

Construction and Validation of Organizational Conflict Types and Conflict Management Styles Inventories

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Conflicts occupy a pertinent role in every aspect of human life and organizational settings are not an exception. In the absence of indigenous, comprehensive and latest assessment measures for organizational conflict types and management styles, the present study aimed to develop and validate inventories for both constructs by converging on the sociocultural context. Ensuing an exploratory sequential design, the investigation started with a qualitative study in which five focus group discussions (FGDs) were conducted with 30 professionals (including teachers, bankers, engineers, managers and doctors) who shared their experiences of organizational conflicts by highlighting types and management styles. From an initial pool of 137 items (65 & 72 items respectively), the subject matter experts finalized 55 items each for organizational conflict types and management style inventories. In study II, exploratory factor analysis was administered on a sample of 400 adult professionals resulting in a six-factor Qayyum-Younas Organizational Conflict Types Inventory (QY-OCTI) with 40 items. It was later confirmed by running a Confirmatory Factor Analysis on another sample of 400 professionals. In study III, EFA was conducted on a sample of 310 participants that revealed a six-factor model of the Qayyum-Younas Organizational Conflict Management Styles Inventory (QY-OCMSI) with 48 items and this model was later confirmed by running CFA on a sample of 490 participants. These scales have significant research, academic and organizational setting-based implications.

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The culture of any organization is considered a primary contributing factor that significantly impacts the performance and productivity of employees (Derine et al., 2021). But it is pertinent to undertake that organizational conflict (OC) is also a paramount challenge that requires effective management conducive to organizational growth. Recounted as a state of the clash between two or more individuals, ideas or interests (Rahim, 2002), the conflicts in any institution typically build unsettling conditions that involve a lack of liaison and trust while also obstructing close communication channels.

Organizational Conflict and its Types

Studies based on organizational settings conducted over the past fifty years (Francis et al., 2015) have argued that conflicts are all around in life and have detrimental effects on organizational functioning. They seem to be the natural and inevitable elements of all human interactions, operative at all levels of society whether interpersonal, intra-psychic, intergroup, intra-group or international (Mateeva & Dimitrov, 2013). Dinn-Fitri (2018) maintained that the presence of conflict indicates that the organization is healthy as it gives way to change and innovation, which is deemed beneficial for the organization.

Mikkelsen and Clegg (2018) studied OC and observed three major shifts in its theorization over the past six decades, which include viewing conflicts as a distinct behavioural phenomenon, as an instrumental means for achievement and lastly, as a social construction dependent on how reality is perceived. They can either occur at colleagues' or supervisors' levels or can emerge among different sections and departments of the organization (Imazai & Ohbuchi, 2002).

Talking about the causes of OC, Shaub (2010, as cited by Dinn-Fitri, 2018) reported internal and external factors. While internal conflict involves unhealthy communication, avoidance of the issues when they are manageable, problematic organizational structure, lack of diversity in the workplace, individual differences in personality and ways of perception, flex offices and non-fulfilment of expectations or/and needs; external conflicts talks about the issues an employee brings into the office like personal problems and stress. At times

personal attributes like race-based prejudice and generalizations can also lead to conflicts at the workplace that may or may not have a direct relationship with the organization.

As far as its types and classification is concerned, several studies have struggled to explain OC in somewhat similar and at times different terms. Like, Brewer et al. (2002) classified conflicts into horizontal and vertical conflicts and argued that horizontal conflicts involve competition among functions like line versus staff, or production versus sales and are mostly experienced by colleagues and coworkers. On the other hand, vertical conflicts manifest themselves at the hierarchical level and explain the conflicts between supervisors and their subordinates.

Similarly, Rahim (2002) provided substantial evidence on conflict types and their management and narrated two substantial components of conflicts as the emotive and cognitive components of conflict. While emotive conflict contains various emotions in its functional value, the cognitive component of the conflict stresses the information processing and thinking aspect of the conflict.

Likewise, Kreitner and Kinicky (2001) argued for three types of conflicts namely personality conflict that involves personal preferences, styles and interests and usually starts with insignificant irritation. Then there's the inter-group conflict that is the most common threat to organizations and emerges between groups. Lastly, there is a cross-cultural conflict that involves cultural differences.

Moreover, another researcher categorized four different types of OC (Thakore, 2013). It includes intrapersonal conflict that takes place between individuals, while inter-group conflict is between different groups. Moreover, the third category is the intra-group conflict which undertakes conflict between groups as a whole and the fourth and final conflict is called inter-organizational conflict which causes a rift between different organizations.

Furthermore, studies classify conflicts into the categories of relationship conflict, task conflict and process conflict (Hu, et al. 2018). Also, Mu (2021) considered that conflicts can either be divided based on their causes involving internal processes like a task, process or relational conflict; or based on their start that may involve internal, external, and systematic conflict.

