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UNRAVELING THE DEMOGRAPHIC PATTERNS OF ADOLESCENTS' MENTAL HEALTH

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ABSTRACT

The current research aimed to examine the demographic patterns of adolescents' mental health focusing on emotional, psychological and social well-being. Using purposive sampling strategy, a sample of 609 participants (344 males & 265 females) with an age range of 15 to18 years (M=15.78, SD, .994) using the Mental Health Continuum Short Form (MHC-SF; Keyes, 2009) was collected from different private schools and colleges in Karachi, Pakistan. Descriptive and inferential statistics were used. Results reveal that 48.3% adolescents have a flourishing mental health, 46.8% haves languishing mental health and 4.9% have moderate mental health. Further, significant gender differences are evident on mental health continuum and social well-being. No significant association of family structure with mental health and well-being dimensions is found. Moreover, significant age-wise differences are found on the mental health continuum as well as emotional and social well-being. The 15-years old adolescents were found to have better mental health than 16, 17 and 18 years age group. The findings have important implications and suggest avenues for future research.

Keywords: *Well-Being, Demographic, Patterns, Adolescents, Mental Health*

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INTRODUCTION

Mental health problems are prevalent across every country worldwide and one in every eight people globally suffers from a mental health condition (WHO, 2022). Adolescence is a crucial time for growing susceptibility and the beginning of mental disorders (World Health Organization, 2014). Globally, 1 in 7 (14%) of people between the ages of 10 and 19 are estimated to have mental health problems (World Health Organization, 2021). Despite this, the majority of these problems continue to go unnoticed and untreated. Adolescent mental health problems have significant psychological, social, and economic repercussions in every society (Kieling et al., 2011; Heizomi et al., 2020). However, the availability of high-quality data on psychological issues associated with teenagers worldwide is less than ten percent, which makes it difficult to target interventions and monitoring global mental health inequities. Furthermore, a lack of data also impedes investments in policies, programs, services, and mental health outcomes (Guthold et al., 2023).

The traditional definition characterizes mental health as the absence of psychopathology. A fresh perspective on mental health emerged with the growth of positive psychology. The most recent definition of mental health given by the World Health Organization (2004) states that mental health ia a state of well-being in which each person can realize their own potential, be able to manage everyday stressors, be able to work effectively and profitably, and be able to contribute to their community

Many models have been put forth to assess and conceptualize mental health. Keyes (2005, 2013) presented a two-continuum paradigm which postulates that mental health and mental illness are two different but connected dimensions. Three dimensions are identified by Keyes' mental health and well-being model (2002): psychological well-being (PWB), emotional well-being (EWB), and social well-being (SWB). The EWB is also called hedonic, whereas social and psychological well-being are collectively called as eudaimonic aspects of mental health which help in assessing an individual’s psychological and social happiness which leads to the understanding of their potential and actual functioning effectively (Fonte et al., 2019).

Keyes (2002) explained hedonic well-being (emotional well-being) as a cluster of positive feelings regarding life which is determined by measuring the perceived satisfaction along with positive and negative affect. Moreover, in the

eudaimonic approach, a person is psychologically healthy when he or she is reaching their full potential or when the proposed goals are consistent with their actual self (Extremera et al., 2011). Gallagher et al. (2009) identified Keyes's five components of social well-being models which include social contribution, social coherence, social integration, , social acceptance, and social actualization.

Keyes et al. (2005; 2013) identified three states of mental health in their mental health continuum model: flourishing, moderate, and languishing. According to him, flourishing is a state where people have above average level of SWB, PWB, EWB whereas languishing mental health is a condition in which participants have low PWB, EWB, and SWB. Average mental health characterizes those who are neither flourishing nor languishing (Westerhof & Keyes, 2010).

As flourishing and languishing aspects of mental health are defined by emotional, psychological and social well-being, it is to be noted that mental health accurately reflects two well-being traditions; hedonic (emotional) and eudaimonic (social and psychological) well-being (Fonte et al., 2019). Venning et al. (2013) mentioned that mental health is viewed as a pattern of symptoms of hedonia along with social and psychological well-being. When linking eudemonic and hedonic well-being with flourishing and languishing, some characteristics are prevalent i.e. flourishing participants are free from mental illness and exhibit high emotional well-being and positive functioning. Furthermore, Grant (2021) added that languishing is not burnout or depression, rather, it is a feeling of joylessness and aimlessness, characterized by dull motivation, focus disruption, and increased work cutbacks which is often more common than major depression and may be a larger risk factor for mental illness.

