




Construction and Validation of the Conflict Expression in Meaning Formation Scale for Adolescents

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ABSTRACT

Objective: The present study aimed to construct and validate the Conflict Expression in Meaning Formation Scale for adolescents aged 12-20 years in the city of Isfahan during the years 2022-2023.

Methods and Materials: The research was conducted using a mixed-methods approach with a sequential exploratory qualitative-quantitative design. The population for both the qualitative and quantitative sections included male and female adolescents within the age range of 12-20 years, from which 443 adolescents (248 females and 185 males) were randomly selected through cluster sampling. The Meaning in Life Questionnaire (Steger, 2010) was used to determine convergent validity, and the researcher-developed Conflict Expression in Meaning Formation Scale was administered by the researcher. Data were analyzed using SPSS22 and Amos26 software through correlation coefficients and confirmatory factor analysis. Additionally, the content validity of this scale was confirmed by 15 experts in the field of psychology.

Findings: The results of the factor analysis indicated that the model for the Conflict Expression in Meaning Formation Scale for adolescents, with three components—Problematic Coping, Emotional Confusion, and Meaning Protest—showed an acceptable fit with the collected data. Each of the components also demonstrated acceptable capability in measuring the respective factors of the questionnaire. Furthermore, the items related to each factor of the Conflict Expression in Meaning Formation Scale for adolescents exhibited acceptable internal consistency, with Cronbach's alpha coefficients for the factors being above 0.7.

Conclusion: This study concludes that the 11-item Conflict Expression in Meaning Formation Scale for adolescents is a suitable tool for use in various psychological, educational, and research domains.

Keywords: meaning, adolescent, factor structure, conflict expression

1. Introduction

Adolescence is a critical and vital stage in personality development (Blakemore, 2019). Many physiological, psychological, and social changes occur within an individual during this life period (Bartsch & Oliver, 2011). Adolescence is a time when individuals experience more conflict and psychological turmoil than in childhood, and they engage more in the search for self-meaning. Having meaning and purpose can assist in resolving the identity crisis that adolescents typically face during this period (Pavai et al., 2021). Some view the search for meaning as a facilitator of identity development in adolescents (Brassai et al., 2012). Developmental theories (Erikson, 1968; Erikson & Erikson, 1998; Marcia, 1966, 1980) identify exploration and discovery in response to the need to establish and create identity, career, and social roles as key characteristics of adolescence and early adulthood (Yoon et al., 2021). These theories emphasize the importance of search and exploration during these years, indicating that younger age groups report higher levels of meaning-seeking compared to older adults. A study by Brassai et al. (2012) on 15- to 18-year-olds showed that the search for meaning plays the most significant role in determining adolescent behavior; the study's results indicated that the presence and search for meaning were significant predictors of reduced violent behavior, antisocial behavior, and academic irresponsibility among adolescents (Brassai et al., 2012). In other words, increasing meaning in life not only helps adolescents overcome difficult situations but also enhances their personal satisfaction and self-sufficiency (Kim et al., 2005).

Various perspectives have been proposed regarding the formation of meaning and the process of meaning-making. For example, Park (2010) believes that coping through active problem-solving, emotion regulation, and seeking social support can be beneficial after a disaster; however, meaning-making is often the best or even the only option for recovering from deep trauma and loss. In other words, meaning-making often involves changing the meaning one assigns to a disaster, but it may also involve altering global beliefs or goals. Individuals strive to reduce the discrepancies between their assessment of the disaster and its global meaning, and change in either one or both may be necessary to realign their global meaning with their experiences (Park, 2016, 2017). The results of a study by Nasiri et al. (2023) showed that meaning formation occurs in several stages: (1) creating conflict, (2) expressing

