannya, merasa tidak ada sesuatu yang dirinya nantikan, merasa bahwa dirinya adalah orang yang gagal total, merasa tidak puas atau bosan dengan segalanya, merasa bersalah sepanjang waktu, dan merasa bahwa dirinya sedang dihukum. Hasil identifikasi dukungan sosial yang baik seperti tidak merasa sedih, tidak berkecil hati terhadap masa depan saya, tidak merasa gagal, memperoleh kepuasan atas segala sesuatu seperti biasanya, tidak merasa bersalah, tidak merasa bahwa saya sedang dihukum, dan tidak merasa bahwa dirinya lebih buruk daripada orang lain.

Hasil analisis kejadian depresi dapat dilihat dimana distribusi kejadian depresi ini dari jumlah 158 responden, diperoleh 72 responden atau sebanyak 45,57% responden mengalami depresi dan 86 responden atau sebesar 54,43% responden tidak mengalami depresi. Hasil identifikasi gejala depresi yang pernah dialami siswa-siswi SMA XY yaitu siswa-siswa merasa mood tertekan hampir sepanjang hari dan perasaan tidak berharga.

Hasil Analisis bivariat penelitian ini untuk menganalisis hubungan faktor dukungan sosial dengan tingkat depresi seperti pada tabel 2 berikut:

Tabel 2. Hubungan Faktor Dukungan Sosial dengan Kejadian Depresi

Faktor Dukungan Sosial	Kejadian Depresi				P Value	OR dengan 95% CI
	Depresi		Tidak Depresi			
	n	%	n	%		
Buruk	40	25,3	28	17,7	0,006	0,386 (0,202-0,738)
Baik	32	20,3	58	36,7		
Total	72	45,6	86	54,4		

Sumber: Data Primer 2020.

Berdasarkan Tabel 2 menunjukkan bahwa sebanyak 25,3% responden yang mengalami depresi memiliki dukungan sosial yang buruk dan sebanyak 20,3% responden yang mengalami depresi namun memiliki dukungan sosial yang baik. Hasil uji hubungan didapat nilai P Value = 0,006 dimana nilai tersebut Asymp.Sig (2-sided) < 0,05 menunjukkan bahwa ada hubungan antara faktor dukungan sosial dengan kejadian depresi. Individu yang mengalami dukungan sosial buruk memiliki risiko 0,386 lebih besar terkena depresi.

PEMBAHASAN

Berdasarkan hasil analisis responden yang diperoleh dari siswa-siswi SMA XY di Kabupaten Jember menunjukan bahwa sebagian responden berjenis kelamin perempuan yaitu sebanyak 121 responden (76,58 %). Berdasarkan karakteristik jenis kelamin remaja, didapatkan bahwa sebagian besar remaja yang mengalami depresi adalah perempuan. Data distribusi depresi berdasarakan jenis kelamin pun memperlihatkan jumlah yang tidak mengalami depresi lebih tinggi dibandingkan dengan yang mengalami

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depresi baik responden yang berjenis kelamin perempuan atau laki-laki. Hal ini didukung dengan data dari presepsi dukungan sosial Sekolah SMA XY di Kabupaten Jember. Presepsi dukuangan sosial di sekolah ini menunjukan lebih banyak yang mempresepsikan dukungan sosial yang baik. Oleh karena ini, hasil responden tingkat depresi pada sekolah ini menunjukan nilai yang masih lebih rendah dibandingkan dengan yang tidak mengalami depresi. Hasil analisis bivariat didapatkan adanya hubungan antara faktor dukungan sosial dengan kejadian depresi. Hal ini didukung pada nilai-nilai yang ditunjukan pada Tabel 2, yang dapat diartikan bahawa individu yang mengalami dukungan sosial buruk akan memiliki risiko lebih besar terkena depresi.

Menurut hasil penelitian ini, benar adanya hubungan dukungan sosial dengan tingkat depresi pada remaja. Rendahnya tingkat dukungan sosial diasosiasikan pada tingginya tingkat depresi dan sebaliknya (Tabel 2), dengan nilai risiko sebesar 0,386 atau 38,6 %. Hal ini diartikan individu dalam hal ini siswa-siswi Sekolah XY di Kabupaten Jember yang tidak memperoleh dukungan sosial akan mengalami risiko 38,6% terkena depresi. Hasil penelitian ini sesuai dengan hipotesis, dimana Hasil uji hubungan didapat nilai P Value = 0,006. Hal ini dapat diartikan faktor dukungan sosial memiliki peran atau mempunyai hunbungan dengan kejadian depresi pada siswa-siswi di SMA XY Kabupaten Jember. Menurut Friedman, Bowden & Jones 2009, mengatakan bahwa dukungan sosial dapat dianggap mengurangi dampak stres serta mengurangi dampat negatif pada individu, yang diartikan dukungan sosial dapat menjadi strategi penting yang harus ada dalam keadaan stes. Namun hasil korelasi antara dukungan sosial dengan depresi tidak selalu negatif, tetapi bisa juga korelasinya positif. Hal tersebut disebabkan oleh adanya faktor-faktor lain yang menyebabkan terjadinya depresi seperti faktor kesehatan, kepribadian, religiusitas, pengalaman hidup yang pahit, dan harga diri (Saputri & Indrawati, 2013). Pada hasil penelitian ini juga ditemukan lebih banyak kejadian depresi pada perempuan seperti yang diungkapkan pada penelitian yang dilakukan di Banyuwangi pada mahasiswa baru atau setelah peralihan dari masa SMA di tahun 2020 menemukan setengah lebih mengalami tingkat depresi yang tinggi dan lebih banyak dialami oleh perempuan (Aidi. B, 2020). Seperti halnya penelitian yang dilakukan di Surabaya pada tahun 2019 mengungkapkan adanya keterkaitan antara jenis kelamin dengan tingkat depresi dengan pengaruh sebesar 85,9% (Prayogi, A. R. I. Y., 2020).

Dukungan sosial menjadi faktor utama dalam penanganan pada saat depresi. Dukungan sosial adalah dukungan atau bantuan yang dibutuhkan oleh individu dan bisa didapatkan dari berbagai sumber seperti keluarga, teman, dokter atau profesional dan organisasi kemasyarakatan. Dukungan sosial juga didefinisikan sebagai keberadaan orang lain yang dapat diandalkan untuk memberi bantuan, semangat, penerimaan dan perhatian, sehingga bisa meningkatkan kesejahteraan hidup bagi individu yang bersangkutan (Saputri & Indrawati, 2013).

Munculnya gejala depresi yang ditemukan pada partisipasi penelitian ini pada dasarnya semakin menguatkan hasi-hasil penelitian sebelumnya. Suatu penelitian yang dilakukan di Amerika tentang gejala depresi menjabarkan bahwa remaja awal pada usia 11-13 tahun memiliki potensi depresi ringan ketimbang anak remaja usia 14-18 tahun (Richards, 2011). Dukungan sosial (dalam Malecki & Dermaray, 2003) merupakan persepsi seseorang lain dalam jaringan sosialnya (seperti keluarga dan teman) yang dapat membantu dalam meningkatkan kemampuan dirinya untuk bertahan dari pengaruh-pengaruh yang dapat merugikan. Dukungan sosial meliputi emosional, informasi, atau materi alat bantu yang diberikan beberapa dari bantuan yang diberikan oleh para professional, dukungan sosial ini bersifat informal dan dapat berasal

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dari keluarga besar, kelompok agama/ spiritual, teman, tetangga, dan kelompok sosial lainnya untuk membantu, pengakuan yang positif, ketergantungan yang dapat diandalkan, dan memperoleh informasi dan bimbingan dalam keadaan stres dan depresi (Hallahan,2006, dalam Mangunsong,2011). Jika seseorang memiliki integrasi sosial dan dapat menggunakan dukungan sosial dengan efektif dari orang lain, mereka akan menemui lebih sedikit penyebab stres dan depresi. Ketika seseorang menemui keadaan yang penuh dengan stres dan depresi, kehadiran orang lain yang menyediakan dukungan secara efektif dapat mengurangi kemungkinan seseorang akan mengalami stres dan depresi (Albert, 2015).

Menurut hasil penelitian ini menunjukan bahwa adanya hubungan dukungan sosial dengan kejadian depresi pada remaja. Rendahnya tingkat dukungan sosial diasosiasikan pada tingginya kejadian depresi dan sebaliknya. Tingginya dukungan sosial dapat menjadi "buffer" untuk simtom depresi. Buffer sebagai penahan atau penyangga efek perkembangan simtom depresi. Dengan kata lain, dukungan sosial menjadi faktor protektif untuk simtom depresi. Dukungan sosial adalah dukungan atau bantuan yang dibutuhkan oleh individu dan bisa didapatkan dari berbagai sumber seperti keluarga, teman, dokter atau profesional dan organisasi kemasyarakatan. Dukungan sosial juga didefinisikan sebagai keberadaan orang lain yang dapat diandalkan untuk memberi bantuan, semangat, penerimaan dan perhatian, sehingga bisa meningkatkan kesejahteraan hidup bagi individu yang bersangkutan (Amelia et al., 2011).

Kebijakan program yang dilakukan oleh Kabupaten Jember untuk menangani tingkat depresi pada remaja yaitu dengan cara melakukan pendampingan rutin dengan keluarga dan konseling kepada dokter spesialis kejiwaan, yang diharapkan bisa membaik kondisi depresi sehingga dapat menjalankan aktivitas kehidupan dengan normal kembali.

Peneliti menyadari masih terdapatnya kelemahan ataupun kekurangan pada proses penelitian yang dilakukan, diantaranya, durasi waktu yang digunakan peneliti dalam melakukan observasi terlalu singkat, seharusnya dengan durasi observasi yang lebih lama sehingga lebih dapat menilai hubungan antar variabel secara rinci untuk lebih menunjang konfirmasi ada tidaknya perilaku depresi serta faktor – faktor yang mempengaruhi yang ada pada responden.

SIMPULAN DAN SARAN

Berdasarkan hasil analisis dan pembahasan diperoleh kesimpulan yaitu gejala depresi yang pernah dialami siswa-siswi SMA XY di Kabupaten Jember seperti merasa mood tertekan hampir sepanjang hari dan perasaan tidak berharga. Terdapat hubungan dukungan sosial dengan tingkat depresi pada remaja. Rendahnya tingkat dukungan sosial diasosiasikan pada tingginya tingkat depresi dan sebaliknya. Presepsi dukungan sosial yang baik pada remaja akan mengurangi tingkat depresi pada remaja, begitu juga dengan presepsi dukungan sosial yang buruk akan menambah tingkat depresi pada remaja.

Saran bagi institusi Pendidikan terkait agar bisa melakukan evalusi program-program di sekolah yang sekiranya dapat digunakan untuk pencegahan gejala depresi pada remaja.

Pada penelitian selanjutnya dapat dilakukan penelitian prospektif dengan durasi observasi yang lebih lama sehingga lebih dapat menilai hubungan antar variabel secara rinci untuk lebih menunjang konfirmasi ada tidaknya perilaku depresi serta faktor yang mempengaruhi yang ada pada responden. Penelitian ini masih sangat perlu disempurnakan dan diharapkan penelitian selanjutnya lebih lanjut membahas penyebab atau faktor yang dapat mempengaruhi depresi dan juga menggunakan kuesioner serta metode

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wawancara untuk melihat lebih lanjut gejala depresi yang dialami oleh remaja.

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PLOS ONE

RESEARCH ARTICLE

Prevalence and associated factors of depression among Korean adolescents

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Abstract

This study aimed to identify factors significantly associated with recent depressive mood with respect to health-related behavioral patterns at the individual level, perceived safety in the school environment, and willingness to share concerns with family and social networks. Self-reported responses to questions regarding recent feelings of depression, health-related behaviors in physical, psychological, and spiritual subdomains, school refusal and perceived safety at school, and perceived social support were obtained from 1,991 in-school adolescents (mean [SD] age = 15.3 [1.7] years; male/female = 936/1055). Multivariate logistic regression analyses were used to identify explanatory factors significantly associated with recent depression, defined as feelings of sadness or hopelessness for more than 2 weeks (during the last 12 months) that interfered with everyday functioning. Of the 1,991 students, 271 (13.6%) reported recent depression. Multivariate logistic regression analyses revealed higher odds of recent depression in adolescents with frequent thoughts of school refusal (odds ratio [95% confidence interval] = 3.25 [2.44–4.32]) and those who engaged in regular physical exercise (1.57 [1.19–2.07]), whereas a positive mindset (0.65 [0.49–0.86]), perceived safety at school (0.62 [0.47–0.82]), and perceived social support from one's mother (0.54 [0.40–0.72]) were associated with lower odds of recent depression. Taken together, our findings suggest that parents and teachers should talk regularly with adolescents about recent life (dis)satisfaction and stressors, particularly when they report frequent thoughts of school refusal. Perceived social support would increase perceived safety on school grounds and make it easier for teenagers to share their concerns with parents, thereby reducing the risk for depressive symptoms. School-based programs that promote a positive mindset would be helpful in preparing students for the challenges of adulthood.

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Introduction

Depression in adolescence

Mental health problems including internalizing psychopathologies such as depressive mood and anxiety may develop during adolescence [1]. Importantly, depression during adolescence could affect the trajectory of personality development and academic achievement, which in turn may impair social functioning during adulthood [2, 3]. Furthermore, the lack of appropriate treatment for depression and suicidality in adolescents and young adults increases the likelihood of mood disorders later in life [4, 5]. However, parents and schoolteachers often do not recognize the early signs of depression in adolescents and the need for stress management in daily activities [6, 7].

Behavioral routine of daily living and depression

Previous studies have reported correlations between increased risk of depression and substance use (i.e., alcohol, tobacco, and cannabis) [8], deliberate food restriction for weight control [9], and obesity. By contrast, protective factors against depression include daily consumption of vegetables and fruit [10], regular sleep, and frequent participation in sports and high-intensity physical activity [11]. Furthermore, a well-balanced lifestyle that enables work–life balance [12], prosocial activities focused on helping others [13], and religious activities to clarify the meaning of life [14] may be helpful in reducing the risks of burnout and depression.

Stress-related cognitive style and depression

Previous studies have reported positive correlations between increased risk for adolescent depression and the use of avoidant–maladaptive coping strategies (e.g., worry, self-blame, distraction, disengagement, tension reduction, and escape from negative emotions through substance misuse) [8, 15] and emotional–impulsive decision making in the face of stressful daily life events. By contrast, modifiable protective factors against depression include lifestyle factors such as prosocial involvement in a family context [16] and adaptive coping strategies (e.g., focusing on the positive, problem solving, and seeking social support) that stem from a positive mindset [8, 15]. Notably, many previous studies have posited the importance of a positive mindset (e.g., self-efficacy [17, 18], optimism [19], acceptance [20], resilience [21], and gratitude [22, 23]) in helping patients and caregivers to cope with debilitating medical illnesses such as chronic obstructive pulmonary disease, Parkinson's disease, and multiple sclerosis [19–21, 24, 25]; in fostering healthy development in children facing physical disability after trauma [17]; and in enhancing academic achievement [25, 26], elite sports performance [18], and creative art work [27]. Moreover, the presence of a positive mindset, such as that reflected in resilience, was associated with greater positive affect and reduced depression in community-dwelling middle-aged adults [28].

School refusal and perceived safety at school in adolescence

Given the amount of time adolescents spend at school, the school environment and school-related activities may be the greatest source of protection against, or the greatest source of, distress for adolescents [29, 30]. Indeed, school refusal (self-motivated refusal to attend school and/or difficulty remaining in class for the full day) [31] might not be simply a maladaptive behavior [32]. Rather, it may often be a warning sign of severe distress and negative emotional states including anxiety and depressive mood that markedly impair social and daily functioning [33]. Better understanding of the importance of school refusal as a possible warning sign of

depressive symptoms and clarification of lifestyle- or environment-related factors that can affect the risk of adolescent depression, will enable parents and teachers to recognize emotional distress and help adolescents who refuse to attend school.

Study aim and hypothesis

The long list of behavioral factors that positively or negatively affect the risk for depression in adolescents shown above may leave parents, teachers, and adolescents themselves confused about the best first steps to take in recognizing emotional distress [7, 34] and strengthening stress resilience [35]. Accordingly, the current study used self-reports from school-attending adolescents (N = 1,991) to identify the most significant factors associated with feelings of sadness or hopelessness (for more than 2 weeks in the last 12 months) that interfered with daily life functioning. We hypothesized that the odds of recent experiences of depressive mood among in-school adolescents may be associated with distress about school attendance [33]; perceived level of safety at school [36]; one's own lifestyle related to physical [37, 38], psychological [39–42], and spiritual [43, 44] sub-domains of health; and perceived social support that enables adolescents to share their concerns with others and get help [45–47].

Materials and methods

Participants

Data were collected between August 2014 and January 2015 in a cross-sectional survey for the validation and field-testing of the Korean version of the School Health Score Card (SHSC) [48]. With cooperation of the Korean Association of Secondary Education Principals, 30 schools (15 middle schools and 15 high schools) from a diverse range of provinces in the Republic of Korea participated in the study. Following a detailed description of the study purpose and procedure, 2,800 students provided informed consent and completed a five-part self-report questionnaire (S1 and S2 Texts): Part 1 assessed level of satisfaction with one's own health condition and health-related behavior, Part 2 assessed physical and behavioral health-related factors and perceived safety of the school environment, Part 3 assessed psychological health-related factors, Part 4 assessed social health-related factors (people to discuss concerns with), and Part 5 assessed awareness and prior experience with health-enhancement programs in school (see 'Measures' below for detailed information on the items included in Parts 1–4). Our study included the subset of participants who responded to all of the items in the Parts 1–4, (Part 5 data were not included in our study) without omission or error responses. Therefore, the final analyses included 1,991 students from 30 schools (mean [SD] age, 15.3 [1.7] years; male/female, 936/1055). The Institutional Review Board of Seoul National University College of Medicine approved this study (IRB No. E-1407-127-597). Informed consent was obtained from all participants after the procedure was fully explained. As this was a minimal-risk study, the requirement for written consent from the individual participants was waived by the board. All procedures were performed in accordance with the ethical standards of the Seoul National University Hospital Institutional Review Board on Human Experimentation and the Helsinki Declaration of 1975, as revised in 2008.

Measures

Data were obtained using self-report questionnaires (please refer to Supporting Information) completed by 1,991 adolescent students; 17 items regarding health-related behaviors (7 items) [49, 50], school refusal and perceived safety at school (4 items) [51], and perceived social support (6 items) [51] were used to identify the most strongly associated factors that could explain

recent feelings of depression, defined in terms of a 'Yes' (= depressed) or 'No' (= non-depressed) response to the item "Have you had feelings of sadness or hopelessness for more than 2 weeks (in the last 12 months) that interfered with your daily functioning?"] [52–54].

First, responses to seven items about health-related behaviors [49, 50], categorized by physical [1) regular physical exercise of moderate intensity and >150 min per week, 2) healthy eating habits, and 3) lifestyle balanced between study and rest], psychological [4) positive mindset and 5) proactive lifestyle], and spiritual [6) make time for helping others and 7) maintain faith and religious activities] subdomains, were retrieved. The regular physical exercise question required a 'Yes' (0) or 'No' (1) binary response. The ordinal responses to the remaining questions were converted into binary values ('Have been practicing more than 6 months' [1] and 'Have been practicing less than 6 months' [2] were converted to 'Have been practicing' [0]; and 'Planning to start within 1 month' [3], 'Planning to start within 6 months' [4], and 'No plan to practice in the future' [5] were converted to 'Not started yet' [1]), and these later underwent stepwise multiple linear regression.

Second, four items addressing school refusal/perceived safety at school [51] were as follows: 1) being able to ask for help when needed, 2) awareness of risky areas in the school zone, and belief that the school grounds are free from 3) bars and 4) gambling venues. The ordinal responses were converted into binary values for use in a subsequent stepwise multiple linear regression analyses ('Do not know' [1], 'Totally false' [2], and 'False' [3] became 'False' [1]; and 'True' [4] and 'Totally true' [5] became 'True' [0]). One variable selected from Part 4 (psychological health-related factors) that concerned frequent thoughts of school refusal was converted from ordinal responses to binary values ('Totally disagree' [1] and 'Slightly true' [2] were re-coded as 'No' [0]; and 'Agree'[3] and 'Strongly agree' [4] were re-coded as 'Yes' [1]).

Third, six items regarding perceived social support [51] assessed respondents' perception of the ease of being able to discuss their concerns with 1) their father, 2) their mother, 3) siblings, 4) friends of the same sex, 5) friends of the opposite sex, or 6) teachers at school. The initial ordinal responses were converted into binary values ('Not applicable' [1], 'Not possible' [2], and 'No' [3] became 'No' [1]; and 'Yes' [4] and 'Very much so' [5] were re-coded as 'Yes' [0]) for inclusion as candidate explanatory variables in subsequent multiple logistic regression analyses.

Statistical analyses

Based on their response to the question about feelings of sadness or hopelessness for more than 2 weeks, participants were classified as 'depressed' (n = 271) or 'non-depressed' (n = 1,720), and these two groups were compared in terms of demographic characteristics (age and body mass index) using independent t-tests ($P < (0.05/4) = 0.013$), and associations between group membership (depressed versus non-depressed) and sex (male or female) or level of school attendance (middle school or high school) were calculated using chi-square tests ($P < (0.05/4) = 0.013$). Simple logistic regression analyses were used to calculate the associations of the 17 items (see the 'Measures' section above) addressing health-related behaviors (7 items) [49, 50], school refusal/perceived safety at school (4 items) [51], and perceived social support (6 items) [51] with recent experiences of depression [52–54] (**Table 1**). Items that showed significant associations with recent depressive feelings ($P < 0.05$) were used as candidate explanatory variables in the subsequent multivariate logistic regression analyses (with variable selection methods for 'forward: LR' and 'backward: LR'). Adjusted ORs of each final explanatory variable for recent depression were estimated from the final multivariate regression model. All statistical analyses were performed using IBM SPSS Statistics version 24 (IBM Corp., Armonk, NY, USA).

Table 1. Estimated effects of demographic and clinical characteristics on experiencing depressive mood (n = 1,991).

Depressive = Feelings of sadness or hopelessness for more than 2 weeks (in the last 12 months) that interfered with daily life.	Depressed (n = 271)	Non-depressed (n = 1,720)	Unadjusted OR (95% CI)/ χ^2 score	*P*-value (Wald test/t-test)	Use in the multivariate logistic regression (forward LR/ backward LR)
Age, mean (SE)	15.5 (1.6)	15.2 (1.7)	t(1989) = 2.13	0.033	NA
Sex (%), M/F	117/154	819/901	$\chi^2(1) = 1.86$	0.173	NA
Body mass index	21.1 (3.7)	20.7 (3.1)	t(334.46) = 1.44	0.15	NA
Level of school, middle school/high school	106/165	792/928	$\chi^2(1) = 4.54$	0.033	NA
Part 1: Health-related behaviors: physical, psychological, and spiritual					
Physical: regular physical exercise (moderate intensity and >150 min/week) [Y/N]	124/147	678/1042	1.296 [1.002–1.678]	0.048	O
Physical: healthy eating habits [Y/N]	124/147	944/776	0.693 [0.536–0.897]	0.005	O
Physical: lifestyle balanced between study and rest [Y/N]	108/163	846/874	0.685 [0.527–0.889]	0.004	O
Psychological: positive mindset [Y/N]	141/130	1163/557	0.519 [0.401–0.673]	<0.001	O
Psychological: proactive lifestyle [Y/N]	132/139	1042/678	0.618 [0.478–0.799]	<0.001	O
Spiritual: make time for helping others [Y/N]	115/156	777/943	0.895 [0.691–1.159]	0.4	×
Spiritual: maintain faith and religious activities [Y/N]	91/180	567/1153	1.028 [0.784–1.349]	0.842	×
Part 2: School refusal/perceived safety at school					
Frequent thoughts of school refusal [Y/N]	125/146	296/1424	4.119 [3.145–5.394]	<0.001	O
Perceived level of safety on the school grounds: able to ask for help [Y/N]	148/123	1280/440	0.414 [0.318–0.538]	<0.001	O
Perceived level of safety on the school grounds: have information about risky areas [Y/N]	122/149	838/882	0.862 [0.666–1.115]	0.257	×
Perceived level of safety on the school grounds: free from bars and gambling venues [Y/N]	143/128	1099/621	0.631 [0.488–0.817]	<0.001	O
Part 3: Perceived social support (people with whom concerns are discussed)					
Perceived availability of father for discussing concerns [Y/N]	136/135	1129/591	0.527 [0.407–0.683]	<0.001	O
Perceived availability of mother for discussing concerns [Y/N]	178/93	1432/288	0.385 [0.291–0.510]	<0.001	O
Perceived availability of siblings for discussing concerns [Y/N]	138/133	1030/690	0.695 [0.538–0.899]	0.006	O
Perceived availability of friends of the same sex for discussing concerns [Y/N]	216/55	1515/205	0.531 [0.382–0.739]	<0.001	O
Perceived availability of friends of the opposite sex for discussing concerns [Y/N]	124/147	780/940	1.017 [0.786–1.315]	0.9	×
Perceived availability of schoolteachers for discussing concerns [Y/N]	115/156	994/726	0.538 [0.415–0.698]	<0.001	O

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Results

Of the 1,991 adolescents who participated in the study, 271 (13.6%) reported recent (in the last 12 months) sadness or hopelessness for more than 2 weeks that interfered with daily life functioning. We found no significant differences in age, sex, body mass index, or school level (middle school vs. high school) between depressed ($n = 271$) and non-depressed ($n = 1,720$) adolescents ($P < (0.05/4) = 0.013$; Table 1).

