

Adolescents' Identity Development, Personality Characteristics, and Psychological Well-Being in Adolescent Students: A Mediating Model

Momina Zahid & Dr. Kirstin Goth

Abstract

Background: Adolescence is an important time for managing the demanding developmental responsibilities of identity development and exploration. A multidimensional framework related to the nature of identity development and the personality structure is used to describe the processes that contribute to enhancing the mental health of adolescents. The present study aimed to examine the association of identity development with personality traits and psychological well-being in adolescents. Furthermore, this study investigated the potential mediation pathways among identity development, personality traits, and psychological well-being in adolescents.

Methods: The purposive-convenient sampling technique and cross-sectional research design were used to gather data. Two hundred students (male, $n = 108$; female, $n = 92$) whose ages ranged from 12 to 18 years ($M = 16.51$, $SD = 1.12$) were recruited from different public colleges in Rawalpindi and Islamabad, Pakistan, from September, 2020 to December, 2020. Three standardized instruments were applied to assess personality traits, identity development, and psychological well-being in adolescent students.

Results: This study's findings indicated that neurotic, introversion, and extraversion personality traits were negatively significantly related to incoherent identity development and psychological well-being in adolescents. Additionally, the results demonstrated that incoherent identity development fully mediated in the relationship among neurotic, introversion, and extraversion personality traits and psychological well-being in adolescents. However, incoherent identity development only partially mediated psychotic personality traits and psychological well-being in adolescents.

Conclusions: This study recommended that different personality traits could be salient factors in shaping coherent and incoherent identity development and psychological well-being in adolescents. These results can be used to spread knowledge as well as provide insight to develop new assessment techniques, prevention, and intervention strategies for adolescents in Pakistani society.

Keywords: Identity development, personality traits, adolescence, psychological well-being.

1. MSc scholar, Department of Psychology, Foundation University Islamabad, Pakistan.

2. Senior researcher, Department of Child and Adolescent Psychiatry, Psychiatric University Clinics (UPK) Basel, Basel, Switzerland.

Correspondence concerning this article should be addressed to Momina Zahid, Department of Psychology, Foundation University Islamabad, Pakistan. Email: momina1410@hotmail.com.

Background

Nowadays, adolescents are a very crucial developmental stage for handling the persistent developmental tasks of identity formation and exploration. It is a cultural and developmental period linked to a long transition into old-style "adult" roles, for example, marriage and full-time employment (Achermann et al., 2022; Arnett, 2000, 2014; Booker & Johnson, 2022; Goth et al., 2012; Kroger, 2005; Syed & Seiffge-Krenke, 2013). In the Pakistan context, adolescents explore potential identities and start to accept features of identity in the middle of handling life changes (for example, school, college, and early career opportunities) and pursuing goals that can contribute to how they pursue to embrace and understand themselves (Achermann et al., 2022; Arnett, 2000, 2014; Booker & Johnson, 2022; Erikson, 1968; Goth et al., 2012; Kroger, 2005; Syed & Seiffge-Krenke, 2013). At this time, social and personal factors contribute to and help adolescents understand and develop a sense of who they are and their roles in this world (Achermann et al., 2022; Jung et al., 2013).