conflict, (3) confronting conflict, (4) addressing conflict, and (5) generating solutions and achieving integration. The expression of conflict includes three components: problematic coping with painful and traumatic contexts, emotional confusion, and meaning protest. It describes how adolescents, after experiencing conflict, seek ways to express and reveal their conflict in relation to the issue or event that occurred. Problematic coping with painful and traumatic contexts refers to adolescents' initial reaction after encountering an event or issue that changes everything, where their first response is to cope with the event and regain control. In this stage, adolescents employed various strategies: some tried to forget that the event had occurred, others quickly sought to eliminate the source of the problem, and some decided not to seek help from others, opting instead to solve problems alone and similar actions. The results of the study by Nasiri et al. (2023) also showed that adolescents expressed and revealed their conflict through two means: "emotional confusion" and "meaning protest." Emotional confusion refers to adolescents' emotional reactions after encountering a significant event or issue. This reaction is described as an expression of conflict, detailing how adolescents responded to the issue through their emotions. Emotional arousal manifested as feelings of discomfort, sadness, fatigue, anger, entrapment, and loneliness. Meaning protest is another strategy adolescents used to express their conflict. Through this strategy, they sought to understand why the event happened, and more importantly, why it happened to them. The behaviors and thoughts in the meaning protest stage help individuals seek answers to their questions, address their emotions, and develop the capacity to accept the situation (Nasiri et al., 2023).

In a study by Dittmann-Kohli and Westerhof (1999), it was observed that the personal meaning system significantly differs between young and elderly individuals (Dittmann-Kohli & Westerhof, 1999). Most of these studies have not focused on the construct of meaning in life but rather on the goal in life and have implications regarding meaning. However, various studies conducted in the field of meaning, its sources, and dimensions have often overlooked the adolescent stage. A case study by Hamzeh Gerdishi et al. (2019) showed that factors such as mental health, identity styles, hope for life, religion, and social connections play important roles in achieving meaning in life for adolescents (Hamzeh Gerdishi et al., 2019). Orang et al. (2018) in their study showed that significant differences exist between the

age groups of 17 to 25, 25 to 46, and 65 to 80 years in terms of the components of meaning presence, self-acceptance, positive relationships with others, personal growth, and purposeful life; therefore, age can increase meaning in life and psychological well-being (Orang et al., 2018). Additionally, a literature review indicated that various tools have been developed to measure meaning. For example, Schnell et al. (2009) designed a questionnaire that includes 26 sources of meaning, categorized into four dimensions: self-transcendence, self-actualization, religious sect, and well-being (Schnell, 2009). MacDonald et al. (2007) introduced a five-factor system for the meaning of life (MacDonald, 2007). Steger et al. (2006) developed a questionnaire that measures two dimensions of meaning in life: presence of meaning and search for meaning (Steger, 2012; Steger et al., 2006; Steger et al., 2008; Steger & Kashdan, 2013; Steger et al., 2009). Mascaro et al. (2004) designed a spiritual meaning questionnaire, defining spiritual meaning as the expansiveness of the spirit, such that each person believes life has a purposeful function (Mascaro et al., 2004). Furthermore, Heydari et al. (2019) developed, validated, and standardized a meaning of life test based on Islamic sources. This questionnaire assesses three main factors: value-based meaning, epistemic meaning, and life meaningfulness (Heydari et al., 2019).

Most of these studies have been conducted in Western cultures, with few studies examining these sources and domains within the framework of Iranian culture. However, according to research conducted in this area, the construct is influenced by cultural factors (Steger et al., 2008; Steger & Kashdan, 2013; Steger et al., 2009). Additionally, most developed tools have focused on examining the meaning of life and its dimensions, while the core focus of the present research is the study of the process of meaning formation, and the measurement tool developed in this study aims to identify and assess the manner of meaning formation. In comparison to most studies and questionnaires, which have aimed to study and measure the meaning of life, this research takes a broader perspective. Furthermore, meaning and meaning of life measurement tools have typically examined the adult population, and no tool was found that specifically assesses meaning and the process of meaning formation in adolescents. Therefore, the existence of a measurement tool that examines the manner of meaning formation in adolescents addresses this research gap. As the literature review indicated, another part of the research has examined the process of meaning formation in critical life events such as accidents and illnesses (Park, 2016, 2017; Seligman,

2011); therefore, these findings have limited generalizability to normal life conditions. Overall, although the framework for meaning formation is widely accepted, empirical findings regarding this framework are mixed, with support for many meaning-related propositions being weak or absent (Park, 2017); thus, there are limitations in measuring and assessing the components of meaning formation. Finally, based on the research conducted, the present study seeks to answer the question of how the Conflict Expression in Meaning Formation Scale for adolescents is structured.

