

**PARENTIFICATION, IMPOSTOR PHENOMENON AND
METACOGNITIVE BELIEFS IN YOUNG ADULTS**

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ABSTRACT

The study aimed to explore the meditational role of metacognitive beliefs between experience of parentification and impostor phenomenon in young adults. Sample of 199 young adults with age range of 18 to 25 years and a mean age of 20.52 years ($SD \pm 1.52$) was taken. The Parentification Inventory (Hooper, 2009), Clance Impostor Phenomenon Scale (Clance, 1985) and Metacognitive Questionnaire (Wells & Cartwright-Hatton, 2004) were used to assess the study variables. Results show parentification (parent-focused parentification and sibling-focused parentification), metacognitive beliefs and impostor phenomenon to be correlated with each other. Moreover, metacognitive beliefs partially mediated the association between parentification and impostor phenomenon. These results signify that experience of parentification can influence on metacognitive beliefs which can lead impostor and related fear among individuals. Considering findings future implications have been discussed.

Keywords: Parentification, Metacognitive beliefs, Imposter

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INTRODUCTION

The psychological well-being of individuals is influenced by the quality of care and supervision they receive from their caregivers during their developmental stages. This can result in positive outcomes such as autonomy, competence and psychosocial stability (Longest & Shanahan 2007; McMahon & Luthar 2007; Telzer & Fuligni 2009). On the other hand, an unhealthy environment can lead to short and long term negative outcomes such as psychosocial difficulties, maladaptive thinking patterns (Hildyard & Wolfe, 2002; Taillieu et al., 2016). Growing up in an environment that lacks adequate support and care, whether emotionally or materially, can have negative effects on one's well-being and personality development. Such an environment can create a sense of lack and deficiency that one tries to compensate for by adapting to the demands of the situation and becoming parentified. Parentification is a term that describes the phenomenon of children taking on parental roles and responsibilities that are not appropriate for their age or development. This can happen when children have to provide care and support for their parents or siblings, acting as their helpers and confidants. This disrupts the normal family hierarchy and places a heavy burden on the children, who are deprived of their own emotional needs and are suspected for mental health problems (Jankowski et al., 2013) and psychosocial difficulties in later life (Hooper, 2007).

Experience of parentification can be seen on continuum of constructive and other side is destructive. Destructive nature involves when a child is abused or neglected to meet somehow emotional or/ and instrumental needs of parents and siblings. Constructive parentification involves similar behaviours, but the child receives support from the family and the responsibilities are temporary, such as during a health or financial crisis. However, the dynamics of constructive parentification are still unclear and undecided (Hooper, 2011). On the other hand, researchers have described parentification on the basis of numerous roles that can be expected including parent-focused and sibling-focused parentification. This role-based style of parentification highlights the role a child as parent focused to care for the parents or becoming sibling-focused parentified to take the responsibilities of their siblings. These role based parentification are also considered to provide responsibility as instrumentally or emotionally (Dariotis et al., 2023).

The phenomenon of Parentification has different consequences (Earley & Cushway, 2002). Cho and Lee (2019) examined the link between parentification

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and depression in South Korean college students. They found that experiencing parentification for a long time in childhood was related to higher levels of depression in adulthood. Other studies with Asian participants also reported that parentification increased the risk of mental health problems and crises (Köyden, 2015; Yıldırım, 2016). A study examined how parentification affects the emotional and functional growth of adolescents. The results showed that parentification can impair academic performance, emotional development and stability (Żarczyńska-Hyla, 2019). Additionally, the literature revealed that parentification can lead to negative outcomes such as shame proneness and identity issues (Wells & Jones, 2000). Parentification describes that when parents expect their children to do things that are not suitable for their age or abilities, making them feel fake and insecure. This can lead to a feeling of being an impostor, which means that a person does not believe in their own achievements and skills, and fears being exposed as a fraud by others (Castro et al., 2004).