Identity is a widely discussed concept and is associated with various social, cognitive, psychodynamic, and philosophical theories globally (Achermann et al., 2022; Erikson, 1968; Erikson, 1950; Fonagy et al., 2018). According to Erikson (1950), identity is defined as a mix of ideas, giving a sense of continuity to distinguish among self and others and allowing an individual to function independently. Ermann (2011), on the other hand, defines identity as being associated in a temporary space between a given individual and her/his society (Ermann, 2011). However, an individual has a sense of novelty related to the future and the past; whereas she/he sees changes and similarities to others. "This sense of continuity and coherence in the setting of social and cognitive similarity contributes to life" (Ermann, 2011). Developing a constant identity is a very important developmental task for youngsters (Foelsch et al., 2008). These tasks of identity exploration and development go alongside with identity crises in adolescents that are temporary and normal phenomena in learning growth-related appropriate developmental jobs (Foelsch et al., 2008). Kernberg explains the transformation of the psychological and physical experiences of adolescents and the incongruity among the sense of self as well as the others' perception of the young people drag toward identity crises (Jung, 2014). Erikson describes the requirement for the resolution of identity conflict through producing earlier recognitions or introjections into a combined identity (Erikson, 1950). In contrast to the normal identity conflict, Erikson refers to the concept of identity diffusion, which is perceived as a mental health problem underlying personality disorders cluster (Jung, 2014; Samuel & Akhtar, 2009). Kernberg's theory of personality disorders defines borderline personality as a result of identity diffusion (Cisheng et al., 2017; Levy et al., 2018; Levy et al., 2006; Levy et al., 2006; Samuel & Akhtar, 2009). He explains that there is a discrepancy between the concept of the self and others' perceptions of self in patients with identity diffusion and that this leads to other mental health problems, poor psychological well-being, and quality of life (Foelsch et al., 2010; Goth et al., 2012). Adolescents is a transitional time wherein adolescent are navigating features of doubt in how they comprehend themselves, other's perspective, and their future plan in life

(Achermann et al., 2022; Arnett, 2014; Jung et al., 2013). As part of their efforts to revolve this time, adolescents must derived to holds with who they are like person as well as what their role is in this the world by examining and obligating to constant features of identity. In this perspective, personality traits is considered as a very crucial social factor like other salient factors. It could be important contribute to shape and develop healthy identity and psychological well-being throughout this transitory time (Achermann et al., 2022; Arnett, 2000, 2014; Booker & Johnson, 2022; Erikson, 1968; Goth et al., 2012; Jung et al., 2013).

There is consensus among mental health professionals that due to current circumstances in society with transitions in work and family, the number of identity diffusion cases rises over period of the time (Keupp, 1999; Seiffge-Krenke, 2014; Syed & Seiffge-Krenke, 2013). According to an optimistic point of view, those people who have experienced identity diffused are flexible and seem to fit well into the advanced technological world (Gergen & Gergen, 2000; Gul & Aqeel, 2021; Marcia, 2006; Rashid et al., 2021; Saif et al., 2021; Sarfraz et al., 2021). In the following, new methods of treatment, conceptualizations, as well as diagnostic scales of disturbed and healthy identity are debated. In a previous study, Goth et al. (2012) discussed an integrative comprehending of disturbed and healthy identity and she also introduced new conceptualization and a new method of assessment to evaluate pathology-related identity growth in youth (Achermann et al., 2022; Goth et al., 2012; Jung et al., 2013).

New conceptualizations of the identity development concepts in DSM-5

The DSM-5 incorporates identity problems as a criterion of personality disorder and it defines a persistently and markedly unstable sense of self as an unstable self-image (Larivière, 2022; Regier, 2022). Personality disorders are defined by deficits in personality functioning in two areas: self-functioning (for example, self-identity and direction) and interpersonal functioning (intimacy and empathy). Identity is defined as the experience or perception of oneself as novel, with clear restrictions among self or others' views; solidity of self-esteem and self-appraisal; and the capacity to manage a board level of emotional experience (Larivière, 2022). The latest unique model is placed in DSM-5 to encourage advanced study in this field. This topic remains open for further debate and further advanced research. This present study aimed to establish the link between personality traits, psychological well-being, and incoherent and coherent identity development in adolescents. Furthermore, this study examined the potential mediating pathway among identity development, personality traits, and psychological well-being in adolescents.

Method

Research design

Purposive sampling technique was used based on cross-sectional design.

