Impact of rational and experiential thinking styles on interpersonal conflict resolution among young adults

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ABSTRACT

This research aimed to find the relationship between thinking styles (rational or experiential) and interpersonal conflict resolution (ICR) in young adults. A sample of 99 females and 103 males, age range 18 to 40 years, was selected via convenient and snow-ball sampling. Thinking styles were assessed using Rational-Experiential Inventory-40, and ICR was measured using Conflict Resolution Questionnaire. Regression analysis was used to predict ICR based on thinking style covariates and several relevant demographic covariates, including gender and family birth order. Rational thinking style (RTS) was most prevalent among young adults and was the strongest predictor of ICR. In addition, gender was a significant predictor. These findings may help in coaching young adults toward a well-integrated personality by using rational thinking for effective ICR.

ARTICLE DATA

Introduction

During emerging adulthood (age range 18 to 25), which falls neither in pubescence nor in early adulthood yet is hypothetically and factually different from the former stages of development, an individual has surpassed the age of dependency of childhood and adolescence but is not mature enough to handle the obligatory responsibilities of adulthood. During this stage, individuals seek various opportunities in their personal and professional lives, including a well-paid job and having a strong enduring relationship. Good decision-making and other life skills are important during these critical years, as many people are not satisfied with their work life and fifty percent of marital relationships result in divorce [1].

Young Adulthood is a key transition stage in a person's life and is linked to a distinctive group of relational challenges [2]. During this stage of development, a person faces new adult roles, personal obligations, and is held accountable for fulfilling the forms of social communion [1]. Underlying changes in interpersonal relationships and psychosocial operations occur as the person enters young adulthood [3]. Much research on college and bachelor students has garnered support for the idea that higher education encourages surveying and reanalyzing views about the world [4]. However, even those individuals in this developmental stage who were not attending university are also likely to rethink their views and seek out goals, embracing their own perspective on their beliefs and moral codes [5, 6].

According to the dual processing theory [7], there are two ways in which information is processed- either analytically or intuitively. Epstein proposed the Cognitive-experiential self-theory (CEST), which states that tension occurs between the rational and experiential systems because the rational system controls intellect whereas the experiential system controls emotions [8]. Stella Ting-Toomey [9] stated that individualistic and collectivistic culture backgrounds will cause a difference in how a person responds to conflicts which, as explained by theories put forward by Erickson and Arnett, is crucial in young adulthood.

In the study of organizational behavior, significant value is placed on one's thinking style, as it helps organizational psychologists account for individual differences in workplace functioning [10]. The Cognitive-

Experiential theory (CET) assumes that every individual proceeds with instructions using the interconnected logical and intuitive systems, the results of which impact the way an individual comprehends the situation, feels, decides, and then acts [11]. When the link between styles of thinking and conflict-handling was examined, a direct association between rational thinking and behavioral endurance has been found [12, 13]. In today's workplace characterized by excessive stress, conditions constantly fluctuate as organizations adjust to diversity, downsizing, or temporary work, and as a result, interpersonal conflict resolution takes on an important role. To develop a positive environment within the workplace, conflicts occurring among employees need to be intentionally minimized and resolved [14]. Accordingly, resolving conflicts is a tactful procedure where the persons involved eradicate the apparent mismatch between their objectives and concerns and create an innovative state of apparent match [15]. A mutual conclusion is often reached in which all parties have a say and the specifics of the agreement are outlined as such as to permit the parties to perceive and own the objectives and perceive them as non-contradictory.

Conflict at work is both predictable and unavoidable, but it can also be an asset in producing creative solutions [16]. Analytical/critical thinking is frequently connected with directed thinking, for example problem solving, looking for reality and creating understanding, with the emphasis on a desired result [17]. The rational framework (Rational Thinking Style) can help the individual identify legitimate arguments and manage abstract issues [8]. The Rational Thinking style consists of Rational Ability and Rational Engagement. The former refers to the higher level of ability of an individual to think analytically and logically; the latter is related to the individual's finding satisfaction in thinking analytically and logically. In contrast, the experiential system (Experiential Thinking Style) can be constructive or destructive during conflict management with its deep link with affect, that is, mood and emotions, and quick management [18]. The results of Patterson, Quinn and Baron's research [19] showed that intuition is widely practiced by marketing managers who strive to make better decisions. The Experiential thinking style consists of Experiential Ability and Experiential Engagement. Experiential Ability is explained as the capacity of an individual to report his/her own instinctive impressions and feelings whereas Experiential Engagement displays the pleasure of making decisions relying on instincts and feelings [20]. In summary, however, both thinking styles have benefits, depending on the context and needs.