Impostor phenomenon is defined by Clance (1985) as "the internal experience of intellectual phoniness". Research has shown that environmental factors, especially the relationship with one's caregivers and family dynamics, are crucial in the development of impostor phenomenon (Sonnak & Towell, 2001). The relationship between impostor phenomenon and family environment was investigated by Hawbam and Singh (2018) in their study on adults and found that impostor phenomenon was lower when the family had a positive emotional bond and a sense of independence, and higher when the family was demanding and challenging. People with impostor phenomenon have a gap between their ideal and realistic self. They set unrealistic goals for themselves and do not appreciate their achievements or efforts, even when there is evidence to the contrary (Clance, 1985).

A child's self-related thoughts are influenced by early life experiences with the environment. These thoughts affect how a person behaves in different situations (either adaptively or maladaptive) to keep a balance between self and environment. Person who felt inadequate as a child, may develop impostor fears and cope with them by being perfectionist and anxious about meeting the unrealistic and demanding standards. However, having a secure self-perception can prevent psychological distress. People experiencing imposter phenomenon may suffer from belittled psychological well-being and increased psychological distress (Kananifar et al., 2015; Wang et al. 2019). They tend to use unhealthy ways to cope with their fear of being exposed as frauds. They may avoid challenging situations or feedback (Hutchins et al., 2018). Their constant sense of

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being fake and unworthy prevents them from using their strengths and resources effectively. They also try to hide their perceived flaws and inadequacies (Mascarenhas et al., 2018; Schubert & Bowker, 2017), which can lead to more different types of mental health problems commonly “anxiety, depression and worry etc.” (Kananifar et al., 2015). The way they cope with stress depends on how they think about themselves and their situation. The cognitive model suggests that psychological problems are caused by distorted thinking patterns that affect how people feel and behave. Changing these thinking patterns can help reduce psychological distress (Beck & Beck, 1995). To change these thinking patterns, people need cognitive control, which involves cognitive interpretation and cognitive monitoring.

“Metacognitions” refers to the term that encompasses the cognitive control, monitoring, planning and creating cognitive balance processes. According to Wells (2000), metacognitions are “thoughts about thinking processes” that influence the development and maintenance of mental health problems. People's metacognitive beliefs about their problems shape their emotional reactions and coping strategies (Wells & Cartwright-Hatton, 2004). These beliefs have great impact on the way person think, feel and behave and usually these beliefs serve as factor which maintained trouble on longer run (Papageorgiou, & Wells 2003; Spada et al., 2008; Wells & Carter 2001). Similarly a research conducted with university students of Iran explored the influence of metacognitive beliefs on psychological distress (Tajrishi et al., 2011). It has been concluded that negative metacognitive beliefs are linked to more psychological problems and negative metacognitive belief about worry over control and danger is a significant factor for emotional instability in young adults. Metacognitive beliefs can influence the fear of success (Ashrafifard & Mafakheri, 2017). Similarly, people with impostor phenomenon feel afraid of success because they do not acknowledge their abilities and feedback from others. They try to hide their perceived inadequacy by either overworking or procrastinating, which reinforces their chronic sense of insufficiency and worsens their psychological difficulties (Sakulku, 2011).

Early experiences shape metacognitive beliefs (Well, 2000). According to attachment theory, the way a child relates to self and environment depends on the early attachment bond with the parent, which forms the internal working models. These are mental representations that guide future interactions and self-perceptions (Bowlby, 1988). A secure attachment fosters healthy cognitive development, as it supports a positive self-concept and facilitates information

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processing. An insecure or disrupted attachment, on the other hand, leads to distorted and defensive cognitions and unhealthy internal working models. Parentification is an example of a disrupted attachment, where the child feels neglected and unworthy of the environment's attention and care (Hooper, 2007).

Metacognitive framework is influenced by parental attachment, which shapes a person's beliefs about themselves and their environment. Gallagher and Cartwright-Hatton (2008) showed that metacognitions and inaccurate thinking patterns partially mediated the relationship between parenting experiences and negative emotions later in life. In summary, parenting factors affect cognitive development and are associated with inaccurate thinking and beliefs, which are risk factors for mental health problems. Therefore, in the light of scientific evidences and existing literature, this study intended to explore the meditational role of metacognitive beliefs between experience of parentification (parent-focused and sibling-focused) and impostor phenomenon in young adults.