It is also interesting to note that while several studies focused on the dysfunctional outcomes of conflicts, some studies also focused on functional outcomes. Discussing the functional aspects of conflicts, Rahim (2017) argued that conflicts can stimulate innovation and creativity, leading to improved decision-making and opportunities to

find unique alternate solutions. They can also increase individual and group performance as they would be forced to search for new approaches, which might require positional clarity from organizations, thus ushering in change.

But on the other hand, dysfunctional outcomes can cause job stress, burnout, dissatisfaction, and lower job performance. It can also lead to a breakdown of communication among individuals and groups that will further damage their professional relationships, creating an environment of mistrust and suspicion. Moreover, employees may be more resistant to any change and their job commitment and loyalty will also be affected. It is quite clear from these findings that conflict has both positive and negative consequences. And if any organization wants to get benefit from conflict, the negative effects of conflict must be controlled while its positive effects should be enhanced.

Previous studies highlight the impact of organizational conflicts (OCs) across various professional settings. In a study, Nwokorie-Edwin (2017) found that unclear responsibilities, poor reward system, and lack of group cohesiveness, were responsible for OCs. Similarly, another study found that the task, relationship and process conflicts were influenced by three factors namely (a) the personal attributes of the participants, (b) their interpersonal relational characteristics and, (c) the characteristics of the project (Wu et al., 2017).

Also, Dinn-Fitri (2018) found that lack of communication, cultural diversity and unmet expectations and needs were major contributing factors to conflicts. Likewise, a study found a negative association between relationship conflict and team creativity (Hu et al., 2017). Furthermore, Zheng et al. (2019) concluded that inter-organizational conflict provided a useful heuristic for articulating and understanding the inter-organizational relationships within the Chinese elite sports system.

While exploring the antecedents and consequences of conflict in a New Product Development (NPD) setting, Um and Oh (2021) concluded that NPD task uncertainty simultaneously provoked cognitive and affective conflict and both cognitive and affective conflicts affect NPD performance in opposite directions. Similarly, Raub et al. (2021) concluded that role ambiguity was negatively related to task performance while role conflict predicted hospitality employees' job attitudes. Moreover, a study found that human-rooted conflict (HRC) was always a threat to software project success for any organization or team size (Basirati et al., 2020). Also, Abah et al. (2019) reported that conflict in secondary schools had dampened the

morale of teachers and other staff and negatively affected their productivity.

A few studies have also discussed the role of sociodemographic variables and leadership styles concerning OCs. Van den Oever and Beerens (2021) found a partial mediating effect of task-related conflict in the board gender diversity–organizational performance relationship. Similarly, a study found a positive effect of transformational leadership on interpersonal communication and OC (Mukhtar et al., 2020). While Hasani et al. (2018) did not find significant gender differences between the causes of OC, still differences in age, education and work experience were observed.

Organizational Conflict Management Styles

Organizational effectiveness depends upon the way it handles conflict in a constructive and timely manner. With a frequent rise in conflicts, it has even become more important to apply accepted means of resolving conflicts (Rahim, 2017). Nordbhy (2018) believed that organizational conflict management (OCM) primarily depends upon the managers' conflict resolution skills, which included their relational attitudes and effective communication. But other than that, the nature of conflicts also plays a significant role in strategizing conflict management (Budd et al., 2018). Therefore, it's imperative to manage conflicts at an apt time, to establish a conducive workplace environment (Sadia et al., 2017).

Mu et al. (2021) suggested that project managers should adopt a constructive debate approach for knowledge acquisition and assimilation while Perrigot et al. (2019) concluded that the implementation of conflict management processes over time and with various franchisees nurtures the conflict management capabilities of franchisors. Similarly, a study investigated OCM and found that employee engagement fully mediated the relationship between conflict management climate and innovative behaviour (Jung & Yoon, 2018). Also, Apipalakul and Kummooon (2017) found that organizational structure, level of responsibility, warmth, standard of performance and unity were positively associated with OCM.

While studying the effects of conflict due to uncivil social interactions between consumers on social media fan pages, Dineva et al. (2020) identified five different organizational conflict management strategies namely non-engaging, censoring, bolstering, educating, and

mobilizing and found them affect consumers' attitudes towards the conflict management.

Furthermore, a study revealed that mindfulness facilitates constructive conflict management by increasing collaboration and reducing avoidance (Kay & Skarlicki, 2020). Also, another study found that cultivating the spirit of learning in the organization and also improving the communication skills of employees, individuals and OCs can be prevented (Mohammad & Ali, 2020). Similarly, Hodgson et al. (2018) stressed the usage of dialogue and collaborative styles for OCM.

Further, Muathle (2021) found negotiation and collaboration had a positive impact on conflict management while avoidance was found to have a negative relationship with employees' performance. Similarly, a study concluded that the most commonly used conflict resolution strategy was cooperation while avoidance was found to be the least used style (Al-Rousan & Al-Kenani, 2018). Moreover, Ray (2019) argued that organizations were racial structures that affect their foundations, hierarchies and processes. By considering race as a constitutive of organizations, stability and change can be managed.