2. Methods and Materials

2.1. Study Design and Participants

The present study is applied in terms of purpose, and consistent with the research objectives, a mixed-methods approach with a sequential exploratory qualitative-quantitative design was employed. The study population in both the quantitative and qualitative sections included male and female adolescents aged 12-20 years. A total of 434 individuals were randomly selected through cluster sampling from five regions (north, south, east, west, and central) of Isfahan, based on inclusion criteria: (being within the age range of 12-20 years, providing informed and voluntary consent to participate in the research, scoring above 24 on the Meaning in Life Questionnaire by Steger (2010), not having prominent psychological disorders such as depression and anxiety as diagnosed by a psychiatrist or clinical psychologist). Additionally, 15 experts in the field of counseling and psychology were selected as scientific experts for the initial evaluation of the questionnaire items. In the qualitative section of the present study, 9 adolescents aged 12-20 years were selected through theoretical sampling based on the inclusion criteria (scoring above 24 on the Meaning in Life Questionnaire by Steger (2010)).

2.2. Measures

2.2.1. Conflict Expression in Meaning Formation

In this study, a scale developed by the researcher was used to assess the Conflict Expression in Meaning Formation. To develop this scale, a qualitative study was conducted, and then based on the findings of the qualitative study, the main factor (conflict expression and the components of problematic coping, emotional confusion, and meaning protest) was formulated into 11 items (Nasiri et al., 2023). To determine the validity and content validity, it was reviewed by 15 psychology experts, and the final scale

was developed. Scoring was done using a Likert scale ranging from 1 (very rarely) to 5 (almost always); the response level to each item was determined by the researcher. For each of the five main factors, several items were formulated, which were then reviewed by 15 experts, and after making some changes to the items and final approval, the scale was administered to male and female adolescents aged 12-20 years in Isfahan. Finally, the scale's validity, reliability, and norms were assessed. Internal consistency and Cronbach's alpha were reported to examine the mutual correlation of the scale items. Exploratory factor analysis was used to determine construct validity. Discriminant validity was assessed using differentiation analysis. Concurrent or convergent validity was also determined using Steger's (2010) Meaning in Life Questionnaire.

2.2.2. *Meaning in Life*

The Meaning in Life Questionnaire (Steger et al., 2006) measures two dimensions of meaning in life, namely the presence of meaning and the search for meaning, using 10 items based on a seven-point Likert scale from 1 (completely incorrect) to 7 (completely correct). This questionnaire was validated by Majd Abadi (2017). In this questionnaire, a score above 24 on the presence dimension and above 24 on the search dimension indicates a person who feels that their life has valuable meaning and purpose, but explicitly examines that meaning and purpose. A score above 24 on the presence dimension and below 24 on the search dimension indicates a person who feels that their life has valuable meaning and purpose but does not actively examine or seek goals in their life. A score below 24 on the presence dimension and above 24 on the search dimension indicates a person who probably feels that their life lacks valuable meaning and purpose but is actively searching for something or someone to give their life purpose or meaning. A score below 24 on the presence dimension and below 24 on the search dimension indicates a person who probably feels that their life lacks valuable meaning and purpose and does not actively examine or search for meaning in their life. Items 1, 4, 5, 6, and 9 belong to the presence subscale, and for scoring this subscale, the rating of item 9 is subtracted from the rating of item 8 and then added to the ratings of items 1, 2, 5, and 6. The score range is 5 to 35. Items 2, 3, 7, 8, and 10 belong to the search subscale, and for scoring this subscale, the ratings of these items are summed. The score range is 5 to 35. Research indicates the questionnaire's reliability and

validity, including convergent and discriminant validity. In both scales, excellent internal consistency (alpha coefficients ranging from .82 to .87) has been reported, and a one-month test-retest reliability ($r = .70$ for the presence subscale and $r = .73$ for the search subscale) has been obtained (Steger et al., 2009).