METHOD

Participants

The data of 199 participants, using G*Power, was collected using the purposive sampling technique from different universities of Karachi-Pakistan. The participants were aged between 18 and 25 years, with a mean age of 20.52 years ($SD \pm 1.52$). The demographic details are presented in Table 1 and 2. The sample of the study was taken based on certain inclusion/exclusion criteria:

- Only participants from intact families were included, individuals with other family structures including (i.e. separated, divorced or with deceased parents) were excluded. This was because family instability can have negative effects on psychological well-being and can alter parenting related experiences.
- Only single participants were considered as potential sample members. This was because married or divorced individuals may have different responsibilities that could interfere with the variable of Parentification.
- Participants who had any kind of physical disability were not included. This was because special needs and dependence on others could affect their psychological well-being.

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- Only participants who agreed to participate voluntarily and agreed on written research consent were included.
- Birth order was controlled, only participants with siblings were included in which eldest and mid born participants were considered as participants.

Measures

Demographic Form

The demographic form included information about the participants' personal and health characteristics, such as age, gender, marital status, birth order, education level, family background, and health status. The purpose of this form was to check if the participants met the criteria for inclusion or exclusion in the study.

Parentification Inventory

Parentification Inventory (PI) is a self-reported quantitative measure to assess the retrospective experience of childhood parentification (Hooper et al., 2011). The measure has 22 items that are rated on Likert scale from "*I (never true)*" to "*5 (always true)*". The measure has three subscales: parent-focused parentification (PF-P) comprises on 12 items, sibling-focused parentification (SF-P) comprises on 7 items and perceived benefit of parentification comprises on 3 items. It provides three scores based on the average scores of each subscale. The scores range from 1 to 5, with higher scores indicating greater parentification experiences. In the current study, only the parent-focused and sibling-focused parentification subscales were used. The Cronbach's alpha value for overall PI is .80 and for subscales (PF-P, SF-P) is .80 and .60, respectively indicating satisfactory internal consistency.

Metacognitive Questionnaire

Metacognitive Questionnaire (MCQ-30) is a brief version of the Metacognitive Questionnaire with 30 items (Wells & Cartwright, 2004). These items measure five types of metacognitive beliefs: "positive belief about worry (POS), negative belief about worry's uncontrollability and danger (NEG), cognitive confidence (CC), need for control (NC), and cognitive self-

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consciousness (CSC)". Each type has six items and uses a four-point Likert scale from *do not agree (1)* to *agree very much (4)*. The MCQ-30 gives five scores for each type of belief and a total score that ranges from 6 to 36. Moreover, a total score across the five beliefs provide a composite score of the profile ranging from 30 to 120. The Cronbach alpha values for overall MCQ-30 is .86, while for each type ranges from .60 to .80 indicating satisfactory internal consistency.

Clance Impostor Phenomenon Scale

Clance Impostor Phenomenon Scale (CIPS) is a quantitative measure of impostor phenomenon (Clance, 1985). It has 22 items, each with a five-point Likert scale from *"not true (1)"* to *"very true (5)"*. The total score ranges from 22 to 100, and it indicates the level of impostor phenomenon experienced by the participants. A score of 40 or below means "few features of impostor phenomenon", while a score between 41 to 60 means mild, 61 to 80 means moderate, and 81 and above means severe or intense. The Cronbach alpha of CIPS for the current study was .85 indicating satisfactory internal consistency.

Procedure

Before conducting the research, the research proposal was approved by the Institutional Departmental Research Committee and Ethical Review Board. Then permissions were obtained from the authors of the scales used in current study. After getting permission from, relevant authorities of the universities were contacted from the permission of data collection. The data was collected from the participants who agreed and duly signed the consent to take part in the study. The research measures of PI, MCQ-30 and CIPS were then administered following the demographic form. The researchers addressed queries of the participants about the study. The data collection process was followed by scoring the measures according with the standard method established by the authors.

Statistical Analysis

Mean and standard deviation were included as descriptive statistics, while the inferential statistics involved Hayes' PROCESS Macro for the mediational analysis. The software used for these analyses was Statistical Package for Social Science-22.