Simple logistic regression analyses revealed that the odds of recent feelings of depression were increased in adolescents with frequent thoughts of school refusal (crude OR [95% confidence interval] = 4.12 [3.15–5.39]) and in those who engaged in regular physical exercise (1.30 [1.00–1.68]). By contrast, physical health-related behaviors such as healthy eating habits (0.69

[0.54–0.90]) and a lifestyle balanced between study and rest (0.69 [0.53–0.90]); psychological health-related factors including a positive mindset (0.52 [0.40–0.67]) and proactive lifestyle (0.62 [0.48–0.80]); perceived school zone safety, including the ability to ask for help (0.42 [0.32–0.54]) and a school environment free from bars and gambling venues (0.63 [0.49–0.82]); and perceived availability of father (0.53 [0.41–0.68]), mother (0.39 [0.29–0.51]), siblings (0.70 [0.54–0.90]), friends of the same sex (0.53 [0.38–0.74]), or school teachers (0.54 [0.42–0.70]) were associated with a decreased risk for recent experiences of depression ($P < 0.05$; Table 1).

Multivariate logistic regression analyses with these 14 candidate variables (obtained from simple logistic regression analyses with $P < 0.05$; refer to the paragraph above and Table 1) revealed an increased risk of recent depressive feelings in adolescents who reported frequent thoughts of school refusal (adjusted OR = 3.25 [2.44–4.32]) and in those who engaged in regular physical exercise (1.57 [1.19–2.07]), whereas the health-related behaviors of positive mindset (0.65 [0.49–0.86]), perceived school zone safety including the ability to ask for help (0.62 [0.47–0.82]), and perceived availability of mother for support (0.54 [0.40–0.72]) were associated with a decreased risk for recent depression (Table 2). The multivariate logistic regression models were the same regardless of the variable selection method applied (forward LR or backward LR) and had significant goodness of fit (Hosmer–Lemeshow test = 0.394 > 0.05; percentage of correct classification = 86.4% >70%; area under the receiver operating characteristic curve for classifying group membership = 0.71 [0.68–0.75]).

Discussion

Summary

We used a self-report questionnaire dataset obtained from school-attending adolescents (N = 1,991) to identify factors significantly associated with the recent experience of depressive mood that interfered with daily living. Of the 1,991 students, 271 (13.6%) answered 'yes' to a single item asking about feelings of sadness or hopelessness for more than 2 weeks (in last 12 months) that interfered with everyday functioning. Although a diagnosis of depression cannot be based on this single item but must be confirmed through clinical evaluation by a certified psychiatrist, use of this single item might be more suitable for initial detection of recent experiences of depression in a community population [52–55]. Multivariate logistic regression analyses revealed higher odds of recent depression in adolescents with frequent thoughts of school refusal (odds ratio [95% confidence interval] = 3.25 [2.44–4.32]) and in those who engaged in regular physical exercise (1.57 [1.19–2.07]), whereas a positive mindset (0.65 [0.49–0.86]), perceived school zone safety (0.62 [0.47–0.82]), and perceived social support from one's mother (0.54 [0.40–0.72]) were associated with lower odds of recent depression.

Table 2. Multivariate logistic regression (with forward LR/backward LR applied for variable selection from candidate variables in Table 1): Estimated effects of health-related behaviors, school refusal/perceived safety at school, and perceived social support on recent depression.

Depression = Feelings of sadness or hopelessness for more than 2 weeks (in the last 12 months) that interfered with daily life.	b	Adjusted OR (95% CI) based on multivariate logistic regression	*P*-value (Wald test)
Part 1: Health-related behaviors: physical, psychological, and spiritual			
Physical: regular physical exercise (moderate intensity and >150 min/week)	0.449	1.566 (1.187–2.067)	0.002
Psychological: positive mindset	−0.435	0.648 (0.489–0.858)	0.002
Part 2: : School refusal/perceived safety at school			
Frequent thoughts of school refusal	1.179	3.250 (2.444–4.324)	<0.001
Perceived level of safety on the school grounds: able to ask for help	−0.479	0.620 (0.466–0.824)	0.001
Part 3: Perceived social support (people with whom concerns are discussed)			
Perceived availability of mother for discussing concerns	−0.624	0.536 (0.397–0.724)	<0.001

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School refusal: A possible indicator of adolescent depression

The most significant finding of our study is that frequent thoughts of school refusal are critical warning signs of adolescent depression. School refusal (self-motivated refusal to attend school and/or difficulty remaining in class for the full day) may be associated with loss of motivation for school attendance, the absence of social connectedness, sustained distress at school, social phobia or separation anxiety, and depressive mood [31–33, 56, 57]. Depressed individuals whose condition has not been identified likely suffer from diverse symptomatology and more severe functional impairment than their peers who have been diagnosed and are under proper psychiatric treatment [58]. Therefore, attentive detection of warning signs for depression, such as school refusal and insomnia, at an earlier stage, followed by referral to a physician for proper clinical treatment and efforts to identify and reduce the principal stressors, such as peer bullying at school, might be critical [58, 59].

More regular physical activity in adolescent depression

In the current study, higher odds for recent depression were shown among school-attending adolescents who participated in regular physical activity of moderate intensity. By contrast, other cross-sectional studies have reported an association between regular physical exercise and fewer depressive symptoms in adults [60, 61] and reduced risk of self-mutilating behavior in adolescents [62]. Furthermore, confounding clinical features such as the individual's tendency toward anxiety [63], the degree of self-efficacy [64], the compulsive nature of exercise [65], pressure for better performance among elite sports players [66], and the nature of sedentary behaviors (passive vs. mentally active) in daily living [67] could affect the pattern of the relationship between regular physical exercise and depressive symptoms. Physical activity and adolescent mental health interact in a bidirectional way [68]. Previous studies that applied physical activity programs as an intervention for adolescents have mainly examined the effects on weight control and did not focus on the impact of regular physical exercise on mental health [69]. Thus, further longitudinal studies are required to elucidate the profile and direction of influences between regular physical activity and depression in school-attending adolescents.

Positive mindset as a stress resilience factor in adolescence

A positive mindset could be defined as a cognitive–emotional–behavioral style that approaches stressors in one's life with an optimistic outlook, accepting reality as it is and making the most of the potentially bad situations with resilience, self-esteem, and self-efficacy [19, 70, 71]. Our finding that a positive mindset was associated with reduced risk for depressive mood in school-attending adolescents is consistent with a recent large-population study of more than 10,000 participants worldwide, which found that the strength of stress resilience (one's ability to positively adapt and manage stressful experiences using diverse coping strategies) was negatively correlated with depressive mood severity [72]. Another study found that stress resilience mediated the effects of social support on depressive mood [73]. A balanced attributional style for positive events may underlie the lower risk for depressive mood in middle school students who tend to have greater self-esteem than in high school students [74]. Moreover, well-developed stress resilience in late adolescence is associated with a reduced risk for bipolar disorder in adulthood [75]. Furthermore, a study in high-risk adolescents and young adults with depression and suicidal ideation found that increased use of a positive mindset, such as positive reframing, and decreased use of negative cognitive styles, such as self-blame and disengagement, lowered the risk for suicide at baseline and 4 months after the intervention [40]. Because stress resilience can be modified, an ongoing randomized controlled study to modify negative cognitive style by disrupting a selective bias toward negative information and thoughts is needed to investigate

whether enhanced stress resilience is a cost-effective [76] method for reducing depressive symptoms in adolescents [77].

Perceived social support and sharing concerns with parents

We found that the degree of perceived ease in sharing one's concerns with their mother was significantly associated with fewer reports of depressive mood in school-attending adolescents. Our finding is consistent with that of a previous study, which found the quality of communication with a parent (mother for girls and father for boys) had effects on depression and suicidal ideation in adolescents [78]. Similarly, a recent longitudinal investigation of the social interaction–depressive mood association using growth curve modeling found an association between adolescent–parent communication (with father for boys and with mother for girls) and a decrease in depressive symptoms as the adolescents reached early adulthood [79]. Moreover, female willingness to communicate with their parents is markedly related to sexual behavior in girls and the use of emergency contraceptive pills during adolescence [80]. With regard to the treatment of depressive symptoms, sustained emotional warmth from both parents has been shown to reduce significantly the severity of depressive symptoms experienced by male and female children and adolescents [81]. School-based programs targeting parent–student dyads or triads that focus on parental stress management skills [82] and emotionally attuned communication based on cognitive empathy [83, 84], offered during school vacations or on weekends, may help promote meaningful adolescent–parent communication.

Study limitations

Our study had several limitations. First, the cross-sectional study design does not allow causal inferences to be made between the intensity of perceived depressive mood and environmental, interpersonal, and individual cognitive factors. Second, use of one self-reporting item cannot be regarded as an equal substitute for clinical diagnosis based on a face-to-face interview by a trained physician. Third, as our study population consisted of middle school and high school students, we urge caution in generalizing our findings to adolescents who do not attend school.

Conclusions

Taken together, our findings suggest that parents and schoolteachers should talk regularly with adolescents about recent life (dis)satisfaction and stressors, particularly when teens report frequent thoughts of school refusal. Perceived social support would increase perceived safety on school grounds (i.e., students can find teachers and get help) and make it easier for young people to share their concerns with parents, thereby reducing the risk for depressive symptoms. School-based programs that promote a positive mindset would be helpful in preparing students for the diverse challenges of adulthood.

Supporting information

S1 Text. Self-reporting questionnaire (English version).
(DOC)

S2 Text. Self-reporting questionnaire (Korean version).
(DOC)

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Online Real-Self Presentation and Depression among Chinese Teens: Mediating Role of Social Support and Moderating Role of Dispositional Optimism

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Abstract The present study aimed to test the relation between adolescents' online real-self presentation and depression, as well as the mediating role of social support and moderating role of dispositional optimism. A sample of 1742 Chinese adolescents (girl = 961, mean age = 14.35 ± 1.52 years) completed questionnaires of depression, online real-self presentation, social support, and dispositional optimism. Results of correlation and regression analyses showed that adolescents' online real-self presentation could predict decreased depression via increasing social support. What's more, the mediation effect was moderated by dispositional optimism, in which the mediation effect was stronger among adolescents with low dispositional optimism than those with high dispositional optimism. This study explained how and when online real-self presentation affected adolescents' depressive symptoms, and provided a deeper understanding of the relation between online self-presentation and adolescents' mental health. The implications and limitations were discussed.

Keywords Depression · Online real-self presentation · Social support · Dispositional optimism

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1 Introduction

1.1 The Relation between Online Real-Self Presentation and Depression

Depression is a serious risk factor for adolescents. In the U.S., about 20% of girls and 7% of boys suffer from depressive symptoms during adolescence (Angold et al. 2002). In China, 28.6% of adolescents suffer from depressive symptoms, and the rate for boys is lower than for girls (Li et al. 2017). Depressive symptoms put adolescents at various disadvantageous situations of negative outcomes, including negative cognitive style and suicidal behavior (Apter et al. 1988; Frison and Eggermont 2015; Kindt et al. 2015). Protecting adolescents from depression has become the responsibility of the whole society.

Nowadays the Internet is a key element of adolescents' everyday life (Subrahmanyam and Šmahel 2011). The relation between social network sites (SNS) use and depressive symptom is twofold: Active SNS use can reduce depressive symptoms, while passive SNS use can exacerbate depressive symptoms (Frison and Eggermont 2016; Jelenchick et al. 2013). Active SNS use refers to that individuals interact with others on SNS actively, including leaving messages, making comments, disclosing themselves, and posting photos, et al.; however, passive SNS use refers to that people merely browse others' messages and information on SNS without leaving any comments or self-disclosure (Verduyn et al. 2015).

Self-presentation is a process through which people convey the image of themselves to others (Baumeister 1982; Leary and Kowalski 1990; Yang and Brown 2016). It is a way for adolescents to construct themselves, and it is important for adolescents' self-development (Yang and Brown 2016). Self-presentation is popular on SNS. This phenomenon reflects a motivation of impression management (Dogruer et al. 2011). In the Internet era, adolescents prefer to present themselves on SNS, as adolescents regard the Internet as a free and safe platform for them to express themselves (Joinson et al. 2007). On SNS, people can maximize their control over what they want to express (Attrill 2015a; Boyle and Johnson 2010). Online self-presentation is an activity sensitive to social and relational contexts (Yang and Brown 2016). This means that individuals should frequently adjust the way in which they convey their information on the SNS in order to conform to the social and relational contexts. From this perspective, online self-presentation is not a passive browsing activity, but an active interacting activity. Therefore, online self-presentation is a process of information management in cyberspace (Boyle and Johnson 2010), during which users control what they want to express via a series of active online activities such as posting photos, updating information and emoticons, as well as leaving messages.

Rogers (1951) put forward the concept of "true self". True self is an actual psychological existence which is not fully expressed in social life. Rogers considered the true self as a distinct concept from the ideal self and actual self (Bargh et al. 2002). The ideal self is the self-concept containing the qualities that people strive to possess and the actual self is the self-concept that people express to others at present (Higgins 1987). As the Internet provides an opportunity for self-express (Turkle 1995), Bargh and his colleagues suggested that true self is the first and foremost self-concept that one should express online (Bargh et al. 2002). Online real-self presentation is the behavior of presenting the true self on SNS (Michikyan et al. 2015). One recent research found

that person in late adolescence and emerging adulthood like to express their true selves on SNS (Michikyan et al. 2015).

Hyperpersonal communication theory indicates that individuals who are less concerned about how others perceive them feel less inhibited during computer-mediated communication than during face-to-face communication (Frison and Eggermont 2016; Walther 1996). Empirical studies also found that people like to present or disclose their depressive symptoms on SNS (e.g. Blease 2015; Moreno et al. 2011). For example, Moreno et al. (2011) found college students prefer to present their depressive symptoms on Facebook. Thus, online communication drives users to express and disclose more than face-to-face interaction does.

Similar to self-disclosure, self-presentation can enhance well-being and decrease depressive symptoms (Huang 2016; Ko and Kuo 2009; Yang and Brown 2016; Zhu 2011). One empirical study has found that the more real pain and needs that individuals present online, the more help they will get and then less depressed they will feel (Zhu 2011), and the more honest information individuals disclose online, the higher level of well-being they perceive (Huang 2016). Frison and Eggermont (2016) also have found that adolescents who present themselves on SNS more actively have less depressive symptoms. Because online self-presentation is a kind of active SNS behavior, we supposed that online real-self presentation would negatively correlate with depressive symptoms. Thus, the main aim of the present study is to investigate the relation between online real-self presentation and adolescents' depression.

Previous studies have indicated a negative correlation between online real-self presentation and depression. However, these studies have three weaknesses. First, most of previous research on the relation between online self-presentation and depression focused on adults but not adolescents in developmental period. However, adolescence is a critical period for the development of depression (Frison and Eggermont 2016), it is necessary to pay more attention to depressive symptoms among adolescents. To our knowledge there is little research specially investigated the relation between adolescents' SNS use and depression (e.g. Frison and Eggermont 2016). Furthermore, nearly all of the previous studies on online real-self presentation and depression were conducted among Western adolescents. Although psychological research emphasizes conclusions should be generalized to people all over the world (Li et al. 2012), the cultural difference for SNS use and depression still exist (e.g. Liu et al. 2016; Ryder et al. 2008) and it should be paid attention to. Report from China Internet Network Information Center (CINIC) showed that the popularizing rate of Internet among Chinese teens by the end of 2015 is 85.3% (more than 145 million), and about 90% of them use instant message and SNS (CINIC 2016), which reminds us the significance of research in Chinese cultural background. Therefore, the current study will investigate the relation and the mechanism of online real-self presentation and depression among adolescents in mainland China.

The second weakness is that the very few studies indeed investigated the relation between adolescents' SNS use and depression focused on generalized online behavior rather than the specific online activity. For example, Frison and Eggermont's (2016) study on adolescents focused the generalized active online behavior rather than online real-self presentation, which could not target at the specific relation between the characters of information people presented online and depressive symptoms. Therefore,

the present research will investigate the relation between adolescents' online real-self presentation and depression.

The third limitation is that many previous studies did not explore how and when online self-presentation affects depression. The present study will build a moderated mediation model to test the mediation and moderation effects synchronously, so as to help understand how and when online real-self presentation affects adolescents' depressive symptoms.

1.2 The Mediating Role of Social Support

Previously, the hyperpersonal communication theory indicates there is a correlation between online real-self presentation and depression. However, there will be some important variables mediate the relation between online real-self presentation and depression, such as social support. Social support is a human interaction through which people perceive, express, and gain emotional concern, information, or instrumental help (Trepte et al. 2015). Main effect model of social support suggests that social support is a protective factor which enhance individual well-being and reduce negative outcomes (Cohen and Wills 1985). Empirical research support this theory and reveal that social support increases life-satisfaction and decreases loneliness and depression (Frison and Eggermont in press; Heo et al. 2015; Trepte et al. 2015). For example, social support mediates the relation between self-disclosure and mental health (Chaudoir and Fisher 2010).

Nowadays, social support can occur both online and offline. Many studies found that self-disclosure is positively associated with social support (Chaudoir and Fisher 2010; Lee et al. 2013; Tichon and Shapiro 2003). Attrill (2015b) reviewed that people who suffer from depressive symptoms will use the Internet to seek support to reduce their depressive feelings. One recent study indicated that the more real-self people express on the SNS, the more supportive information they will receive (Yang and Brown 2016). Thus, the present study supposed that online real-self presentation reduces adolescents' depressive symptoms via increasing their social support. In addition, social support has been demonstrated to play a mediating role between online behavior and mental health (Beaudoin and Tao 2007; Frison and Eggermont 2015; Frison and Eggermont in press; Jung et al. 2012). For instance, in Frison and Eggermont's (2015) study, adolescents reported that the more active SNS activities they have, the more social support they gain and the less depressive mood they perceive. Therefore, the present research integrated the hyperpersonal communication theory and main effect model of social support to put forward the first hypothesis:

> H1: Online real-self presentation will negatively predict adolescents' depression through social support.

1.3 The Moderating Role of Dispositional Optimism

Although online real-self presentation will decrease depression via increasing social support, it is impossible that all individuals are affected by the mediation effect equally. Organism–environment interaction model states that people with certain intrapersonal

traits will respond to similar environmental contexts differently, the dynamics of individual and contextual interactions will contribute to the person's psychological and social adaptation (Lerner et al. 2006). This indicates that adolescents with different intrapersonal attributes may respond differently even in the same situation (Li et al. 2013). Therefore, it is necessary to investigate which intrapersonal attribute will moderate the relation among online real-self presentation, depression, and social support. Dispositional optimism is a cognitive construct which refers to the positive and negative expectations toward future outcomes (Carver and Scheier 2014). It is an important intrapersonal attribute related to many positive outcomes (Zou et al. 2016). In the present study, we supposed that dispositional optimism is one such intrapersonal attribute variable that will play a moderating role.

As real-self presentation, social support, and disposition optimism are all protective factors of adolescents' development, the interactions of these variables will present two modes basing on the previous studies reviewed (Li et al. 2013; Pluess and Belsky 2013). The first one is protective enhancing model, which refers to that one protective factor enhances the positive effect of another protective factor (Li et al. 2013). In this study, enhancing model indicates that the reduced effect of online real-self presentation on depressive symptoms will be higher among adolescents with high disposition optimism than in adolescents with low dispositional optimism. The other one is protective attenuating model, which refers to that the positive effect of one protective factor is stronger for individuals with low levels of another protective factor than high levels (Li et al. 2013). In this study, attenuating model indicates that the reduced effect of online real-self presentation on depressive symptoms will be higher in adolescents' with low dispositional optimism than in those with high dispositional optimism. Some studies found that dispositional optimism moderated the relation between socio-economic status (SES) and self-esteem (Chen et al. 2016), and the relation between optimism intervention training exercises and training time (Sergeant and Mongrain 2014). In Chen and his colleagues' study, they found that dispositional optimism enhanced the relation between SES and self-esteem (Chen et al. 2016). Thus, basing on the protective interaction model and previous studies, we put forward the second hypothesis:

> H2: Dispositional optimism moderates the mediation model, and the moderating mode will be the protective enhancing model. Specifically, the effect of online real-self presentation on depressive symptoms will be stronger in adolescents with high dispositional optimism than adolescents with low dispositional optimism.

1.4 The Present Study

The present study focused on the relation between online real-self presentation and depressive symptoms, as well as the mediation effect of social support and the moderation effect of dispositional optimism among Chinese teenagers' online communication. In China, QQ and Wechat are two most popular SNS among adolescents. Thus, the present study chose there two as the platform of this study. In addition, the present research did not distinguish the place where social support occurred (online or offline), but only focused on the degree of social support that adolescents' perceived.

Because most of adolescents' online friends are friends and classmates with whom they acquainted offline (Subrahmanyam et al. 2008), in other words, the same friend can provide support both online and offline, the effect of social support on depression depends on the degree of and/or the number of support adolescents perceive, rather than the support occur online or offline. Moreover, some research found that gender difference exists on the level of online self-presentation and depressive symptoms among adolescents (Angold et al. 2002; Susan and Kapidzic 2015). Thus, gender would play as the covariate and be controlled in the data analyses in the present study.

2 Method

2.1 Participants and Procedure

The present study recruited 1742 adolescents (girl = 961) from four high schools in Mainland China by cluster sampling. The mean age of the participants was 14.35 ± 1.52 years old. All students in the present study have used QQ and Wechat previously, but most of them (63.0%) use SNS for less than 10 min per day. Trained research assistants conducted the survey in the classroom after the informed consent was obtained from students and teachers. Participants completed the questionnaires following the instructions of research assistants, and they finished all questionnaires in 25 min. This investigation was approved by the Ethical Committee for Scientific Research at the researchers' affiliated institution.

2.2 Measures

Online Real-Self Presentation We used the real-self subscale from the adolescents' online self-presentation questionnaire developed by Kim and Lee (2011). This questionnaire has been revised into Chinese by Niu and his colleagues (Niu et al. 2015a, b). The real-self presentation subscale consisted of four items (e.g. "I freely reveal negative emotions I feel—for example, sadness, anxiety, or anger"). Participants rate their attitude on a 7-point scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. This scale was reliable in this study (Cronbach's $\alpha = .65$).

Depression The present study used the Center for Epidemiological Studies Depression Scale (Frison and Eggermont 2015) to assess adolescents' depressive symptoms. Participants rate their depressive symptoms on the 4-point scale ranging from 1 = *not at all* to 4 = *a lot* in the last week. This scale consisted of 20 items. This scale was widely used in Chinese adolescents (Cui et al. 2012; Niu et al. 2015a, b) and was reliable in this study (Cronbach's $\alpha = .86$).

Social Support We used the adolescents' social support scale (Ye and Dai 2008) to assess adolescents' social support. This scale consisted of 17 items (e.g. "Most of classmates are care about me") classified into three dimensions: subjectively perceived support (Cronbach's $\alpha = .88$), objectively gained support (Cronbach's $\alpha = .86$), and the support availability (Cronbach's $\alpha = .83$). Participants rated on a 5-point scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. This scale was reliable in this study.

Dispositional Optimism We used adolescents' optimism scale (Zhang et al. 2015) to assess participants' dispositional optimism. This scale consisted of 27 items (e.g. "I have confidence in myself") divided into three dimensions: pessimism (Cronbach's α = .79), optimism (Cronbach's α = .83), and optimism efficiency (Cronbach's α = .86). Participants rated on a 5-point scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. This scale was reliable in this study.

2.3 Data Analysis

The present study conducted multiple regressions using Hayes' (Hayes 2013) SPSS Marco (Model 59) to analyze the moderated mediation effect. Before regression analyses, all variables except gender were standardized. In regression Model 1, online real-self presentation, optimism, and the interaction of online real-self presentation and optimism were independent variables, depression was dependent variable; in regression Model 2, independent variables were the same as model 1 but dependent variable was social support. In regression Model 3, independent variables were online real-self presentation, optimism, social support, the interaction of online real-self presentation and optimism, and the interaction of social support and optimism, dependent variable was depression. Gender was the control variable in all regression models. We randomly sampled 5000 times from the original data when doing the regressions, the 95% confidence interval (CI) without *zero* meant statistically significant.