Peterson et al. [21], Hendry et al. [22], and Beser and Utku [23] have found that students show differences in thinking styles, backgrounds, and perception. This variation presents a chance to investigate how thinking styles are related to problem solving. Conflict arises, for example, when two students are unable to understand each other's thinking styles. This inability leads the intuitive thinker to view the systematic thinker as ignorant and dawdling, and the systematic thinker to view the intuitive thinker as unreliable and impetuous. When scholars are mindful of each other's thinking styles, likely conflicts may be diminished or avoided.

During the stages of Emerging Adulthood (18-25 years) and Young Adulthood (18-40 years), individuals go through certain life experiences and conflicts which have a large impact on their lives. As Ting- Toomey (9) researched, the interpersonal conflict resolution of an individual is dependent upon the person's culture: individualistic or collectivistic. In contrast to an individualistic society, Pakistani young adults are not socially obligated to move out from their parents' houses and live on their own, and thus they remain shielded from many responsibilities, hurdles, and conflictual experiences that an independent life would provide. This situation then might provide a unique opportunity to explore the relationship between thinking styles and conflict resolution in young adult developmental stages, specifically examining how different thinking styles of young adults in a collectivistic society help them in resolving interpersonal conflict effectively. Also, because a significant amount of research has related thinking styles to human resources (HR) development, the findings of such research might help organizations in the hiring and termination process. Specifically, HR departments might select more appropriate candidates based on their thinking styles and improve their decision-making process when employees need to be terminated. Furthermore, for employees exposed to interpersonal conflicts in the work environment, it will be beneficial to know whether specific thinking styles lead to better interpersonal conflict resolution

The objectives of the present research were to address the following questions. (1) What is the prevalence of thinking styles (rational or experiential) in a sample of young adults? (2) Do thinking styles (rational or experiential) have a relationship with interpersonal conflict resolution in young adults? And (3), what is the difference due to gender in the prevalence of thinking styles (rational or experiential) in young adults?

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Materials and Methods

Participants

Data were collected from 202 participants at a private sector university by using convenient and snowball sampling techniques. Inclusion criteria included at least 18 years of age and no older than 40—to capture the young adult developmental stage—and understanding the English language. In addition, participants had to have had at least some years of formal education. Exclusion criteria included participants whose family incomes were under Rs. 25,000 ($160US) per month as, according to Maslow's

Hierarchy of Needs [24], to reach one's full potential, basic needs must first be fulfilled.

Measures

Pacini and Epstein [20] created the *Rational Experiential Inventory (REI-40)* to document thinking styles. This questionnaire consists of 40 items, with responses on a 5-point rating scale (1 = definitely not true of myself to 5 = definitely true of myself). The inventory is divided into the rational domain and experientiality domain, each having 20 items. For the rational domain, Cronbach alpha was .68 to 0.90; for experientiality domain it ranged from 0.79 to 0.91 [25, 26].

McClellan [27] developed the *Conflict Resolution Questionnaire (CRQ)*, accessible from the internet as a free resource [28]. This questionnaire consists of 41 items and is divided into 10 factors. Each item documents responses on a five-point response ranging from 'almost never' to 'almost always'. A high score on any item indicates that the participant successfully resolves conflicts that meet everyone's needs and is likely to strengthen the relationship between parties in conflict. Low scores may show areas for improvement where an individual can think of enhancing their productiveness in conflict resolution [27]. Internal consistency (Cronbach's alpha) coefficients ranged from +/-0.352 - 0.68 [29].

Procedure

Permission from our institute, Institute of Professional Psychology- Bahria University Campus (IPP- BUKC), was obtained to conduct this research, with data collected from various institutes and organizations located in Karachi, Pakistan. Prospective participants were first given the consent form which outlined the ethical considerations of the research. They were provided with a brief introduction and purpose of the study and informed of their right to withdraw at any stage without penalty. Also, they were assured of the confidentiality of their personal information and of avoidance of any risk of harm. Given their consent, they were then asked to fill out a form for demographic information, and if they qualified for the study, they were given the REI-40 and the CRQ. Data were analyzed using SPSS.