Research Hypotheses and Objectives

Based on the above-mentioned concerns, the present study aimed to examine the association of identity development with personality traits, and psychological well-being in adolescents. Furthermore, this study investigated the potential mediation pathways among identity development, personality traits and psychological well-being in adolescents. More specifically, this research is also planned to examine the following hypotheses: Hypothesis 1 (H1): A higher level of both extraverted and introverted personality will be positively associated with psychological well-being and coherent identity development in adolescents. Hypothesis 2 (H2): A higher level of both neuroticism and psychoticism in adolescents will be positively associated with incoherent identity development. Hypothesis 3 (H3): Incoherent identity development will be negatively associated with psychological well-being in adolescents.

Participants

Two hundred students (male, $n = 108$; female, $n = 92$) whose ages ranged from 12 to 18 years ($M = 16.51$, $SD = 1.12$) were recruited from different public colleges in Rawalpindi and Islamabad, Pakistan, from September, 2020 to December, 2020. The purposive-convenient sampling technique and cross-sectional research design were used to gather data from 11th to 12th grade students. This study was approved by the ethical review board of Foundation University Islamabad, Pakistan. It was also approved by the higher authorities of different colleges to conduct this study. Both written and verbal informed consent were taken from all students before performing this research. The inclusion criteria to collect data for this study were applied: those participants who did not have a diagnosis of any psychological or neurological disease were included in the present study. The following exclusion criteria were applied: those participants who had been diagnosed with any psychological problems were excluded from this study. All participants were invited to fill out standardized questionnaires.

Instruments

Three standardized instruments were applied to assess personality traits, identity development, and psychological well-being in adolescent students.

Assessment of Identity Development in Adolescents (AIDA; Goth et al., 2012)

It was developed by Goth et al. (2012) and translated by Aqeel (2020). It is a valid and reliable scale to measure pathology-related identity development in adolescents. It is a 59-item self-reported questionnaire for adolescents and young adults that assesses identity formation in the two dimensions of continuity and coherence. Each item of the AIDA is rated on a five-point Likert scale from 0 (*strongly disagree*) to 4 (*strongly agree*). The AIDA has revealed suitable validity and reliability in this study (Goth et al., 2012).

Eysenck Personality Questionnaire Junior (EPQJ; Eysenck et al., 2021)

EPQJ was developed by Eysenck et al. (2021). It is a valid and reliable scale to measure three dimensions of personality, which include introversion-extraversion, neuroticism, and psychoticism. It also measures the liar tendency in adolescents. It is an 81-item standardized instrument. Each item of the EPQJ is rated on a dichotomous scale from 0 (*no*) to 1 (*yes*). The EPQJ has revealed suitable validity and reliability in this study (Eysenck et al., 2021).

The Flourishing Scale (FS; Diener et al., 2010). The FS was developed by Diener et al. (2010). It is a valid and reliable scale to measure important characteristics of human functioning, going from positive relationships, to emotional competency, to having meaning, determination, and purpose in life (Diener et al., 2010). It consists of eight items. The FS has revealed suitable validity and reliability in this study (Diener et al., 2010).

Procedure

The present research was carried out in accordance with the ethical standards of the American Psychological Association and the Committee on Publication Ethics. This study was sanctioned by the ethical review board of the Foundation University, Islamabad, Pakistan. Two hundred participants were recruited from different public colleges in Rawalpindi and Islamabad, Pakistan. This study was approved by the higher authorities of different colleges to collect the present study data. Both written and verbal informed consent were taken from all students before performing this research. Three standardized instruments were applied to assess personality traits, identity development, and psychological well-being in adolescent students. Pearson Correlation and mediational analyses were used to analyze the data.

Analysis plan

First of all, the missing values of the flourishing scale, assessment of identity development in adolescents, and Eysenck personality questionnaire junior were dealt with on SPSS-18 with an imputation method. Secondly, the Pearson correlation method was used to investigate the association among personality traits, psychological well-being, and incoherent and coherent identity development in adolescents (Field, 2013). Finally, a multiple mediation analysis was applied to examine the mediating role of incoherent and coherent identity development between personality traits and psychological well-being in adolescents (Baron & Kenny, 1986).