2.3. *Data analysis*

In the present study, after obtaining approval from the Ethics Committee of the Islamic Azad University, Khomeinishahr Branch, and approval of the questionnaires, the sample individuals, as described in the participants section, were selected and studied. Before administering the questionnaires and collecting any information, the research purpose, how to complete the questionnaires, and the confidentiality of the obtained information were explained to the participants to ensure ethical principles were followed, and their full consent was obtained. In the qualitative section of this research, a semi-structured interview form, including open-ended questions along with follow-up questions to encourage participants to explore the process of meaning formation, was used. All interviews were digitally recorded and transcribed verbatim immediately after recording. Data analysis was conducted using Glaser's (1987) method in seven stages: open coding, selective coding, memo writing, sorting, theoretical coding, literature review, and theory writing. To develop the questionnaire, as much as possible, simple and understandable language was used to increase the validity of the items, using participants' own words where possible. The item pool was created through both inductive and deductive methods (by comparing other tools for assessing meaning), and the research team members reviewed the item pool again, selecting the best items. Conceptually similar items were either deleted or merged, and thus the questionnaire's structure (dimensions or factors and appropriate items) for assessing the process of meaning formation in adolescents was designed and evaluated as a methodological process based on perceived definitions. For each final code, 3 to 5 items were considered. Thus, based on theoretical codes, an 11-item questionnaire with overarching and organizing main and sub-themes was designed and distributed among 15 psychology and counseling experts for reviewing its validity and reliability. They were asked to provide feedback on the difficulty level, appropriateness, and ambiguity of each item (qualitative face validity). They were also requested to give feedback on the tool's qualitative content validity regarding the use of

appropriate words, necessity, importance, and placement of phrases in the correct positions. After analyzing and summarizing the feedback, some long items were shortened, and necessary revisions were made. Additionally, to determine the content validity ratio (CVR), experts were asked to evaluate each item based on a three-point scale ("essential," "useful but not essential," and "not essential"). The responses were calculated according to the CVR formula, and the content validity ratio for each item was obtained. According to the Lawshe table, a content validity ratio of .49 was considered acceptable, given that 15 experts were involved. To determine the content validity index (CVI), Waltz and Bausell's content validity index was used. For this purpose, after determining the content validity ratio, 15 experts in psychology and counseling were asked to assess the relevance of each item based on a four-point Likert scale (1 = irrelevant, 2 = somewhat relevant, 3 = relevant but needs revision, 4 = completely relevant). The content validity index for each item regarding relevance was then calculated using the CVI formula. According to Polit et al. (2007), if the resulting value is greater than .79, the item is acceptable; if the value is between .70 and .79, the item needs revision; and if the value is less than .70, the item is deleted. Accordingly, the mean content validity index score for the items in this study was estimated to be .91. According to Polit et al. (2007), an overall index value of .90 is considered acceptable. Finally, after confirming the validity and reliability, the 11-item questionnaire was distributed

among the members of the study population. Responses were scored using a 5-point Likert scale ranging from 1 (very rarely) to 5 (almost always). Data analysis for the quantitative phase was conducted using descriptive statistics and confirmatory factor analysis with SPSS 25 and AMOS 24.0 software, and the final model was confirmed.