Results

Table 1 provides a description of the sample, including age, birth order, marital status, family system, and occupation. Regarding occupation, 61.9% were students, 35.1% were working, and 3% were unemployed (Table 1). For the major variables investigated in this study,

Table 1 Percentage and frequency table of demographics (N=202)

		f	**%**
Gender			
	Male	103	51.0
	Female	99	49.0
	Total	202	100.0
Birth Order			
	Firstborn	67	33.2
	Middle Child	82	40.6
	Lastborn	48	23.8
	Only child	5	2.5
	Total	202	100.0
Marital Status			
	Single	183	90.6
	Married	19	9.4
	Total	202	100.0
Family system			
	Nuclear	140	69.3
	Joint	62	30.7
	Total	202	100.0
Family Monthly Income			
	25001 - 50000	17	8.4
	50001 - 100000	77	38.1
	100001 - 200000	55	27.2
	200001 - 300000	31	15.3
	300001 <	22	10.9
	Total	202	100.0
Occupation			
	Student	125	61.9
	Working	71	35.1
	Unemployed	6	3.0
	Total	202	100.0
Educational System			
	Federal	51	25.2
	Sindh	92	45.5
	Cambridge	33	16.3
	Other	22	10.9
	Total	198	98.0
Missing	System	4	2.0
Total		202	100.0

descriptive statistics are provided in Table 2. Bivariate correlations, shown in Table 3, indicate a significant positive relationship between rational thinking style and interpersonal conflict resolution and a weak positive relationship between rational thinking style and experiential thinking style. However, no significant relationship was observed between experiential thinking style and interpersonal conflict resolution.

Regression analysis using thinking style, gender, age, and birth order as predictors for interpersonal conflict resolution yielded an overall significant F value (F [2,199] = 13.35, p < .001), with an overall adjusted R-squared value of 0.128. Specifically, rational thinking style was positively related to interpersonal conflict resolution, whereas experiential thinking style was unrelated (Table 4). In addition, gender was related to interpersonal conflict resolution in that being male was associated more with better interpersonal conflict resolution. Thus, a unit change in the predictor variable of rational thinking style will result in significant change in the criterion variable which is interpersonal conflict resolution, with a predictive percentage of 15%. In a post hoc follow-up, independent t-tests were used to explore gender differences in the thinking style, with results indicating that women were more likely to use experiential thinking style than men (Table 5).

Table 3 Correlation between Thinking Styles (Rational and Experiential) and Interpersonal Conflict Resolution (N= 202)

	Rational Thinking Style	Experiential Thinking Style	Interpersonal Conflict Resolution
Rational Thinking Style	-	.178*	.341**
Experiential Thinking Style		-	.101
Interpersonal Conflict Resolution			-

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Discussions

The first aim of the present research was to examine the prevalence of thinking styles (rational or experiential) among young adults in Pakistan. Young adulthood is a crucial period for personal development and represents a

Table 2 Descriptive Statistics and Alpha Reliability Coefficients, Univariate normality of study Variable (N=202)

Variables		Items	M	SD	SK		K		Range
REI									
	Rational Thinking Style	20	3.6124	.46591	.212	.171	-.524	.341	.217
	Experiential Thinking Style	20	3.2521	.45548	.090	.171	1.024	.341	.207
CRQ		40	3.5216	.39283	-.230	.171	-.293	.341	.154

Note: M= Mean, SD= Standard Deviation, V= Variance, SK= Skewness, K= Kurtosis, REI= Rational Experiential Inventory, CRQ= Conflict Resolution Questionnaire.
As shown in Table 3, the results indicate that the Rational Thinking Style was more prevalent among young adults.

Table 4 Multiple Regression Results

Model	Beta	t	Sig.	R	R Square	Adjusted R Square
Constant		6.019	.000	.387[a]	.150	.128
Age	.118	1.762	.080			
Rational Thinking Style	.341	4.990	.000			
Experiential Thinking Style	.012	.180	.857			
Gender	.152	2.231	.027			
Birth Order	-0.28	-.419	.676			

Table 5 Comparison (Independent t-test) analysis of males and females based on Thinking Styles (rational and experiential) and Interpersonal Conflict Resolution.

	Male (n=103)		Female (n=99)				95%CI	
	M	SD	M	SD	t	p	LL	UL
Rational Thinking Style	3.6453	.47321	3.5781	.45807	1.026	.306	-0.6204	.19655
Experiential Thinking Style	3.1879	.45057	3.3189	.45315	-2.061	.041	-.25651	-.00567
Interpersonal Conflict Resolution	3.5692	.38665	3.5692	.39551	-1.694	.092	-.20177	.01528

key transition period in individuals' lives [2] in which a person faces different kinds of relational challenges such as new roles as an adult, different obligations and forms of social interaction [1]. Enduring life changes can result from developing interpersonal relationships and psychosocial functioning during this period of young adulthood [3]. Therefore, this stage lays a crucial foundation for developing lifelong intimate partnerships [30]. Resolving interpersonal conflicts effectively can result in strong, intimate bonds. Therefore, it is important that interpersonal conflict is aptly resolved during this age period.