3 Results

3.1 Preliminary Analyses

T-test revealed that girls (M = 1.76, SD = 0.50) reported higher depression scores than boys (M = 1.70, SD = 0.47), $t_{(1682)} = 2.69$, $p < .01$. Pearson's product moment correlation was calculated before main analyses. Table 1 showed the results of correlation and the mean and standard deviation of variables. Results showed that depression was negatively correlated with online real-self presentation ($r = -.19$, $p < .001$), social support ($r = -.48$, $p < .001$), and optimism ($r = -.64$, $p < .001$).

Table 1 Correlation coefficients, means, and standard deviations of variables

	M	*SD*	1	2	3	4
1 Gender [a]	0.43	0.50	1			
2 Depression	1.74	0.49	−.07**	1		
3 ORSP [b]	4.12	1.31	−.05	−.19***	1	
4 Social support	3.66	0.75	−.05	−.48***	.26***	1
5 Dispositional optimism	3.52	0.54	.06*	−.64***	.18***	.48***

[a] 0 = girls, 1 = boys. [b] ORSP = online real-self presentation

* $p < .05$ ** $p < .01$ *** $p < .001$

3.2 Moderated Mediation Effect Analyses

First, the total effect of online real-self presentation on depression was conducted (see Model 1 in Table 2) after controlling for gender. Results showed that online real-self presentation negatively predicted depression (B = −.09, SE = .02, p < .001), optimism negatively predicted depression (B = −.61, SE = .02, p < .001). The interaction of online real-self presentation and optimism positively predicted depression (B = .08, SE = .04, p < .001).

Then, we tested the effects of online real-self presentation, optimism, and the interaction of online real-self presentation and optimism on social support while controlling for gender (see Model 2 in Table 2). Results showed that online real-self presentation positively predicted social support (B = .18, SE = .02, p < .001), optimism positively predicted social support (B = .45, SE = .02, p < .001). The effect of interaction of online real-self presentation and optimism on social support was negative (B = −.04, SE = .02, p < .05). Results of simple slope test indicated that the regression slope of online real-self presentation on social support was stronger for adolescents with low level of optimism (B_{simple} = .18, p < .001) than adolescents with high level of optimism (B_{simple} = .13, p < .001) (Fig. 1).

In the third step, we included online real-self presentation, optimism, social support, the interaction of online real-self presentation and optimism, and the interaction of social support and optimism as independent variables to predict depression, with gender controlled as well (see Model 3 in Table 2). Results showed that online real-self presentation negatively predicted depression (B = −.05, SE = .02, p < .01), optimism negatively predicted depression (B = −.51, SE = .03, p < .001), social support negatively predicted depression (B = −.22, SE = .02, p < .001). The interaction of online real-self presentation and optimism (B = .04, SE = .02, p < .05) and the interaction of social support and optimism were positive (B = .09, SE = .02, p < .001). Results of simple slope tests showed that the effect of social support on depression was stronger for adolescents with low level of optimism (B_{simple} = −.31,

Table 2 Moderated mediating effect analyses

	Model 1 criterion (depression)		Model 2 criterion (social support)		Model 3 criterion (depression)	
Predictors	*B*	*SE*	*B*	*SE*	*B*	*SE*
Gender [a]	.01	.02	−.13**	.04	−.09*	.04
ORSP [b]	−.09***	.02	.18***	.02	−.05**	.02
Optimism	−.61***	.02	.45***	.02	−.51***	.03
ORSP× Dispositional optimism	.08***	.04	−.04*	.02	.04*	.02
Social support					−.22***	.02
Social support × Dispositional optimism					.09***	.02
R^2	.42***		.27***		.46***	
F	304.85		152.44		240.69	

[a] 0 = girls, 1 = boys. [b] ORSP = online real-self presentation

*p < .05 **p < .01 ***p < .001

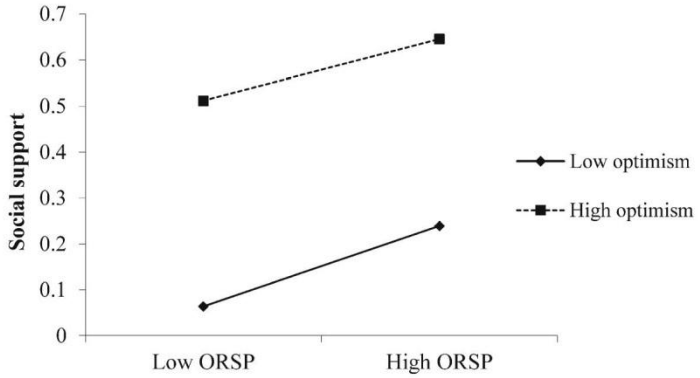

Fig. 1 Disposition optimism moderated the relation between online real-self presentation and social support. ORSP = online real-self presentation. The function was graphed for two levels of independent variable and moderator: 1 *SD* above the mean and 1 *SD* below the mean

$p < .001$) than for adolescents with high level of optimism ($B_{simple} = -.01$, $p < .001$) (Fig. 2). The effect of online real-self presentation on depression was significant for adolescents with low level of optimism ($B_{simple} = -.09$, $p < .01$), but not for adolescents with high level of optimism ($B_{simple} = -.01$, $p = .68$) (Fig. 3). Results of regression were shown in Table 2. The indirect effect of social support was significant (ab = −.04, *SE* = .01, 95% CI [−.05, −.02]).

The conditional indirect effect was stronger for adolescents with low optimism (ab = −.07, *SE* = .01, 95% CI [−.09, −.04]) than those with high optimism (ab = −.02, *SE* = .01, 95% CI [−.03, −.01]). This meant that social support played a mediating role in the relation between online real-self presentation and depression, and the mediation effect was moderated by the dispositional optimism. Thus, the first hypothesis was completely supported, but the second

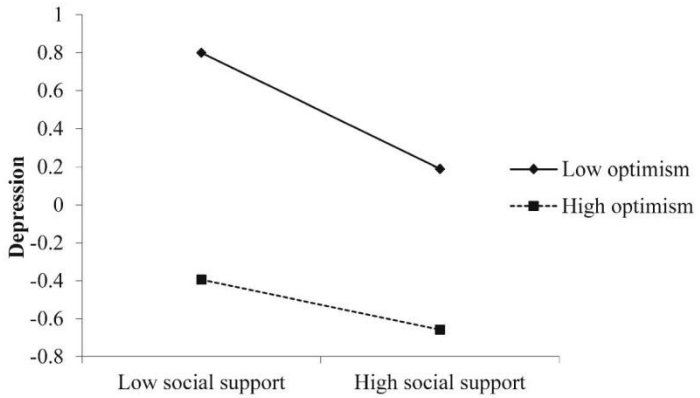

Fig. 2 Disposition optimism moderated the relation between support and depression. The function was graphed for two levels of independent variable and moderator: 1 *SD* above the mean and 1 *SD* below the mean

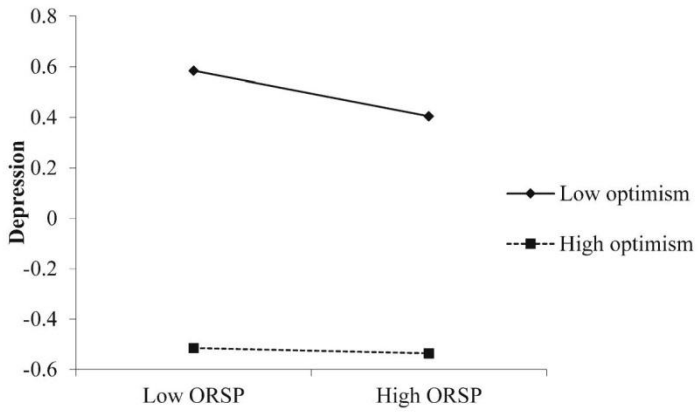

Fig. 3 Disposition optimism moderated the relation between online real-self presentation and depression when social support was included in the regression function. ORSP = online real-self presentation. The function was graphed for two levels of independent variable and moderator: 1 *SD* above the mean and 1 *SD* below the mean

hypothesis was partially supported, because the interaction mode was protective attenuating model but not the supposed protective enhancing model.

4 Discussion

The present study was the first to test the relation between online real-self presentation and depression among Chinese teenagers, as well as the mediating role of social support and moderating role of dispositional optimism. Results showed online real-self presentation was negatively associated with depression, and online real-self presentation reduced depression via social support. These results were similar with some previous researches (Attrill 2015b; Beaudoin and Tao 2007; Chaudoir and Fisher 2010; Frison and Eggermont 2015; Zhu 2011), and can be explained by the hyperpersonal communication theory and the main effect model of social support (Cohen and Wills 1985; Walther 1996). Compared with offline environment, cyberspace enhances the possibility for individuals to present more self-related information, and people like to present more real self than ideal self on the SNS (Michikyan et al. 2015; Walther 1996). Moreover, as a kind of online self-disclosure, adolescents who present more of their authentic information online will be more likely to let friends know themselves, and then receive more social supports (Yang and Brown 2016). The mediation model indicates that the enhancement effect of online self-presentation on mental health does not only work in a direct way, but also in an indirect way via social support. The present results indicate that, as a kind of active SNS activity and a way of self-development (Yang and Brown 2016), online real-self presentation is beneficial for adolescents' mental health.

In addition, the present study also finds that the mediation model is moderated by adolescents' dispositional optimism. In specific, the indirect effect is stronger for

adolescents with low dispositional optimism than for those with high dispositional optimism. This moderation effect supports the protective attenuating model, but is opposite to the protective enhancing model and some previous studies (Chen et al. 2016; Li et al. 2013). Although this result does not support our hypothesis, it is reasonable for some reasons. Dispositional optimism is a key intrapersonal trait that can protect adolescents from negative outcomes (Zou et al. 2016) such as adolescents' depressive symptoms (Niu et al. 2015a, b). Therefore, we thought that adolescents with high level of dispositional optimism have a low level of depressive symptoms. Their online real-self presentation will not contain much information related to depressive symptoms. In addition, they may not have many needs for reducing depressive symptoms. Therefore, the amount of their online real-self presentation will not help them gain the social support that reduces the depressive symptoms. On the contrary, as Attrill (2015b) summarized, adolescents with low optimism may have much negative feeling in daily life, and like to present their negative feeling on the SNS. Thus, they may seek and get supports from families or friends via their online real-self presentation, which in turn can reduce their depressive symptoms. This moderation effect enlightens that it is necessary to consider intrapersonal attributes when investigating the relation between online behaviors and mental health.

There are some limitations and future directions should be clarified. First, all questionnaires in this study are self-reported and one scale is of relatively low reliability, which may bring negative influences to the study validity and cause social desirability effects. Therefore, multiple-source assessments and high quality questionnaires are needed in future studies. Second, the present study can only reveal the correlativity among all variables, thus it is necessary to conduct experimental or longitudinal studies to reveal the causality in future. Both experiment study and multiple-source assessment can control more covariates and social desirability effects and to enhance the validity. However, according to Haugland and Wold's (2001) suggestion, adolescents older than 14 years old are able to assess their mental health accurately. Therefore, though social desirability effects are inevitable, the present study is of certain validity. Third, the present research only tested social support as the mediation variable in the relation between online real-self presentation and depression. However, the relation between online real-self presentation and depression may be mediated by more variables except for social support. For example, the quality of friendship has been proved to mediate the relation between online communication and well-being (Valkenburg and Peter 2007). Thus, it is necessary to explore more important mediating variables in future studies.

In conclusion, the present study finds that adolescents' online real-self presentation decreases their depressive symptoms via increasing perceived social support, and this mediation effect is stronger among adolescents with low dispositional optimism than those with high dispositional optimism. The study has both theoretical and practical significance. From the theoretical perspective, this study integrates the hyperpersonal communication theory and main effect model of social support to reveal how and when online interaction affects adolescents' mental health. From the practical perspective, the results of present study reveal that it is important and necessary to encourage adolescents to present real self during online communication.

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Compliance with Ethical Standards

Conflict of Interest No financial interest and conflict in present research.

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HUBUNGAN DUKUNGAN KELUARGA DENGAN KEJADIAN DEPRESI PADA REMAJA AWAL

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ABSTRAK

Remaja mengalami berbagai perubahan yaitu fisik, emosional, sosial, dan kognitif yang menyebabkan munculnya berbagai permasalahan. Salah satunya ialah depresi. Selain itu, remaja mengalami berbagai stressor sehingga dibutuhkan dukungan untuk mengatasinya, terutama dukungan dari orang tua. Penelitian ini bertujuan untuk mengidentifikasi adanya hubungan dukungan keluarga dengan kejadian depresi pada remaja awal di SMPN 106 Jakarta Timur. Penelitian ini adalah penelitian deskriptif analitik dengan pendekatan *"Cross Sectional".* Jumlah *sample* yang diperoleh sebanyak 176 siswa di SMPN 106 Jakarta Timur dengan teknik *sampling* yang digunakan adalah *Stratified Random Sampling.* Hasil analisis data menggunakan uji *chi squre* dengan tingkat keperacayaan 95 % (*p-value* = 0,05). Hasil dari penelitian ini menunjukan *p-value* = 0,010 (<0,05), berarti hal ini menunjukan bahwa terdapat hubungan yang signifikan antara dukungan keluarga dengan kejadian depresi pada remaja awal di SMPN 106 Jakarta Timur. Rekomendasi penelitian adalah mengadakan penyuluhan tentang kesehatan mental, deteksi dini remaja yang beresiko mengalami depresi, dan mengadakan program PIK-R.

Kata kunci : dukungan keluarga, kejadian depresi, remaja awal

Abstract

Early adolescence experience some changes namely physical, emotional, social, and cognitive that cause emergence of various problem. One of them is depression, in addition to experiencing a variety of stressors that need support to overcome them, including support from parents. The purpose of this research is to identification related family support to the incidence of depression on early adolescence in SMPN 106 Jakarta Timur. This study used a descriptive analitic with cross sectional approach. There were 176 respondents in SMPN 106 Jakarta Timur with the sampling technique is Stratified Random Sampling. The result of data analytic used chi squre with level of confidence 95% (p-value = 0,05). The result of this research showed p-value = 0,010 (<0,05), that is means there is a significant related family support to the incidence of depression on early adolescence in SMPN 106 Jakarta Timur. Recommendation of this research is to give conduct counseling about mental health, early detection of adolescents at risk of depression and provide PIK-R program.

Keyword : *family support, incidence of depression, early adolescence*

LATAR BELAKANG

Survei Penduduk Antar Sensus 2015 menunjukkan bahwa penduduk usia 15-24 tahun mencapai 42.061,2 juta atau sebesar 16,5 persen dari total penduduk Indonesia (Brief Notes, 2017). Generasi muda merupakan generasi penerus bangsa yang diharapkan mampu memegang tanggung jawab, menghadapi tantangan, dan menghadapi perubahan yang terjadi pada dirinya sehingga dapat tumbuh dan berkembang secara wajar baik jasmani, social, maupun mental (Zainudin, 2016).

Remaja mengalami perubahan fisik, emosional, sosial, dan kognitif (Yusuf, 2016) yang dapat menyebabkan munculnya berbagai permasalahan seperti depresi. Remaja yang tidak mampu beradaptasi dengan perubahan akan mengalami kesulitan untuk melakukan pilihan, melakukan perilaku yang menyimpang dari kebiasaan sehingga terdapat banyak masalah yang tidak teratasi yang menyebabkan remaja menjadi merasa kecewa, tidak menghargai diri sendiri serta menganggap dirinya sebagai orang yang gagal atau tidak mampu. Kondisi ini jika berkelanjutan dapat menyebabkan depresi pada remaja (Khan, 2012). Menurut Yusuf (2016), depresi pada remaja disebabkan perceraian orang tua, pola asuh otoriter, dan kurangnya hubungan dengan teman sebaya. Remaja yang mengalami tekanan saat belajar di sekolah berada pada resiko yang lebih tinggi untuk mengalami depresi (Haryanto, 2015).

Depresi pada remaja dapat ditandai dengan perilaku menyimpang, seperti penyalahgunaan narkoba, balapan liar, tawuran, minum-minuman keras, dan perilaku seksual (Yusuf, 2016). Menurut WHO (2012) depresi dapat mengarah pada usaha bunuh diri dimana gangguan ini telah menyebabkan 850.000 orang meninggal setiap tahunnya. Sebanyak 86 % dari jumlah tersebut terjadi di negara-negara berkembang, setengah dari jumlah penderita tersebut berusia 15-44 tahun. Hasil studi dr. Anne Glowinski dari Washington University, dikutip dari Reuters menyebutkan remaja usia 12-17 tahun mengalami peningkatan pravalensi depresi, dari sebelumnya 8,7 % pada tahun 2005 menjadi 11,3 % pada tahun 2014 (Sulaiman, 2016).

National Institute of Mental Health prevalensi depresi pada anak usia 9-17 tahun adalah lebih dari 6% dimana 4,9% diantaranya mengalami depresi mayor pada usia 8-10 tahun (Asmika, 2013). Menurut Kemenkes (2016) berdasarkan data WHO (2016) terdapat sekitar 35 juta orang terkena depresi, 60 juta orang terkena bipolar, 21 juta terkena skizofrenia, serta 47,5 juta terkena dimensia dan diperkirakan sekitar 20% anak dan remaja di seluruh dunia mengalami masalah kejiwaan termasuk depresi.

Prevalensi gangguan mental emosional pada penduduk umur ≥ 15 tahun secara nasional 6,0% yang ditunjukkan dengan gejala depresi dan kecemasan (Riskesdas, 2013). Di Indonesia pada tahun 2013 prevalensi gangguan mental emosional tertinggi adalah Sulawesi Tengah 11,6%, terendah di Lampung 1,2% dan data DKI sebesar 5,7 % (Riskesdas, 2013). Data diatas menunjukan bahwa usia muda beresiko tinggi mengalami depresi.

Depresi dapat diderita oleh laki-laki maupun perempuan. Hasil penelitian Darmayanti (2008) mengatakan penderita depresi pada remaja perempuan lebih banyak dibandingkan laki-laki. Hal ini dikarenakan perempuan kurang asertif, lebih memusatkan perhatian pada gejala depresi, dan kurang agresif baik secara fisik maupun verbal dalam berinteraksi dengan kelompoknya. Depresi dapat mengakibatkan dampak yang merugikan seperti terganggunya fungsi sosial, mengalami kesulitan untuk berkonsentrasi, mengurung diri di kamar, hilangnya rasa percaya diri dan semangat hidup, dengan begitu remaja menjadi pesimis dan

tidak ada yang bisa memahami dirinya (Khan, 2012).

Depresi juga berdampak pada resiko untuk melakukan bunuh diri karena adanya stressor pada remaja yang membuat remaja merasa tertekan sehingga diperlukannya dukungan sebagai penguat positif dan regulasi diri yang adekuat salah satunya adalah dukungan yang bersumber dari keluarga (Haryanto, 2015). Dukungan keluarga pada dasarnya membantu remaja mengembangkan keseimbangan yang lebih besar, memperkuat selama momen ketidakberdayaan dan membantu dalam pencapaian tugas-tugas perkembangan (Rahmawati, 2015). Dukungan yang paling besar bagi remaja berasal dari orang tua dan keluarga terdekat karena keluarga merupakan tempat yang utama bagi perkembangan remaja baik secara fisik, kognitif, sosial emosional.

Dukungan yang positif dari orang tua sangat membantu dalam penyesuaian diri remaja dan dapat mengurangi depresi pada remaja (Sarafino, 2011 dalam Kisnawati, 2017). Dukungan keluarga yang dapat diberikan berupa dukungan informasi, dukungan penilaian, dukungan instrumental dan dukungan emosi (Friedman, 2010). Dukungan-dukungan tersebut memberikan penyediaan sarana prasarana, jasa, informasi, perhatian, apresiasi atau penghargaan maupun nasihat yang mampu membuat penerima akan merasa disenangi, aman, dihargai, dan tentram (Friedman, 2010).

Penelitian tentang hubungan dukungan sosial keluarga dengan *Self Esteem* pada Remaja Akhir di Kota Denpasar yang dilakukan oleh Sancaya (2014) menunjukan dukungan sosial keluarga yang tinggi yaitu 82,4% berdampak pada *self esteem* dengan kategori tinggi pada remaja yaitu 40 %. Hal ini menunjukkan dengan dukungan keluarga yang tinggi dan *self estem* yang baik maka remaja mampu bertindak mandiri, bertanggung jawab, memiliki tingkat frustasi yang rendah, senang dengan tantangan baru, mampu mengendalikan emosi positif maupun negatif sehingga akan terhindar dari depresi.

Penelitian yang dilakukan oleh Rahmawati (2015) dengan judul Hubungan Dukungan Keluarga dengan Tingkat Depresi pada Remaja Awal di Lembaga Pemasyarakatan menunjukkan dukungan keluarga yang tinggi dengan remaja yang tidak mengalami depresi sebesar 10,9 % dan dukungan keluarga yang rendah serta mengalami depresi ringan sebesar 39,1%. Hal ini di karenakan dukungan keluarga memberikan dampak positif terhadap seseorang dalam melawan stessor yang dialaminya sedangkan depresi dapat muncul karena dipicu oleh kurangnya dukungan yang diperoleh sehingga tidak dapat menolak efek negatif dari stressor yang muncul.

Berdasarkan studi pendahuluan yang dilakukan peneliti di SMPN 106 Jakarta Timur dengan melakukan wawancara pada guru BK (Bimbingan Konseling) didapatkan data gejala depresi yaitu mengalami perasaan mudah tersinggung, perasaan takut/tertekan, berfikiran negatif, tidak bersemangat untuk sekolah sehingga sering bolos sekolah, sedih, mengalami sosial yang kurang baik seperti berkelahi dengan temannya dan permasalahan pada keluarga yaitu sering mengalami perdebatan dengan orang tua.

Berdasarkan hasil wawancara pada siswa/siswi dengan jumlah 20 orang didapatkan 9 diantaranya mengalami gejala depresi yaitu remaja merasa bahwa ia kesulitan dalam belajar,merasa ada beban, mudah tersinggung, suka bolos sekolah, kehilangan minat beraktivitas, merasa sedih, sering mengalami perdebatan dengan teman. Sedangkan untuk dukungan keluarga remaja mengungkapkan terkadang merasa orang tua tidak membantu dalam belajar, mengalami perdebatan dengan orang tua, dan terkadang orang tua tidak memahami masalah yang terjadi pada remaja.

Berdasarkan uraian diatas peneliti bertujuan mengidentifikasi hubungan dukungan keluarga dengan kejadian depresi pada remaja awal di SMPN 106 Jakarta Timur

METODOLOGI

Penelitian ini merupakan penelitian kuantitatif dengan desain deskriptif analitik menggunakan pendekatan *"cross sectional"* Penelitian dilakukan di SMPN 106 Jakarta Timur. Populasi adalah siswa/siswi kelas 1 dan kelas 2 dengan sampel 176 responden yang diambil dengan menggunakan teknik *Stratified Random Sampling.*

Pengumpulan data menggunakan kuesioner dilakukan oleh peneliti dengan tahapan memberikan penjelasan penelitian dan *informed consent.* Jika responden menyetujui untuk menjadi responden, selanjutnya akan menandatangani lembar persetujuan. Data yang diperoleh diolah menggunakan metode komputer melalui tahapan *editing, coding, data entry,* dan *cleaning.* Tehnik analisis data menggunakan analisis deskriptif (*univariat*) dan analisis analitik (*bivariat*). Dalam penelitian ini, remaja dikategorikan mengalami depresi bila skor > 10 dan tidak depresi, bila skor ≤ 9. Sedangkan dukungan keluarga dikategorikan menjadi dukungan kurang, bila skor < 86,34 (nilai mean) dan dukungan baik, bila skor ≥ 86,34 (nilai mean)

HASIL DAN PEMBAHASAN

Analisis Univariat

Karakteristik remaja awal di SMPN 106 Jakarta Timur sebagaian besar responden berjenis kelamin perempuan 56,2%. Usia pada remaja awal sebagian besar berusia 12-13 tahun sebanyak 51,1 %. Karakteristik orang tua pada penelitian ini yaitu pendidikan ayah sebanyak 74,4 % ≥ SMA dan pendidikan ibu sebanyak 72,7% ≥ SMA dengan penghasilan keluarga sebanyak 61,4% < UMR (UMR DKI Jakarta Rp. 3.648,035). Remaja awal yang memiliki dukungan keluarga baik 44,3% dan dukungan keluarga kurang 55,7%. Remaja yang mengalami kejadian depresi sebanyak 34,1% dan yang tidak mengalami depresi 65,9%.