Also, Lacity and Willcocks (2017) found Thomas and Kilmann's typology of conflict resolution styles to be robust and concluded that only the collaborative and switched-to-collaborative styles resolved conflicts. Similarly, Caputo et al. (2018) reported the impact of cultural orientations on OCM while Kościelniak (2018) did not find any direct effect of gender on OCM. Another study argued that professionalism which encompasses an attitude and character of being, competency in the field, observing codes of conduct, the pursuit of excellence and an enthusiastic attitude are the keys to solving conflicts (Mbegu, 2018).

Shedding light on the role of leadership in conflict resolution, a study argued that constructive conflict management is a core leadership skill (Hull & Ragsadle, 2020). Similarly, Williams (2021) concluded that a skilful leader cultivates strategies for dealing with tension, emotion, and diverse viewpoints, all of which enable the creation of an effective team that will lead to better outcomes.

Theoretical Underpinnings of Organizational Conflict

Organizational conflicts are interpersonal conflicts as they are a product of interpersonal interaction. Research suggests that four different types of theories explain interpersonal conflict (Schellenberg,

1996). First of all, there are individual trait-based theories that address the conflictual situations among individuals and result in personal attacks and disregard. Second, there are social process theories that focus on the relational dynamics between conflict, competition and cooperation. Third, there are social structure theories that target the social hierarchy that creates conflict due to inequality and inequity. Lastly, there are logical and mathematical theories that look at conflict through the lens of systematic and logical means and highlight various opportunities and alternatives to generate different outcomes.

In the present study, we focused on the social process theories that have previously been applied to a variety of contexts and taking the lead from Rahim et al. (2000), the present investigation involved the perception of the justice model, which maintained that negative forms of conflicts emerge from a perceived sense of injustice (Deutsch, 2000), which also seemed to influence how people deal with conflicts (Rahim et al., 2000).

Overview of Scales on Organizational Conflict Types and Conflict Management Styles

Most of the conflict scales that appear in the latter half of the 20th century were based on Blake and Mouton's managerial grid but still had different assumptions about the nature of conflict management (Womack, 1988). Also, a majority of these scales measured OCM styles by either focusing on general strategies or specific tactics. The Conflict Management Survey (CMS) by Hall (1969) can be regarded as the foremost scale of conflict management. Although it was very comprehensive with specific organizational contexts, it was lengthy, difficult to administer and assumed that one particular style is the most effective.

Then, there was the Thomas-Kilman MODE Survey (1974) which had better reliability and was easy to administer, score and interpret but its ipsative format made the research process rather complicated. In 1982, Putnam-Wilson Organizational Communication Conflict Instrument (OCCI) was developed which is considered the most reliable and valid instrument among the scales of the conflict of this era. Its situational focus enables the researchers to specify the target and context of the conflict but it lacked a clear scoring process. Also, another scale appeared in 1982 by Ross and DeWine is known as Conflict Management Message Style (CMMS) with good reliability and focused on the wording of the messages rather than the intentions of the communication but it did not incorporate the messages a

manager might send in organizations (Womack, 1988). The last major instrument of this era is the Rahim Organizational Conflict Inventory-II (ROCI-II) which was developed in 1983 with a large sample of executives. It incorporated the five-factor structure given by Blake and Mouton and is available in different forms for different target samples (superior, subordinate and peer). Its scoring was considered more difficult than other scales and initial testing was conducted only on the managerial population. It is regarded as one of the popular and comprehensive scales that measures both organizational conflict types (OCTs) and organizational conflict management styles (OCMSs).

From the above overview of the major available scales, it's quite evident that most of them only measure OCMSs and almost all of them were developed and validated in western samples thus leaving behind a significant research gap for culture-specific measures. Furthermore, almost all of them were developed decades ago and the dynamics of organizational settings have evolved since then.

Though, a few other scales were also developed in the last two decades, like a theory-based instrument of OCMSs by de Dreu et al. (2001), which did not measure OCTs. Similarly, Haque (2004) also developed a 37-item OCMSs scale that was limited to five dimensions and validated on corporate managers only. Therefore, it would be a worthwhile contribution to develop and validate indigenous scales for both constructs. Hence, the objectives for the current investigation were: (a) to develop and validate an indigenous measure of organizational conflict types, and (b) to develop and validate an indigenous measure of organizational management styles.

Rationale and Significance of the Study

The research literature on OC clearly shows that there are certain antecedents of conflicts and if they are not addressed timely and appropriately manner, they can negatively affect organizational efficiency. A review of available scales highlights the fact that though there were few OCMSs scales in existence, there's an absence of OCTs scales, which might be indigenous, latest and comprehensive. This categorically calls for the development of assessment measures for both organizational conflict types and conflict management styles. The development and validation of these assessment measures would enrich the existing research scholarship on OC and fill the research gap. Apart from these inventories being valuable for academics and researchers focused on organizational settings, these inventories would also be beneficial for the human resource management (HRM)

departments of various organizations as they would provide them with empirical evidence and indigenous assessment measures to deal with OC in their respective workplaces. By addressing the underlying conflictual issues, organizations would be able to create a conducive environment imparting a positive impact on their attitudes towards work efficiency and decreasing turnover intentions.