3. Findings and Results

The results of the qualitative study indicated that the Meaning Formation Questionnaire for adolescents includes five factors: conflict creation, conflict expression, conflict confrontation, conflict resolution, and achieving integration. The conflict expression factor itself consisted of three components: problematic coping (4 items), emotional confusion (5 items), and meaning protest (2 items) (Nasiri et al., 2023). In the quantitative section of the research, 434 adolescents (248 females and 185 males) with a mean age of 14.97 years and a standard deviation of 1.83 completed the designed questionnaire. To assess the convergent validity of the Conflict Expression Scale, the relationship between its components and total score with the components of the Meaning in Life Questionnaire was examined using Pearson's correlation coefficient. Table 1 presents the correlation coefficients between the components of the two instruments, as well as the means, standard deviations, and Cronbach's alpha coefficients for each.

Table 1

Means, Standard Deviations, and Correlation Coefficients Between the Components of Conflict Expression in Adolescents and Meaning in Life

Variable	1	2	3	4	5	6
1. Conflict Expression - Problematic Coping	-					
2. Conflict Expression - Emotional Confusion	.47**	-				
3. Conflict Expression - Meaning Protest	.27**	.51**	-			
4. Total Conflict Expression Score	.77**	.90**	.65**	-		
5. Meaning in Life - Presence of Meaning	-.23**	-.16**	-.25**	-.36**	-	
6. Meaning in Life - Search for Meaning	-.27**	-.10*	-.31**	-.29**	.62**	-
Mean	12.38	16.52	5.53	34.43	23.26	26.75
Standard Deviation	3.21	4.55	1.82	8.73	7.63	7.26
Cronbach's Alpha Coefficient	.72	.82	.68	.83	.80	.82

**p<0.01

As expected, the results in Table 1 indicate that the components and the total score of conflict expression are

negatively and significantly correlated with both components of meaning in life. This finding suggests that the

Conflict Expression Scale for adolescents has acceptable convergent validity. Additionally, the Cronbach’s alpha coefficients for the components of the Conflict Expression Scale were close to or above .70. Therefore, it can be concluded that the Conflict Expression Scale and its components have acceptable internal consistency.

The fit of the conflict expression measurement model with the collected data was examined using confirmatory factor analysis and the AMOS 24.0 software with the maximum likelihood (ML) estimation. Efforts were made to evaluate and compare the fit indices of three measurement models. The first model was a single-factor model where all items were allowed to load on one factor. The second model was a three-component model where each item was restricted to its respective component, and the components

were allowed to correlate with each other. The third model was a hierarchical three-component model where each item was restricted to its respective component, and the components were allowed to load on a broader overall factor.

Although the fit indices obtained indicated acceptable fit for both the three-component model ($X^2/df=2.28$, CFI = .954, GFI = .951, AGFI = .927, RMSEA = .054) and the hierarchical three-component model ($X^2/df=2.10$, CFI = .966, GFI = .964, AGFI = .942, RMSEA = .050), the fit indices obtained for the hierarchical three-component model were substantially better than those obtained for the three-component model. Table 2 shows the factor loadings for each item of the conflict expression factor in the hierarchical three-component model.

Table 2

Parameters of the Conflict Expression Factor Measurement Model

Level	Latent Variables - Indicators	b	β	SE	t
First Order	Problematic Coping - Item 1	1	.627		
	Problematic Coping - Item 2	1.128	.679	.113	10.01**
	Problematic Coping - Item 3	1.104	.648	.113	9.78**
	Problematic Coping - Item 4	.932	.546	.107	8.73**
	Emotional Confusion - Item 5	1	.725		
	Emotional Confusion - Item 6	.895	.664	.070	12.73**
	Emotional Confusion - Item 7	.826	.657	.065	12.61**
	Emotional Confusion - Item 8	1.085	.790	.073	14.87**
	Emotional Confusion - Item 9	.811	.619	.068	11.91**
	Meaning Protest - Item 10	1	.558		
	Meaning Protest - Item 11	1.097	.557	.148	7.43**
Second Order	Conflict Expression - Problematic Coping	1	.599		
	Conflict Expression - Emotional Confusion	2.141	.911	.362	5.93**
	Conflict Expression - Meaning Protest	1.203	.803	.179	6.70**