Analisis Bivariat

Remaja awal yang mendapat dukungan keluarga yang baik dan tidak mengalami depresi sebanyak 76,9%, sedangkan remaja yang mendapat dukungan keluarga yang kurang dan mengalami depresi sebanyak 42,9%. Berdasarkan analisis menggunakan uji statistik *chi-square* diperoleh *p-value* 0.010 nilai *p-value* ini < 0.05 maka H0 ditolak, dapat disimpulkan bahwa ada hubungan bermakna antara dukungan keluarga dengan kejadian depresi pada remaja awal di SMPN 106 Jakarta Timur. Dengan *Odd Ratio* sebesar 0,400 yang berarti remaja awal yang mendapatkan dukungan keluarga yang kurang memiliki 0,400 kali berpeluang mengalami depresi dibandingkan dengan yang mendapatkan dukungan keluarga yang baik.

Hasil penelitian berdasarkan kejadian depresi pada remaja awal di SMPN 106 Jakarta Timur menunjukkan 65,9 % remaja awal tidak mengalami depresi dan 34,1% remaja awal mengalami depresi. Hal ini sesuai dengan penelitian yang dilakukan oleh Kisnawati, (2016) remaja yang mengalami depresi minimal sebanyak 70 orang (91,7%) dan rendah sebanyak 6 orang (7,9%). Namun, hal ini tidak sesuai pada penelitian yang di lakukan oleh Rahmawati, (2015) responden yang depresi lebih banyak dibandingkan yang tidak depresi yaitu 28 orang (60,9 %) mengalami depresi ringan dan 18 orang (39,1 %) tidak mengalami depresi. Hal ini kemungkinan terjadi karena perbedaan karakteristik remaja dimana responden yang di teliti Rahmawati (2015), adalah penghuni lembaga pemasyarakatan (Lapas).

Hasil penelitian menunjukkan sebagian besar remaja awal tidak mengalami depresi 65,9% kemungkinan hal ini terjadi karena remaja awal merasa masih memiliki masa depan yang baik 71 %, merasa masih ada hal yang dapat diharapkan dimasa depan 69, 3%, dan merasa bahwa hidupnya masih berharga 68,2 %. Hasil penelitian menunjukkan 34,1% depresi. Hal ini menunjukan bahwa faktor yang paling tinggi mengarah pada depresi yang diungkapkan oleh remaja yaitu sering merasa putus asa dan sedih 49,4 %, merasa sulit untuk meningkatkan inisiatif dalam melakukan sesuatu 44, 9% dan tidak dapat merasakan perasaan positif 41,5%.

Hal ini diperkuat oleh pernyataan Sumiati, (2009) depresi pada remaja dapat diakibatkan karena remaja tidak mengetahui penyebab konflik yang terjadi secara terus menerus. Hal ini menyebabkan remaja menjadi merasa gelisah dan bimbang karena tidak ada yang memahami masalahnya maka sikap yang ditimbulkan pada remaja yaitu murung, sedih yang berkepanjangan, sensitif, mudah tersinggung, hilang semangat sekolah/bermain, hilang rasa percaya diri dan menurunnya daya tahan tubuh.

Remaja yang mengalami depresi mayoritas adalah remaja perempuan 43 (43,4%) sedangkan remaja laki-laki 17 (22,1%). Hal ini menunjukkan bahwa tidak menutup kemungkinan remaja laki-laki dan perempuan mengalami depresi, yang membedakan remaja perempuan lebih sering terjadi depresi dikarenakan adanya perbedaan strategi dalam mengatasi masalah yang menyebabkan perempuan lebih banyak menderita depresi dibandingkan laki-laki. Hal ini sesuai dengan penelitian yang dilakukan oleh Kisnawati, (2016) bahwa remaja perempuan lebih sering mengalami depresi yaitu sebesar 53 (69,7%) dibandingkan remaja laki laki yaitu 23(30,3%). Hal ini sejalan dengan penelitian Darmayanti (2008) yaitu perempuan cenderung lebih depresif dibanding laki-laki, karena perempuan kurang asertif, perempuan lebih memusatkan perhatiannya pada simtom-simtom depresi yang dialaminya.

Usia remaja pada penelitian ini adalah remaja awal dengan usia 12-15 tahun. Hasil penelitian menunjukkan bahwa remaja awal yang mengalami depresi 30 orang (33,3 %) berusia 12-13 tahun dan 30 orang (34,9 %) berusia 14-15 tahun. Hal ini menunjukkan tidak ada perbedaan yang signifikan antara remaja yang berusia 12-13 tahun dan 14-15 tahun untuk mengalami depresi yang paling tinggi namun pada penelitian ini usia responden mayoritas adalah pada usia 12-13 tahun 51,1%. Remaja yang mengalami depresi berusia 12-15 tahun kemungkinan memiliki stressor yang sama yaitu dikarenakan pada usia 11-15 tahun pertama kalinya remaja wanita mengalami menstruasi. sedangkan remaja laki-laki mengalami mimpi basah sekitar usia 14-15 tahun. Perubahan fisik pada remaja wanita ditandai dengan kematangan organ-organ seksnya dan mengeluarkan hormon-hormon.

Menurut Yusuf, (2016) gelombang hormon estrogen dan hormon progesteron pada saat menstruasi mempengaruhi emosi perempuan, mudah tersinggung, sakit kepala, sakit punggung, kadang-kadang kejang, merasa lelah, dan depresi. Dampak yang muncul dari perubahan hormonal pada remaja laki-laki yaitu menjadi pemarah, yang tadinya baik menjadi lebih agresif (Sumiati, 2009).

Hasil penelitian menunjukkan remaja awal mengalami depresi diantaranya memiliki penghasilan kurang dengan mengalami depresi yaitu 38%. Hal ini diperkuat oleh penelitian yang dilakukan oleh Replita (2016) Rendahnya keadaan ekonomi keluarga membuat remaja banyak yang menjadi buruh atau kenek mobil angkutan umum. Akibat pekerjaan remaja yang berada di lapangan atau di luar rumah maka membuat pergaulan remaja menjadi bebas, yang mengakibatkan

kurang sehatnya mental.

Hasil penelitian menunjukkan penghasilan keluarga < UMR namun remaja tidak mengalami depresi sebesar 62,0 %. Hal ini terjadi karena walaupun dengan penghasilan orang tua yang kurang dari UMR namun remaja mendapatkan dukungan keluarga yang baik. Berdasarkan hasil analisis kuesioner pada item pertanyaan dukungan keluarga menunjukkan 38,6% orang tua mengatasi kecemasan dengan memberikan informasi yang diperlukan, 35,2% ketika remaja merasa minder dengan kondisinya orang tua selalu mendukung sehingga remaja tetap percaya diri, orang tua memberikan remaja uang sesuai dengan kebutuhan 47,2%, orang tua akan memotivasi remaja jika terpuruk 38,6 %.

Hal ini menandakan bahwa penghasilan yang kurang namun keluarga tetap memaksimalkan dukungan yang diberikan pada remaja agar tetap dapat memenuhi kebutuhan remaja. Hasil penelitian menunjukkan pendidikan orang tua yaitu ayah sebesar 74,4% berpendidikan ≥ SMA diantaranya 91 (69,5%) remaja awal tidak mengalami depresi, dan 40 (30,5 %) remaja awal mengalami depresi. Mayoritas pendidikan ibu 128 (72,7%) berpendidikan ≥ SMA diantaranya 86 (67,7%) remaja awal tidak mengalami depresi, dan 41 (32,3 %) remaja awal mengalami depresi.

Hal ini menunjukkan bahwa semakin tinggi pendidikan orang tua maka semakin kecil remaja mengalami depresi artinya orang tua yang memiliki pendidikan yang tinggi maka akan memudahkan peran orang tua menerima informasi baru terutama dalam tahap tumbuh kembang remaja dan sebagai pendidik bagi anak-anaknya. Hal ini diperkuat dengan pernyataan (Helmawati, 2016) yang mengatakan dengan memiliki pendidikan yang tinggi orang tua dapat memberikan bimbingan dan pendidikan bagi setiap anggota keluarganya, selain itu dengan bertambahnya pengetahuan dan wawasan maka akan memudahkan perannya sebagai pengelola dalam rumah tangga dan pendidik utama bagi anak-anaknya.

Berdasarkan hasil analisa *bivariat* secara statistik, dukungan keluarga mempunyai hubungan yang bermakna terhadap kejadian depresi pada remaja awal di SMPN 106 Jakarta Timur. Hasil penelitian menunjukkan remaja awal yang memiliki dukungan keluarga baik dengan tidak mengalami depresi sebesar 76,9%. Penelitian ini diperkuat oleh penelitian yang dilakukan Rahmawati (2015) yaitu dukungan keluarga memberikan dampak positif terhadap seseorang dalam melawan stressor yang dialaminya.

Rata rata remaja yang memiliki dukungan keluarga baik mengungkapkan bahwa orang tua senantiasa memberikan petunjuk dalam bertindak 39,2 %, orang tua bersedia menemani remaja ketika sedang kesepian 39,8 %, orang tua sering menyempatkan diri untuk mengajak remaja berekreasi 37,5%, orang tua akan memotivasi remaja ketika terpuruk 38,6 %, sehingga remaja memiliki pertahan diri yang cukup baik untuk menghadapi stressor yang dialaminya.

Hasil penelitian menunjukkan dukungan keluarga kurang dengan mengalami depresi sebanyak 42 (42,9%). Hasil kuesioner menunjukkan dukungan keluarga yang kurang rata-rata remaja awal mengungkapkan bahwa saya merasa pesan yang disampaikan orang tua membuat perasaan semakin kacauu 43,8%, orang tua kurang peduli tentang prestasi belajar dan tidak menanyakan masalah yang saya hadapi ketika belajar 50 %, orang tua membeirakan saya melakukan aktivitas sendiri meski saya membutuhkan bantuan 36,9 %, dan orang tua berperilaku kasar ketika saya putus asa dengan kondisi saya 59,1% sehingga remaja tidak memiliki pertahanan diri yang baik saat mengalami masalah yang berdampak pada depresi. Penyebab terjadinya depresi pada remaja adalah remaja mengalami masa transisi

ialah kesulitan dalam proses pembelajaran dan belum mampu beradaptasi dengan hal yang baru dipelajarinya sehingga menimbulkan stress yang berdampak pada kejadian depresi pada siswa/ siswi. Oleh karena itu dukungan orang tua dapat mempengaruhi motivasi belajar. Hal ini sesuai dengan penelitian yang dilakukan oleh Mawarsih (2013) yang menyatakan bahwa terdapat pengaruh yang signifikan antara pengaruh perhatian orang tua dan motivasi belajar terhadap prestasi belajar Siswa SMA Negeri Jumapolo.

SIMPULAN DAN SARAN

Terdapat hubungan antara dukungan keluarga dengan kejadian depresi pada remaja awal di SMPN 106 Jakarta Timur. Hasil penelitian ini dapat dijadikan masukan bagi profesi keperawatan untuk melakukan upaya preventif, promotif, dan kuratif yaitu memberikan pendidikan kesehatan terhadap orang tua terkait dukungan-dukungan yang dapat diberikan oleh orang tua pada remaja, tumbuh kembang remaja, permasalahan yang mempengaruhi kesehatan mental remaja, dan dapat melakukan deteksi dini pada remaja-remaja yang beresiko mengalami depresi dan memberikan asuhan keperawatan. Serta Upaya rehabilitatif yang dapat dilakukan pihak sekolah yaitu mengadakan program Pusat Informasi dan Konseling Remaja (PIK-R), dan mengadakan pertemuan dengan orang tua murid untuk menangani permasalahan yang di hadapi remaja termasuk proses perubahan-perubahan yang dihadapi remaja.

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RESEARCH ARTICLE

Friendships and Family Support Reduce Subsequent Depressive Symptoms in At-Risk Adolescents

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Abstract

Background

Early life stress (ELS) consists of child family adversities (CFA: negative experiences that happened within the family environment) and/or peer bullying. ELS plays an important role in the development of adolescent depressive symptoms and clinical disorders. Identifying factors that may reduce depressive symptoms in adolescents with ELS may have important public mental health implications.

Methods

We used structural equation modelling and examined the impact of adolescent friendships and/or family support at age 14 on depressive symptoms at age 17 in adolescents exposed to ELS before age 11. To this end, we used structural equation modelling in a community sample of 771 adolescents (322 boys and 477 girls) from a 3 year longitudinal study. Significant paths in the model were followed-up to test whether social support mediated or moderated the association between ELS and depressive symptoms at age 17.

Results

We found that adolescent social support in adolescence is negatively associated with subsequent depressive symptoms in boys and girls exposed to ELS. Specifically, we found evidence for two mediational pathways: In the first pathway family support mediated the link between CFA and depressive symptoms at age 17. Specifically, CFA was negatively associated with adolescent family support at age 14, which in turn was negatively associated with depressive symptoms at age 17. In the second pathway we found that adolescent friendships mediated the path between peer bullying and depressive symptoms.

and preparation, review, or approval of the manuscript.

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Specifically, relational bullying was negatively associated with adolescent friendships at age 14, which in turn were negatively associated with depressive symptoms at age 17. In contrast, we did not find a moderating effect of friendships and family support on the association between CFA and depressive symptoms.

Conclusions

Friendships and/or family support in adolescence mediate the relationship between ELS and late adolescent depressive symptoms in boys and girls. Therefore, enhancing affiliate relationships and positive family environments may benefit the mental health of vulnerable youth that have experienced CFA and/or primary school bullying.

Introduction

Adolescence is a key developmental time where the incidence and prevalence of mental illnesses such as major depression (MD) increases considerably[1]. It is well established that exposure to negative experiences within the family environment (childhood family adversities; CFA) increases risk for depressive symptomatology[2–4]. CFA may include negative parenting styles, emotional, physical, sexual abuse, lack of affection or engagement, family discord, financial problems, family loss, criminality, unemployment, and parental psychopathology. Parent child interactions set the stage for later peer interactions (see Pallini, Baiocco, Schneider, Madigan, & Atkinson, 2014 for a meta-analysis). Indeed, CFA increases risk for (chronic) bullying from peers[6–13]. One way through which CFA can increase risk for peer bullying is through increased arousal and anxiety [14,15]which may be adaptive in negative family environments but may be maladaptive in the outside world[16].

Bullying by peers is a similar toxic social experience that has been associated with subsequent mental illness (e.g.[17–20]), including increased risk for, and chronicity of, depressive disorders (e.g.[21–26], with effects possibly being stronger in boys[27], although others did not find gender effects[21]). Peer bullying may represent a key link between CFA and later depressive symptoms[28], at least in children from low socio-economic backgrounds[29]. Importantly, the combined experience of CFA *and* peer bullying has been associated with increased severity of depression symptoms[30]. Adolescent depression predicts a cascade of behavioural and mental health problems, including recurrent depressive disorders and depression is a major risk for suicide in adolescents [1]. Therefore, in order to reduce adolescent depression, it is crucial to identify environmental factors that may increase resilience in adolescents who have experienced CFA and/or peer bullying

As childhood progresses into adolescence, social environments widen and friendships become increasingly important for social, and psychological development[31,32]. For this reason, friendship support may be an especially important factor that may increase resilience in vulnerable adolescents[33]. Several studies have examined the impact of adolescent friendships on depressive symptoms in adolescents who have been exposed to CFA and/or peer bullying, with mixed findings. For instance, in a cross-sectional study, adolescent friendships have been associated with lower likelihood of depressive symptoms in boys[34]. Furthermore, adolescent friendships were associated with higher rates of later life resilience (defined as the absence of adult psychopathology over a 30 year time-period) in a small sample of abused individuals [35].

Supportive *family* environments may be another important social factor that may increase adolescent resilience after CFA and/or peer bullying[33]. Studies that examined the impact of positive parenting on depression in adolescents that reported CFA/ peer bullying indicate differential findings. Abused individuals that reported at least one parent as caring in adolescence had higher rates of adult resilience (defined as the absence of adult psychopathology over a 30 year time-period[35]). In line with these findings, adolescent bullying was associated with increases in later adolescent depression, but only in those adolescents without supportive parents[36]. Similarly, more positive parental quality was associated with reduced association between peer stress (including bullying) and depressive symptoms[37]. Furthermore, maternal warmth between ages 5–10 has been found to reduce the relationship between peer bullying in primary school and emotional problems at age 10[38]. However, others only found that, in a cross sectional design, supportive parents may reduce mental health difficulties in victimized adolescent girls, but not in boys[39]. Finally, supportive parenting accounted for greater variance than CFA in depressive symptoms in adolescents[40]. Null effects were also reported in the cross-sectional relationship between supportive parenting and peer bullying in boys[34], and parental verbal affection did not mediate the relationship between CFA before the age of 6, and psychiatric symptoms [41].

In sum, there are indications that adolescent friendships and supportive family environments may increase resilience in adolescents who have experienced peer bullying and/or CFA, although there may be gender differences. However, these studies examined either friendship support [37,42,43], or family support[38,40,44] in isolation, and unmeasured co-occurrence between friendships and family support (e.g.[5,45]) may hamper the interpretability of these findings. Other studies investigated CFA[40] or peer bullying[34] in isolation, despite the fact that these two negative experiences co-occur frequently (e.g.[7]). A recent study in adolescents aged 10–17 showed that current family support and friendship support were not related to current distress after recent (past 2 years) poly-victimization (including bullying and CFA)[46]. However, this study did not examine early life CFA, nor peer bullying, nor did they disentangle the specific relations of CFA and peer bullying with friendships and family support. Thus, to our knowledge, no study has simultaneously examined the interplay of early life CFA and/or peer bullying, and family support and/or friendships in adolescence on later adolescent depressive symptoms.

Our study uses Structural Equation Modelling (SEM) in a longitudinal population based community sample (N = 771; 322 boys and 477 girls) to examine the relations between CFA and peer bullying before age 11, family and friendships at age 14, and depressive symptoms at age 17. In addition, we also examine whether we find any evidence for gender-specific effects. We expected that the social environment mediates the association between CFA/peer bullying and depressive symptoms as peer bullying adversely affects future peer interactions[47,48], and friendship difficulties increases depressive symptoms[32]. Furthermore, a negative family environment is relatively persistent throughout childhood [49], and it is likely that CFA is associated with reduced family support in adolescence. Therefore, we choose SEM testing these hypothesized mediation effects of friendship and/or family support after CFA and/or peer bullying. Furthermore, significant paths in our model were followed up with specific mediation analyses. In addition, as a moderating ('Buffering') hypothesis of social support has also been suggested[33], we also tested whether we found support for such moderations (i.e. whether social support reduces the association between CFA/peer bullying and depressive symptoms at age 17).

Finally, there are indications that depressive symptoms may form antecedents to negative peer relations [24,50], thus it is vital that sequential events are examined when investigating the impact of the social environment on late adolescent depression. To examine the temporal

dynamics of our findings, we also examined longitudinal effects of adolescent support on depressive symptoms in later life. We chose to use a cross-lagged SEM as this allowed us to simultaneously assess the effects of family support, depression symptoms, and friendships over time (from age 14 to 17). This also allows us to test the reverse hypothesis that higher depression symptoms at age 14 are associated with reduced friendships and family support at age 17, which could explain associations between family support and friendships at age 14 and depression symptoms at age 17.

Materials and Methods

Participants

Participants were drawn from the ROOTS study; a 3-year longitudinal study of adolescent development in 1238 participants from 18 Cambridgeshire secondary schools between November 2005 and January 2010, see[51,52] for more information on ROOTS. ROOTS was approved by the local Cambridge Research Ethics Committee [RNAG/360]. Written informed consent was obtained from both children and their caregivers. 771 adolescents (62.3%) had complete data on all measures for this investigation (Table 1). This subsample was not significantly

Table 1. Sample characteristics.

Variables used	Total N (%) with complete data:	Descriptives for sample used N = 771 (62.3%)				
Sex	N = 1238 (100%)	322 (41.8%) Boys		449 (58.2%) Girls		
Family adversity classes	N = 1139 (92.0%)	558 (72.4%) Optimal	52 (6.7%) Aberrant	128 (16.6%) Discordant	33 (4.3%) Hazardous	
Bullying	**N = 900 (72.7%)**	**Never**	**Once**	**Sometimes**	**Weekly**	**Daily**
I was hit, punched or kicked	N = 920 (74.3%)	616 (79.9%)	72 (9.3%)	68 (8.8%)	11 (1.4%)	4 (0.5%)
I was scratched	N = 915 (73.9%)	685 (88.8%)	37 (4.8%)	42 (5.4%)	7 (0.9%)	0 (0%)
I was threatened	N = 915 (73.9%)	597 (77.4%)	54 (7.0%)	88 (11.4%)	26 (3.4%)	6 (0.8%)
I was sent nasty notes/texts/ emails	N = 910 (73.5%)	681 (88.3%)	30 (3.9%)	52 (6.7%)	5 (0.6%)	3 (0.4%)
I was ignored	N = 925 (74.7%)	546 (70.8%)	48 (6.2%)	105 (13.6%)	38 (4.9%)	34 (4.4%)
People said nasty things about me	N = 927 (74.9%)	506 (65.6%)	62 (8.0%)	118 (15.3%)	56 (7.3%)	29 (3.8%)
I felt unable to defend myself	N = 921 (74.4%)	610 (79.1%)	33 (4.3%)	62 (8.0%)	37 (4.8%)	29 (3.8%)
I was frightened	N = 918 (74.2%)	590 (76.5%)	41 (5.3%)	85 (11.0%)	33 (4.3%)	22 (2.9%)
Factor and sum scores		**mean (SD)**	**Min**	**Max**		
Relational bullying Factor score	N = 900 (72.7%)	-1.46 (1.32)	-3.02	2.06		
Physical bullying Factor score	N = 900 (72.7%)	-0.98 (1.41)	-2.32	3.31		
Friendships at age 14	N = 1133 (91.5%)	23.54 (4.21)	2	30		
Family support at age 14	N = 1105 (89.3%)	-22.43 (5.76)	-48	-12		
Depressive symptoms sum score at age 17	N = 1007 (81.3%)	13.6 (10.21)	0	57		

Note. The total number of individuals with complete data per variable in ROOTS is depicted in column 2. There were no significant differences between these variables when comparing that total number (i.e. the ROOTS sample) with this subsample (N = 771). The factor scores depicted here were based on the 'final model' SEM with N = 771. All participants were 14 years of age upon entry to the study when childhood family adversities, peer, and family support were assessed. All participants were 17 years of age when we re-assessed depressive symptoms, and retrospectively assessed primary school peer bullying.

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different (*p* values>.10) from the full ROOTS cohort on: age, sex, socio-economic status, CFA, peer bullying, family support, friendships, and depressive symptoms at age 17.

Childhood Family Adversity (CFA)

CFA was assessed when the participants were aged 14 using the Cambridge Early Experiences Interview (CAMEEI)[49]. The CAMEEI is a semi-structured, respondent-sensitive, interviewer led procedure that collected retrospective accounts of the quality of family environment. These recalled experiences were obtained from the main caregiver independently of the self-reported assessments carried out with their adolescent offspring. The caregivers being interviewed were biological mothers (96%, N = 1143), biological fathers (3%, N = 35), adoptive mothers (N = 7), both parents (N = 3) and N = 2 each of extended family members, step-mothers and step-fathers. The CAMEEI focuses on three time domains of childhood: "early childhood" (pre-school years–birth until approximately five years of age), "later childhood" (approximately six-11 years) and "early adolescence" (approximately 11 years– 14 years).

Adversities reported in the CAMEEI were: 1) Negative family relationships (family loss and separations (includes step parents and siblings and partners resident for more than 6 months) through divorce, death or adoption; ii) family discord; iii) lack of maternal affection/engagement with the proband; iv) maternal parenting style and v) paternal parenting style), family discord. 2); i) lifetime family medical illnesses sufficiently severe to impact on family life (moderate, chronic and life-threatening); ii) lifetime psychopathology in family members 3) Family Economics i) periods of unemployment; ii) financial difficulties. 4) Childhood Maltreatment: i) physical abuse; ii) sexual abuse; iii) emotional abuse. Including 'at risk' children defined as those ever having been on the Child Protection Register or for whom there was strong, but inconclusive, evidence of abuse. 5) Other Events; i) criminality among family members, ii) acute life events, and iii) chronic social difficulties (e.g. ongoing litigation or the demands of caring for extended family).