Method

Research Design and Plan

Following an exploratory sequential research design, the following investigation involved three studies. Study I involved a qualitative approach, in which focus group discussions (FGDs) were conducted with several professionals, inquiring about their experiences of OCTs and OCMSs. In study II, the exploratory factor analysis (EFA) of the OCTs inventory was conducted on a sample of participants that showed a six-factor solution which was later confirmed through confirmatory factor analysis (CFA).

In study III, EFA for OCMSs inventory was administered to a sample of participants that also revealed a six-factor solution duly confirmed later by CFA analysis.

Study I

Study I was a qualitative investigation that aimed to explore the experiences of participants by developing a focus group discussion (FGD) protocol which included questions about OCTs and OCMSs like, *what type of conflicts do you think exist at your workplace? What kind of conflicts do you face in your organization? Elaborate with an example. How do people usually deal with these conflicts? How do you resolve workplace conflicts? Explain with an example.*

Sample

The participants for all five FGDs were recruited through the non-probability purposive sampling technique and comprised of professionals working across diverse public and private workplace settings (i.e. teachers, bankers, engineers, managers and doctors), with six participants each ($N = 30$) from every organizational setting.

Ethical Considerations

Throughout the research process, strict adherence to institutional and APA ethical guidelines was observed. Only those participants were recruited who gave their formal consent. Pseudonyms were used

in the transcription process to maintain the anonymity of the participants.

Procedure

After taking institutional permission, participants from different workplace settings were approached and those who showed interest and gave their formal consent were recruited. Each FGD session lasted for 90-120 minutes on average and generated valuable information regarding the OCTs and OCMSs. Transcriptions were made after conducting the FGDs and a total of 137 items were generated from the data. After scrutiny by the five expert judges (including three Assistant Professors of Psychology, one MPhil scholar from the Institute of Business Administration and one Lecturer from the English Department), 55 items each for OCTs and OCMSs inventories were finalised.

Study II

Study II involved the validation of OCTs inventory and was administered in two phases. The initial pool of items was 65 but the subject matter experts (SMEs) included 55 items only.

Sample

In phase one, the 55-item OCTs inventory was administered to a sample of ($N = 400$) young adults working in education, health, business and marketing, pharmaceutical and technology-based professional settings, recruited through the non-probability purposive sampling technique. A total of 550 questionnaires were distributed among the willing participants but only 400 were included in the final assessment as 123 participants did not return the questionnaires in time, while 27 forms were incomplete. The response rate was 73%.

Similarly, for phase two the 40-item OCTs inventory was administered to another sample of ($N = 400$) young adults working in education, health, business and marketing, pharmaceutical and technology-based professional settings, recruited through the non-probability purposive sampling technique. A total of 590 questionnaires were distributed among the willing participants but only 400 were included in the final assessment as 139 participants did not return the questionnaire in time, while 51 forms were incomplete. The response rate was 68%.

Ethical Considerations

Throughout the research process, strict adherence to institutional and APA ethical guidelines was observed. Only those participants were recruited who gave their formal consent and completed the questionnaire. All the information was kept confidential.

Procedure

After taking institutional permission, participants from different workplace settings were approached and only those recruited who gave their formal consent and returned the duly completed questionnaires. The study was conducted in two phases. In phase one; EFA was conducted on 55 item inventory that showed the emergence of a six-factor model but with 40 items. In phase two, this 40-item OCTs inventory was administered to a new sample after following the mandated ethical guidelines and analyzed through CFA that confirmed the six-factor model for Qayyum-Younas Organizational Conflict Type Inventory (QY-OCTI).

Results

During phase one, the 55-item inventory was administered to a sample of interest. To identify different factors of the inventory, principal component analysis (PCA) with varimax rotation was used. Moreover, the Eigenvalue above one was used to retain the factors on loading ($\geq .30$), while the scree plot was used to determine the numbers of the factors (Finch, 2020).

The exploratory factor analysis (EFA) through the correlation matrix showed that 40 out of the 55 items showed factor loadings $\geq .30$ with an Eigenvalue of one. Secondly, the Kaiser-Meyer-Olkin (KMO) that measures the sampling adequacy was found to be .82. This value of KMO supported the finest sampling adequacy on this inventory. Bartlett's test of sphericity was also significant (9215.15, $p < .001$). Finally, the commonalties' value on these items was also higher than .3, which confirmed that each item shared a common variance item.