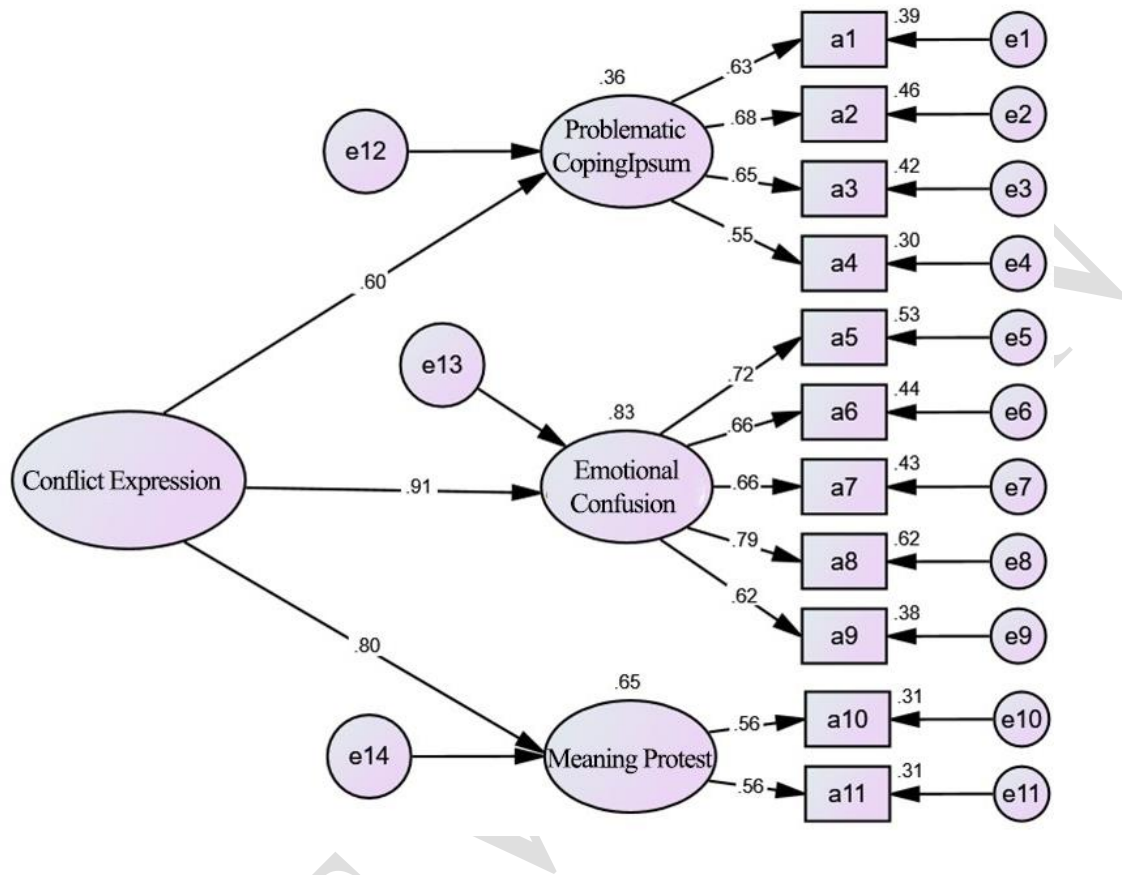
Items 1, 5, and 10 in the first-order analysis and the Problematic Coping component in the second-order analysis were fixed at 1, so standard error and significance level were not calculated for them.

Table 2 shows that the highest factor loading in the first-order analysis belonged to Item 8 ($\beta = .790$) and the lowest factor loading belonged to Item 4 ($\beta = .546$). In the second-order analysis, the factor loadings for the Problematic Coping, Emotional Confusion, and Meaning Protest components were .599, .911, and .803, respectively. Since the standardized factor loadings for all indicators in both the

first- and second-order analyses were above .32, it was concluded that each item has the necessary capability to measure the components of the Conflict Expression Scale, and each component has an acceptable capability to measure the broader factor, i.e., conflict expression. Figure 1 presents the conflict expression measurement model using standardized data.