In previous work[49], we used latent class analysis to identify subgroups of adolescents who had experienced different types of early adversity, based on their CAMEEI data. Latent Class Analyses (LCA) assumes that a population can be divided into mutually exclusive and exhaustive latent groups (classes) based on individual response patterns from a set of measured items [53]. Identifying these latent classes is of value because different groups have different characteristics, different prognoses and therefore different aetiologies. We found support for four mutually exclusive CFA subgroups[16]. The largest class (the 'Optimal class') contained those with a low (<13%) probability of any adversity at any time-point (n = 784, 69% of the sample). The second ('Abberant Parenting'; n = 76, 7% of the sample) had a high probability (70–100%) of inconsistent and atypical parenting by both parents (e.g. lax, very strict, cruel to be kind, hitting, all of which showed low prevalence) and a lower probability (8–17%) of any adversity at any time-point. The third class (the 'Discordant class'; n = 213, 19% of the sample) had a high probability (47%) of family discord (e.g. marital disagreements) and a 11–39% probability of any adversity at any time-points. They also showed elevated rates of family loss, financial difficulties, and maternal psychiatric illness. The fourth class (the 'Hazardous class'; n = 66, 6% of the sample) had 50–90% probability of any adversity at any time-point) with a high probability (60%) of physical and/or emotional abuse. These classes were replicated at each time-point (birth to age 5; ages 6 to 11; and ages 12 to 14) [44]. In this study, we focused on adversities in the preschool years (birth-5), as these adversity classes have been shown to be relatively stable and thus represent persistent exposure to a suboptimal family environment[49]. We used the four CFA latent classes that were based on our previous report[49]. Given the fact that some of these classes are relatively small, and to ensure the robustness of our findings, we also reran the

model with a dichotomous CFA division comparing an 'Optimal' vs. 'Adverse' (i.e. the Discordant, Hazardous, and Aberrant classes combined) childhood. We found that the findings were virtually identical. Note that all results in the current study also remained the same when the analyses were performed with the classes at age six-11.

Primary school peer bullying

We assessed primary school (age five-11) peer bullying using the self-report Peer Victimization Questionnaire (PVQ, see S1 Appendix). The PVQ was completed retrospectively when participants were aged 17. Average split-half reliability in our sample was good $\alpha = .91$ (95% CI = .89-.92). As this is a new scale we undertook a preliminary theory driven confirmatory factor analysis (see S2 Appendix), which revealed 2 factors; (indirect) relational bullying characterized by verbal criticisms, and physical bullying (i.e. direct assault). This is in line with the suggestion of others that bullying comprises of relational and physical bullying [27,29,54,55]. As these two forms of bullying have been found to have a differential impact on the development of depression [27], and girls are more likely to report relational bullying[27,56], we examined their impacts separately in our analyses.

Perceived family support

Family support was assessed at age 14 and 17 with the McMaster Family Assessment Device (FAD)-General Functioning Scale (FAD-GF[57], administered to adolescents. The FAD has adequate test-retest reliability, and differentiates between clinician assessed healthy versus unhealthy families[58]. The FAD-GF is a 12 item self-report questionnaire where respondents rate statements such as "*we can express our feelings to each other*" or "*there are lots of bad feelings in the family*". The FAD-GF yields an estimate of overall family functioning[59]. In ROOTS, positive items on this scale were reverse coded so as to measure overall *negative* family functioning. To facilitate interpretation in our full model below, we inverted these scores so that a high score reflects *positive* family functioning (i.e. *family support*; scores ranged from -12 to -48 with a mean of -22.43 (SD = 5.76).

Friendships: perceived quality of friendships

Friendships were assessed at age 14 and 17 with the self-report Cambridge Friendships Questionnaire (CFQ)[60]. The CFQ is an 8 item questionnaire assessing the number, availability, and quality of friendships (e.g. 'Do you feel that your friends understand you?', 'are you happy with the number of friends that you've got at the moment', 'can you confide in your friends', 'do you have arguments with your friends that upset you?). The CFQ is derived from a semi-structured interview based on ethological principles of social relationships and the hypothesis that friendships are a key supportive network in the development of social and cognitive competencies [48]. The CFQ has good measurement invariance and external validity, and adequate test retest reliability across two week intervals (Kappa = .80)[61]. Scores in this sample ranged from two to 30 with a mean of 23.54 (SD = 4.21), and higher scores indicate better perceived overall quality of friendships (i.e. '*Friendships*').

Depressive symptoms

To assess current (last two weeks) depressive symptoms at age 14 and 17 we utilized the 33 item self-report Mood and Feelings Questionnaire (MFQ)[62] for eight to 18-year-olds. In this study, the MFQ has good internal consistency ($\alpha = 0.93$), with sum scores ranging between

zero and 57 with a mean of 13.6 (SD = 10.21), with higher scores indicating more depressive symptoms.

Data

The raw data and analysis code used for this manuscript will be available from www.annelauravanharmelen.com/data/ and on figshare (https://figshare.com/authors/_/1376682).

Statistical analyses

We used Structural equation models (SEM) in Lavaan version 05.17[63] in R version 3.3[64] to examine the relations between family and friendships at age 14, and CFA and peer bullying before age 11, on depressive symptoms at age 17. Fig 1 displays the full theoretical model being tested in this study.

First, we specified the full structural equation model (Fig 1) for all participants who had complete data (N = 771). We specified gender as a covariate for all endogenous variables in this model. Note that within the model the latent variables 'physical bullying' and 'relational bullying' are estimated within the current sample. The latent CFA classes were based on our previous report[49]. Findings in this study remained the same when we used a binary CFA variable (i.e. Optimal vs. other classes (Discordant, Hazardous, and Aberrant). The latent variables are signified by the observed indicators shown in Fig 1. Relational and physical bullying (as well as friendships and family support) were allowed to co-vary within the model[7,31]. In posthoc analyses, we further tested the suggested mediations in the model using formal mediation analyses. In these mediation analyses we fitted a path analysis model in Lavaan that included the direct effect of X on Y and the indirect effect of X on Y via M. The standard errors for these defined parameters were computed using the Delta method[65], and the effect sizes were estimated using the method proposed by Iacobucci et al[66] (p. 153), namely as the proportion of

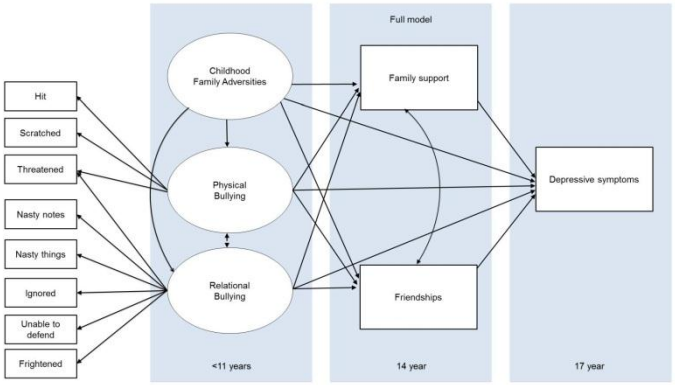

Fig 1. The full model based on the relationships in the literature and the bullying factor analysis. Note. Arrows depict hypothesized relationships. Black double headed arrows represent covariances that were specified between endogenous variables in the model. Black single headed arrows outside of the panels represent the factor loadings in the confirmatory factor analysis, whereas black single headed arrows inside the panels indicate regression paths. Gender was specified as covariate for all endogenous variables in this model, but is not depicted for simplicity.

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the total effect (a*b+c') explained by the mediation pathway alone (a*b) ranging from 0 to 100%. For posthoc moderation analyses, we fitted regressions whilst adding an interaction term that reflected the moderation.

Second we aimed to examine whether there were gender differences in the best fitting model. To do so, we fitted an equality constrained multi-group model, to examine whether the structural relations were identical in boys and girls.

Third, we examined the temporal dimensions of adolescent support on depressive symptoms by including friendships, family support and depressive symptoms at both ages 14 and 17 (Fig 2). It is important to note that for our main hypothesis we fitted a model (depicted in Fig 1) that represented the current state of knowledge. However, in this analysis we fitted a more complex model that captured measurements of depressive symptoms, friendships and family support at ages 14 *and* 17 (see Fig 2), to see whether the influences shown above are consistent and to examine the temporal dynamics of these influences. In line with our previous analyses we again specified gender as a covariate for all endogenous variables, and relational and physical bullying as well as friendships- and family support at age 14 and 17 were allowed to co-vary within the model. It should be noted that this model is quite complex with 83 free parameters, and that despite the considerable sample size (i.e. complete data was available for N = 713) this is below an often-cited common guideline of N>10 per parameter[67]. This also indicates that division into genders and subgroups is, as opposed to the simpler model, not feasible.

In all analyses we used the option 'mimic Mplus' in Lavaan. We used the weighted least squares means and variance adjusted (WLSMV) estimator which is optimal for models that contain combinations of continuous, categorical and ordinal measures[68]. We modelled only complete cases and reported the Robust test statistic to account for deviations from normality of our data. As depressive symptoms, friendships and family support scores had different

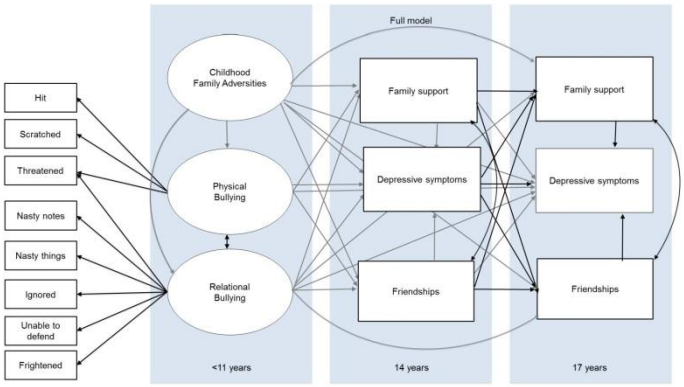

Fig 2. Model with temporal dimensions for friendships and/or family support. Note. For reasons of clarity grey arrows depict hypothesized relationship from 11 and 14 years, whereas black arrows represent hypothesized relationships from 14 and 17 years, and the factor loadings that were specified in the confirmatory factor analysis. Double headed arrows represent covariances that were specified in the model. Black single headed arrows outside of the panels represent the factor loadings in the confirmatory factor analysis, whereas black single headed arrows inside the panels indicate regression paths. Gender was specified as covariate for all endogenous variables in this model, but is not depicted for simplicity.

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ranges, we scaled these variables to a standard normal distribution. We report chi-square (X^2) fit statistics as well as the root mean squared error of approximation (RMSEA) and its 90% confidence interval (CI). RMSEA of less than 0.08 implies an acceptable model fit, and values of less than 0.05 imply a good fit[68]. Furthermore, we report comparative fit index (CFI), and the Tucker-Lewis index (TLI), where values of CFI &TLI >.95 represent good fit of the overall model[68]. We do not report SRMR value, as this is not defined for the WLSMV estimator in Lavaan in R. We used Chi-square comparisons to compare nested models.

Results

The importance of support after ELS on depressive symptoms

We first investigated the impact of friendships and/or family support at age 14 on depressive symptoms at age 17. The full model (Fig 1) had a good fit to the data X^2 (48) = 175.602,p = .000,CFI = .992, TLI = .987, RMSEA = .059 (90%CI = .050-.068). To reveal the best model based on the known paths in the literature we next individually deleted the non-significant paths (based on highest P value). After every path deletion the model fit was re-evaluated. Table 2 depicts the specific paths that were deleted with every step.

The best fitting model (Fig 3) had a good fit [X^2(54) = 133.51, p < .001, CFI = .99, TLI = .99, RMSEA = .044 (90% CI:.043-.053). This model shows two pathways through which symptom reduction at age 17 might occur. In the first path, CFA had a negative association with family support at age 14, which had a negative association with depressive symptoms at age 17. In the second path, CFA had a positive association with relational bullying, and relational bullying had a negative association with friendships at age 14, whereas friendships at age 14 had a negative relationship with depressive symptoms at age 17. Self-esteem may be an important confounding factor in the association between social support and depressive symptoms[69,70]. However, all findings and paths remained the same when self-esteem at age 14 (as measured with the Rosenberg self-esteem scale [71,72] was added to our model (see S3 Appendix for more information.

We next formally tested the proposed mediation paths in our model. A mediation analysis between CFA, depressive symptoms and family support suggested that the strength of the relationship between CFA and depressive symptoms was attenuated when taking family support into account. The indirect path (standardized estimate (Est) ab = 0.027(SE = .01), p = .005) explained 29% of the variance in the association between CFA and depressive symptoms (Est c = 0.094 (.04), p = .015), rendering the direct path between CFA and depressive symptoms non-significant (Est c' = 0.066 (= .04), p = .079).

Table 2. ROBUST model fit and model comparisons for each model.

	X^2	DF	P	CFI	TLI	RMSEA	90% CI	Path that was removed	X^2diff	Df diff	P
First Model	175.602	48	< .001	0.992	0.987	0.059	.50-.068	Family support ~ relational bullying			
1	168.938	49	< .001	0.993	0.988	0.056	.047-.066	Friendships~ physical bullying	0.01	1.00	0.91
2	165.853	50	< .001	0.993	0.989	0.055	.046-.064	Depressive symptoms~ CFA	0.07	2.00	0.97
3	164.816	51	< .001	0.993	0.989	0.054	.045-.063	Depressive symptoms~ relational bullying	0.70	3.00	0.87
4	162.352	52	< .001	0.993	0.99	0.052	.043-.062	Friendships~ CFA	1.53	4.00	0.82
5	162.297	53	< .001	0.993	0.99	0.043	.043-.061	Family support ~ physical bullying	3.95	5.00	0.56
Final Model	133.51	54	< .001	0.995	0.993	0.044	.034-.053		10.86	6.00	0.09

Note. CFA = Childhood Family adversities

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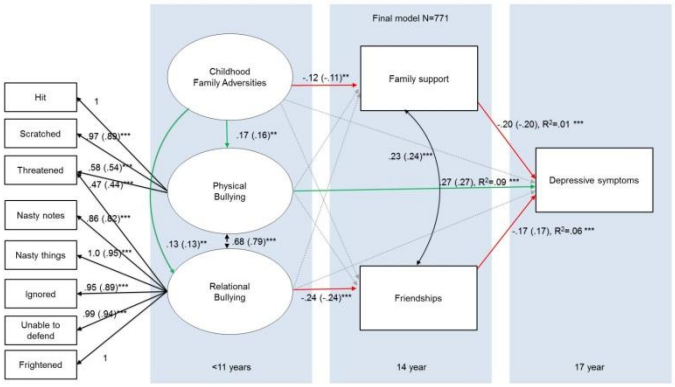

Fig 3. The influence of support after ELS on depressive symptoms. Note. *** = P < .001, ** = P < .01,* = P < .05. Estimates are unstandardized (standardized) path coefficients. Red arrows depict negative relationships, green arrows show positive relationships, Grey arrows depict non-significant (removed paths). Black double headed arrows represent covariance s that were specified between endogenous variables in the model. Black single headed arrows outside of the panels represent the factor loadings in the confirmatory factor analysis, whereas black single headed arrows inside the panels indicate regression paths. Gender was specified as covariate for all endogenous variables in this model, but is not depicted for simplicity.

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Next, we tested the role of friendships as a mediator between relational bullying and depressive symptoms at age 17. This mediation analysis revealed that the indirect path from relational bullying to depressive symptoms through friendships (est ab = 0.023(0.007), $p < .005$) explained 35% of the variance of relationship between relational bullying and depressive symptoms (Est c = 0.17(0.024), $p < .001$), although the direct path between relational bullying and depressive symptoms remained significant (Est c' = 0.15(0.024), $p < .001$).

Our model also showed a strong association between CFA and relational bullying, whilst relational bullying was negatively associated with friendship support. A follow-up mediation analysis revealed that the indirect path from CFA to friendships through relational bullying (Est ab = -0.038(0.01), $p < .001$) explained 47% of the variance between CFA and friendships (Est c = -0.08(0.4), p = .04), and the direct path between CFA and friendships was non-significant (Est c' = -0.04(.04), p = .26).

Our model also showed that CFA had a positive association with physical bullying, and physical bullying has a direct association with depressive symptoms at age 17 (but not with friendships or family support in adolescence). Indeed, a follow up mediation analysis revealed that the indirect path from CFA and depression (Est ab = 0.054(0.012), $p < .001$) explained 58% of the variance between CFA and depressive symptoms (Est c = 0.093(0.4), $p < .001$), rendering the direct path between CFA and depressive symptoms non-significant (Est c' = 0.039 (0.04), p = .30).

In sum, our findings support a mediating role for friendships and family support in adolescence on depressive symptoms at age 17 after CFA and/or peer bullying. Our model also suggests that adolescents who reported to have experienced *physical* bullying (in isolation or together with CFA) showed no mediating effects of family support or friendships on subsequent depressive symptoms.

Social environment as moderator

Our model represents, in essence, a mediation of positive social family and friendship environments across adolescence. However, one may also hypothesize a moderating effect of social support, where friendships reduce the effect of relational bullying on depressive symptoms at age 17, and/or family support reduces the strength of the association between CFA and later depressive symptoms. Therefore, we next tested these hypothesize moderations. In a model where family support moderated the relationship between abuse and depressive symptoms at age 17 we found that there was no significant relation between CFA and depressive symptoms at age 17 (Est = -0.04, SE = .03, t = -1.09, p = .28), and there was a significant relationship between family support and depressive symptoms at age 17 (Est = -0.24, SE = .03, t = -6.91, p < .001). However, there was no significant moderation (CFA*family support) on depressive symptoms at age 17 (Est = 0.02, SE = .03, t = 0.54, p = .59). Next we tested whether friendships moderated the relationship between relational bullying and depressive symptoms at age 17. There was a significant relation between relational bullying and depressive symptoms at age 17 (Est = 0.34, SE = .05, t = 6.62, p < .001), and there was a significant relationship between friendships support and depressive symptoms at age 17 (Est = -0.22, SE = .04, t = -5.10, p < .001), however, there was no significant moderation (relational bullying*friendship) on depressive symptoms at age 17 (Est = 0.04, SE = .04, t = 0.97, p = .33). The lack of moderating effects contrasts markedly with the indirect pathways that were proposed in our model, and are in line with our findings of mediating roles for friendship and family support.

Sex differences

Next, we examined whether the effects reported above for the full sample differed between boys and girls. Examining the descriptive statistics, Self-reported relational bullying, friendships, and family support did not differ between boys and girls (Table 3). However, there were more boys in the hazardous CFA group, and boys reported more physical bullying, whereas girls reported more depressive symptoms at age 17.

To formally test for possible differences in the structural relations between boys and girls, we fitted a multi-group model (322 boys, 449 girls), using the same '*final*' model (same regression paths as depicted in Fig 3; whilst removing gender as covariate). This model showed good fit to the data X^2 (126) = 204.74,P = .001, CFI = .995, TLI = .995, RMSEA = .040 (90% CI: .030-.050).

Next, we re-ran this final model, only now with equality constraints. We first fixed the factor loadings to be equal to ensure measurement invariance, cf.[73]; a '*factor loadings equality*

Table 3. Characteristics for boys and girls separately.

	Boys (N = 322)	Girls (N = 449)		Wilcox t	P
CFA (#O/A/D/H)	228/22/53/19	330/30/75/14		52003	< .001
% O/A/D/H	70.81/6.83/16.46/5.90	73.49/6.68/16.70/3.11			
	Mean (SD)	**Mean (SD)**	**t**	**DF**	**P**
Relational bullying	0.35 (.69)	0.39 (0.67)	-0.86	680.16	0.39
Physical bullying	0.41(0.68)	-0.10 (0.63)	10.49	656.62	< .001
Friendships	23.73 (4.26)	23.54 (3.93)	0.64	657.48	0.52
Family support	-22.15 (5.41)	-22.23 (6.01)	0.21	730.30	0.84
Depressive symptoms at age 17	11.45 (9.24)	15.14 (10.60)	-5.14	740.20	< .001

Note. CFA = Childhood Family adversities, O = optimal parenting, A = aberrant parenting, D = discordant parenting & H = Hazardous parenting.

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constrained model' that showed good fit [X^2 (103) = 157.009,P = .000,CFI = .997, TLI = .996, RMSEA = .037 (90% CI: .025-.048)]. We then also fixed the regressions to be equal, thereby implying that all regression relationships drawn in Fig 3 should be equal in both groups (i.e. boys and girls). This '*factor and regressions equality constrained*' model also had good fit to the data[X^2 (110) = 170.398,p = .000,CFI = .996, TLI = .996, RMSEA = .038 (90%CI: .026-.049)]. We then compared the '*factor loadings and regressions equality constrained*' to the '*factor loadings equality constrained model*', thereby examining if the regressions should be allowed to differ between the genders. The chi-square model comparison showed that the more complex '*factors equality constrained model*' fitted the data significantly better (X^2diff (7) = 14.29, p = .046), suggesting that the regression paths are different in boys compared to girls.

To examine which paths were significantly different in boys vs. girls, we then examined modification indices for the '*factors and regressions equality constrained*' model. This inspection showed that the association between *relational bullying* and *friendships* had the largest modification index (mi = 11.45 (1), p = 0.0007). Examination of the path coefficients in the '*factors equality constrained model*' (where the regression paths were allowed to differ) revealed that this relationship was *more negative* in boys (est = -0.345, SE = 0.058, Z = -5.930, p < .000) than in girls (Est = -0.160, SE = 0.048, Z = -3.327, p< 0.001). We now re-ran the '*factors and regressions equality constrained*' whilst now also specifying that this one path should be allowed to differ. This '*factors and regressions equality minus one constrained*' model had good fit to the data [X^2 (109.00) = 153.644, p = .003,CFI = .997, TLI = .997, RMSEA = .033 (90%CI: .019-.044)]. Finally, we compared this '*factors and regressions equality minus one constrained*' model with the '*factors equality constrained model*' (i.e. all regression paths were allowed to differ), thus testing whether a model where only one path differs between boys and girls is significantly different from a model where all paths differ between boys and girls. This analysis showed that the more complex '*factors equality constrained model*' (i.e. all regression paths were allowed to differ), did not fit the data significantly better than the '*factors and regressions equality minus one constrained*' model (X^2diff (6) = 3.6455, P = 0.7245). Therefore, the '*factors and regressions equality minus one constrained*' is preferred for our data, and depicted in Fig 4. In this model, no differences between boys and girls were found (i.e. similar paths coefficients for boys and girls) except for the path between relational bullying and friendships, which was more negative in boys.

Developmental influences of friendships and/or family support

We next investigated the developmental influences of friendships and/or family support on depressive symptoms at age 17 through testing a model that included friendships, family support and depressive symptoms at ages 14 and 17 (as hypothesized in Fig 2). This full model had a good fit to the data *X*2 (66) = 184.770, p = < .001, CFI = .99, TLI = .99, RMSEA = .050 (90% CI = .042-.059). The fitted model is shown in Fig 5 and shows that friendships and/or family support in adolescence indirectly acted on depressive symptoms at age 17 through depressive symptoms at age 14, and through friendships and/or family support at age 17. These findings were confirmed when we re-ran the model whilst specifying these indirect effects: we found support for indirect effects of family support at age 14 on depressive symptoms at age 17 through family support at age 17 (Est = -.07,SE = .01, Z = -5.55 P < .001), and through depressive symptoms at age 14 (Est = -.09,SE = .01, Z = -8.12 P < .001). Friendship support at age 14 had an indirect effect on depressive symptoms at age 17 through friendship support at age 17 (Est = -0.08 SE = .01,Z = -6.16 P < .001), and through depressive symptoms at age 14 (Est = -.04,SE = .01, Z = -2.87 P = .004). Interestingly, the model also suggested that family support at age 14 was positively related with friendships at age 17. Finally, another interesting finding

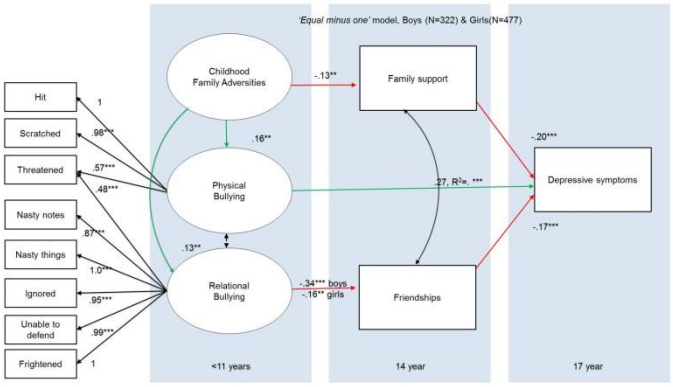

Fig 4. Best fitting model for boys and girls: The factors and regressions equality minus one constrained ('equal minus one') model. Note. *** = P < .001, ** = P < .01, * = P < .05. Estimates are unstandardized path coefficients in boys and girls. Red arrows depict negative relationships, green arrows show positive relationships. Black double headed arrows represent covariance's that were specified between endogenous variables in the mode. Black single headed arrows outside of the panels represent the factor loadings in the confirmatory factor analysis, whereas black single headed arrows inside the panels indicate regression paths.