In our sample of educated Pakistani students, rational thinking was the preferred style. This preference was not surprising, given that one of the major aims of higher education is to cultivate critical (rational) thinking skills among students [31] — and most of the sample was comprised of students and/or well educated individuals. Most teachers agree that developing critical thinking skills of students during the time of academic learning is a crucial objective as it empowers them to adopt meaningful and self-governing judgment [32]. Using an analytical (rational) style of thinking guides students in assessing their own and others' arguments. It also helps in effectively resolving disputes and in creating reasonable solutions for complex issues [33].

A second aim of this study was to determine whether a significant relationship existed between thinking styles (rational or experiential) and interpersonal conflict resolution in young adults. The results confirmed that a significant relationship existed between rational thinking style and interpersonal conflict resolution. The rational thinking style consists of solid rules, reasoning, and conscientiousness. This procedure is laborious, verbal, and has non-emotional components [20]. In contrast, the experiential thinking style consists of an instinctive-holistic style of thinking that is swift, primal, and is linked with interpersonal relationships and emotionality [34].

In his theory of transactional analysis, Berne notes that the adult ego-state consists of an autonomous set of emotions, attitudes, and patterns of behavior which are accommodated in the present situation [35]. The Adult is depicted as a rational, calculating, and integrated personality state. For survival and for dealing effectively with the outside world's problems, the adult state is essential, as it processes data and evaluates the probabilities rationally. It also faces its own kinds of complications and pleasure [36], and therefore promotes resolving interpersonal conflicts effectively.

Brain dominance reflects cognitive preferences, indicating how we prefer to learn, think, and express ourselves. These preferences emerge when solving problems or learning new things, and these cognitive preferences can influence personality [37]. For instance, preference can have an effect on the information we attend to and thus the way we perceive the world. A person who might be left-brain dominant, or a rational thinker, might be more interested in factual information, might tend to keep things organized, think in a linear manner, and be able to easily verbally express him/herself. In contrast, a right-brain individual, or an intuitive thinker, tends to think more metaphorically, is in tune with spatial surroundings, and might be creative in the way he/she expresses emotions and

thoughts [38]. One part of the brain responsible for emotional processing of information is the amygdala. When activated in the presence of a threat, this brain region leads to the release of stress hormones like adrenaline and cortisol. Goleman coined the term "amygdala hijack" to refer to this functioning, which has the effect of blocking prefrontal cortical functioning, the area of the brain responsible for making complex decisions. When such events occur, individual may be less capable of rational decision-making as emotions take control and impulsive decisions are made [39]—processes that likely interfere with resolving interpersonal conflicts.

The third aim was to understand gender differences in prevalence of thinking styles (rational or experiential) among young adults. In this study, females preferred experiential thinking style significantly more than males. Many factors may contribute to this preference— biological, psychological, and cultural. From a biological standpoint, the hormones (progesterone and estrogen), and their changes through the lifespan of women, may play important roles in neuro-psychological capacity which affects brain function, including cognition, appetite, sensory processing, emotional state, and more. As an example, in research on women with neurosis, personal diaries were analyzed through a psychoanalytic approach. In those diaries, women recorded their dreams and emotional status, and these were related to hormonal status. During the premenstrual period, women were increasingly fatigued, fearful, irritable, restless, and depressed relative to other stages of the cycle. Emotional behavior can also be regulated by the estrogen receptors and emotional processing can be impacted by estrogen via neurological factors. Emotional arousal and its intensity, which can play a leading role while handling a conflict, can also be influenced by estrogen [40]. Such different mood states and hormonal profiles of women might partly account for their preference for experiential over rational thinking styles [41].