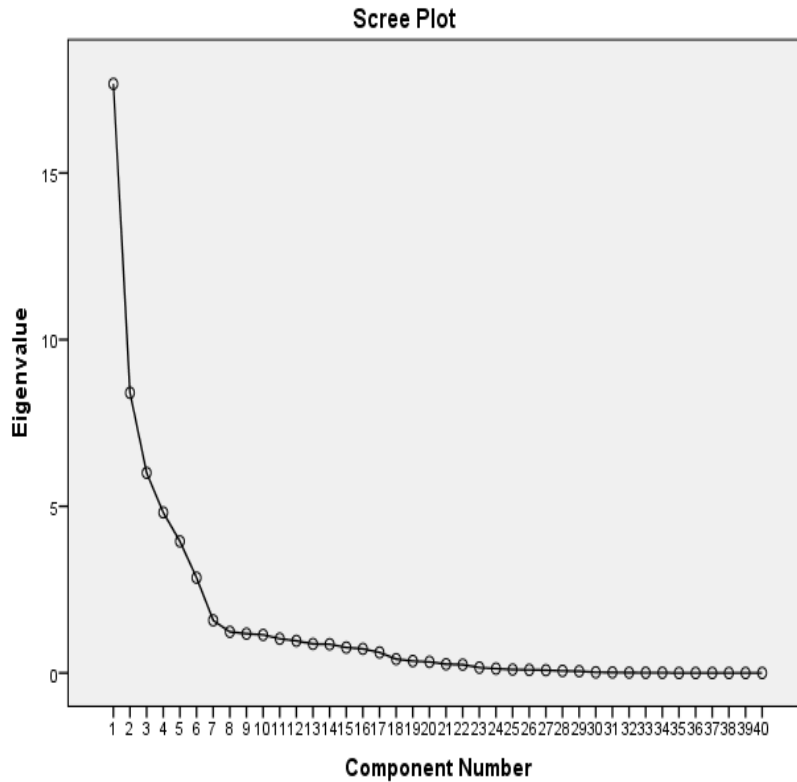


Figure 1. *Scree Plot Showing Extractions of Factors of Qayyum-Younas Organizational Conflict Type Inventory (QY-OCTI).*

In figure 1, the scree plot was used to determine the number of factors for the QY-OCTI. According to the scree plot, the elbow at first turned on the fourth, then on the sixth and further on the seventh factor but the rotated component matrix showed that all the items were loaded on six factors. So, this initial exploratory factor analysis indicated a six-factor QY-OCTI. For scoring purposes, a five-point Likert scale was devised where a score of 1 was assigned to option 'Never' and 5 to 'Always'. For analysis, the mean scores for all six factors were calculated separately and analysed.

The factors were clustered together and labelled following the thematic nature of the items namely (a) masquerading conflict, (b) transformative conflict, (c) task conflict, (d) procedural conflict, (e) role conflict and, (f) institutional conflict. The details of each factor are given below:

Masquerading Conflict. This conflict type arises when one has an emotional/personal dislike or resentment for others but tries to mask it by expressing it through task-related problems.

Transformative Conflict. This conflict type arises when one has an organizational task-related conflict but that eventually becomes an emotional conflict where one engages in personal attacks.

Task Conflict. This conflict type arises when the problems related to task performance like the approach used to complete a task or the difficulties that delay its completion takes place.

Procedural Conflict. This conflict type arises from the ambiguity and disagreement over the procedures essential for the completion of the tasks.

Role Conflict. This conflict type emerges from the ambiguity over the assigned roles and responsibilities of oneself and others in the organization.

Institutional Conflict. This conflict type arises from the organizational policies, rules and strategies that affect the workplace dynamics, leading to multiple conflicts.

Similarly, during phase two, this six factors model for QY-OCTI inventory was analysed through CFA which confirmed the six-factor solution.

Table 1
Factor Analysis of Qayyum-Younas Organizational Conflict Type Inventory (QY-OCTI)

QY-OCTI items	Factor loadings					
	1	2	3	4	5	6
<i>Factor 1: Masquerading</i>						
5. Employees hide their...						.97
9. Employees have negative...						.95
15. Employees, who have...						.95
21. Employees create...						.94
23. Employees, who...						.97
24. Employees involved in...						.97
32. Employees criticize...						.94
34. Employees satisfy...						.94
36. Employees make the...						.95
39. Employees instigate...						.97
<i>Factor 2: Transformative Conflict</i>						
4. Employees yell at...						.99
26. Employees feel that...						.97

QY-OCTI items	Factor loadings					
	1	2	3	4	5	6
27. Employees' work...		.98				
28. Employees' task...		.60				
33. When employees...		.98				
37. Employees' task...		.99				
<i>Factor 3: Institutional Conflict</i>						
2. Employees work...			.69			
3. Employees find it...			.65			
6. Employees find it...			.66			
7. Employees find it...			.71			
8. Employees are stressed...			.68			
10. Employees'64			
17. Employees feel...			.68			
18. Employees disagree...			.73			
19. Employees feel...			.71			
20. Employees' job...			.71			
<i>Factor 4: Task Conflict</i>						
11. Employees find it...				.97		
12. Employees find...				.62		
13. Employees find it hard...				.49		
14. Incapable employees...				.55		
16. Employees are given...				.97		
22. Employees have...				.94		
25. Employees' task...				.97		
<i>Factor 5: Role Conflict</i>						
31. Employees have...					.97	
35. Employees don't have...					.89	
38. Employees disagree...					.92	
40. Employees are...					.97	
<i>Factor 6: Procedural Conflict</i>						
1. Employees disagree...						.97
29. Employees disagree...						.96
30. Employees disagree on...						.98

Note. N=400. The abstraction method was the principal component with varimax rotation. Factors that were loaded above .3 are mentioned in the table.