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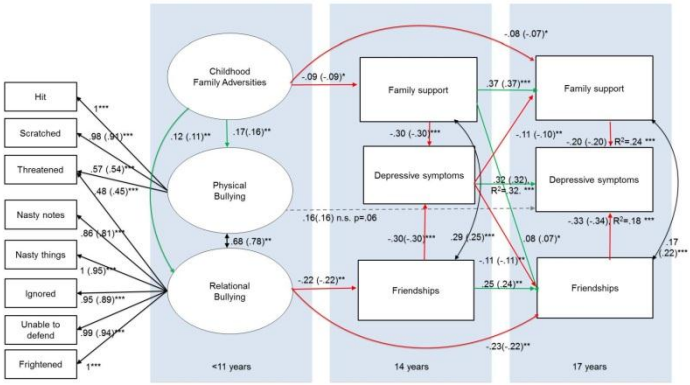

Fig 5. Developmental influences of friendships and/or family support. Note. *** = P < .001, ** = P < .01, * = P < .05, n.s. = not significant. Estimates are unstandardized (standardized) path coefficients. Red arrows depict negative relationships, green arrows show positive relationships. Grey dashed represents a non -significant relationship. Black double headed arrows represent covariance's that were specified between endogenous variables in the model. Black single headed arrows outside of the panels represent the factor loadings in the confirmatory factor analysis, whereas black single headed arrows inside the panels indicate regression paths. Gender was specified as covariate for all endogenous variables in this model, but is not depicted for simplicity.

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from this model is that depression at age 14 is negatively associated with both friendship and family support at age 17.

Discussion

Our study suggests that friendships and/or family support in adolescence may reduce depressive symptoms in boys and girls who have been exposed to early life stress (childhood family adversity and/or relational bullying before age 11). Our findings suggest a cascading effect of ELS on later life. We find support that CFA is associated with bullying from peers (both relational and physical bullying), and that CFA is associated with reduced adolescent family support. Furthermore, we find that peer relational bullying is associated with reduced friendship support in adolescence, and that relational bullying mediates 47% of the negative association between CFA and friendship support (corroborating[29]).

Crucially, despite these cascading negative effects of ELS on later interactions, our findings also suggest that *positive* social environments in adolescence may reduce depressive symptoms in later life. Specifically, our findings suggest two pathways through which a positive social environment might mediate the link between ELS and depressive symptoms in later life. First, CFA was associated with reduced perceived *family support*, which has a negative association with depressive symptoms in boys and girls (corroborating[35]). In the second pathway relational bullying was associated with reduced self-reported *friendships* at 14 years, which were negatively associated with depressive symptoms at age 17 in boys and girls (corroborating [35,42,43]). Follow up mediation analyses confirmed these results, and we found no support for moderating effects of the social environment on depressive symptoms. Finally, when we tested the temporal dynamics of friendships and family support, we found that friendships and/or supportive families in early adolescence indirectly affect depressive symptoms at age 17 through intermediate effects on depressive symptoms at age 14, and through intermediate effects on friendships and/or family support at age 17. In sum, our findings suggest that adolescent family and friendships support may reduce later depressive symptoms in adolescents with a history of CFA and/or peer relational bullying.

The negative association between relational bullying and adolescent friendships was stronger in boys when compared to girls, which is in line with findings that the association between relational bullying and depressive symptoms appears to be stronger for boys compared to girls [27]. Perhaps boys reported more *severe* relational bullying events, or it may be that boys are more sensitive to relational bullying. In addition, our model suggests that strong links between CFA and both relational and physical bullying, which is in line with findings that CFA predicts greater likelihood of further peer bullying (e.g[7]), and this double disadvantage is related with more severe depressive symptoms[30]. In sum, our findings suggest that mental health interventions aimed at enhancing family support and peer relationships may be particularly helpful for adolescents who were exposed to CFA and/or peer relational bullying. Of note is that our findings suggest that such strategies may not be beneficial for those exposed to physical bullying.

This study finds evidence for several key pathways through which the adolescent social environment affects later life mental health. However, the *mechanism* through which social support exerts its influence on depressive symptoms remains unknown. It has been suggested that supportive family environments may increase resilience through enhancing coping performance and reducing threat appraisals [69], through a positive effect on self-esteem, self-regulation and through offering stress-relief[33,38,74]. Another way in which family support may increase resilience is through modelling effective interpersonal skills[37]. The mechanisms through which friendship support may increase resilience are similarly not well understood. Perceived

friendship support may have a similar positive effect on coping skills, self-esteem and threat appraisal[33], perhaps through companionship, and experiences of low conflict[69]. There are indications that friendships increase adolescents perceived friendship self-efficacy; their beliefs that they are able to communicate and engage with their friends, to resolve conflict and to manage their interpersonal emotions[42]. Indeed, friendship self-efficacy is negatively associated with depressive symptoms in boys and girls[42]. Another way in which friendship may increase resilience is through updating self-cognitions. It is well established that CFA and relational bullying each induce negative self-cognitions[22,47,75,76], which have been linked to subsequent depression (e.g.[76–78]). Perhaps positive friendships and family support in adolescence provide opportunities for a more positive update of self-cognitions. Physical bullying is not as strongly related to negative self-cognitions[27], which may explain why social support was not effective in adolescents that experienced physical bullying. Examining the mechanisms of action for adolescent friendships and family support is an important avenue for future research.

To our knowledge, this is the first study in a community sample of adolescents that simultaneously examines the relations between ELS, adolescent friendships and/or family support, and later depressive symptoms. However, this study is not without limitations. First, other factors such as genotypes[29] or temperament [79] may influence the paths in the model. However, these factors were not part of the theoretical framework addressed in this study, and recent reports on this cohort suggest that temperament is not likely to alter the current findings[79]. Second, bullying in our sample was retrospectively assessed at age 17, and self-report measures of bullying may be sensitive to recall bias. However, inflated recall of bullying in depressed adolescents would likely only further reduce the already non-significant relationship in our model between relational bullying and depression at 17. Furthermore, retrospective self-reported bullying has been found to have adequate accuracy and reliability[80]. Third, our cohort is more affluent compared to UK norms[51], therefore caution should be taken when generalizing our findings. Fourth, CFA was assessed from the primary care-giver, which may have led to an underreporting of CFA. Although an underreporting of CFA would reduce the reported relationships in our model, indicating that the *actual* relationships between care-giver assessed CFA and adolescent assessed family support, peer bullying, or friendships are stronger. Importantly, underreporting of CFA would not impact on the relationships between adolescent friendships and/or family support and depressive symptoms at age 17.

Conclusion

First, our study finds support for a prolonged negative impact of CFA on adolescent family and peer interactions and consequently on depressive symptoms in late adolescence. These findings stress the importance of early intervention and prevention programs[81–83]. For instance, case management services for families at risk[81], parenting programs [84] and the Nurse-Family partnership program [82] may be effective in reducing the occurrence of CFA. Second, our study suggests that friendships and/or family support in adolescence may attenuate subsequent depressive symptoms in boys and girls exposed to CFA and relational bullying. Clearly, our study stresses the importance of a positive social environment in early life and in later adolescence. These findings have important implications, for instance they could inform psychosocial education programs that discuss the prolonged effects of childhood maltreatment and peer relational bullying and how to counter these effects. These psychosocial programs may be run in schools, general health medical centers, mental health institutions, hospitals, sports clubs, and other institutions relevant for psychosocial education. In addition, our study suggests the need for interventions aimed at increasing the positive social environments in the adolescent

epoch. For instance, school based mental health interventions aimed at finding and sustaining friendships through the active facilitation of social skills training in victimized boys and girls [85] may increase mental health resilience in adolescents that experienced relational bullying (with or without concurrent CFA). Similarly, our findings suggest that the efficacy of interventions that increase positive parenting, and video feedback programs[86] or the triple P intervention programs[87] might be fruitful for the parents of adolescents who have experienced early life CFA. Our study suggests that such interventions aimed at increasing friendships and family support may have great potential to reduce late adolescent depressive symptoms in boys and girls that experienced early life child maltreatment and/or relational bullying.

Supporting Information

S1 Appendix. Copy of the Peer Victimization Questionnaire.
(DOCX)

S2 Appendix. Factor analysis for the Peer Victimization Questionnaire (PVQ).
(DOCX)

S3 Appendix. Additional Self-esteem analysis.
(DOCX)

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Author Contributions

Conceived and designed the experiments: IG PBJ TC AlvH. Performed the experiments: VD. Analyzed the data: ALvH JB VD MS MO. Wrote the paper: ALvH JG MS MO JBGL VD TC PBJ RAK IMG.

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HUBUNGAN ANTARA DUKUNGAN SOSIAL KELUARGA DENGAN DEPRESI PADA REMAJA DI SMPN KOTA MALANG

(*Relationship Between Social Support With Adolescent Depression in Junior High School at Malang*)

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Abstrak

Masa remaja merupakan masa transisi dari anak- anak menuju dewasa. Perubahan yang terjadi pada masa remaja dapat memicu munculnya gangguan kesehatan mental, salah satunya adalah depresi. Depresi yang terjadi pada masa remaja akan berpengaruh terhadap terjadinya episode depresi mayor pada masa dewasa. Keluarga merupakan support system terdekat bagi remaja. Dukungan sosial keluarga yang optimal dapat meningkatkan perilaku adaptif remaja. **Metode**: Penelitian ini menggunakan desain analitik korelasional dengan pendekatan crossectional untuk mengetahui hubungan antara dukungan sosial keluarga dengan depresi pada remaja di SMPN 11 Kota Malang. Sampel penelitian terdiri atas 94 responden dengan teknik sampling *proportionate stratified random sampling*. Pengambilan data menggunakan kuesioner dukungan sosial dan kuesioner *Depression Anxiety Stress Scale* (DASS). Data dianalisis dengan uji korelasi Spearman rank. **Hasil dan analisis**: Sebagian besar responden mendapatkan dukungan sosial dari keluarga dalam kategori tinggi, yaitu sebanyak 81 responden (86,2%) dan sebagian besar responden tidak mengalami depresi, yaitu sebanyak 69 responden (73,4%). Dari uji statistik didapatkan nilai signifikansi sebesar 0,016 (<0,05), yang artinya terdapat hubungan signifikan antara dukungan sosial keluarga dengan depresi pada remaja. **Diskusi dan Kesimpulan**: Dukungan sosial yang diberikan keluarga berperan efektif dalam mengatasi tekanan psikologis yang dialami individu pada masa-masa sulit. Dukungan sosial keluarga yang tinggi diperlukan untuk mencegah timbulnya depresi pada remaja dalam menghadapi masa transisi.

Kata Kunci: *Dukungan sosial keluarga; Depresi; Remaja*

PENDAHULUAN

Masa remaja merupakan suatu fase perkembangan antara masa kanak-kanak dan masa dewasa yang berlangsung antara usia 10 sampai 19 tahun (WHO, 2015). Salah satu gambaran dasar masa remaja adalah adanya serangkaian perubahan biologis atau dikenal sebagai masa pubertas. Masa pubertas melibatkan serangkaian kejadian biologis yang berdampak pada perubahan tubuh.

Menurut Stuart (2016) perubahan fisik, kognitif dan emosional yang dialami pada fase remaja dapat menimbulkan stress dan memicu perilaku unik pada remaja. Disamping itu, salah satu tugas perkembangan remaja yang harus dilalui adalah mengembangkan identitas diri dan mulai mengembangkan kemandirian emosional dari orangtua. Remaja memiliki keinginan alam bawah sadar untuk mempertahankan ketergantungannya, namun disisi lain remaja juga dalam proses kemandirian. Sehingga remaja mungkin akan menunjukkan sikap ambivalen yang ditunjukkan dalam emosi yang meluap – luap.

Kegagalan dalam mencapai tugas perkembangan pada masa ini dapat menyebabkan kebingungan peran *(role confusion)* (Keliat, et al, 2013; Townsend, 2014). Selain itu juga dapat menimbulkan kurangnya rasa percaya diri, yang akan diekspresikan pada perilaku kenakalan remaja (Townsend, 2014). Sehingga dampak yang muncul adalah berbagai perilaku menyimpang seperti perilaku agresif (Williford, et al, 2011). Masalah perilaku anak dan remaja seperti perilaku agresif dapat berkembang menjadi gejala positif skizotipal (Fagel, 2014).

Salah satu masalah gangguan kesehatan mental yang umum dialami oleh remaja adalah depresi. Depresi adalah perubahan mood atau afek yang diekspresikan dalam bentuk perasaan sedih, putus asa, dan pesimis. Selain itu juga terjadi penurunan minat pada aktivitas sehari – hari, perubahan nafsu makan, perubahan pola tidur, dan gejala somatic lainnya (Townsend, 2014).

Prevalensi depresi pada usia remaja menunjukkan peningkatan yang sangat tinggi

dibandingkan dengan usia kanak- kanak dan usia dewasa. Tanda gejala depresi meningkat antara usia 13 – 15 tahun dan mencapai uncaknya pada usia 17 – 18 tahun (Marcotte, 2002). Menurut Stuart (2016), depresi mayor mempengaruhi 4 – 8% pada remaja. Remaja yang mengalami depresi pada usia 14 – 16 tahun akan berisiko tinggi untuk terjadinya depresi mayor pada masa dewasa. Hasil studi longitudinal menunjukkan bahwa sekitar 20-25% remaja yang mengalami depresi akan berkembang menjadi gangguan penyalahgunaan zat. Dan sebayak 5-10% remaja akan melakukan tindakan bunuh diri dalam rentang 15 tahun dari awal episode depresi mayor.

Di Indonesia sendiri angka prevalensi depresi remaja belum teridentifikasi secara teliti. Meski demikian, depresi terlihat manifestasinya dalam bentuk substance abuse (penyalahgunaan narkotika, obat terlarang, alkohol, dan lain-lain), perilaku merusak atau agresif (seperti tawuran pelajar dan kekerasan di sekolah), penurunan prestasi belajar, dan lain-lain. Di Indonesia, narkoba dan tawuran pelajar sudah menjadi persoalan serius.

Tren remaja yang mengalami masalah cenderung meningkat dari tahun ke tahun. Hasil Survey Demografi Kesehatan Indonesia pada tahun 2007 menunjukkan beberapa kenakalan remaja diantaranya adalah kasus tentang minuman keras, rokok dan narkoba. Pada masa remaja dengan perilaku penyalahgunaan zat, masalah hukum, agresi/tawuran pelajar, menjadikan risiko tinggi bunuh diri pada remaja (Brent et al, 1999, 1993e; Marttunen, Aro, Henrikson, & Lonnqvist, 1994b dalam Bridge, A *et al*. 2006). Banyaknya masalah dan perilaku menyimpang pada masa remaja menunjukkan bahwa remaja merupakan kelompok risiko terhadap masalah kesehatan jiwa.

Apabila berbagai perilaku menyimpang yang terjadi pada masa remaja dibiarkan terus berlanjut, maka akan semakin banyak remaja yang tidak siap untuk melaksanakan perannya sebagai generasi penerus. *National Service Framework* (NSF) *for Children and Young People* menyampaikan bahwa masa transisi harus dibimbing, dididik, dan merupakan proses terapeutik tidak hanya sebatas proses administratif. Transisi yang efektif juga harus memberikan kesempatan pada remaja untuk mengalami perubahan secara luas, lebih dari sekedar kebutuhan klinis remaja (RCN, 2013). Dukungan sosial baik dari keluarga, sekolah, maupun lingkungan luar merupakan hal yang penting bagi kesehatan jiwa remaja, dalam menjalani masa transisi.

Keluarga merupakan support system terdekat bagi remaja. Orangtua mempunyai peran untuk melindungi dan mengasuh anak dalam menjalani proses tumbuh kembangnya. Pola asuh orangtua akan berpengaruh pada kematangan emosi remaja, yang pada akhirnya berdampak pada perilaku remaja (Arsyam, 2016). Selain pola asuh, dukungan keluarga juga berperan penting dalam proses tumbuh kembang remaja. Dukungan keluarga diharapkan mampu memfasilitasi remaja untuk beradaptasi dalam menjalani masa transisi. Dukungan keluarga dapat diberikan dalam bentuk informasi, instrumental, emosional, dan penghargaan.

Optimalisasi dukungan keluarga dalam menghadapi remaja pubertas dapat dilakukan dengan menggunakan modul praktis yang mudah dimengerti oleh keluarga. Optimalisasi peran keluarga tersebut dapat dilakukan melalui pelatihan, pendampingan dan konseling dalam menghadapi remaja pubertas. Aktivitas ini diharapkan dapat meningkatkan pengetahuan, keterampilan dan sikap orang tua dalam menghadapi dan memberikan dukungan kepada remaja, sehingga remaja mampu berperilaku adaptif (Triyanto, 2014).

Penatalaksanaan gangguan jiwa remaja diantaranya yaitu pencegahan primer melalui berbagai program sosial yang ditujukan untuk menciptakan lingkungan yang kondusif dan pencegahan sekunder dengan menemukan kasus secara dini pada remaja yang mengalami kesulitan di sekolah sehingga tindakan yang tepat dapat segera dilakukan (Kusumawati, 2010). Dengan menemukan kasus secara dini dapat meminimalkan tingkat keparahan masalah kesehatan jiwa pada remaja dan memberikan benefit secara ekonomi mengingat bahwa pengobatan gangguan jiwa memerlukan waktu dan biaya yang tidak sedikit (Aidyn, L et al., 2015).

Berdasarkan studi pendahuluan yang dilakukan di SMPN 11 Kota Malang, didapatkan bahwa rata - rata jumlah masalah/kasus yang ditangani guru BK 10-15 siswa/bulan. Adapun jenis permasalahan yang dihadapi antara lain siswa yang mengalami kesulitan belajar, penurunan minat belajar, perselisihan dengan teman, dan siswa dengan keluarga *broken home*. Berbagai masalah kesehatan jiwa yang kompleks pada remaja dan mengingat pentingnya dukungan sosial keluarga dalam menghadapi masa transisi, mendorong peneliti untuk

melakukan penelitian tentang hubungan dukungan social keluarga dengan depresi pada remaja.

METODE PENELITIAN

Penelitian ini menggunakan desain analitik korelasional dengan pendekatan *crossectional.* Sampel penelitian berjumlah 94 siswa dari kelas VII dan VIII SMP Negeri 11 Kota Malang, yang diambil menggunakan teknik sampling *proportionate stratified random sampling.* Kriteria inklusi responden yaitu: Siswa SMPN 11 Kota Malang yang aktif pada TA 2017 – 2018, berusia 12 – 16 tahun, dan bersedia menjadi responden. Sedangkan kriteria eksklusinya yaitu siswa yang tidak hadir pada saat pengambilan data.

Penelitian dilakukan mulai bulan Maret - Agustus 2018. Pengambilan data menggunakan kuesioner dukungan sosial dan kuesioner *Depression Anxiety Stress Scale* (DASS). Data dianalisis dengan uji korelasi Spearman rank.

Penelitian ini telah mendapatkan ijin etik penelitian dari komite etik kesehatan Universitas Muhammadiyah Malang dengan no: E.5a/127/KEPK-UMM/IV/2018.

HASIL DAN PEMBAHASAN

Berikut ini penyajian data hasil penelitian, meliputi data umum dan data khusus:

Tabel 1. Karakteristik remaja

No	Karakteristik	f	%
1	Usia		
	a. 12 – 14 tahun	82	87 %
	b. 15 – 18 tahun	12	13 %
2	Jenis Kelamin		
	a. Laki - laki	46	48,9 %
	b. Perempuan	48	51,1 %

Berdasarkan hasil penelitian data umum responden didapatkan sebagian besar berusia 12-14 tahun sebanyak 82 responden (87%) dan sebagian besar responden berjenis kelamin perempuan sebanyak 48 responden (51,1%)

Tabel 2. Karakteristik orangtua

No	Karakteristik	f	%
1	Pendidikan		
	a. SD	7	7,4 %
	b. SMP	15	15,9 %
	c. SMA	35	37,3 %
	d. Diploma/ Sarjana	37	39,4 %
2	Pekerjaan		
	a. TNI/Polri	11	11,8 %
	b. Pegawai swasta	49	52,2 %
	c. Wiraswasta	18	19,2
	d. Petani	1	1
	e. Pedagang	6	6,4
	f. Buruh	4	4,2
	g. Lain -lain	4	4,2
4	Penghasilan Keluarga		
	a. < 1,8 juta	33	77 %
	b. > 1,8 juta	10	23 %
6	Penghasilan		
	a. < UMR	64	68 %
	b. > UMR	30	32 %

Berdasarkan hasil penelitian data umum responden orangtua didapatkan bahwa sebagian besar orang tua berpendidikan perguruan tinggi (PT) sebanyak 37 responden (39,4%) dan SMA sebanyak 35 responden (37,3%), sebagian besar orang tua responden memiliki pekerjaan sebagai pegawai swasta sebanyak 49 responden (52,2%), dan sebagian besar penghasilan orang tua < 2.470.000 sebanyak 64 responden (68%).

Tabel 3. Data Khusus Penelitian

No	Karakteristik	f	%
1	Dukungan Keluarga		
	a. Tinggi	81	86,2 %
	b. Sedang	13	13,8 %
2	Tingkat Depresi		
	a. Normal	69	73,4 %
	b. Ringan	13	13,8 %
	c. Sedang	7	7,4 %
	d. Berat	4	4,3 %
	e. Sangat Berat	1	1,1 %

Sedangkan untuk data khusus penelitian didapatkan bahwa sebagian besar responden mendapatkan dukungan sosial dari keluarga dalam kategori tinggi, yaitu sebanyak 81 responden (86,2%). Berdasarkan tingkat depresi didapatkan bahwa sebagian besar responden dalam kategori normal, yaitu sebanyak 69 responden (73,4%) dan sebagian kecil responden mengalami depresi sangat berat, sebanyak 1 responden (1,1%).

Tabel 4. Hasil Uji Korelasi

Variabel	r	p	Keterangan
Dukungan keluarga – depresi remaja	0,249	0,016	Signifikan

Berdasarkan hasil uji statistik menggunakan uji korelasi spearman rank dapat

diketahui bahwa ada hubungan antara dukungan keluarga dengan depresi pada remaja (ρ = 0,016). Kekuatan hubungannya lemah (r = 0,249) dengan arah positif. Hal ini berarti bahwa semakin tinggi dukungan sosial keluarga, maka remaja semakin tidak mengalami depresi.

Masa remaja merupakan masa transisi dari anak- anak menuju dewasa. Pada fase ini salah satu stresor yang dialami remaja yaitu adanya perubahan, terutama perubahan fisik. Apabila terjadi kegagalan dalam mencapai tugas perkembangan pada masa remaja dapat menyebabkan munculnya masalah kesehatan jiwa pada remaja, salah satunya adalah depresi. Depresi adalah perubahan mood atau afek yang diekspresikan dalam bentuk perasaan sedih, putus asa, dan pesimis. Selain itu juga terjadi penurunan minat pada aktivitas sehari – hari, perubahan nafsu makan, perubahan pola tidur, dan gejala somatik lainnya (Townsend, 2014).

Banyak faktor yang dapat menimbulkan depresi pada remaja selain adanya perubahan yang terjadi pada masa transisi, antara lain hubungan interpersonal (tekanan dari teman sebaya, pasangan, maupun hubungan dengan orangtua), kehidupan dirumah, masalah finansial, ketidakpastian masa depan, dan tuntutan dari dari orangtua (Camara et.al, 2017).

Hasil penelitian menunjukkan bahwa lebih dari setengah responden tidak mengalami depresi, yaitu sebanyak 69 responden (73,4%), 13 responden (13,8%) mengalami depresi ringan, 7 responden (7,4%) mengalami depresi sedang, 4 responden (4,3%) mengalami depresi berat dan hanya 1 responden mengalami depresi berat (1,1%).

Berdasarkan hasil penelitian, didapatkan bahwa tanda gejala depresi yang paling banyak dirasakan remaja antara lain perasaan negative terhadap diri sendiri, adanya perasaan sedih dan tertekan, perasaan tidak berharga, tidak memiliki antusias terhadap apapun, dan perasaan tidak ada inisiatif dalam melakukan sesuatu.

Berdasarkan karakteristik jenis kelamin remaja, didapatkan bahwa sebagian besar remaja yang mengalami depresi baik ringan maupun sangat berat adalah perempuan yaitu 19 orang (76%). Hal ini sesuai dengan pendapat Van Droogenbroeck et al.(2018) yang menyatakan bahwa perempuan memiliki skor lebih tinggi terhadap kejadian distress psikologis, ansietas dan depresi jika dibandingkan dengan laki – laki. Hasil penelitian lain juga menunjukkan bahwa insiden depresi pada perempuan lebih tinggi dari laki – laki dengan perbandingan 2:1 (Townsend, 2014).