Gender differences in preferred thinking styles may also be related to psychological-cognitive function differences. According to Hamann [42], memory for emotionally arousing experiences is superior to memory shaped by emotionally neutral events, and the two genders contrast significantly regarding emotionally arousing memory of a person [43]. For instance, emotionally elevated memories were more rapidly recalled by females and they report that the recollections of their emotional memory are more vivid, richer, and progressively extreme [44]. Yet, the more grounded impact of emotion on women's recollections of events may not be completely

beneficial, as emotion can also debilitate memory in certain circumstances, and this hindrance is also more prominent in women. Furthermore, the fact that emotional recollections of memories are more prevalent among women might be connected to the higher rate of some types of anxiety disorders and depression [45]. Finally, Murphy and Janeke's study [46] shows that thinking styles are significant predictors of emotional intelligence and that participants who have high emotional intelligence prefer more complex and creative thinking styles. Women are more intelligent emotionally in some domains than males [47], and thus they may be more creative in expressing emotions, which is a characteristic of an intuitive thinker [48] and might be one of the many reasons why experiential thinking style was most prevalent among females [49].

Perhaps most important to gender differences in preferred thinking styles are social and cultural factors. Schemas of cultures for interpreting social and employment worlds are represented by gender beliefs. These beliefs can impact attitudes, career aspirations, and the professional choices of youngsters, particularly the adolescent [50]. During childhood, instructors and guardians, through their assumptions regarding behavior, roles, and attitudes of children, will impact the gender socialization processes that guide both genders towards different professions [51]. Warrier, Toro, Chakrabarti, Børglum, & Grove [52] suggest that females are not genetically inclined or naturally disposed towards experiential thinking. Instead, social factors contribute to a person's empathy levels, with society generally expecting female children to be more understanding and in tune with their emotions. Women may show greater empathy simply because of their upbringing, life experience, and social differences, thus explaining why women rely more on experiential thinking styles. As indicated by "boys-in-crisis" authors, a rigid "Boy Code" urges young men to conceal their sentiments and weaknesses so that their "genuine selves" are kept secret [53, 54]. Spokespersons for the boys-in-crisis movement urge guardians, educators, and psychotherapists to protect young men from a societal "gender straitjacket" that forbids emotional closeness and articulation of torment feelings [55]. According to Bischoping [56], males are usually hesitant to express private emotions as an approach for preserving identity, as the expression of soft emotions suggests vulnerability which, in turn, is a tell-tale of feebleness [56]. In Pakistan, a society that follows patriarchal culture, masculinity is associated with control, including self-control. The basis of this control lies in the programmed containment of desires,

feelings, and emotions [57], leading men to rely on experiential thinking less than females.

From this viewpoint, the link between specific occupational types and gender stereotypes impacts the partialities toward educational–professional directions considered more suitable for males vs. females [58]. These differences in occupational preferences according to gender are also a factor in the underrepresentation of women in math-intensive fields: working with people is of interest to females whereas working with objects is of interest to males [59], reflected in part by the greater interest among males in STEM disciplines (science, technology, engineering, mathematics) and in people/socially-oriented professions for females. The reason behind these preferences in females may be selflessness, as women typically have stronger need than males to exhibit helping behaviors which are societally benefitting [60]. To illustrate, females acquire more qualifications in biomedical and environmental engineering than in mechanical or electrical engineering [61]. This leads to suggestibility of interests outweighing capability, even among those females who choose professions in STEM [62]. More evidence is offered by Wang and Degol [63] who conclude that a child's gender schemas about others and their outlooks about gender professions are associated with the parents' gender stereotypes reflecting abilities, interests, and gender functions. Hence, professional choices are less likely to be influenced by biology and more likely the result of a combination with community views, outlooks of gender differences in capability (e.g., men are systematic and rational, women are emotive and panic-stricken), societal weights to follow conventionally male or female preferences (e.g., "boys don't play with dolls"), and other sociocultural aspects.

Conclusions

Having a good relationship with others involves using specific thinking styles to resolve interpersonal conflicts. The present study demonstrates that rational thinking style was more prevalent among young adults and that it, rather than experiential thinking style, helps more with interpersonal conflict resolution. It was also found that females use experiential thinking style more than males, which might be due to factors such as biological predisposition, cultural influence, and emotional intelligence.

The results of this study may help young adults develop diverse thinking styles that represent a well-integrated personality that includes both rational and experiential

processes, with the former applied to interpersonal conflict problems. In addition, this research could guide organizations to make better decisions in the hiring process, as HR departments could select more appropriate candidates and make better decisions regarding termination. Training workshops could be conducted to improve the interpersonal conflict resolution by enhancing rational thinking styles in such situation.

On the other hand, thinking styles are a good predictor of emotional intelligence (EQ), so measuring EQ could contribute to the hiring process as candidates whose thinking style matches the one required for the job can be more readily identified. Retail managers could be taught improved ways for resolving conflicts and could enhance their capacities to perform in teams through training on thinking styles and emotional intelligence, which could lead to better outcomes ensuring increased profitability and success for retail organizations.