Results

In the Table 1, the Cronbach's alpha coefficients of all study variables were adequate in this study. This results of the present study revealed that neurotic, introversion, and extraversion subscales of personality traits were significantly negatively related to incoherent identity development and psychological well-being in adolescents. Furthermore, psychoticism subscales of personality trait was significantly positively related to incoherent and coherent identity development and psychological well-being in adolescents. Additionally, incoherent and coherent identity development were significantly positively related to psychological well-being in adolescents.

Table 1

Correlation Matrix, alpha coefficient, mean and standard deviation among personality traits, identity development and psychological well-being along their subscales in adolescents (N=200)

Variable	M	SD	α	1	2	3	4	5	6
1. IE	12.36	2.82	.67	-	-.10	-.02	-.15*	-.06	-.41*
2. Neurotic	9.90	2.50	.68		-	-.08	.10	-.10	.10
3. Psychoticism	8.19	2.21	.84			-	.19**	.16*	.18**
4. ICI	61.65	9.91	.71				-	.71**	.63***
5. CI	21.39	5.05	.70					-	.17*
6. WB	16.19	4.01	.81						-

Note. IE= Introversion and Extraversion subscale of the personality trait; Neurotic= Neuroticism subscale of the personality trait; Psychoticism subscale of the personality trait. Lie= lie scale; CI= Coherent Identity; ICI= Incoherent Identity; WB= Psychological well-being, * $p < .05$ ** $p < .01$. *** $p < .000$.

Table 2

The mediating role of incoherent and coherent identity development between personality traits and psychological well-being in adolescents (N=200).

Variables	Coherent Identity(CI)			Incoherent Identity(ICI)			Well-Being(WP)		
	B	SD	β	B	SD	β	B	SD	β
IE	.25	.12	.33*	-.34	.04	-.55*	.26	.05	.21*
Neurotic	.09	.05	.07	.10	.05	.21*	.21	.12	.19*
Psychoticism	.12	.03	.15	.65	.07	.88*	.05	.01	.11
Lie	.10	.02	.11	.01	.01	.09	.05	.01	.11
CI							.12	.01	.09
ICI							-.68	.09	.34*

Note. IE= Introversion and Extraversion subscale of the personality trait; Neurotic= Neuroticism subscale of the personality trait; Psychoticism subscale of the personality trait. Lie= lie scale; CI= Coherent Identity; ICI= Incoherent Identity; WB= Psychological well-being, * $p < .05$ ** $p < .01$. *** $p < .000$.

In the Table 2, the findings of the present study demonstrated that introversion and extraversion (IE) personality traits was significant predicting to coherent identity (CI) ($\beta=.33$, $p < .05$), incoherent identity development (ICI) ($\beta=-.55$, $p < .05$), and psychological well-being ($\beta=.21$, $p < .05$) in adolescents. Additionally, this study's results revealed that neurotic personality trait was significant predicting to incoherent identity development ($\beta=-.21$, $p < .05$), and psychological well-being ($\beta=.19$, $p < .05$) in adolescents. Moreover, psychotic personality trait was significant predicting to incoherent identity ($\beta=-.88$, $p < .05$) in adolescents. However, incoherent identity was significant predicting to psychological well-being ($\beta=-.88$, $p < .05$) in adolescents. These results illustrated that incoherent identity development fully mediated in the relationship among neurotic, introversion, and extraversion personality traits and psychological well-being in adolescents. However, incoherent identity development only partially mediated psychotic personality traits and psychological well-being in adolescents.

Discussion

Identity is a widely discussed concept and is associated with various social, cognitive, psychodynamic, and philosophical theories globally. The present study aimed to examine the association of identity development with personality traits and psychological well-being in adolescents. Furthermore, this study investigated the potential mediation pathways among identity development, personality traits, and psychological well-being in adolescents.