Ada beberapa faktor yang menyebabkan perbedaan insiden tersebut, yaitu karekteristik gender itu sendiri, dan strategi koping. Terkait perbedaan karakteristik gender hal ini dikaitkan dengan lebih tingginya kadar hormone oksitosin pada perempuan dibandingkan laki – laki. Hal ini menyebabkan remaja perempuan memiliki ketertarikan lebih tinggi pada hubungan interpersonal, sehingga remaja perempuan lebih peka terhadap penolakan orang lain, mudah merasa tidak puas. Kondisi ini diyakini sebagai risiko unculnya gejala depresi (Steiberg, 2002 dalam Darmayanti, 2016). Sedangkan menurut Townsend (2014), menyatakan bahwa gender perempuan identik dengan perasaan tidak berdaya, pasif, dan mudah emosional yang dikaitkan dengan terjadinya depresi. Sebaliknya, maskulinitas berhubungan dengan tingginya harga diri dan rendahnya kejadian depresi pada laki – laki.

Faktor kedua yaitu perbedaan strategi koping yang digunakan dalam menghadapi stressor. Perempuan lebih banyak menggunakan strategi koping yang tidak efektif, seperti internalisasi, intelektualisasi, dan rasionalisasi. Sehingga tidak mampu mempertahankan keseimbangan emosi dan lebih rentan mengalami depresi. Sedangkan laki – laki menggunakan strategi koping bersifat eksternalisasi yang diekspresikan dalam bentuk perilaku agresif, kepribadian antisosial, dan penyalahgunaan napza. (Darmayanti, 2016; Van Droogenbroeck et al.2018).

Hasil uji statistik pada penelitian ini menunjukkan adanya hubungan signifikan antara dukungan sosial keluarga dengan depresi remaja. Keluarga merupakan support system terdekat bagi remaja. Dukungan keluarga adalah suatu bentuk hubungan interpersonal yang meliputi sikap, tindakan dan penerimaan terhadap anggota keluarga, sehingga anggota keluarga merasa ada yang memperhatikan. Menurut Friedman (2010), ada 4 dimensi dukungan keluarga yaitu dukungan informasional, dukungan penghargaan, dukungan instrumental dan dukungan emosional.

Pada remaja dukungan emosional ari keluarga dan teman merupakan dukungan yang paling efektif dalam mencegah depresi. Dengan adanya perasaan diterima yang berdampak pada peningkatan harga diri. Sehingga remaja akan memberikan penilaian diri secara positif. Dukungan emosional yang diberikan dapat

berupa mendengarkan, menunjukkan perasaan kasih saying, dan memberikan apresiasi (Camara, 2017).

Hal ini sesuai dengan hasil penelitian yang menunjukkan bahwa dukungan keluarga yang paling banyak diberikan yaitu dukungan emosional dalam bentuk kehadiran keluarga yang dapat membuat remaja merasa nyaman ketika menghadapi masalah, yaitu sebanyak 78,7%. Selain itu bentuk dukungan emosional yang lain adalah dengan adanya perhatian keluarga terhadap pergaulan remaja, yaitu sebanyak 68%. Selain dukungan emosional bentuk dukungan keluarga yang diberikan adalah dukungan instrumental. Sebanyak 76,6% keluarga selalu memberikan kebutuhan sekolah yang diperlukan remaja.

Sedangkan bentuk dukungan keluarga yang perlu ditingkatkan yaitu dukungan informasional, dengan cara memberikan informasi terkait tumbuh kembang pada remaja, dan dukungan penghargaan dengan cara tidak membandingkan antar anak didalam keluarga.

Hasil penelitian ini sejalan dengan Triyanto (2014) yang menyatakan bahwa terdapat pengaruh signifikan antara dukungan keluarga yang optimal terhadap peningkatan perilaku adaptif remaja. Salah satu perkembangan pada masa remaja adalah emosi yang masih labil. Hal ini akan menjadi tantangan bagi keluarga dalam menyikapi perubahan emosional remaja. Perhatian keluarga, khususnya dari orangtua dalam menghadapi perubahan psikologis remaja akan membantu remaja mencapai kematangan emosional. Selain itu dengan memberikan perhatian terhadap pergaulan remaja, maka dapat meminimalkan remaja terjerumus dalam pergaulan yang tidak baik.

Dukungan instrumental keluarga berkaitan dengan faktor ekonomi. Menurut Yusuf (2009) rendahnya dukungan material disebabkan karena rendahnya faktor ekonomi. Dan kondisi ekonomi keluarga yang rendah berhubungan dengan depresi dan kenakalan remaja (Coley, et al., 2018). Hal ini sesuai dengan hasil penelitian ini bahwa sebagian besar (80%) remaja yang mengalami distress psikologis dalam kategori sedang, berasal dari keluarga dengan penghasilan dibawah UMR.

Menurut Gottlieb (1983) dalam Astuti (2016) dukungan sosial yang diberikan, baik dalam bentuk informasi atau nasehat verbal maupun non verbal, bantuan nyata ataupun tindakan berperan efektif dalam mengatasi tekanan psikologis yang dialami individu pada masa-masa sulit. Hal tersebut memungkinkan individu melakukan upaya pemecahan masalah yang dihadapinya menggunakan strategi koping berfokus masalah. Dengan demikian akan meminimalkan terjadinya depresi pada remaja.

Dukungan social diprediksi sebagai salah satu factor proteksi terhadap stressor yang ada. *The buffering hypothesis* (Cohen & Wills, 1985) menjelaskan bahwa dukungan social sebagai buffer atau melindungi dari efek distress yang terjadi. Dengan kata lain ketika menghadapi masalah, remaja dengan dukungan social tinggi lebih tidak beresiko mengalami depresi dibandingkan dengan yang dukungan sosialnya rendah. Selain itu dukungan social berhubungan langsung dengan rendahnya tingkat depresi, penyesuaian akademik yang lebih baik, dan rendahnya angka penyalahgunaan zat (Camara, 2017).

Berbeda dengan teori *The buffering hypothesis*, teori lain yaitu *the principle – effect model* (Dumont and Provost, 1999) menjelaskan bahwa dukungan social memiliki efek positif pada individu dalam menghadapi stressor dalam kehidupan. Penelitian menunjukkan bahwa dukungan social keluarga yang rendah berhubungan dengan gejala depresi pada remaja usia 12-18 tahun. Selain itu penelitian secara longitudinal mengindikasikan bahwa remaja usia 11 – 15 tahun dengan dengan dukungan keluarga yang rendah mengalami peningkatan gejala depresi (Possel et.al., 2018).

KESIMPULAN DAN SARAN

Kesimpulan

Berdasarkan hasil analisis dan pembahasan didapatkan kesimpulan, yaitu: Sebagian besar responden mendapatkan dukungan sosial keluarga dalam kategori tinggi, yaitu sebanyak 81 orang (86,2 %). Sebagian besar responden tidak mengalami depresi, yaitu sebanyak 69 responden (73,4%). Terdapat hubungan signifikan antara dukungan sosial keluarga dengan depresi remaja, dengan kekuatan hubungan lemah ($\rho = 0{,}016$; $r = 0{,}249$).

Saran

Bagi pihak Sekolah diharapkan dapat memberikan dukungan kepada guru BK dalam menjalin kerjasama dan komunikasi dengan orangtua mengingat pentingnya dukungan sosial keluarga bagi kesehatan jiwa remaja.

Bagi keluarga diharapkan lebih meningkatkan dukungan yang diberikan pada

remaja khususnya pada aspek informasional dan penghargaan.

Bagi remaja diharapkan lebih meningkatkan koping adaptif terhadap stressor yang dialami, dengan memanfaatkan support system yang ada, khususnya dari keluarga

Bagi Peneliti selanjutnya perlu penelitian lanjutan tentang efektifitas terapi yang dapat diberikan pada remaja dengan depresi, seperti terapi perilaku kognitif. Selain itu juga memperbanyak sampel dalam lingkup yang lebih luas agar hasil peneltian dapat digeneralisasikan.

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Social support and depression among Chinese adolescents: The mediating roles of self-esteem and self-efficacy

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ABSTRACT

Objectives: This study investigated the effect of various sources of social support (i.e., parental support, teacher support, and peer support) on the level of depression, and the mediating effect of self-esteem and self-efficacy in the relationship between various sources of social support and the level of depression among Chinese adolescents. It also attempted to explore whether or not the relationships among social support, self-esteem, self-efficacy and depression would differ between students in upper primary school (Grades 4 to 6) and those in lower secondary school (Grades 7 to 9).

Method: The study employed a cross-sectional survey design. Using a three-stage cluster sampling method, 1507 students from primary schools (Grades 4 to 6) and secondary schools (Grades 7 to 9) in Hong Kong were recruited and given a structured questionnaire.

Results: The results of a structural equation analysis indicated that both parental and peer support are directly and indirectly related to the level of depression. The indirect effect of social support on depression is via the mediating effect of self-esteem. However, self-efficacy does not mediate the relationship between social support and depression. Similar findings were found for both 4th to 6th graders in primary schools and 7th to 9th graders in secondary schools.

Conclusion: The findings suggest that enhancing self-esteem should be emphasized in depression prevention/intervention for Chinese adolescents.

1. Introduction

Concern about adolescent mental health has been growing in Chinese societies (Choi & Hung, 2011). It is estimated that 16% of Chinese students in Hong Kong aged 13 to 15 have mental disorders (Leung et al., 2008). Recent studies conducted in mainland China have found mental disorder rates for children and adolescents of between 8.3% and 16.2% (Yang et al., 2014). Major depressive disorder is one of the most common mental disorders among adolescents in China (Yang et al., 2014). In Hong Kong, a study using the Center for Epidemiological Studies Depression Scale (CESD) found that about 30% of Chinese adolescents reported mild to severe depression (CESD ≥ 16; Li, Chan, Chung, & Chui, 2010). As depression is associated with an increased risk of suicide, poor health behavior, functional impairment, and additional burdens on the family (Balázs et al., 2013; Thapar, Collishaw, Pine, & Thapar, 2012; Zheng & Zheng, 2015), there is an immediate need to design effective prevention and intervention methods to relieve depression in this population. Therefore, a better understanding of what contributes to Chinese adolescents' depression is necessary.

1.1. Social support and mental health

Social support refers to "the provision of both psychological and material resources with the intention of helping the recipients to cope with stress" (Chu, Saucier, & Hafner, 2010, p. 625). Major sources of social support for adolescents include family, peers, and school teachers (Rosenfeld, Richman, & Bowen, 2000). According to the social support main effect model, a major psychosocial theory for explaining why people suffer from mental health problems, people who perceive that they have less social support are more likely to suffer from depression (Cohen & Wills, 1985). Despite considerable research demonstrating the effect of social support on adolescents' depression, gaps remain in the literature (Ronen, Hamama, Rosenbaum, & Mishely-Yarlap, 2016; Stewart & Suldo, 2011; Wu, Tsang, & Ming, 2012; Young, Berenson, Cohen, & Garcia, 2005; Zhuang & Wong, 2017). For example, few studies investigated the mediating effect in the relationship between social support and depression among Chinese adolescents.

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1.2. The mediating effect of self-esteem and self-efficacy

A review of the literature indicated that social support enhances mental health through fostering of the individual's self-concept (Kim & Nesselroade, 2003). Two aspects of self-concept, self-esteem and self-efficacy, have mainly been discussed to explain the relationship between social support and the individual's mental health (Kim & Nesselroade, 2003; Saltzman & Holahan, 2002; Symister & Friend, 2003). First, social support promotes self-esteem by conveying messages of being cared for, being loved, and being valued by others and by fostering feelings of belonging (Kim & Nesselroade, 2003; Lakey & Cohen, 2000; Turner, Turner, & Hale, 2014). In turn, this enhanced self-esteem can reduce the likelihood of suffering negative psychological outcomes, such as depression (Lakey & Cohen, 2000; Lee, Dickson, Conley, & Holmbeck, 2014). Second, social support can bolster self-efficacy by showing positive coping attitudes and skills, providing encouragement, and demonstrating that challenges can be overcome (Bandura, Schunk, & Hogan, 1981; Benight & Bandura, 2004). The resulting high self-efficacy can promote adjustment outcomes and psychological well-being (Bandura & Pallak, 1982).

The majority of the few empirical studies examining the mediating effects of self-esteem and self-efficacy in the relationship between social support and mental health were conducted in Western countries (Saltzman & Holahan, 2002; Symister & Friend, 2003; Yarcheski, Mahon, & Yarcheski, 2001). However, there are conflicting arguments about whether or not these mediating effects would be existing in the Chinese adolescent population. On the one hand, because a good social relationship is highly valued in Chinese culture (Chen & Astor, 2010) and is associated with self-concept and depression (Dang, Li, & Zhang, 2016; Peterson, Cobas, Bush, Supple, & Wilson, 2005), logically, the mediating role of self-esteem and self-efficacy in the link between social support and depression would be significant in this population. On the other hand, under the influence of Confucian doctrine, the role of self-concept in the relationship between social support and depression may not be salient. For example, Chinese culture heavily emphasizes hierarchy in social relationship and filial piety (Chen et al., 1998; Wang & Ollendick, 2001). These values lead to a set of culturally unique child rearing features, including authoritarian parenting styles, high parental control, and high parental involvement (Huang, Cheah, Lamb, & Zhou, 2017; Wang & Ollendick, 2001), and, in turn, could lead to the child's low self-esteem (Milevsky, Schlechter, Netter, & Keehn, 2007). The low self-esteem consistently reported by Chinese people (Leung, 2010) may result in the mediating effect of self-esteem being discounted in the relationship between social support and depression among Chinese adolescents.

The mediating effect of self-efficacy in the relationship between social support and depression also might be attenuated among Chinese adolescents because peaceful relationship is strongly emphasized in Chinese culture (Cheng, Lo, & Chio, 2010). In the Western culture, which values individualism, personal control and competence are heavily emphasized in the understanding of the nature of mental health (Chen, Chan, Bond, & Stewart, 2006). When a person does not have control over a certain life situation, his/her self-regulation of emotion could be affected, and he/she may thus experience emotional difficulties (Bandura & Pallak, 1982; Chen et al., 2006). However, in Chinese culture, because interpersonal harmony is weighted more heavily than personal achievement, emotional disturbance is more likely to be present when encountering interpersonal relationship issues (Cheng et al., 2010). Therefore, self-efficacy may not lead to decreased depression among Chinese adolescents.

Although the results of a recent study show that personal and relational self-esteem mediates the relationship between overall social support and depressive symptoms among Hong Kong youth (Du, King, & Chu, 2016), the study has three major limitations. First, it was conducted using a path analyses method with a small convenience sample; did not adjust for measurement errors and suffered from sample selection bias. Second, this study did not examine how social support from different sources correlated with depressive symptoms. Third, it did not investigate the role of self-efficacy in the relationship between social support and depressive symptoms. Therefore, it is still unclear how self-esteem and self-efficacy mediate various sources of social support (e.g., parental support, peer support, and teacher support) and the level of depression among Chinese adolescents.

1.3. Age difference

The literature has suggested that the nature of social support and levels of self-concept change in the course of adolescence. Over time, the importance of peer support increases and the influence of family remains constant or decreases (Erikson, 1950; Helsen, Vollebergh, & Meeus, 2000). In addition, students' self-concept drops substantially after they enter secondary school (Chang, McBride-Chang, Au, & Stewart, 2003). As family support was found to be much stronger than peer support in preventing depression and suicide (Cheng & Chan, 2007), the changing nature of social support and self-concept might lead to a difference in the dynamism among social support from various sources, self-esteem, self-efficacy and the level of depression between primary school students (4th to 6th graders) and secondary school students (7th to 9th graders). However, there is a lack of study examining the age difference in the relationships among these variables.

1.4. Current study

To fill the above-mentioned knowledge gaps, using a large number of random selected samples, the current study investigates the relationships among social support from various sources, self-esteem/self-efficacy, the level of depression among Chinese adolescents, and the age differences in these relationships. It is hypothesized that the level of depression is negatively associated with levels of social support from peers, teachers, and parents and with self-esteem and self-efficacy. Moreover, the effects of social support from each source (i.e., parental support, teacher support, and peer support) on the level of depression are hypothesized to be through the mediating effects of self-esteem and self-efficacy. With regard to the analysis of age difference in the relationship among social support from various sources, self-esteem/self-efficacy, and the level of depression, as there is a lack of study in this area, we consider it an exploratory analysis and do not propose a hypothesis for it.

2. Method

2.1. Participants and procedures

This survey study was conducted in Hong Kong using a sample consisting of 1507 students from primary schools (Grades 4 to 6; ages around 9 to 11) and secondary schools (Grades 7 to 9; ages around 12 to 14). A three-stage cluster sampling method was adopted. First, primary and secondary schools from each region in Hong Kong (i.e., Kowloon East, Kowloon West, New Territories, and Hong Kong Island) were randomly selected from the sampling frame. Second, three grades in each school were selected: three upper grades in primary schools (Grades 4 to 6 inclusive) and three lower grades in secondary schools (Grades 7 to 9 inclusive). Third, one class from each of the selected grades was randomly selected. The survey was administered during class by professionally trained monitors. Respondents were encouraged to respond truthfully. Parental consent forms were distributed and collected through the assistance of the teaching staff at schools prior to the survey administration. Participants' consent forms were collected at the beginning of the survey administration. Participants were free to withdraw from the study at any time and for any reason. This study had a completion rate of over 95%.

2.2. Measurement

2.2.1. Demographics

Demographic information, including gender and grade levels, was collected through self-reporting.

2.2.2. Level of depression (α = 0.90)

Level of depression was assessed using the depression subscale of the Brief Symptom Rating Scale (BSRS; Lee, Lee, Yen, Lin, & Lue, 1990). The BSRS is a Chinese questionnaire widely used to screen individuals for common mental health problems. The depression subscale consists of seven items (e.g., "I blame myself for trivial things"). The rating for each item ranged from 1 = never to 5 = very severe, where a higher score indicates a higher level of depression. Studies have shown the depression subscale has high test-retest reliability and factorial validity (Chen & Wei, 2011; Lee et al., 1990).

2.2.3. Social support

The items in this scale were selected from the Child and Adolescent Social Support Scale (CASSS; Malecki, Demaray, Elliott, & Nolten, 1999). This scale includes three subscales: parent social support, teacher social support, and peer social support. The items were all rated on a 5-point Likert scale (1 = never to 5 = always). Peer social support (α = 0.94) includes six questions to assess whether or not respondents perceived their peers as caring, friendly, and supportive (e.g., "My classmates say nice things to me"). Teacher social support (α = 0.94) comprises five items on how often students' teachers show care, patience, and fairness to them (e.g., "My teacher cares about me"). Parental social support (α = 0.95) contains four items measuring how often parents offer advice and help them address problems (e.g., "My parents help me make decisions"). Previous studies have shown the CASSS to have high validity and reliability (Chen & Wei, 2011; Malecki et al., 1999).

2.2.4. Self-esteem (α = 0.85)

The Rosenberg Self-Esteem Scale (Rosenberg, 1965) was used to measure self-esteem. Five positively worded items out of the original ten items were used in this study (e.g., "I take a positive attitude toward myself," "On the whole, I am satisfied with myself") given the scale's high validity, as demonstrated in previous studies (Chen & Wei, 2011; Shahani, Dipboye, & Phillips, 1990). Items for the self-esteem scale range from 1 = strongly disagree to 4 = strongly agree.

2.2.5. Self-efficacy (α = 0.82)

This 5-item scale was adapted from the General Self-Efficacy Scale (GSE; Schwarzer & Jerusalem, 1995). It was used to assess the extent and strength of the respondents' beliefs in their own ability to complete tasks and reach goals (e.g., "I am confident that I could deal efficiently with unexpected events," "I can usually handle whatever comes my way"). The criterion-related validity and the test-retest reliability of this scale have been documented in previous studies (Romppel et al., 2013). Items for the self-efficacy scale range from 1 = strongly disagree to 4 = strongly agree.

2.3. Data analysis plan

2.3.1. Descriptive and bivariate analysis

Preliminary analyses, including descriptive statistics and bivariate analyses, were first conducted to understand the nature of the study samples and the correlations between the study variables. The Statistical Package for Social Sciences (SPSS 21.0) was used for the preliminary analysis.

2.3.2. Main analysis

2.3.2.1. Overall model. Structural equation modeling (SEM) with maximum likelihood (ML) estimation was conducted using Amos 21.0 to test the hypothesized model. SEM permits the use of latent constructs composed of multiple observed variables and allows for estimation of the relationships among latent constructs while providing explicit estimates of measurement errors to increase the accuracy of the analysis results (Byrne, 2001). Moreover, it permits the simultaneous estimation of direct and indirect paths, estimating each path after the effects of all of the other paths are accounted for. These features render SEM a particularly appropriate technique for this study given the hypothesized direct and mediating effects of the latent predictor variables on the outcome variables. The main statistical analysis followed Kline's (2005) proposal for testing structural equation models: testing the measurement model first, and then the structural model. The factor loadings are examined when testing the measurement model. Only if the measurement model fits the data well should the structural model be tested further.

Multiple model fit indices were used to assess the goodness of the model. The chi-square (χ^2) was used, which is a likelihood ratio statistic for testing a hypothesized model against the alternative that the covariance matrix is unconstrained. A non-significant χ^2 indicates that the hypothesized model should not be rejected (Bollen, 1989). However, due to the sensitivity of the likelihood ratio test to sample size, it is not uncommon for a well-fitting hypothesized model to yield a significant χ^2 if the sample is large (Byrne, 2001). Therefore, because of the large sample size (N = 1507), model evaluation in this study relied more on other fit indices, including the comparative fit index (CFI; Hu & Bentler, 1999), the normed fit index (NFI; Bentler & Bonett, 1980), and the incremental fit index (IFI; Bollen, 1989). Typically, values above 0.90 indicate good model fit (Bentler, 1988). The result of a common misfit measure, the root mean square error of approximation (RMSEA), is also reported in the analysis. It presents the differences between corresponding elements of the observed and predicted covariance matrix, where values lower than 0.06 indicate a close fit (Hu & Bentler, 1999). The above-mentioned model fit indices, which represent different aspects of the overall adequacy of a model, are widely used in the literature. A model can be regarded as adequate if all of its indices yield satisfactory results. The p-value chosen as the cutoff for determining significance in this study was 0.05.

2.3.3. Age comparison analysis

This study also tested whether or not the same theoretical model was applicable to subsamples of primary school students and secondary school students. The analysis followed a two-step procedure. First, the factor loadings, the paths, and the covariance were constrained to be equal to simultaneously fit the covariance matrices of the two subgroups to the same model. Next, the model was tested to determine whether releasing the equality constraints on the paths could significantly improve the fit. Path constraints were released one at a time to test if any of them yielded a significantly better model fit. The model where age makes a difference will show significant change.

3. Results

3.1. Descriptive statistics and bivariate analyses

About 51.5% of the students were boys, 47.6% were girls, and 0.9% did not indicate their gender. Table 1 presents the means and standard deviations of the variables included in the model.

The results of the bivariate analyses are presented in Table 2. They provide evidence that all of the variables were significantly correlated.

3.2. Overall model analysis

A test of the hypothesized structural model yielded good fit to the data. Although the chi-square value was large and significant ($\chi^2 = 2492.590$, df = 449, $p < 0.001$) due to its sensitivity to the large sample size, other goodness of fit indices demonstrated

Table 1
Means and standard deviations for the study variables.

Scale	Range	Overall M (SD)	Primary school students M (SD)	Secondary school students M (SD)
Depression	1–5	1.91 (0.89)	1.68 (0.82)	2.02 (0.90)
Peer social support	1–5	3.20 (1.05)	3.23 (1.11)	3.18 (1.02)
Teacher social support	1–5	3.42 (1.02)	3.70 (1.03)	3.28 (0.99)
Parental social support	1–5	3.38 (1.17)	3.77 (1.12)	3.19 (1.14)
Self-esteem	1–4	2.83 (0.52)	2.86 (0.55)	2.81 (0.50)
Self-efficacy	1–4	2.73 (0.52)	2.76 (0.53)	2.71 (0.52)

satisfactory results, with the CFI (0.941), the NFI (0.930), and the IFI (0.942) > 0.90, and the RMSEA (0.055) < 0.06. The variance in depression explained by this model was 23%. Table 3 illustrates the psychometric properties of each scale. All of the observed variables were significantly loaded on the latent constructs in the expected directions, which suggests that the selected indicators reasonably represented the underlying constructs in a statistically reliable manner.

The standardized solution for the test of the overall structural model is presented in Fig. 1. As shown in Fig. 1, a higher level of peer social support was directly related to a lower level of depression ($\beta = -0.08$, $p < 0.01$), as was a higher level of parental social support ($\beta = -0.18$, $p < 0.001$). Teacher social support showed no significant direct effect on depression ($\beta = -0.02$, $p > 0.05$). Moreover, the level of depression was negatively related to self-esteem ($\beta = -0.34$, $p < 0.001$) but not to self-efficacy ($\beta = -0.02$, $p > 0.05$). Taken together, this suggests that a lower level of depression is directly associated with higher levels of peer social support and parental social support and indirectly associated with these two variables through the mediating effect of self-esteem.