In vital facets of EQ, women are better in headship roles than men, signifying that these differences may be indispensable for women in order for them to develop professionally in their careers. As people become more aware of the worth of emotional intelligence, women have a significant chance to create added value and develop work environments where employees can grow. Furthermore, training workshops can be conducted for men to enhance emotional intelligence which will help them in developing leadership qualities.

References

1. Jensen AJ. Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychological Association* 2000; 55: 469–480. doi:10.1037/0003-066X.55.5.469

2. Monahan KC, Steinberg L, Cauffman E, Mulvey EP. Trajectories of antisocial behavior and psychosocial maturity from adolescence to young adulthood. *Developmental Psychology* 2009; 45: 1654–1668. doi:10.1037/a0015862

3. Maughan B, Rutter M. Antisocial children grown up. In J. Hill & B. Maughan (Eds.), Cambridge child and adolescent psychiatry. *Conduct disorders in childhood and adolescence* 2001 (pp. 507-552). New York, NY, US: Cambridge University Press.

4. Pascarella ET, Terenzini PT. How college affects students: Findings and insights from twenty years of research, Teachers' learning activities in the workplace: How does teacher education matter? Jossey-Bass, San Francisco, CA. 1991.

5. Jensen AJ. Young People's Conceptions of the Transition to Adulthood. *Youth & Society* 1997;29(1): 3–23. doi:10.1177/0044118x97029001001

6. Jensen AJ. Adolescent Storm and Stress, Reconsidered. American Psychological Association 1999; 54: 317-326. Available: http://www.kvccdocs.com/KVCC/ 2015-Summer/PSY215/content/L-24/Storm-Stress.pdf

7. James W. (1890/1983). The principles of psychology. Cambridge, MA: Harvard University Press.

8. Epstein S. Cognitive-Experiential Self-Theory. *Advanced Personality* 1998; 211–238. doi: 10.1007/978-1-4419-8580-4_9

9. Toomey ST, Kurogi A. Facework competence in intercultural conflict: An updated face negotiation theory. *Int J Intercultural Rel*. 1998;11:187-225. Available_http://ww.scrip.org/(S(351jmbntvnsjt1aadkpos zje)/refrence/RefrencesPapers.aspx?RefrencID=1e17865 14

10. Allinson CW, Hayes J. The Cognitive Style Index: A measure of Intuition analysis for organizational research. *Journal of Management Studies* 1996;119-135.

11. Epstein S. (2014). Cognitive-Experiential Theory: An integrative theory of personality . New York, NY: Oxford University Press

12. Cerni T, Curtis GJ, Colmar SH. Leaders' information processing systems can influence leadership styles, influencing tactics, conflict management, and organizational outcomes. *Journal of Leadership Studies*, 2014;8:3.

13. Rahim MA, Magner NR. Confirmatory Factor Analysis of the Styles of Handling Interpersonal Conflict: First-order factor model and its invariance across groups. *Journal of Applied Psychology* 1995;80:122-132. Available_https://pdfs.semanticscholar.org/2feb/ca7f8 eccd59c16a4024ffcdf4a2febe0777e.pdf

14. De Dreu CKW, Weingart LR. Task versus relationship conflict, team member satisfaction, and team effectiveness: A meta-analysis. *Journal of Applied Psychology* 2003; 88: 741–749.

15. Kreisberg S. (1992). Transforming power: Domination, empowerment, and education. Albany, NY: State University of New York Press.

16. Owens RG, Valesky TC. (2007). Organizational behavior in education: Adaptive leadership and school reform (9th ed.). Toronto, Canada: Pearson Education, Inc.

17. Oetzel, J. G., & Ting-Toomey, S. Face Concerns in Interpersonal Conflict. *Communication Research* 2003; 30(6): 599–624. doi: 10.1177/0093650203257841

18. Epstein S, Meier P. Constructive thinking: A broad coping variable with specific components. *Journal of Personality and Social Psychology* 1989; 57(2): 332–350. doi:10.1037/0022-3514.57.2.332

19. Patterson A, Quinn L, Baron S. The power of intuitive thinking: a devalued heuristic of strategic marketing. *Journal of Strategic Marketing* 2012; 20(1): 35–44. doi: 10.1080/0965254x.2011.628407

20. Pacini R, Epstein S. The relation of rational and experiential information processing styles to personality, basic beliefs, and the ratio-bias phenomenon. *Journal of Personality and Social Psychology* 1999; 76: 972-987. doi: 10.1037/0022-3514.76.6.972

21. Peterson E, Rayner SG, Armstrong SJ. The psychology of cognitive style and learning style: Is there really a future? *Learning and Individual Differences* 2009; 19(4): 518-523.

