

Perfectionism and Resistance to Peer Pressure Among Adolescent Girls: The Protective Role of Assertiveness

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Abstract: Adolescence is a developmental period during which peer influence becomes particularly salient, and the ability to resist peer pressure is an important factor in promoting adaptive decision-making and preventing risky behaviors. The present study aimed to examine the relationships between different dimensions of perfectionism and resistance to peer pressure and to investigate the moderating role of assertiveness in these relationships. The study employed a descriptive correlational design. Participants were 357 female students enrolled in the second cycle of secondary education in Bojnourd, Iran, who were selected through single-stage cluster sampling. Data were collected using the Resistance to Peer Influence Scale, the Assertion Inventory, and two measures of perfectionism, including the Positive and Negative Perfectionism Scale and the Multidimensional Perfectionism Scale. Data were analyzed using Pearson correlation and hierarchical multiple regression analyses. The results indicated that resistance to peer pressure was positively associated with assertiveness, positive perfectionism, and self-oriented perfectionism, whereas it was negatively associated with negative perfectionism and other-oriented perfectionism. The relationship between socially prescribed perfectionism and resistance to peer pressure was not statistically significant. Hierarchical regression analyses showed that assertiveness significantly moderated the relationships between perfectionism dimensions and resistance to peer pressure. Specifically, assertiveness strengthened adolescents' ability to resist peer pressure in the presence of perfectionistic tendencies, with the moderation models explaining between 21% and 37% of the variance in resistance to peer pressure. These findings highlight the importance of considering interpersonal skills, particularly assertiveness, as a protective factor that influences how perfectionistic tendencies are expressed in adolescents' social functioning.

Keywords: Resistance to peer pressure, Assertiveness, Perfectionism, Positive perfectionism, Negative perfectionism, Adolescents.

INTRODUCTION

Adolescence is a developmental period characterized by profound biological, cognitive, and social changes, during which relationships with peers become increasingly important in shaping individuals' thoughts, emotions, and behaviors. As adolescents gradually seek greater autonomy from their families, peer groups become a primary context for social interaction, identity development, and emotional support (Steinberg & Monahan, 2007). Positive peer relationships can provide adolescents with valuable sources of social support, acceptance, and a stronger sense of belonging, which contribute to psychological adjustment and social competence (Lee & Bonk, 2016; Wentzel *et al.*, 2021). However, peer influence is not always beneficial; adolescents may also be particularly vulnerable to adopting risky attitudes and behaviors when attempting to gain peer approval or maintain group acceptance. Research has consistently shown that peers play a significant role in adolescents' decision-making, including decisions made in situations involving potential risks and social pressures (Somerville, 2013; Pei *et al.*, 2020). This heightened susceptibility to peer influence has been partly attributed to developmental changes in the adolescent

brain, particularly the imbalance between the relatively mature reward-sensitive subcortical systems and the still-developing prefrontal regions involved in self-regulation and cognitive control (Somerville *et al.*, 2010; Steinberg, 2014). Consequently, the ability to resist negative peer pressure represents an important developmental competency that may protect adolescents from engaging in maladaptive and risky behaviors.

Resistance to peer pressure is considered an important developmental capacity that enables adolescents to maintain personal values and make autonomous decisions despite social influences. Although sensitivity to peer influence is a normative feature of adolescence, considerable individual differences exist in adolescents' ability to regulate their responses to peer demands and resist involvement in undesirable behaviors. Neurodevelopmental research suggests that adolescents' vulnerability to peer influence is associated with ongoing maturation of the prefrontal cortex, which plays a central role in self-control, decision-making, and regulation of impulsive responses (Steinberg, 2008; Steinberg *et al.*, 2018). At the same time, changes in subcortical systems involved in emotional and reward processing during puberty may increase adolescents' sensitivity to social approval and acceptance by peers (Somerville *et al.*, 2010; Chein *et al.*, 2011). Previous studies have demonstrated that adolescents who have greater

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difficulty resisting peer pressure are more likely to engage in delinquent and risky behaviors (Wójcikowska, 2018). Moreover, resistance to peer influence may vary according to demographic and individual characteristics. For example, some studies have indicated that boys may show greater susceptibility to certain forms of peer pressure, particularly those associated with risk-taking and social dominance, whereas girls may demonstrate different patterns of social responsiveness (Mello *et al.*, 2018). Age-related differences have also been reported, with younger adolescents generally showing greater vulnerability to peer influence compared with older adolescents and young adults (Sherman *et al.*, 2018). Therefore, identifying psychological characteristics that enhance adolescents' ability to resist negative peer influence is essential for understanding protective factors against risky behaviors.

Assertiveness is one of the important interpersonal skills that may contribute to adolescents' ability to resist negative peer influence. Assertiveness refers to the capacity to express one's feelings, needs, opinions, and rights in a direct and respectful manner while considering the rights of others (Omura *et al.*, 2017). Unlike passive or aggressive behavioral patterns, assertive individuals are able to communicate their preferences clearly, reject unwanted requests, and maintain interpersonal relationships without excessive fear of social rejection or conflict (Speed *et al.*, 2018). In adolescence, when acceptance by peers and belonging to social groups become highly salient, assertiveness may function as a protective factor by enabling individuals to maintain personal autonomy and make independent decisions in socially challenging situations. Research has shown that adolescents with higher levels of assertiveness are more capable of expressing disagreement, coping with interpersonal conflicts, and resisting external pressures, including pressure from peers (Saito, 2021). Furthermore, assertiveness training has been associated with reductions in maladaptive interpersonal behaviors, such as bullying involvement and difficulties in peer relationships, suggesting that strengthening assertive skills can improve adolescents' social functioning (Mohammadi *et al.*, 2021). Therefore, assertiveness may represent an important psychological resource that helps adolescents balance the need for social acceptance with the ability to preserve personal choices and resist undesirable peer influences.