Moreover, the overall Cronbach alpha reliability of QY-OCTI was found to be .90 while the alpha reliabilities for all of its subscales ranged between .89 to .99; with masquerading showing the highest α reliability index (.99) while institutional conflict showed the lowest (.89) reliability value among the respective subscales. All values showed high internal consistency.

Table 2

Cronbach Alpha Reliabilities of the Subscales of QY-OCTI

<i>Subscales with Respective Item No.</i>	<i>α</i>
Masquerading (5, 9, 15, 21, 23, 24, 32, 34, 36, 39)	.99
Transformative Conflict (4, 26, 27, 28, 33, 37)	.97
Institutional Conflict (2, 3, 6, 7, 8, 10, 17, 18, 19, 20)	.89
Task Conflict (11, 12, 13, 14, 16, 22, 25)	.91
Role Conflict (31, 35, 38, 40)	.95
Procedural Conflict (1, 29, 30)	.99

Study III

Study III involved the validation of OCMS inventory and was administered in two phases. The initial item pool included 72 items but after the decision of SMEs, only 55 items were retained.

Sample

In phase one, the 55-item OCMSs were administered to a sample of ($N = 310$) young adults working across the education, health, business and marketing, pharmaceutical and technology sectors, recruited through the non-probability purposive sampling technique. A total of 500 questionnaires were distributed among the willing participants but only 310 were included eventually as 105 participants did not return the questionnaires in time, while 85 questionnaires were incomplete. The response rate was 62%.

Similarly, for phase two the 48-item OCMSs inventory was administered to a sample of ($N = 490$) young adult professionals from the education, health, business and marketing, pharmaceutical and technology sectors, recruited through the non-probability purposive sampling technique. A total of 600 questionnaires were distributed among the willing participants but only 490 were included in the final assessment as 67 participants did not return the questionnaires in time, while 43 forms were incomplete. The response rate was 82%.

Ethical Considerations

Throughout the research process, strict adherence to institutional and APA ethical guidelines was observed. Only those participants were recruited who gave their formal consent and completed the questionnaire. All the information was kept confidential.

Procedure

After taking institutional permission, participants from different workplace settings were approached and only those recruited showed

their formal consent and returned the duly completed questionnaires. The study was conducted in two phases. In phase one; EFA was conducted on the 55-item inventory which showed the emergence of a six-factor model with 48 items. In phase two, the 48-item inventory was administered to a new sample and analyzed through CFA which duly confirmed the six-factor model for Qayyum-Younas Organizational Conflict Management Styles Inventory (QY-OCMSI).

Results

In phase one, to identify different factors of QY-OCMSI according to our context, principal component analysis (PCA) with varimax rotation was conducted on the 55-item inventory. The Eigenvalues higher than one were retained with the factors loadings of ($\geq .30$), while a scree plot was used to determine the numbers of the factors (Finch, 2020). Moreover, the Kaiser-Meyer-Olkin (KMO) value for sampling adequacy was found to be .82, which supports the finest sampling adequacy of this inventory. Also, Bartlett's test of sphericity was found to be significant (9451.14, $p < .001$). Finally, the communalities' value on these items was also greater than .3 which confirmed that each item shared a common variance item. Scoring was done by applying a five-point Likert scale, where a score of 1 was assigned to the option 'Never' and 5 to 'Always'. For analysis, the mean scores for all six factors were calculated separately and analysed.

Figure 2. Scree Plot Showing Extractions of Factors of Qayyum-Younas Organizational Conflict Management Styles Inventory (QY-OCMSI).