Adolescence is a distinctive and transformative period of life. Because this stage of life is accompanied with physical, emotional, and social changes, they can be more vulnerable to mental health problems (World Health Organization, 2021). Adolescents' well-being is one of the most important precursors to adolescents' mental health (Patalay & Fitzsimons, 2018). A substantial number of studies have documented the association between demographic characteristics and adolescents' mental health and well-being including gender, family structure and age. Pertaining to gender, a study by Yeo et al. (2007) highlighted the gender differences on emotional well-being in a sample of adolescent students. Girls were found to have a better attitude towards school, were friendlier in their social situation and have good relationships with their parents as compared to boys, which eventually impact their social well-being (Yeo et al., 2007). However, girls reported greater emotional

distress and worries in comparison to men. Similar findings are reported by Visani et al., (2011) in another study. Girls were found to be vulnerable towards emotional distress like depression and anxiety when compared to the boys' population. Thus, girls have low psychological well-being as compared to boys (Visani et al., 2011).

Concerning family structure, the existing studies suggest varying findings. Some advocate a link between family structure and mental health and well-being whereas others do not support such a link. For instance, a study by Láng (2018) has shown that family structure has no significant impact on psychological, social and emotional well-being of adolescents. However, in another research, results indicated that adolescents who s family structure consists of biological parents have better psychological social and emotional well-being when compared to caregivers (Langton & Berger, 2011). Phillips (2012) conducted research to explore mental well-being dimensions in comparison with family structure and family climate. Results indicated that family structure has no significant relation with the dimensions of well-being whereas; family climate is significantly related to the dimensions of well-being.

With respect to age, in an estimate by World Health Organization (2021), it has been observed that older adolescents have more emotional, psychological, and social well-being issues as compared to young adolescents. Young adolescents between 10 to 14 years have fewer mental health issues like anxiety, depression, risky behavior, eating disorder, behavioral issues, psychosis, self-harm, and suicide in comparison to 15 to 19 years old adolescents. These issues not only impact their school performance and attendance but also aggravate loneliness and isolation. Similar trends are reported by Verzeletti et al. (2016) who demonstrated that adolescents with an age range of 16 years have lower psychological health as compared to 14 years of age. Contrarily, a significant decrease subjective well-being levels is reported in 11 to 12 years old adolescents with the decrease in females being more pronounced.

Summing up, adolescence is a period of significant changes, in which adolescents form their identity and deal with ongoing internal and external pressures. If these pressures are not dealt with adequately then it makes them susceptible to mental health problems including psychological distress, frustration, irritation, aggression, anxiety, stress, and depression (Masten & Barnes, 2018). Poor mental health and well-being in adolescents' year can have a lasting influence on their healthy development as an adult (Burns et al., 2022) as they are further vulnerable to social isolation, challenges in academics, poor physical health and

risk-taking behaviors. Hence, it is important to understand the demographic profile of adolescents in relation to their mental health for prevention programs to safeguard our future. A lot of data research has been done in the Western countries in this regard, however, there is little research done in our culture especially in adolescent population. Hence, this study aims to bridge the gap in the literature by investigating the relationship between demographic of patterns (gender, family structure and age) and adolescents' mental health with an emphasis on emotional, social and psychological well-being.

METHOD

Participants

The current research is founded on a quantitative survey research design. The sample was gathered using purposive sampling from 609 teenagers (344 males & 265 females) from various schools and colleges in Karachi, Pakistan. The ages of the participants ranged from 15 to 18 years (M= 15.78, SD= .994). They were capable of understanding, reading, and speaking Urdu and English languages, and their education level ranged from 9th to 12th grade. Moreover, they had no previous history of any diagnosed mental disorder or organic brain damage. Those who did not fit the aforementioned requirements were excluded from participation the study.

Measures

Demographic Form

The demographic information form gathered information about age, gender, birth order along with grade, family structure and religion. Questions related to medical and psychological conditions were also asked.

The Mental Health Continuum-Short Form

The Mental Health Continuum-Short Form (MHC-SF; Keyes, 2009) is a 14-item questionnaire that assesses mental health. It is a 6-point Likert scale with 0 rated as being *never experiencing* and 5 meaning that *an individual experiencing every day*. The scale is used for children aged 12 to 18 years. Three aspects of wellbeing are measured by the MHC-SF:

- Emotional well-being (Hedonic): happy, interested in life, satisfied with life.

- Social well-being (eudemonic): social actualization, social interest social contribution, social coherence, social integration, social acceptance.

- Psychological well-being (eudemonic): environmental mastery, self-acceptance, positive relations with others, autonomy, personal growth, and purpose in life (Keyes, 2009).

People can be categorized as having flourishing, moderate or languishing mental health based on their MHC-SF scores. The MHC-SF (Keyes, 2009) is demonstrated to have good internal consistency (α = .91). For the present research the obtained Cronbach's alpha values obtained for overall mental health continuum (α=.76), emotional (α=.67), social (α=.56) and psychological well-being (α=.55) indicate satisfactory internal consistency of MHC-SF.