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RESULTS

Table 1
Descriptive Characteristics of the Participants

Variables	f	%
Gender		
Male	85	42.4
Female	114	57.6
Birth Order		
First	98	49.4
Middle	101	50.6
Family Structure		
Nuclear	126	61.4
Joint	73	38.6

Table 2
Descriptive Statistics for Age of the Participants

Variables	Male		Female		Total	
	M	SD	M	SD	M	SD
Age	20.99	1.42	20.16	1.49	20.52	1.53

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Table 3

Pearson Correlation Coefficients between Parentification, Metacognitive Beliefs and Impostor Phenomenon

Variables	1	2	3	4
1. Parent-Focused Parentification	1.00			
2. Sibling-Focused Parentification	.39*	1.00		
3. Meta Cognitive Beliefs	.31*	.38*	1.00	
4. Imposter Phenomenon	.36*	.38*	.58*	1.00

* $p < .05$

Table 4

Mediation Analysis for Metacognitive Beliefs as mediator between Parent-Focused Parentification and Imposter Phenomenon

Model	<i>B</i>	<i>t</i>	<i>p</i>	95%	
				LLCI	ULCI
Path a PF-P → MC	6.45	4.06	.00	3.30	9.58
Path b MC → IP	.43	7.47	.00	.31	.54
Total effect, Path c PF-P → IP	6.75	5.05	.00	4.11	9.39
Direct Effect, Path c': PF-P → IP	3.97	3.28	.00	1.57	6.35
Indirect Effect: Path a x b PF-P → IP	2.79			.75	5.29

* $p < .05$

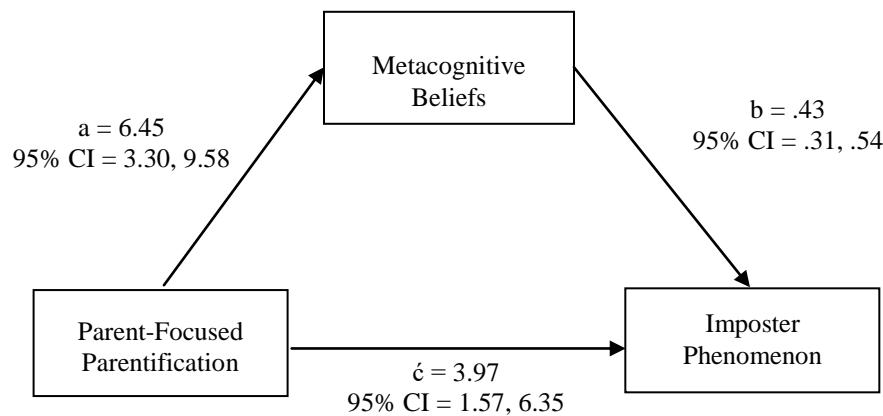


Figure 1. Mediation Model: Metacognitive Beliefs (M), Parent-Focused Parentification (X) and Imposter Phenomenon (Y)

Table 5

Mediation Analysis for Metacognitive Beliefs as mediator between Sibling-Focused Parentification and Imposter Phenomenon

Model	<i>B</i>	<i>t</i>	<i>p</i>	95%	
				LLCI	ULCI
Path a SF-P → MC	7.62	5.07	.00	4.65	10.59
Path b MC → IP	.44	7.24	.00	.48	5.32
Total effect, Path c SF-P → IP	6.24	4.77	.00	3.65	8.81
Direct Effect, Path c': SF-P → IP	2.90	2.37	.02	.48	5.32
Indirect Effect: Path a x b SF-P → IP	3.33			1.27	5.78