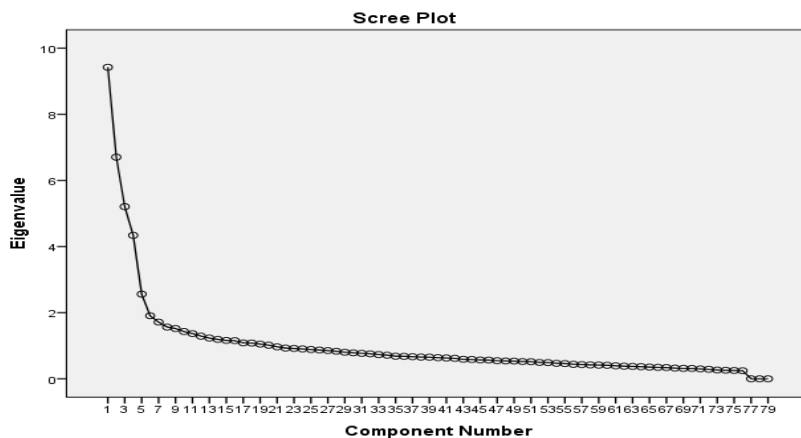


Figure 2 showed the Scree plot, with an elbow that at first turned on the fourth and then on the sixth factor but rotated the component matrix. This meant that all the items were loaded on six- factors. So, According to this initial exploratory factor analysis, it had been seen that all 48 items were suitable for confirmatory factor analysis (CFA) under six factors. All six factors were clustered together and were labelled according to the nature of items as (a) dominating, (b) collaborating, (c) Compromising, (d) avoiding, (e) obliging, and (f) competing. The details of each factor/subscale are given below:

Dominating Style. In this management style, the person tries to resolve a conflict authoritatively, without considering the concerns of others.

Collaborating Style. This management style involves the integration of various parties and individuals, who devise strategies for mutual interaction and includes opinion-taking from others to resolve the issue collectively.

Compromising Style. This management style resolves the conflict by finding a middle approach and by adopting a give-and-take strategy to reach a mutually acceptable decision.

Avoiding Style. In this management style, one tries to deal with a conflict initially by ignoring it and then by withdrawing from the conflict situation.

Obliging Style. This management style involves accommodation by resolving conflict through making concessions and sacrifices at one's end for others, without observing any reciprocity.

Competing Style. This management style focuses on those competitive abilities and skills that the individual use positively for conflict resolution. Unlike the dominating style, this style operates based on competencies and skills rather than authoritativeness, which is a predominant feature of the dominating style.

During phase two, the CFA was conducted to confirm the 48 items on six factors of the Qayyum-Younas Organizational Conflict Management Styles Inventory (QY-OCMSI).

Table 3

Factor Analysis of Qayyum-Younas Organizational Conflict Management Styles Inventory (QY-OCMSI)

QY-OCMSI items	Factor loadings					
	1	2	3	4	5	6
<i>Factor 1 Dominating</i>						
13. I use my...	.91					
36. I use my authority...	.81					
37. I use my power91					
39. I assert on91					
46. I feel satisfied46					
49. I am capable34					
52. I stand with81					
53. I work according...	.56					
<i>Factor 2: Collaborating</i>						
1. I involve my...		.59				
2. I share factual...		.66				
4. I try to see...		.65				
5. I try to resolve...		.67				
10. I prefer a...		.53				
11. I believe that...		.44				
12. I believe in...		.62				
22. I continuously give...		.56				
23. I try to...		.61				
28. I believe in...		.52				
<i>Factor 3: Compromising</i>						
29. I try to achieve...			.65			
30. I try to adopt...			.68			
32. I prefer to...			.67			
33. I try to convince...			.71			
40. I give up...			.65			
50. I prefer to...			.55			
51. I feel that...			.61			
<i>Factor 4: Avoiding</i>						
31. I believe in...				.45		
34. I keep my...				.43		
35. I do not get...				.49		
42. I do not criticize...				.49		
43. I do not want...				.48		
44. I say very...				.67		
45. I feel suffocated...				.64		
54. I delay the...				.47		
55. I think that...				.51		
<i>Factor 5: Obliging</i>						
3. I respect the...					.51	
6. I give concessions...					.44	

QY-OCMSI items	Factor loadings					
	1	2	3	4	5	6
7. I regularly ask...					.53	
14. I do not oppose...					.52	
15. I sacrifice my...					.53	
16. I try to...					.66	
17. Despite focusing on...					.61	
26. I step back...					.51	
27. While negotiating, I...					.52	
<i>Factor 6: Competing</i>						
8. I use my...						.73
9. I use my...						.77
18. I argue logically...						.59
21. I attempt to...						.51
25. I believe in...						.65

Note. N=490. The abstraction method was the principal component with varimax rotation. Factors that were loaded above .3 are mentioned in the table.

Table 4

Cronbach Alpha Reliabilities of the Subscales of QY-OCMSI

Subscales with Respective Item no.	α
Dominating (13, 36, 37, 39, 46, 49, 52, 53)	.88
Collaborating (1,2,4,5,10,11,12,22,23,28)	.81
Compromising (29, 30, 32, 33, 40, 50, 51)	.81
Avoiding (31, 34, 35, 42, 43, 44, 45, 54,55)	.74
Obliging (3, 6, 7, 14, 15, 16, 17, 26, 27)	.75
Competing (8, 9, 18, 21, 25)	.72

Moreover, the overall Cronbach alpha reliability of QY-OCMSI was found to be .88, while the alpha reliabilities of its subscales ranged from .72 to .88 (as shown in Table 4), with dominating style showing the highest α index (.88) while the competing style showing the lowest α value (.72) among the respective subscales. All showed high internal consistency.

Also, Table 5 showed the CFA values for both QY-OCTI and QY-OCMSI indicating a good model fit for both inventories.