Procedure

The approval was taken from the Ethical Review Board. Following the ethical review, permission was obtained from the administrators of educational institutions in Karachi for data collection and participants were reached after permission was received. Participants were then briefed about the research and written informed consent was obtained from them. They were briefed about the volunteering participation, right to leave research at any point, confidentiality of the identity and personal information and protect from any harm. After this, the MHC-SF Form was administered in classroom setting. In the end, participants and concerned authorities of educational institutions were paid gratitude for their time and cooperation.

Statistical Analysis

The scoring of research measure was done as per the suggestion of developer of MHC-SF. The data was statistically analyzed through SPSS version 21. Descriptive statistics was employed to assess the patterns of mental health states (flourishing, moderating, and languishing) in sample. Independent samples *t*-test was used to compare the scores of MHC-SF on gender and family structure. One-way ANOVA was used to compare the age-wise differences on well-being dimensions (emotional, psychological and social).

RESULTS

Table 1
Psychometric Properties of the Scale and Subscales

Scales	*M*	*SD*	*Range*	α
Mental Health Continuum	37.30	11.30	5-68	.76
Emotional Well-Being	8.59	3.50	0-15	.67
Social Well-Being	11.28	5.01	0-24	.56
Psychological Well-Being	17.46	5.49	3-30	.55

Table 2
Descriptive Statistics for Participants' Demographic Characteristics (N=609)

Variables	*f*	(%)
Age		
15	336	55.17
16	112	18.39
17	117	18.21
18	44	07.22
Gender		
Male	344	56.5
Female	265	43.5
Family Structure		
Joint	132	21.7
Nuclear	477	78.3
Religion		
Christianity	3	0.5
Hinduism	3	0.5
Islam	603	99
	M	*SD*
Age	15.78	.994

Table 3
Distribution of Flourishing, Moderate, and Languishing Mental Health of Participants (N=609)

Variables	*f*	(%)
Flourishing Mental Health	294	48.3
Moderate Mental Health	30	4.9
Languishing Mental Health	285	46.9

Table 4
Independent t-test showing Gender-wise Difference on Mental Health Continuum and Emotional, Social, and Psychological Well-being (N=609)

	Male (*n*=265)		Female (*n*=344)			
Variables	*M*	*SD*	*M*	*SD*	*t*	*p*
Mental Health Continuum	38.70	6.90	35.46	11.22	-3.52	.00*
Emotional Well-Being	8.73	6.66	8.39	3.54	-1.22	.22
Social Well-Being	12.13	5.08	10.17	4.69	-4.86	.00*
Psychological Well-Being	17.84	5.43	16.98	5.56	-1.91	.06

**p<.05, df = 607*

Table 5
Independent t-test showing Family Structure-wise Difference on Mental Health Continuum and Emotional, Social, and Psychological Well-being (N=609)

	Joint (*n*=132)		Nuclear (*n*=473)			
Variables	*M*	*SD*	*M*	*SD*	*t*	*p*
Mental Health Continuum	36.91	10.21	37.41	11.59	-.45	.65
Emotional Well-Being	8.46	3.37	8.62	3.53	-.46	.64
Social Well-Being	11.30	4.50	11.27	5.14	06	.94
Psychological Well-Being	17.14	5.35	17.55	5.54	-.75	.44

p>.05, df = 607

Table 6
One-Way ANOVA showing Age-wise Difference on Mental Health Continuum and Emotional, Social, and Psychological Well-being (N=609)

	15-Years (*n*=336)		16-Years (*n*=112)		17-Years (*n*=117)		18-Years (*n*=44)			
Variables	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*P*
MHC	38.68	10.82	35.50	10.40	34.87	12.11	37.82	13.50	4.51	.00*
EWB	9.19	3.43	8.04	3.08	7.77	3.63	7.53	3.88	7.89	.00*
SWB	11.80	4.99	10.50	5.00	10.24	4.67	12.00	5.40	4.17	.00*
PWB	17.68	5.26	16.95	5.24	16.91	6.00	18.55	6.36	1.46	.22

Note: MHC= Mental Health Continuum Scale; EWB= Emotional Well-Being; SWB= Social Well-Being; PWB= Psychological Well-Being,
**p<.05*

Table 7
Post-hoc Analysis Showing the Age-wise Differences on Mental Health Continuum and Emotional, Social, and Psychological Well-being (N=609)

		MD	*SE*	*p*
Mental Health Continuum				
15 years	16 years	3.17*	1.22	.04*
	17 years	3.80*	1.20	.01*
Emotional Well-Being				
15 years	16 years	1.14*	.38	.01*
	17 years	1.41*	.36	.00*
	18 years	1.65*	.55	.02*
Social Well-Being				
15 years	17 years	1.56*	.53	.02*