**p* < .05

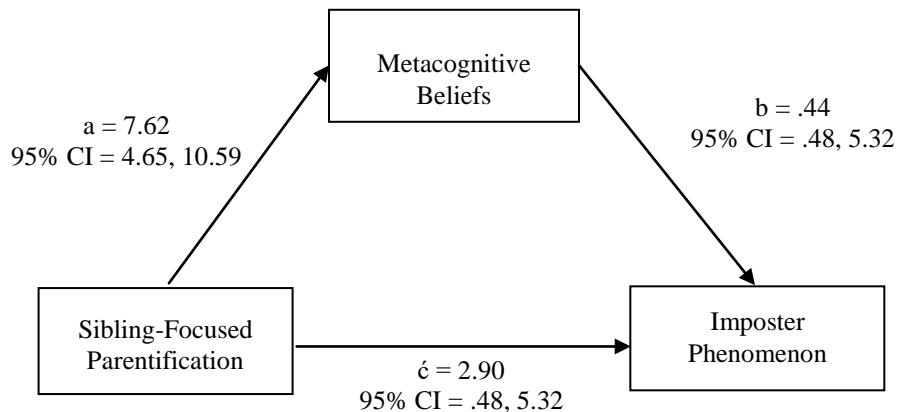


Figure 2. Mediation Model: Metacognitive Beliefs (M), Sibling-Focused Parentification (X) and Imposter Phenomenon (Y)

DISSCUSION

The current study explored the mediational role of metacognitive beliefs between experience of parentification (parent-focused and sibling-focused) and impostor phenomenon in young adults. The results show significant correlation among the variables (Table 3). Moreover, the study also found evidence for the partial mediating role of metacognitive beliefs in the link between parent-focused parentification (Table 4 & Figure 1) and sibling-focused parentification (Table 5 & Figure 2) and impostor phenomenon.

These findings are consistent with previous studies that show that parenting practices affect the development of impostor phenomenon (Sonnak & Towell, 2001; Want & Kleitman, 2006). Parentification experiences are evidenced to contribute to impostor phenomenon (Castro et al., 2004). Parentification occurs when the boundaries are blurred and the roles are reversed, causing the child to suffer and impairing their well-being. The impostor phenomenon and self-doubt are often the result of exposure to inconsistent and demanding situations, which can be mitigated by adequate emotional support and validation. Clance (1985) described that one experiences impostor when one doesn't receive positive feedback and emotional support from the surroundings on achievements and that their family put unrealistic expectations about success and intelligence. On the contrary, a positive and supportive social environment

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enables children to successfully achieve the psychosocial development goals of each stage, while a negative and destructive parentification experience severely impedes the development process (Erickson, 1968). Such an experience compromises the person's autonomy, mastery and ego identity development, as they face overwhelming environmental demands that make them doubt their skills and abilities. They feel incompetent, unable to discover their true selves and perceive themselves as inauthentic (Williams, 2015).

Further, the findings of the present study also corroborate with findings from previous studies that support the strong influence of metacognitive beliefs on impostor phenomenon (Ashrafifard & Mafakheri, 2017). These findings are better explained by cognitive attentional syndrome, suggesting that people experience psychological distress because of their rigid and self-focused thinking patterns (Wells, 2002). It explains impostor phenomenon as a condition where people have distorted thoughts and feelings that make them anxious or worried when they face a challenging task. They either delay the task or work hard on it to avoid negative interpretations of their performance (Clance, 1985). However, these beliefs prevent them from using their Meta belief system, which is a higher level of cognitive control that can help them regulate their emotions. The literature also supports the link between metacognitive beliefs, anxiety, worry and fear of success (Ashrafifard & Mafakheri, 2017; de Jong-Meyer et al., 2009; Wells, 1995).

The mediating role of metacognitive beliefs between parentification and imposter phenomenon is supported by developmental theories (Bowlby, 1988; Inhelder, & Piaget, 1958) that highlighted the importance of early life experiences for the formation and functioning of cognitive structures and processes in humans. Parentification is a type of child neglect that deprives the person various stimulating factors that are necessary and beneficial for cognitive and emotional growth. These neglectful and demanding situations shape the thinking patterns and reasoning skills in a rough way, which can lead to cognitive distortions (Beck, 1995), irrational beliefs (Dryden, David, & Ellis, 2010) and cognitive attentional syndrome (Wells, 2002), and predominant emotional problems in adulthood. Moreover, study on Turkish university students found that childhood experiences indirectly affect psychological distress, by impairing their metacognitive skills, which makes them more prone to psychological distress (Gunduz et al., 2019), other studies further ensured this association (Myers, Wells, 2015; Raes & Hermans, 2008).