Assessment of objectives and Hypotheses

This present study broadly replicates and supports earlier research addressing associations among identity development, personality traits, and psychological well-being in adolescents. The results of the present study demonstrated that neurotic, introversion, and extraversion personality traits were negatively significantly related to incoherent identity development and psychological well-being in adolescents. Additionally, the findings of this study indicated that psychotic personality traits were significantly positively associated with incoherent identity development and psychological well-being in adolescents. Moreover, these results also illustrated that incoherent and coherent identity development were significantly positively associated with psychological well-being. These findings support the previous study's theories and empirical evidence. Furthermore, the findings indicated that the relationship between neurotic, introverted, and extraverted personality traits and psychological well-being in adolescents was fully mediated. However, incoherent identity development only partially mediated psychotic personality traits and psychological well-being in adolescents. The current results clarify and support our study hypotheses and objectives. The findings of this study are also consistent with previous studies (Achermann et al., 2022; Arnett, 2000, 2014; Booker & Johnson, 2022; Erikson, 1968; Goth et al., 2012; Jung et al., 2013). Adolescence is a transitional time wherein adolescents are navigating features of doubt in how they comprehend themselves,

others' perspectives, and their future plans in life (Achermann et al., 2022; Arnett, 2014; Jung et al., 2013). As part of their efforts to revolve in this time, adolescents must come to terms with who they are as a person as well as what their role is in this world by examining and obligating to constant features of identity. In this perspective, personality traits are considered as a very crucial social factor, like other salient factors. It could be an important contribution to shaping and developing healthy identity and psychological well-being throughout this transitory time (Achermann et al., 2022; Arnett, 2000, 2014; Booker & Johnson, 2022; Erikson, 1968; Goth et al., 2012; Jung et al., 2013).

Limitations and Future Directions

The present study only focus on particular college student's sample that has limited generalizability. The sample of the study was primarily male students as well as generally represented only two twin cities in Pakistan. Further, given the present findings, research design, sampling technique, and methodological approach limits of this study, we have recognized promising guidelines for imminent study. Future research would be useful in incorporating a different cluster of college students who denote multiple ethnic backgrounds, gender, occupations, and geographic regions. Furthermore, longitudinal research can explain changes in identity development and psychological well-being over long periods of time—determining reciprocity and trajectories among these salient factors for adolescents. This study opens up new avenues and directions for future studies in the relationships among personality traits, identity development, and psychological well-being in adolescents.

Conclusion

This study found that different personality traits could be salient factors in shaping coherent and incoherent identity development and psychological well-being in adolescents. This study indicated that neurotic, psychotic, and introversion-extroversion personality traits were significantly positively associated with incoherent identity development and psychological well-being. Furthermore, this study suggested that the relationship between neurotic, introverted, and extraverted personality traits and psychological well-being in adolescents was fully mediated. This study opens up new avenues and directions for future studies in the relationships among personality traits, identity development, and psychological well-being in adolescents. These results can be used to spread knowledge as well as provide insight to develop new assessment techniques, prevention, and intervention strategies for adolescents in Pakistani society.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Ethical Consideration

The study was approved by the Department of Psychology, Foundation University Islamabad, Pakistan. Consent Form was taken before taking data and participants were asked to take voluntary participation.

Acknowledgement

The author thanks to Foundation University Islamabad.

Availability of data and materials

The data sets used and analyzed during the current study are available from the corresponding author on reasonable request.

Authors' contributions/Author details

Momina Zahid and Dr. Kirstin Goth performed this study. Momina Zahid and Dr. Kirstin Goth wrote the article under the guidelines of Nature-Nurture Journal of Psychology.

Corresponding author

Correspondence to Zahid, M.
momina1410@hotmail.com

Ethics declarations

Ethics approval and consent to participate

This study was approved by the Institutional Review Board (Department of Psychology, Foundation University Islamabad, Pakistan.). A written informed consent was obtained from all participants.