Table 5

Results of Confirmatory Factor Analysis for Study II (N = 400) & Study III (N = 490)

Models	χ^2	df	NFI	CFI	RMSEA
Study II	426.12***	365	.88	.91	.056
Study III	413.93***	410	.91	.93	.053

Note. Structural equation modelling was used for the analysis. NFI = normed fit index; CFI = comparative fit index; RMSEA = root-mean-square of approximation.

*** $p < .001$.

Discussion

Our study intended to develop comprehensive organizational conflict assessment measures that would be able to investigate the organizational conflict types as well as organizational conflict management styles separately. To achieve this plan, we conducted three studies by adopting an exploratory sequential research design. Study I used a qualitative approach and by conducting FGDs, a pool of items was generated for both OCTs and OCMSs, separately.

Study II focused on the development and validation of an OCTs inventory for which an EFA-based investigation followed a CFA-based inquiry which indicated and confirmed a six-factor model for the Qayyum-Younas Organizational Conflict Types Inventory (QY-OCTI). Emerged factors of this multi-phasic study reinstated the findings of Rahim (2002) concluding that conflict across organizations involved emotional and cognitive components.

Furthermore, the previous scholarship also highlighted the role of relational, process and task-based conflicts (Mu et al., 2021; Nwokorie-Edwin, 2017) that also came up in our factor analysis. Interestingly, several studies including Raub et al. (2021) credited the role ambiguity within workplace settings as a cause of conflict; while others contextualized its origins in the leadership style of the supervisors and those working at the upper echelons of the organization, who seemed to affect the organizational conflict dynamics (Williams, 2021; Hull & Ragsadle, 2020). Current findings also suggested the noteworthy impact of role conflict emerging across indigenous settings.

Also, the masquerading conflict type which was only cited in the work of Rahim (1983) also emerged as a statistically significant conflict type with the highest alpha reliability index (.99) along with the procedural type of conflict. This highlights the relevance, prevalence and implication of these particular conflict types within the indigenous workplace setting in our culture.

The most noteworthy contribution of study II was comprehensively assessing the OCTs as most of the previous assessment measures included five subscales/types while our QY-OCTI included six subscales/types of OC. This means that even though there would be an overlap with previous assessment measures, QY-OCTI is more comprehensive, elaborate, latest and culturally relevant.

Furthermore, study III undertook the development and validation of an OCM styles inventory which included two separate samples for

the EFA and CFA which confirmed a six-factor model for the Qayyum-Younas Organizational Conflict Management Styles Inventory (QYOC-MSI). Relevant scholarship showed the collaborative style as the most efficient OCM style (Kay & Skarlicki, 2020; Lacity & Willcocks, 2017) and our data also suggested the same. Interestingly, the reliability analysis indicated that dominating OCM style had the highest α reliability index (.88) which highlights the unique socio-cultural aspects of our sample. Moreover, another indigenous OCM styles scale (Haque, 2004) included five dimensions and was validated to a sample of corporate managers only, our inventory encompassed six dimensions of conflict management and validated it a sample of professionals from a diverse range of professional settings, making it a more comprehensive measure. The CFA also indicated a good model fit (Hu & Bentler, 1998 as cited by Montoya & Edwards, 2020).

Just like study II, study III successfully established a comprehensive, latest and culturally relevant assessment measure of OCMSs as our QY-OCMSI had six factors/subscales while most of the previous scales only included a maximum of five factors. Even the alpha reliability values of both QY-OCTI and QY-OCMSI are considered very good as Hulin et al. (2001) reported that an alpha of .6-.7 indicated an acceptable level of reliability and .8 or greater is a very good level.

Limitations and Suggestions

Though the current article detailed the development and validation of indigenous organizational conflict types and organizational conflict management style inventories after identifying the research gap, it still has a few limitations. While we tried to enhance the external validity of both inventories by undertaking a statistically significant sample size across five professional fields, still the sample for all three studies was collected from Lahore-based professionals. This shortcoming can be rectified by involving participants across Pakistan as well as from other Asian countries which will further enhance its generalizability. Similarly, only young adults were targeted for data collection and in future, the organizational conflict dynamics across middle and late adulthood can also be investigated. Therefore, with a more eclectic sample and by undertaking comparative studies, the external validity can be enhanced manifold.

Conclusions and Implications

Our findings brought in a timely, comprehensive and culturally relevant understanding of the constructs of organizational conflict types and organizational conflict management styles. Even though our findings and past studies had thematic intersection and commonalities, our inventories expanded the constructs in the discussion by adding new conflict types and management styles emerging from our culturally sensitive and relevant sample which provided promising understanding and nuances. These inventories will become a valuable resource for academicians, researchers and even counsellors, especially serving across the fields of social and organizational psychology, human resource management, and administrative and business management. Lastly, with the availability of indigenous inventories now, the screening of conflict types as well as conflict management styles across almost a variety of workplace settings will become less challenging and complex.

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