22. Hendry G, Ryan G, Harris J. Group problems in problem based learning. *Medical Teacher* 2003; 25(6): 609–616.

23. Beşer A, Utku M. Hemşirelik ve mühendislik öğrencilerinin eleştirel düşünme eğilimlerinin belirlenmesi. İkinci Aktif Eğitim Kurultay Kitabı, I. Baskı. İzmir, 2005; 366-379.

24. Maslow AH. (1970). Motivation and Personality. New York: Harper & Row.

25. Sladek RM, Bond MJ, Phillips PA. Do doctors, nurses and managers have different thinking styles? *Aust Health Rev* 2010; 34: 375-380.

26. Witteman C, van den Bercken J, Claes L, Godoy A. Assessing rational and intuitive thinking styles. *European Journal of Psychological Assessment* 2009; 25: 39–47.

27. McClellan J. (1997). The Conflict Resolution Questionnaire. Retrieved from http://www.qvctc. commnet.edu/classes/ssci121/questnr.html

28. Henning M. Reliability of the Conflict Resolution Questionnaire: Considerations for using and developing Internet-based questionnaires. *The Internet and Higher Education* 2004; 7: 247-258. Available: https://doi.org/10.1016/j.iheduc.2004.06.005

29. Henning M. (2003). Evaluation of Conflict Resolution. Auckland University of Technology

30. Erikson EH. (1968). Identity: Youth and Crisis, Norton, New York.

31. Roth MS. (2010). Beyond critical thinking. The Chronicle of Higher Education. *chronicle.* Retrieved from http://chronicle.com

32. Taleb HM. Enhancing Student Critical and Analytical Thinking Skills at a Higher Education Level in Developing Countries: Case study of the British university in Dubai. *Journal of Educational and Instructional Studies in the World* 2006; 6(1): 08. Available_http://www.wjeis.org/FileUpload/ds217232/ File/8a.hanan_m._taleb.pdf

33. Allegretti CL, Frederick JN. A Model for Thinking Critically about Ethical Issues. *Teaching of Psychology* 1995; 22: 46–48. doi: 10.1207/s15328023top2201_14

34. Epstein S. (2008). Intuition from the perspective of cognitive-experiential selftheory. In H. Plessner, C. Betsch, & T. Betsch (Eds.), Intuition in judgment and decision making (pp. 23–37). Mahwah, NJ: Erlbaum.

35. Berne E. (1977). Transactional analysis: A new and effective method of group therapy. In E. Berne, Intuition and ego states: The origins of transactional analysis (pp. 145-158)(P. McCormick, Ed.). San Francisco: TA Press. (Original work published 1958)

36. Berne E. (1964). Games People Play – The Basic Hand Book of Transactional Analysis. New York: Ballantine Books.

37. Herrmann N. (1994). *The Creative Brain.* Lake Lure, NC: Brain Books.

38. Bagwell, S. (2013, May 27). Predicting Thinking Styles with Early Recollections (Doctoral Dissertation). *ProQuest Dissertations Publishing.* Retrieved from https://search.proquest.com/openview/eece7fcd95d85e01a5c945fb12b05301/1?pq-origsite=gscholar&cbl=18750&diss=y

39. Hamilton DM. (2015). Calming Your Brain During Conflict. *hbr.org.* Retrieved from https://hbr.org/2015/12/calming-your-brain-during-conflict Available: http://aut.researchgateway.ac.nz/bitstream/handle/10292/49/HenningM.pdf

40. Chen CP, Cheng DZ, Luo Yue-Jia. The influence of estrogen on female mood changes. (2012). *Chinese Science Bulletin* 2012; 57: 1351–1351. doi: 10.1007/s11434-011-9936-0

41. Farage MA, Osborn TW, MacLean AB. Cognitive, sensory, and emotional changes associated with the menstrual cycle: A review. *Archives of Gynecology and Obstetrics* 2008; 278: 299–307. doi: 10.1007/s00404-008-0708-2

42. Hamann S. Sex differences in the responses of the human amygdala. *The Neuroscientist* 2005; 11: 288–293. Available: http://languagelog.ldc.upenn.edu/myl/llog/Brizendine/Hamann2005.pdf

43. Hamann S, Canli T. Individual differences in emotion processing. *Current Opinion in Neurobiology* 2004; 14(2): 233–238. doi: 10.1016/j.conb.2004.03.010