Figure 1

Conflict Expression Measurement Model Using Standardized Data



4. Discussion and Conclusion

The present study aimed to construct and evaluate the psychometric properties of the Conflict Expression in Meaning Formation Scale for adolescents. To achieve this goal, a qualitative study was conducted, and its components were examined. The findings indicated that the Conflict Expression Scale for adolescents has appropriate reliability and validity. In this study, construct validity of the scale was assessed using confirmatory factor analysis and convergent validity. Three components were extracted in the confirmatory analysis of the Conflict Expression in Meaning Formation Scale for adolescents.

The first factor obtained was Problematic Coping, which explains a significant proportion of the total variance of the conflict expression construct in meaning formation. This component emphasizes that adolescents react in diverse ways to events and issues that lead to major changes in their lives. Some of the possible behaviors and strategies at this stage include attempts to forget the issue, where some adolescents may try to erase the event or issue from their

minds. This effort might be symbolic and not necessarily effective in reality, but it is a common strategy. Attempts to cut off the source of the problem, where some adolescents may try to identify and eliminate the root cause of the problem. This may involve changes in their behavior or their interactions with others. The decision to solve issues independently, where some adolescents may decide to resolve problems on their own and refrain from seeking help from others. This could reflect independence and self-sufficiency. Additionally, some adolescents may avoid asking for help from others, possibly feeling that doing so indicates weakness or that it may not help solve the problem. In this stage, individuals face issues or events that are unpleasant and respond to them unconsciously. These events may occur suddenly and unexpectedly, having a shocking impact on the individuals. This shock may require interpretation and contemplation. Adolescents may want to reflect on the issue or event to themselves, attempting to understand the deeper meaning and reasons behind it, and to answer questions like "Why did this happen?" and "What does it mean for me?" This process may take time. The items of this component align with those proposed in scales by

previous studies (Fowers, 1992; Gamez et al., 2010; Gorey et al., 2018; Rogers et al., 2020; Rossi Ferrario et al., 2017). In explaining this finding, it can be said that survivors of disasters typically cope with their circumstances through meaning-making. It is evident that coping through active problem-solving, emotional regulation, and seeking social support can be beneficial after a disaster; however, meaning-making is often the best or even the only option for recovering from deep trauma and loss. In other words, meaning-making often involves changing the meaning that individuals assign to the disaster, but it may also include altering global beliefs or goals. Individuals strive to reduce discrepancies between their assessment of the disaster and its global meaning, and change in one or both may be necessary to realign their global meaning with their experiences (Park, 2016, 2017).

The second factor obtained was Emotional Confusion, which explains a significant proportion of the total variance of the conflict expression construct in meaning formation. This component describes emotional confusion as the emotional reactions of adolescents after encountering a significant event or issue, which is described as the expression of emotional conflicts. It explains how adolescents respond to the issue through their emotions. This expression of emotional conflicts includes feelings such as discomfort, depression, fatigue, anger, feeling trapped, and loneliness. The items of this component align with those proposed in scales by prior studies (Jansz & Timmers, 2002; Moscoso, 2011; Rodríguez-Jiménez et al., 2023; Spence & Rapee, 2022; Tonarely & Ehrenreich-May, 2020). In explaining this finding, it can be said that emotional confusion may indicate an individual's need to control and manage their emotions. This effort to control emotions can contribute to meaning formation and personal growth (McGhie et al., 2022). Emotional confusion may indicate an individual's need for emotional balance (Bartsch & Oliver, 2011). The effort to achieve emotional balance can contribute to meaning formation and personal growth. Emotional arousal may indicate an individual's need to fulfill their goals and values (Marco et al., 2021). The effort to achieve goals and values can contribute to meaning formation and personal growth. Additionally, emotional confusion may indicate an individual's need for social interaction and meaningful connections. The effort to establish meaningful connections can contribute to meaning formation and personal growth (McGhie et al., 2022). Overall, emotional confusion can act as a signal for the need for meaning and personal growth, and the effort to fulfill

these needs can contribute to meaning formation and personal growth.