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In conclusion, the present study highlights that childhood parentification can have adverse effects on the developmental process and the emotional well-being in adulthood. In particular, the parentification may affect cognitive development, especially the ability to think procedurally, and eventually the mental health problems and metacognitive factors can lead to impostor fears. Though this study provides some valuable insights, it also has some limitations in term of focus and sample. Therefore, future research should explore the variable with different age groups, samples and research methodologies (qualitative or mixed method approach). It should also include different variables and measurements to enhance the validity and generalizability of the findings.

Despite its limitations, findings of the study would be helpful to understand commonness of parentification in Pakistani culture and its negative effects. It raised awareness about parentification and its harmful consequences and suggests changes in traditional parenting practices and family values. Findings would be beneficial for educators and policy makers in terms to design curricula and exercises that foster critical thinking skills in children. It is also helpful for policies makers to understand adverse after effects of parentification and protect children from destructive parentification and neglect, and can challenge any form of familial negligence.

REFERENCES

Ashrafifard, S., & Mafakheri, A. (2017). Investigating the relationship between attribution styles and metacognitive skills with fear of success among students. *Iran Journal of Psychiatry Behavioral Sciences*, 11(2):e9461. <https://doi.org/10.5812/ijpbs.9461>.

Beck, J. S., & Beck, A. T. (1995). *Cognitive therapy: Basics and beyond* (No. Sirsi) i9780898628470). New York: Guilford press.

Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York, NY: Basic Books.

Castro, D. M., Jones, R. A., & Mirsalimi, H. (2004). Parentification and the impostor phenomenon: An empirical investigation. *The American Journal of Family Therapy*, 32(3), 205-216. DOI:10.1080/01926180490425676

Mukhtar & Bano

Cho, A., & Lee, S. (2019). Exploring effects of childhood parentification on adult-depressive symptoms in Korean college students. *Journal of Clinical Psychology*, 75(4), 801-813. doi: 10.1002/jclp.22737

Clance, P. R. (1985). *The impostor phenomenon: Overcoming the fear that haunts your success*, 209. Atlanta, GA: Peachtree Publishers.

Dariotis, J. K., Chen, F.R., Park, Y. R., Nowak, M. K., French, K. M., & Codamon, A. M., (2023). Parentification vulnerability, reactivity, resilience, and thriving: a mixed methods systematic literature review. *International Journal of Environmental Research and Public Health*, 20(13), 1-66. doi: 10.3390/ijerph20136197.

De Jong-Meyer, R., Beck, B., & Riede, K. (2009). Relationships between rumination, worry, intolerance of uncertainty and metacognitive beliefs. *Personality and Individual Differences*, 46(4), 547-551. <https://doi.org/10.1016/j.paid.2008.12.010>

Dryden, W., David, D., & Ellis, A. (2010). Rational emotive behavior therapy. In K. S. Dobson (Ed.), *Handbook of Cognitive-Behavioral Therapies* (3rd ed.) (p. 226-276). New York: The Guilford Press.

Earley, L., & Cushway, D. (2002). The parentified child. *Clinical child psychology and psychiatry*, 7(2), 163-178. <https://doi.org/10.1177/1359104502007002005>

Erikson, E. H. (1968). *Identity: Youth and crisis* (No. 7). W W Norton & company.

Gallagher, B., & Cartwright-Hatton, S. (2008). The relationship between parenting factors and trait anxiety: Mediating role of cognitive errors and metacognition. *Journal of Anxiety Disorders*, 22(4), 722-733. doi: 10.1016/j.janxdis.2007.07.006.

Gunduz, A., Gundogmus, I., Engin, B. H., Isler, A., Sertcelik, S., & Yasar, A. B. (2019). Effects of adverse childhood events over metacognitions, rumination, depression and worry in healthy university students. *Annals of Medical Research*, 26(7), 1394-401. doi: 10.5455/annalsmedres.2019.05.269

Pakistan Journal of Psychology

Hawbam, S. & Singh, S. (2018). Impostor phenomenon: gender differences and role of family environment. *Research Journal of Social Sciences and Management*, 08(4), 1-08.
<https://api.semanticscholar.org/CorpusID:59327626>

Hooper, L. M. (2007). The application of attachment theory and family systems theory to the phenomena of parentification. *The Family Journal*, 15(3), 217-223. <https://doi.org/10.1177/1066480707301290>

Hooper, L. M. (2011). Parentification. *Encyclopedia of adolescence*, 2023-2031.