Consent for publication

Not applicable.

Competing interests

The authors declare to have no competing interests.

Additional Information

Not applicable

Received: 14 August 2022 Accepted: 6 September 2022: 6 September 2022 published online

References

- Achermann, M., Günther, J., Goth, K., Schmeck, K., Munsch, S., & Wöckel, L. (2022). Body-Related Attitudes, Personality, and Identity in Female Adolescents with Anorexia Nervosa or Other Mental Disorders. *International Journal of Environmental Research and Public Health*, 19(7), 4316.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469.
- Arnett, J. J. (2014). *Emerging adulthood: The winding road from the late teens through the twenties*. Oxford University Press.
- Baron, R. M., & Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research. Conceptual, Strategic, and Statistical Considerations. In *Journal of Personality and Social Psychology* (Vol. 51, Issue 6). Psychological Association, Inc. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Booker, J. A., & Johnson, K. E. (2022). Identity Development and Well-Being Among Nonreligious and Christian Emerging Adults in the Central United States. *Emerging Adulthood*, 10(2), 360–371.
- Cisheng, W., Shah, M. S., Jamala, B., Aqeel, M., Ahmed, A., & Gul, M. (2017). The Moderating Role of Spiritual Intelligence on the relationship between Emotional Intelligence and Identity Development in Adolescents. *Foundation University Journal of Psychology*, 1(1), 77–107.
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143–156.
- Erikson, Erik H. (1968). *Identity: Youth and crisis* (Issue 7). WW Norton & company.
- Erikson, Erik Homburger. (1950). *Childhood and society*, New York (WW Norton) 1950.
- Ermann, M. (2011). Identität, Identitätsdiffusion, Identitätsstörung. *Psychotherapeut*, 56(2), 135–141.
- Eysenck, S. B. G., Barrett, P. T., & Saklofske, D. H. (2021). The junior Eysenck personality questionnaire. *Personality and Individual Differences*, 169, 109974.
- Field, A. (2013). Chapter 17: Exploratory Factor Analysis. In *Discovering Statistics Using IBM SPSS: and Sex and Drugs and Rock "n" Roll* (pp. 665–719).
- Foelsch, P. A., Krischer, M. K., Schlüter-Müller, S., & Schmeck, K. (2010). Differenzierung zwischen Identitätskrise und Identitätsdiffusion und ihre Bedeutung für die Behandlung. *Praxis Der Kinderpsychologie Und Kinderpsychiatrie*, 59(6), 418–434.
- Foelsch, P. A., Odom, A. E., Schmeck, K., Schlüter-Müller, S., & Kernberg, O. F. (2008). Behandlung von Adoleszenten mit Identitätsdiffusion. *PTT-Persönlichkeitsstörungen: Theorie Und Therapie*, 12(3), 153–162.
- Fonagy, P., Gergely, G., Jurist, E. L., & Target, M. (2018). *Affect regulation, mentalization, and the development of the self*. Routledge.
- Gergen, K. J., & Gergen, M. M. (2000). The new aging: Self construction and social values. *Social Structures and Aging*, 281–306.
- Goth, K., Foelsch, P., Schlüter-Müller, S., Birkhölzer, M., Jung, E., Pick, O., & Schmeck, K. (2012). Assessment of identity development and identity diffusion in adolescence-Theoretical basis and psychometric properties of the self-report questionnaire AIDA. *Child and Adolescent Psychiatry and Mental Health*, 6(1), 1–16.
- Gul, M., & Aqeel, M. (2021). Acceptance and commitment therapy for treatment of stigma and shame in substance use disorders: a double-blind, parallel-group, randomized controlled trial. *Journal of Substance Use*, 26(4), 413–419. <https://doi.org/10.1080/14659891.2020.1846803>
- Jung, E. (2014). *Erfassung und Behandlung von Jugendlichen mit einer Identitätsstörung*. University_of_Basel.
- Jung, E., Pick, O., Schlüter-Müller, S., Schmeck, K., & Goth, K. (2013). Identity development in adolescents with mental problems. *Child and Adolescent Psychiatry and Mental Health*, 7(1), 1–8.
- Keupp, H. (1999). *Identitätskonstruktionen: das Patchwork der Identitäten in der Spätmoderne* (Vol. 55634). Rowohlt-Taschenbuch-Verlag.
- Kroger, J. (2005). CHAPTER TEN Identity Development during Adolescence. *Blackwell Handbook of Adolescence*, 205–226.
- Larivée, M.-P. (2022). Borderline personality disorder in adolescents: the He-who-must-not-be-named of