The third factor obtained was Meaning Protest, which explains a significant proportion of the total variance of the conflict expression construct in meaning formation. This component emphasizes that one of the strategies adolescents use to express their conflicts is protest. Through this strategy, they try to understand why this event happened, particularly why it happened to them. Adolescents at this stage may express that they seek to explain the real reasons behind the event, blame themselves for the distress caused by the event, suffer from the distress caused by others, face numerous mental questions and concerns, and feel a heavy burden on their shoulders. The individual's behaviors and thoughts during the protest phase help them seek answers to their questions, address their emotions, and develop a capacity for acceptance. The items of this component align with those proposed in scales by prior studies (Gan et al., 2013; Stoyanova, 2020; Sveen et al., 2019; Yang et al., 2020). In explaining this finding, it can be said that meaning protest through processes such as rumination, blame, and distress tolerance can act as strategies for attributing meaning to life experiences and events. In other words, repeated reflection and thinking about past events and the emotions associated with them can help individuals achieve a deeper understanding of their experiences and develop a better understanding of themselves and others. Additionally, the meaning protest process can help individuals achieve meaning and personal growth by purging negative emotions and focusing on improving their situation (Park, 2016, 2017). Finally, meaning protest involves accepting and tolerating feelings of distress and pain. This process can help individuals achieve meaning and develop the strength to face life's challenges (Munroe, 2022).

The three components of conflict expression in the meaning formation process were examined through confirmatory factor analysis, and all conflict expression components in meaning formation showed a good fit. Additionally, all components of conflict expression in meaning formation and its items were also examined through factor analysis, and the results of exploratory factor analysis confirmed the three-factor structure of conflict expression in meaning formation, indicating that the obtained model has a good fit with the research data. Furthermore, the obtained value of the root mean square error of approximation (RMSEA) index indicated a good fit of the model. The reliability of the Conflict Expression in Meaning Formation Scale for adolescents developed in this study was also

assessed using internal consistency and test-retest methods, with the results reported in the findings section, showing that the developed scale has good and satisfactory reliability.

5. Limitations & Suggestions

Considering that the Conflict Expression in Meaning Formation Scale has been standardized only for adolescents aged 12-20 years and conducted in an urban community, caution should be exercised in generalizing the findings to other age groups, regions, and minorities. It is recommended that a nationwide survey be conducted using the Conflict Expression in Meaning Formation Scale for all male and female adolescents. Moreover, given the importance of meaning formation for other age groups, in addition to constructing a questionnaire, different content such as educational protocols for meaning formation in adolescents should be used. Considering that the Conflict Expression in Meaning Formation Scale for adolescents has acceptable validity and reliability, it can be used in schools, high schools, and counseling centers to determine and assess meaning formation. After evaluating and assessing conflict expression in meaning formation in adolescents, educational courses should be held to improve meaning formation in adolescents.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

This article is derived from the first author's doctoral dissertation, registered under ethical code IR.IAU.KHSH.REC.1401.019. The ethical considerations in this study included obtaining informed and voluntary consent from participants for participation in the research, with participants declaring their understanding and agreement to participate without any pressure. The researcher provided sufficient and comprehensible information to participants about the research's purpose and methodology. According to the principle of withdrawal, the

researcher recognized each participant's right to withdraw from the study at any or no reason at any time and informed them of this right. Participants were recognized for their right to privacy, anonymity, and confidentiality. The principle of non-harm to participants was observed, ensuring that the information provided by participants, which could jeopardize their privacy, family life, and social relationships, remained confidential. The researcher did not establish emotional or friendly relationships with participants and did not include individuals with whom they had emotional, friendly, or familial relationships in the research. The researcher fully accepted responsibility for publishing their research findings and ensured that all relevant information was published in full, without omissions.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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Authors' Contributions

All authors equally contributed in this article.

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