Hooper, L. M., Kirsten, D., Wallace, S., & Hannah, N., (2011). The parentification inventory: development, validation, and cross-validation. *American Journal of Family Therapy*, 39(3), 226-241. doi: 10.1080/01926187.2010.531652

Hildyard, K. L., & Wolfe, D. A. (2002). Child neglect: developmental issues and outcomes. *Child abuse & neglect*, 26(6-7), 679-695. doi: 10.1016/s0145-2134(02)00341-1

Hutchins, H. M., Penney, L. M., & Sublett, L. W. (2018). What imposters risk at work: Exploring imposter phenomenon, stress coping, and job outcomes. *Human Resource Development Quarterly*, 29(1), 31-48. doi: 10.1002/hrdq.21304

Inhelder, B., & Piaget, J. (1958). The growth of logical thinking from childhood to adolescence. In Veenman, M. V., & Spaans, M. A. (2005). Relation between intellectual and metacognitive skills: Age and task differences. *Learning and Individual Differences*, 15(2), 159-176.

Jankowski, P. J., Hooper, L. M., Sandage, S. J., & Hannah, N. J. (2013). Parentification and mental health symptoms: Mediator effects of perceived unfairness and differentiation of self. *Journal of Family Therapy*, 35(1), 43-65. <https://doi.org/10.1111/j.1467-6427.2011.00574>.

Kananifar, N., Seghatoleslam, T., Atashpour, S. H., Hoseini, M., Habil, M. H. B., & Danaee, M. (2015). The relationships between imposter phenomenon and mental health in Isfahan Universities students. *International Medical Journal*, 22(3), 144-146.

Mukhtar & Bano

Köyden, D. (2015). *The relationship between parentification and depression, anxiety, anger and obsessive beliefs*. [Unpublished Master's Thesis., Hacettepe University Graduate School of Social Sciences, Ankara].

Longest, K. C., & Shanahan, M. J. (2007). Adolescent work intensity and substance use: The mediational and moderational roles of parenting. *Journal of Marriage and Family*, 69(3), 703-720. <https://doi.org/10.1111/j.1741-3737.2007.00401>.

Mascarenhas, V. R., D'Souza, D., & Bicholkar, A. (2018). Prevalence of impostor phenomenon and its association with self-esteem among medical interns in Goa, India. *International Journal of Community Medicine And Public Health*, 6(1), 355-359. <https://doi.org/10.18203/2394-6040.ijcmph20185272>

McMahon, T. J., & Luthar, S. S. (2007). Defining characteristics and potential consequences of caretaking burden among children living in urban poverty. *American Journal of Orthopsychiatry*, 77(2), 267-281. doi: 10.1037/0002-9432.77.2.267

Myers, S. G., & Wells, A. (2015). Early trauma, negative affect, and anxious attachment: the role of metacognition. *Anxiety, Stress, & Coping*, 28(6), 634-649. doi: 10.1080/10615806.2015.1009832.

Papageorgiou, C., & Wells, A. (2003). An empirical test of a clinical metacognitive model of rumination and depression. *Cognitive Therapy and Research*, 27, 261–273. <https://doi.org/10.1023/A:1023962332399>

Raes, F., & Hermans, D. (2008). On the mediating role of subtypes of rumination in the relationship between childhood emotional abuse and depressed mood: Brooding versus reflection. *Depression and Anxiety*, 25(12), 1067-1070. doi: 10.1002/da.20447. PMID: 18839403.

Sakulku, J. (2011). The impostor phenomenon. *The Journal of Behavioural Science*, 6(1), 75-97. <https://doi.org/10.14456/ijbs.2011.6>

Schubert, N., & Bowker, A. (2017). Examining the impostor phenomenon in relation to self-esteem level and self-esteem instability. *Current Psychology*, 1-7. doi:10.1007/s12144-017-9650-4

Pakistan Journal of Psychology

Sonnak, C., & Towell, T. (2001). The impostor phenomenon in British university students: Relationships between self-esteem, mental health, parental rearing style and socioeconomic status. *Personality and Individual Differences*, 31(6), 863-874. [https://doi.org/10.1016/S0191-8869\(00\)00184-7](https://doi.org/10.1016/S0191-8869(00)00184-7)