Note: Only significant differences are reported.
*p<.05

DISCUSSION

This research examined the demographic patterns (i.e. gender, family structure and age) in relation to adolescents' mental health with an emphasis on focusing on emotional, social and psychological well-being. The results reveal that 48.3% of participants had flourishing mental health, while 46.9% had languishing mental health. Only 4.9% of individuals were classed as having average mental health (Table 3). This result could be due to the fact that the participants were from Pakistani culture, belonging to private sector schools and colleges. In such collectivistic cultures, students are generally supported financially, emotionally, and socially from parents and extended family members so that they can benefit most from their school experiences (Ahmed et al., 2022). These results of present research are in line with Keyes's (2002) theory of mental health which has provided a combination of good emotions and functionality that uses data from research conducted in the USA to distinguish between flourishing or deteriorating mental health. The poll found that 17.2% of people matched the criteria for flourishing, while 56.6% had moderate mental health. Languishing and depression were related

to considerable psychosocial impairment, whereas moderate and flourishing mental health were related to improve psychosocial functioning. In another study, Hides et al. (2019) discovered that both traits are important for overall mental health. Moreover, 90% of young people expressed flourishing or moderate well-being, while only 6% felt languishing. Those who had mental problems in the previous year were less likely to flourish.

The results pertaining to gender suggest noteworthy dissimilarities in mean scores on the overall mental health continuum and social well-being with males scoring higher than females (Table 4). Moreover, the mean scores on psychological and social well-being showed that males scored higher than females. One other thing worth noting is that psychological well-being scores did not achieve the significance level by a slim margin. Emotional well-being scores indicated no significant difference either (Table 4). A plausible explanation for these obtained findings may be that that Pakistan has a male dominating society where males have more freedom to go out and connect with friends and other relatives. Moreover, they have more independence to go outside for different socializing activities like birthdays, family gatherings, especially on Friday and Eid prayers and sports activities. Socialization helps in buffering their stress and increasing social well-being which eventually affects their mental health in totality (Imran et al., 2022). This also aligns with 2022 population survey indicating that adolescent girls are more prone to experience psychological disorders oriented towards internalizing the emotions, such as anxiety and depression, whereas boys are more prone to experience externalizing difficulties (Yoon et al., 2022).

Moreover, increased mental health problems among adolescents, particularly girls, have been reported in various countries which have shown an increase in school-related stressors (Högberg et al., 2020). Earlier studies have indicated a substantial association between social acceptance and adolescents' psychological development, with peer acceptance reducing depressive symptoms and anxiety, which are common and often comorbid, affecting interpersonal relationships (Law et al., 2019). Socialization is important to maintain adolescents' social life for their effective growth and development (Zhou et al., 2021).

The results with regard to family structure demonstrated insignificant differences between adolescents living in nuclear and joint family structure on overall mental health continuum and all aspects of well-being i.e. emotional, social and psychological. These obtained findings corroborate with the findings of the study which suggest no association between family structure and mental health and

well-being (e.g., Láng, 2018; Phillips, 2012). This study was the preliminary attempt in Pakistani cultural context hence warrants further investigation to have a valid conclusion pertaining to link between family structure and mental health and well-being.

The results pertaining to age reveal some unique findings. The significant differences are evident between age groups of 15, 16, 17, and 18 years old adolescents on overall mental health continuum as well as emotional and social well-being (Table 6). The results of Post Hoc HSD (Table 7) reveals demonstrate that on overall mental health continuum, 15-year old adolescents have a higher mean score when compared to 16 and 17 years old adolescents. Further, on emotional well-being, 15-year old adolescents have greater mean score when compared to 16, 17 and 18 years old adolescents. Moreover, on social well-being, 15-year old adolescents have a higher mean score as compared to 17 years old adolescents. These findings suggest that younger adolescents have better mental health when matched to the other three age brackets of adolescents. They also showed that the increase in age and mental health difficulties is directly proportionate. This could be due to the possibility that as adolescents move towards young adulthood, they are faced with lots of pressure due to home responsibilities, identify formation, building career and stable interpersonal relationships, gaining independence, taking care of young siblings' pressure to perform well in academics to support the family financially. These age pertinent milestones could be challenging if these adolescents don't have the resources to navigate through these transitions. Eventually their mental health and well-being is compromised (Seemi et al., 2023).

In conclusion, the findings of the present research highlight that majority of the adolescents were having a flourishing mental health. Male adolescents reported better mental health and social well-being compared to female adolescents. Further, family structure is demonstrated to have no association with mental health and well-being dimensions. Moreover, 15 years old adolescents had better mental health as compared to their older counterparts. The findings of the present research have significant implications and suggest that prevention interventions targeted to foster positive mental health and well-being of adolescents must take into consideration the demographic profile of the adolescents. A few limitations of the current study must be taken into account when interpreting the results. This study has focused on few demographic variables and specific age groups. Future research can also explore other age groups in comparison to adolescents and can focus on diverse demographic characteristics employing larger sample size.

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