44. Seidlitz L, Diener E. Sex differences in the recall of affective experiences. *Journal of Personality and Social Psychology* 1998; 74: 262–271. doi: 10.1037/0022-3514.74.1.262

45. Davidson RJ, Pizzagalli D, Nitschke JB, Putnam K. Depression: Perspectives from Affective Neuroscience. *Annual Review of Psychology* 2002; 53: 545–574. doi: 10.1146/annurev.psych.53.100901.135148

46. Murphy A, Janeke HC. The Relationship between Thinking Styles and Emotional Intelligence: An Exploratory Study. *South African Journal of Psychology* 2009; 39(3): 357–375. doi: 10.1177/008124630903900310

47. Freedman J. (2012). Women's Leadership Edge: Global Research on Emotional Intelligence, Gender, and Job Level. *6seconds.org*. Retrieved from https://www.6seconds.org/2012/09/11/research-emotional-intelligence-gender-career/

48. Bagwell S. Predicting thinking styles with early recollections, 2013. Available: https://search.proquest.com/openview/eece7fcd95d85e01a5c945fb12b05301/1?pq-origsite=gscholar&cbl=18750&diss=y

49. Salovey P, Mayer JD. Emotional Intelligence. *Imagination, Cognition and Personality*, 1990; 9: 185–211. doi: 10.2190/dugg-p24e-52wk-6cdg

50. Ramaci T, Pellerone M, Ledda C, Presti G, Squatrito V, Rapisarda V. Gender stereotypes in occupational choice: a cross-sectional study on a group of Italian adolescents. *Psychology Research and Behavior Management* 2017; 10: 109–117. doi: 10.2147/prbm.s134132

51. Motofei IG, Rowland DL, Baconi DL, et al. Androgenetic alopecia; drug safety and therapeutic strategies. *Expert Opin Drug Saf.* 2018;17(4):407–412. doi:10.1080/14740338.2018.1430765

52. Warrier V, Toro R, Chakrabarti B, Børglum AD, Grove J. Genome-wide analyses of self-reported empathy: correlations with autism, schizophrenia, and anorexia nervosa. *Translational Psychiatry,* 2018; 8. doi: 10.1038/s41398-017-0082-6

53. Pollack WS., & Levant RF. (Eds.). (1998). New psychotherapy for men. New York: Wiley

54. Oransky M, Marecek J. "I'm Not Going to Be a Girl." *Journal of Adolescent Research* 2009; 24: 218–241. doi: 10.1177/0743558408329951

55. Pollack WS. The "war" for boys: Hearing "real boys'" voices, healing their pain. *Professional Psychology: Research and Practice* 2006: 37(2): 190–195. doi: 10.1037/0735-7028.37.2.190

56. Bischoping K. Gender differences in conversation topics, 1922?1990. *Sex Roles* 1993; 28(1-2): 1–18. doi: 10.1007/bf00289744

57. Bendelow G, Williams SJ. (Eds.). (2002). Emotions in Social Life: Critical Themes and Contemporary Issues. Routledge.

58. Ramaci T, Pellerone M, Ledda C, Presti G, Squatrito V, Rapisarda V. Gender stereotypes in occupational choice: a cross-sectional study on a group of Italian adolescents. *Psychology Research and Behavior Management* 2017; 10: 109–117. doi: 10.2147/prbm.s134132

59. Su R, Rounds J, Armstrong PI. Men and things, women and people: A meta-analysis of sex differences in

interests. *Psychological Bulletin* 2009; 135: 859–884. doi: 10.1037/a0017364

60. Weiss D, Freund AM, Wiese BS. Mastering developmental transitions in young and middle adulthood: The interplay of openness to experience and traditional gender ideology on women's self-efficacy and subjective well-being. *Developmental Psychology* 2012; 48: 1774-1784. Available: http://dx.doi.org/ 10.1037/a0028893

61. Ceci S, Williams W. When Scientists Choose Motherhood. *American Scientist* 2012; 100: 138. doi: 10.1511/2012.95.138

62. Tai RH. Career choice: Enhanced: Planning Early for Careers in Science. *Science* 2006; 312: 1143–1144. doi: 10.1126/science.1128690

63. Wang MT, Degol JL. Gender Gap in Science, Technology, Engineering, and Mathematics (STEM): Current Knowledge, Implications for Practice, Policy, and Future Directions. *Educational Psychology Review* 2017; 29: 119–140. doi: 10.1007/s10648-015-9355-x