Spada, M. M., Nikcevic, A. V., Moneta, G. B., & Wells, A. (2008). Metacognition, perceived stress, and negative emotion. *Personality and Individual Differences*, 44, 1172-1181. <http://dx.doi.org/10.1016/j.paid.2007.11.010>

Taillieu, T. L., Brownridge, D. A., Sareen, J., & Afifi, T. O. (2016). Childhood emotional maltreatment and mental disorders: Results from a nationally representative adult sample from the United States. *Child Abuse & Neglect*, 59, 1-12. <https://doi.org/10.1016/j.chabu.2016.07.005>

Tajrishi, K. Z., Mohammadkhani, S., & Jadidi, F. (2011). Metacognitive beliefs and negative emotions. *Procedia-Social and Behavioral Sciences*, 30, 530-533. doi:10.1016/j.sbspro.2011.10.103

Telzer, E. H., & Fuligni, A. J. (2009). Daily family assistance and the psychological well-being of adolescents from Latin American, Asian, and European backgrounds. *Developmental Psychology*, 45(4), 1177. doi: 10.1037/a0014728.

Wang, K. T., Sheveleva, M. S., & Permyakova, T. M. (2019). Imposter syndrome among Russian students: The link between perfectionism and psychological distress. *Personality and Individual Differences*, 143, 1-6. doi:10.1016/j.paid.2019.02.005

Want, J., & Kleitman, S. (2006). Imposter phenomenon and self-handicapping: Links with parenting styles and self-confidence. *Personality and Individual Differences*, 40(5), 961-971. <https://doi.org/10.1016/j.paid.2005.10.005>

Wells, A. (1995). Meta-cognition and worry: A cognitive model of generalized anxiety disorder. *Behavioural and Cognitive Psychotherapy*, 23(3), 301-320. <https://doi.org/10.1017/S1352465800015897>

Mukhtar & Bano

Wells, A. (2000). *Emotional disorders and metacognition: Innovative cognitive therapy*. Chichester, UK: Wiley.

Wells, M., & Jones, R. (2000). Childhood parentification and shame-proneness: A preliminary study. *American Journal of Family Therapy*, 28(1), 19-27. doi:10.1080/019261800261789

Wells, A., & Carter, K. (2001). Further tests of a cognitive model of generalized anxiety disorder: Metacognitions and worry in GAD, panic disorder, social phobia, depression, and nonpatients. *Behavior Therapy*, 32(1), 85–102. [https://doi.org/10.1016/S0005-7894\(01\)80045-9](https://doi.org/10.1016/S0005-7894(01)80045-9)

Wells, A. (2002). *Emotional Disorders and Metacognition: Innovative Cognitive Therapy*. John Wiley & Sons.

Wells, A., & Cartwright-Hatton, S. (2004). A short form of the Metacognitions Questionnaire: Properties of the MCQ-30. *Behaviour Research And Therapy*, 42(4), 385-396. [https://doi.org/10.1016/S0005-7967\(03\)00147-5](https://doi.org/10.1016/S0005-7967(03)00147-5)

Williams, K. (2015). *Risk and resilience in emerging adults with childhood parentification*. [Doctoral dissertation, University of Windsor]. *Electronic Theses and Dissertations*. 5677. <https://api.semanticscholar.org/CorpusID:147282429>

Yıldırım, F. (2016). Examining the effects of family unpredictability and parentification on university students' depression level, anger styles and obsessive beliefs, *Master's Thesis, Ankara*.

Żarczyńska-Hyla, J., Zdaniuk, B., Piechnik-Borusowska, J., & Kromolicka, B. (2019). Parentification in the experience of polish adolescents. the role of socio-demographic factors and emotional consequences for parentified youth. *The New Educational Review*, 55. 135-146. doi:10.15804/tner.2019.55.1.11

Zencir, T. (2021). The examination of relationships among personal-familial qualifications, levels of parentification, depression and marital satisfaction of married individuals. *Journal of Research in Education and Society*, 8(2), 258-279. <https://doi.org/10.51725/etad.923021>