- psychiatry. *Dialogues in Clinical Neuroscience*.
- Levy, K. N., Clarkin, J. F., Yeomans, F. E., Scott, L. N., Wasserman, R. H., & Kernberg, O. F. (2006). The mechanisms of change in the treatment of borderline personality disorder with transference focused psychotherapy. *Journal of Clinical Psychology*, 62(4), 481–501.
- Levy, K. N., McMain, S., Bateman, A., & Clouthier, T. (2018). Treatment of Borderline Personality Disorder. In *Psychiatric Clinics of North America* (Vol. 41, Issue 4, pp. 711–728). <https://doi.org/10.1016/j.psc.2018.07.011>
- Levy, K. N., Meehan, K. B., Kelly, K. M., Reynoso, J. S., Weber, M., Clarkin, J. F., & Kernberg, O. F. (2006). Change in attachment patterns and reflective function in a randomized control trial of transference-focused psychotherapy for borderline personality disorder. *Journal of Consulting and Clinical Psychology*, 74(6), 1027.
- Marcia, J. E. (2006). Ego identity and personality disorders. *Journal of Personality Disorders*, 20(6), 577.
- Rashid, A., Aqeel, M., Malik, D. B., & Salim, D. S. (2021). The Prevalence of Psychiatric Disorders in Breast Cancer Patients; A Cross-Sectional Study of Breast Cancer Patients Experience in Pakistan. *Nature-Nurture Journal of Psychology*, 1(1 SE-), 1–7. <https://thenaturenurture.org/index.php/psychology/article/view/1>
- Regier, D. A. (2022). Developmental History of Mood Disorder Classification. *The American Psychiatric Association Publishing Textbook of Mood Disorders*, 15.
- Saif, J., Rohail, D. I., & Aqeel, M. (2021). Quality of Life, Coping Strategies, and Psychological Distress in Women with Primary and Secondary Infertility; A Mediating Model . *Nature-Nurture Journal of Psychology*, 1(1 SE-), 8–17. <https://thenaturenurture.org/index.php/psychology/article/view/6>
- Samuel, S., & Akhtar, S. (2009). The identity consolidation inventory (ICI): Development and application of a questionnaire for assessing the structuralization of individual identity. *The American Journal of Psychoanalysis*, 69(1), 53–61.
- Sarfraz, R., Aqeel, M., Lactao, D. J., & Khan, D. S. (2021). Coping Strategies, Pain Severity, Pain Anxiety, Depression, Positive and Negative Affect in Osteoarthritis Patients; A Mediating and Moderating Model . *Nature-Nurture Journal of Psychology*, 1(1 SE-), 18–28. <https://thenaturenurture.org/index.php/psychology/article/view/8>
- Seiffge-Krenke, I. (2014). *Therapieziel Identität: Veränderte Beziehungen, Krankheitsbilder und Therapie*. Klett-Cotta.
- Syed, M., & Seiffge-Krenke, I. (2013). Personality development from adolescence to emerging adulthood: linking trajectories of ego development to the family context and identity formation. *Journal of Personality and Social Psychology*, 104(2), 371.

Publisher's Note

The Nature-Nurture publishing group remains neutral with regard to jurisdictional claims in published maps and institutional affiliations