3.3. Age comparison analysis

Age comparison analysis followed a two-step procedure. The results are presented in Fig. 2. First, the factor loadings, the paths, and the covariance were constrained to be equal to simultaneously fit the covariance matrices of the two subgroups to the same model. The analysis provided a good fit to the data ($\chi^2 = 3557.896$, df = 977, $p < 0.001$; with CFI = 0.925, NFI = 0.900, IFI = 0.925, RMSEA = 0.042). Thus, the same theoretical model fits the data from both age groups well.

Next, the model was tested to determine whether releasing the equality constraints on the paths could significantly improve the fit. After releasing the path constraints one at a time, the results showed that no one of them yielded a significantly better fit to the model. The final model with all constraints released also yielded a good fit to the data ($\chi^2 = 3541.852$, df = 966, $p < 0.001$; with CFI = 0.926, NFI = 0.900, IFI = 0.926, RMSEA = 0.042). The similar proportions of the variance in depression for both age groups, 22% and 23% for primary school students and secondary school students, respectively, were explained by the theoretical model. This suggests that no differences between the two age groups existed on any of the paths. It can be concluded that the proposed model applies equally well to both age groups.

4. Discussion

Using a large-scale random sample in Hong Kong, this study investigated how social support from various sources is associated with levels of depression among Chinese adolescents. The results of our study show that parental support and peer support were directly associated with depression. In addition, these two variables were indirectly related to the level of depression via the mediating effect of self-esteem. The results echo the findings of previous studies (Du et al., 2016; Symister & Friend, 2003; Yarcheski et al., 2001). The overall findings also support the theoretical framework: the level of depression is indirectly associated with social support through the mediating effect of self-esteem, regardless of the impact of culture and age (Saltzman & Holahan, 2002; Symister & Friend, 2003).

It is perhaps surprising that teacher support was neither directly nor indirectly related to the level of depression in our study. The characteristics of Hong Kong's education system may explain these results. The education system in Hong Kong strongly emphasizes academic performance. Teachers' primary role is to perform knowledge transfer, not to provide emotional support. The rating for teachers' support may fall more within the scope of academic support than emotional support, and thus its impact on students' psychological wellbeing and self-concept could be limited. Future studies in this area should utilize measures with more specific questions/items designed to evaluate the relationships of the various dimensions of teachers' support (e.g., teachers' academic support and emotional support measured separately) with self-esteem and the level of depression. The findings from such a study could provide useful information for policy development. For example, if emotional support from teachers is found to be directly and indirectly significant with regard to depression, then policy for enhancing adolescents' mental health should include increasing emotional support from teachers.

In our study, self-efficacy does not mediate the relationship between any sources of social support and the level of depression among Chinese adolescents. This result is inconsistent with the findings of studies in Western countries (Saltzman & Holahan, 2002). In a collectivist culture, such as Chinese culture, conforming to group goals is weighted more heavily than achieving personal goals (Cheng et al., 2010). Although having higher levels of self-efficacy could facilitate personal goal achievement (Bandura & Pallak, 1982), achieving personal goals may not be a major determinant of mental health in Chinese culture. This may explain why the impact of self-efficacy on mental health in our study samples is not as salient as it is in a Western sample.

Parenting style in Chinese society may also explain why self-efficacy does not mediate the relationship between social support and the level of depression in our study. In Chinese culture, children's independence is discouraged. Chinese parents are heavily involved in their children's

Table 2
Bivariate correlations between the study variables.

	Depression	Peer social support	Teacher social support	Parental social support	Self-esteem	Self-efficacy
Depression	1	−0.26**	−0.25**	−0.31**	−0.36**	−0.25**
Peer social support		1	0.40**	0.40**	0.33**	0.25**
Teacher social support			1	0.60**	0.24**	0.17**
Parental social support				1	0.29**	0.14**
Self-esteem					1	0.62**
Self-efficacy						1

Notes.
** $p < 0.01$.

Table 3
Theoretical constructs and factor loadings.

Theoretical constructs	Items	Factor loadings
Level of depression (α = 0.90)	I have suicidal ideation.	−0.62
	I accuse myself for trivial things.	−0.67
	I am lonely.	−0.76
	I am depressed and sad.	−0.83
	I show no interest to things.	−0.74
	I have no hope for the future.	−0.82
	I find myself with no worth.	−0.82
Peer social support (α = 0.94)	My classmates care about and pay attention to me.	0.82
	My classmates offer suggestions to me when I do not know what to do.	0.89
	My classmates offer with me good advice.	0.88
	My classmates notice my efforts.	0.85
	My classmates invite me to join them.	0.82
	My classmates ask me to do things together.	0.83
Teacher social support (α = 0.94)	My teacher cares about me.	0.82
	My teacher treats me fairly.	0.68
	My teacher explains to me clearly when I don't understand.	0.89
	My teacher guides me to sort things out.	0.94
	My teacher offers me good advice.	0.90
Parental social support (α = 0.95)	My parents advise me what to do when I have no idea.	0.93
	My parents offer me good advice.	0.95
	My parents help me solve problems.	0.92
	My parents spend time with me making choices.	0.84
Self-esteem (α = 0.85)	I feel that I am a person of worth.	0.73
	I feel that I have a number of good qualities.	0.74
	I am able to do things as well as most other people.	0.75
	I take a positive attitude toward myself.	0.67
	On the whole, I am satisfied with myself.	0.76
Self-efficacy (α = 0.82)	I am confident to cope with any emergencies.	0.74
	I am able to deal with unexpected things.	0.74
	I am able to face the problems calmly because believe in my problem-solving skills.	0.65
	I can think of ways to work things out when coming across troubles.	0.64
	I can cope with it no matter what happens.	0.69

daily life events and actively solve their children's problems in many situations (Ng, Pomerantz, & Deng, 2014). Thus, when facing difficulties, adolescents may rely on parents to solve their problems. This protective child-raising style may substitute for the effect of self-efficacy in determining the level of mental health. Future studies are needed to investigate whether or not the protective child-raising style affects the mediating role of self-efficacy between social support and the level of depression among Chinese adolescents.

Moreover, analysis indicates that age does not account for different interrelationships among social support from various sources, self-concept, and the level of depression between 4th to 6th graders and 7th to 9th graders. These findings indicate that the mediating effects of self-concept and the contributions of social support and self-concept to depression remain similar across different age groups.

4.1. Practice implications

Using a large-scale sample, the findings provide evidence for

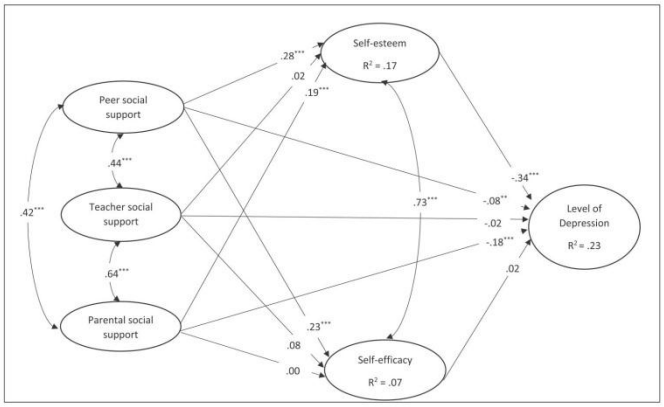

Fig. 1. Structural equation modeling of direct and mediating effects on adolescents' levels of depression.

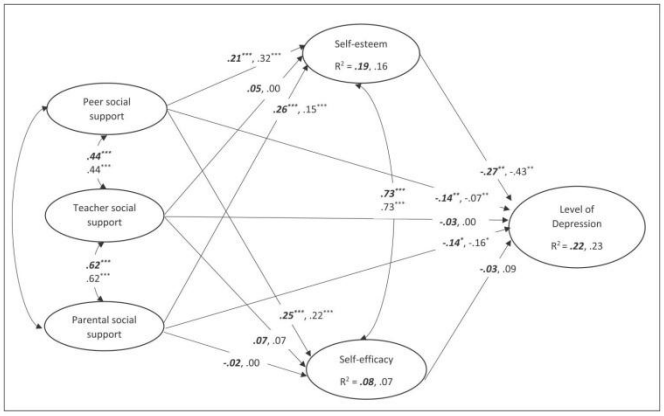

Fig. 2. Structural equation modeling of direct and mediating effects on the level of depression of adolescents' for different age groups.

interventions to reduce the level of depression in Chinese adolescents. As the significant role of self-esteem was identified in effect of parent and peer social support on the level of depression, the focus of interventions also should be on enhancing adolescents' self-esteem. In addition, practitioners could provide cognitive interventions that focus on helping adolescents to perceive parental and peer social support positively. As our findings indicate that social support is related to depression via the mediating effect of self-esteem in both 4th to 6th graders and 7th to 9th graders, the interventions for these two age groups should be consistent.

4.2. Limitations

This study is not exempt from limitations. First, this is a cross-sectional study, and causal inference should be interpreted with caution. Future studies using longitudinal data are needed to verify the causality. Second, this study only investigated overall support from parents, teachers, and peers and may have overlooked the effect of a specific type of support (e.g., instrumental, informational, and emotional support) on self-esteem, self-efficacy, and depression. Future studies using measures that tap the above-mentioned functional aspects of social support are needed to provide more fruitful dimension-specific information to practitioners so they can develop effective interventions. Third, given that this study is based only on adolescents' reporting, there could be a mono-method bias. Future studies using other measures are warranted. Fourth, because the samples for this study were recruited from schools instead of clinical settings, whether or not the findings are applicable to adolescents with clinical depression requires further investigation. Fifth, some other factors that might impact depression, such as gender, social economic status, and bullying, were not included in our analysis. Finally, because the data were collected in Hong Kong, a highly developed city, the findings may only be applicable to Chinese adolescents living in urbanized areas. Hong Kong is characterized by high economic development. The majority of households are nuclear families, and most children and adolescents are raised in an environment with parents around (Tu & Wang, 2014). In contrast, in many rural areas of China, it is common for children and adolescents to be left in the care of relatives or family friends as parents move to cities to seek work. This experience of separation could alter the effect of parental support on the level of depression. Hence, our findings may not be applied to Chinese adolescents living in rural areas with a high poverty rate and should be interpreted with caution.

5. Conclusions

This study investigated how social support from various sources related to depression among Chinese adolescents. The findings of this study show that higher levels of parental and peer support are directly related to lower levels of depression. In addition, these two variables are indirectly related to the level of depression through the mediating effect of self-esteem among Chinese adolescents. Hence, social network interventions intended to prevent or decrease depression should also focus on bolstering self-esteem. Given that the findings for 4th to 6th graders in primary schools and 7th to 9th graders in secondary schools are similar, interventions for these two groups should be consistent.

Conflicts of interest

None.

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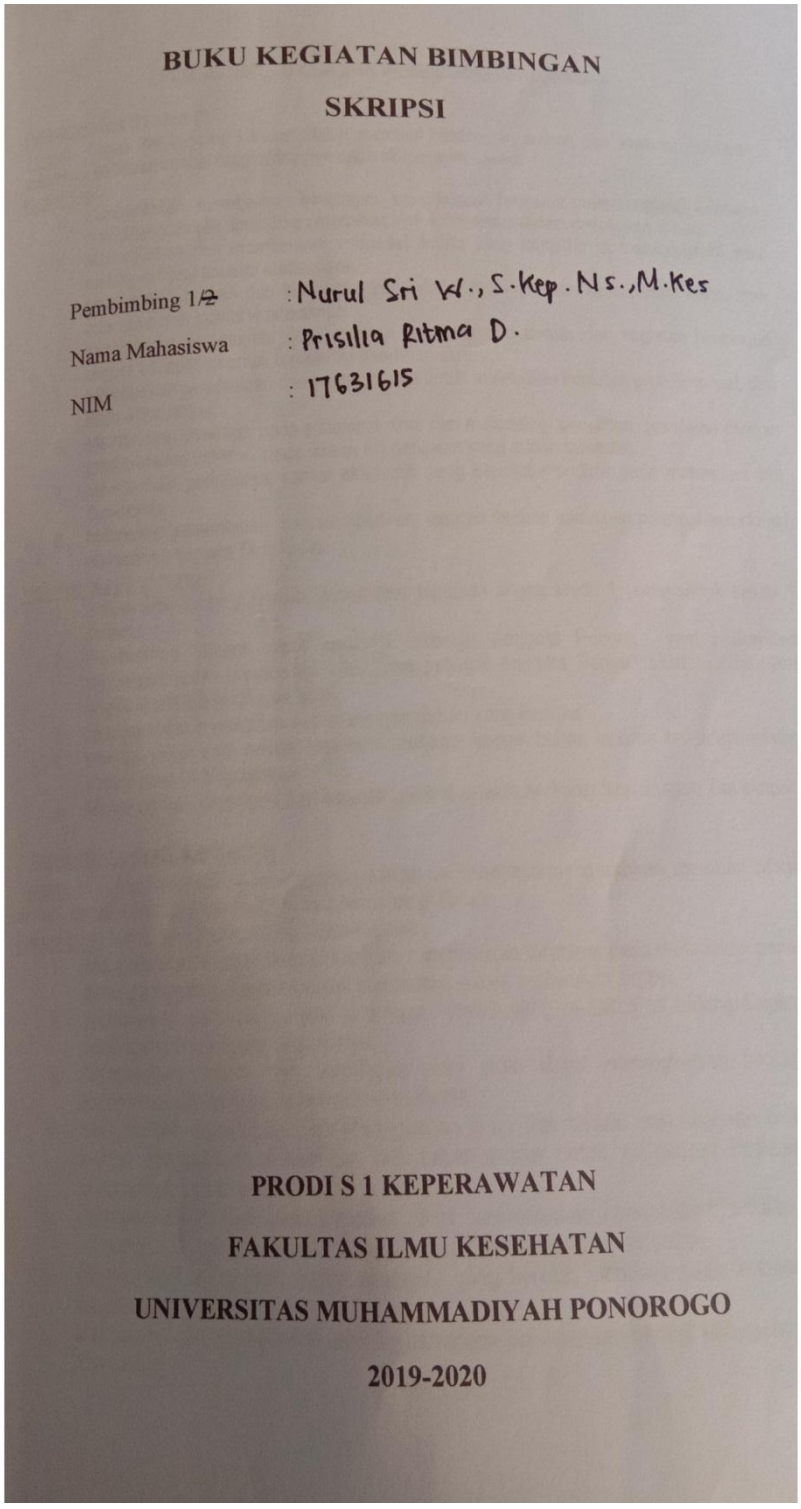

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PRODI S 1 KEPERAWATAN

FAKULTAS ILMU KESEHATAN

UNIVERSITAS MUHAMMADIYAH PONOROGO

2019-2020

LEMBAR KONSULTASI

NO.	HARI/TANGGAL	REKOMENDASI	TANDA TANGAN
1.	Selasa, 06-10-2020	Bimbingan judul.	
2.	Selasa, 24-11-2020	Judul Acc Bab I Revisi Bab I Revisi Acc Bab II Cari alat ukur dep pd penyi	
3.	Senin, 21-12-2020	Bab III Revisi Acc Cari 2 Untuk skunder	
4.	Selasa, 02-02-2021	Revisi kriteria perbaiki skor DO.	
5.	10-2-2021	Acc Siap Sempro (proposal)	

NO.	HARI/TANGGAL	REKOMENDASI	TANDA TANGAN
1	Rabu, 28-07-2021	Bimbingan online	
2	Senin, 02-08-2021	Bimbingan online	
3	Selasa, 03-08-2021	Acc sidang skripsi	

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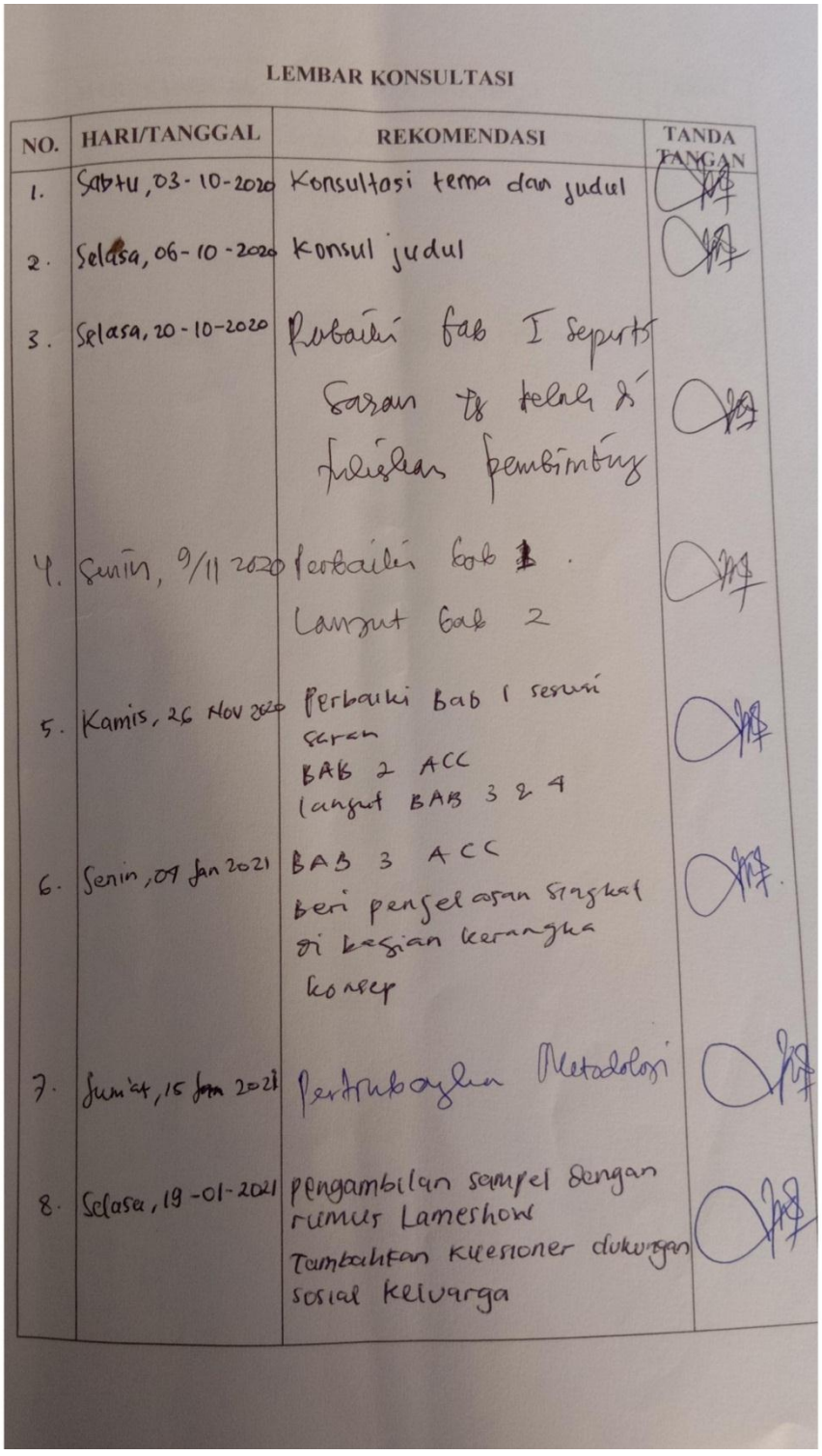
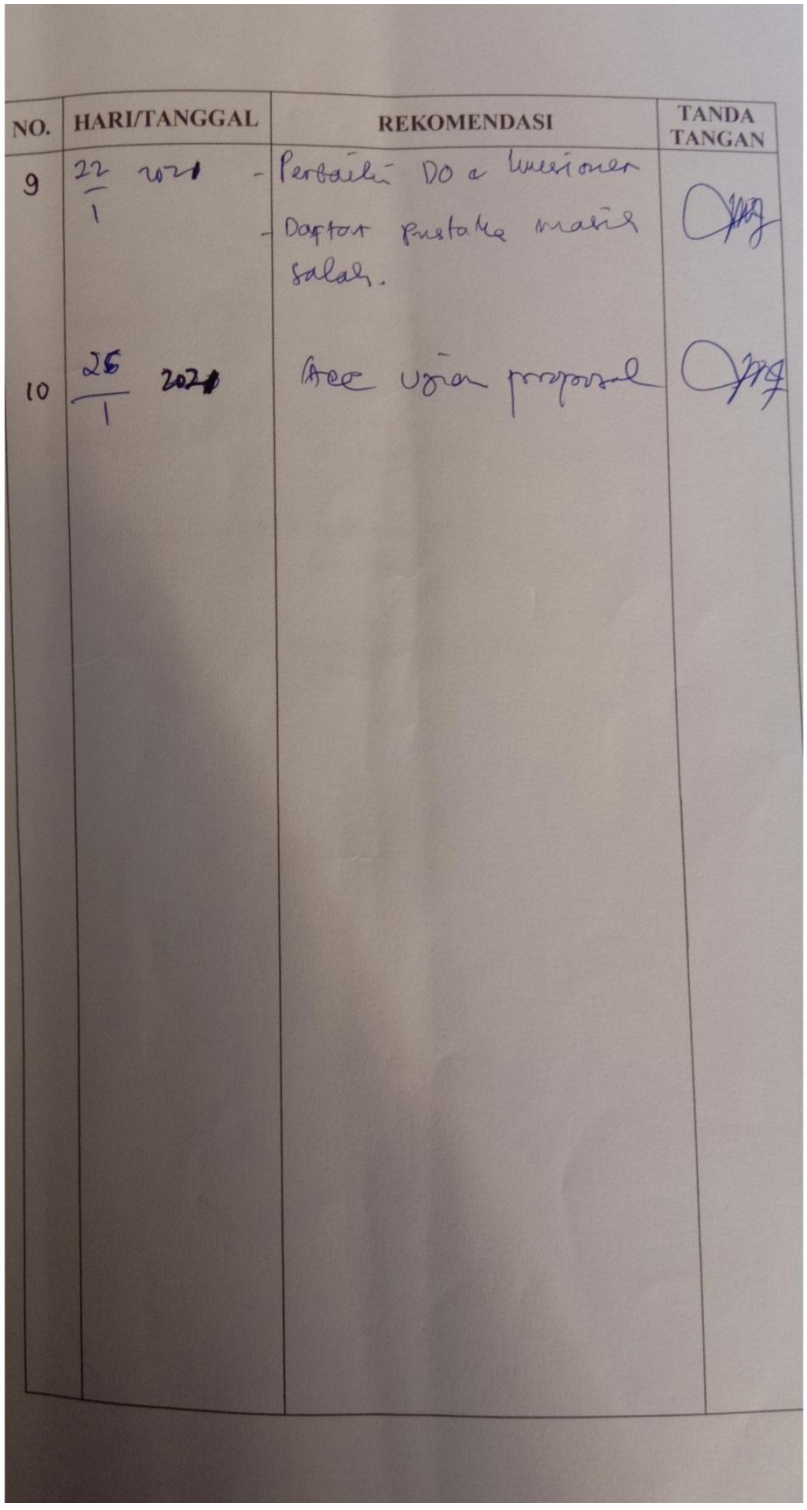
UNIVERSITAS MUHAMMADIYAH PONOROGO

2019-2020



LEMBAR KONSULTASI

NO.	HARI/TANGGAL	REKOMENDASI	TANDA TANGAN
1.	Sabtu, 03-10-2020	Konsultasi tema dan judul	
2.	Selasa, 06-10-2020	Konsul judul	
3.	Selasa, 20-10-2020	Perbaiki bab I seperti saran yg telah di jelaskan pembimbing	
4.	Senin, 9/11 2020	Perbaiki bab 1. Lanjut bab 2	
5.	Kamis, 26 Nov 2020	Perbaiki Bab I sesuai saran BAB 2 ACC lanjut BAB 3 & 4	
6.	Senin, 04 Jan 2021	BAB 3 ACC beri penjelasan singkat di kerangka konsep	
7.	Jum'at, 15 Jan 2021	Pertanyakan Metodologi	
8.	Selasa, 19-01-2021	pengambilan sampel dengan rumus Lameshow Tambahkan kuesioner dukungan sosial keluarga	



NO.	HARI/TANGGAL	REKOMENDASI	TANDA TANGAN
9	22/1 2021	- Perbaiki DO & kuesioner - Daftar pustaka masih salah.	
10	26/1 2021	Acc ujian proposal	

NO.	HARI/TANGGAL	REKOMENDASI	TANDA TANGAN
1	Senin, 02-08-2021	Bimbingan offline - homogenkan artikel - cek ulang penulisan	
2	Rabu, 04-08-2021	Bimbingan online. - perbaiki pembahasan	
3	Minggu, 08-08-2021	Bimbingan online - tambahkan pd pembahasan	
4	Senin, 09-08-2021	Bimbingan online - tambahkan pd pembahasan	
5.	Selasa, 10-08-2021	Bimbingan keseluruhan. - ACC ujian skripsi	