Perfectionism is another individual characteristic that may influence adolescents' responses to social pressures and their ability to maintain independent decision-making. Traditionally, perfectionism was

conceptualized as a maladaptive personality trait characterized by the establishment of excessively high standards and a tendency toward harsh self-evaluation (Flett & Hewitt, 1995). However, contemporary perspectives suggest that perfectionism is a multidimensional construct that includes both adaptive and maladaptive aspects (Hamachek, 1978; Stoeber & Otto, 2006). While adaptive forms of perfectionism may be associated with goal orientation, achievement motivation, and persistence, maladaptive perfectionism is often characterized by excessive concerns about mistakes, fear of negative evaluation, and dependence on external approval (Stoeber, 2018). These characteristics may be particularly relevant during adolescence, a developmental stage in which social acceptance and evaluation by peers become highly important. Adolescents with maladaptive perfectionistic tendencies, especially those characterized by concerns about meeting others' expectations, may become more sensitive to peer evaluation and more likely to modify their behaviors in order to gain acceptance or avoid rejection. In this regard, socially prescribed perfectionism, defined as the perception that significant others impose unrealistic standards and evaluate the individual critically, may increase vulnerability to social pressures and reduce the ability to assert personal preferences in interpersonal contexts (Hewitt & Flett, 1991). Therefore, perfectionism may represent an important personality factor that contributes to individual differences in adolescents' resistance to peer influence.

Given the complex nature of perfectionism, researchers have conceptualized this construct from different theoretical perspectives. One prominent approach emphasizes the multidimensional structure of perfectionism, including self-oriented, other-oriented, and socially prescribed perfectionism (Hewitt & Flett, 1991). Another approach distinguishes between positive and negative perfectionism, highlighting the adaptive aspects of striving for excellence as well as the maladaptive aspects associated with excessive concerns, self-criticism, and dissatisfaction (Terry-Short *et al.*, 1995). Although these conceptualizations differ in their emphasis, both perspectives provide valuable information regarding how perfectionistic tendencies may influence adolescents' psychological and interpersonal functioning. Therefore, examining multiple dimensions of perfectionism may provide a more comprehensive understanding of its relationship with adolescents' resistance to peer influence.

Although perfectionistic tendencies may increase adolescents' vulnerability to social evaluation and peer influence, the presence of protective interpersonal

skills may reduce these negative effects. Assertiveness may be one such protective factor because it enables individuals to express disagreement, establish interpersonal boundaries, and maintain their own preferences despite social expectations. Adolescents with higher levels of assertiveness are more likely to rely on personal judgments rather than excessive concerns about others' approval, which may help them resist conformity pressures from peers. In contrast, adolescents characterized by maladaptive perfectionism, particularly socially prescribed perfectionism, may experience greater fear of rejection and a stronger need for acceptance, making them more susceptible to peer influence. However, this vulnerability may not be inevitable; assertive adolescents may possess greater confidence in communicating their needs and refusing unwanted demands, thereby weakening the association between perfectionistic concerns and susceptibility to peer pressure. Consistent with this perspective, psychological research has emphasized the role of interpersonal competence and self-regulatory skills as important protective mechanisms that shape how adolescents respond to social influences (Speed *et al.*, 2018; Steinberg *et al.*, 2018). Therefore, examining assertiveness as a moderating factor may provide a more comprehensive understanding of the conditions under which perfectionistic tendencies are associated with adolescents' resistance or susceptibility to peer influence.

Despite the extensive research on peer influence during adolescence, important gaps remain in understanding the psychological factors that account for individual differences in adolescents' resistance to peer pressure. Previous research has predominantly emphasized developmental and contextual determinants of peer influence, while comparatively less attention has been given to the interplay between personality characteristics and interpersonal competencies in explaining adolescents' resistance to social pressure. In particular, although perfectionism has been linked to concerns about social evaluation, fear of rejection, and the need to meet perceived interpersonal expectations, limited research has examined whether perfectionistic tendencies are associated with adolescents' ability to resist peer pressure. More importantly, it remains unclear whether interpersonal competencies such as assertiveness may alter this association. Addressing this gap is important because the presence of perfectionistic concerns may not uniformly increase adolescents' susceptibility to peer influence; rather, individual differences in the ability to communicate personal needs, establish interpersonal boundaries, and express disagreement may determine how adolescents

respond to social pressure. Thus, the novelty of the present study lies in examining assertiveness not merely as a correlate of peer pressure, but as a potential moderating factor in the relationship between perfectionism and adolescents' resistance to peer pressure. Accordingly, the present study aimed to investigate the relationship between perfectionism and adolescents' resistance to peer pressure and to examine whether assertiveness moderates this relationship. It was hypothesized that higher levels of maladaptive perfectionism would be associated with lower resistance to peer pressure, whereas higher assertiveness would attenuate this negative association.

METHOD

Research Design

The present study employed a descriptive correlational research design. This design was selected because the study aimed to examine the relationships between dimensions of perfectionism and resistance to peer pressure and to investigate the moderating role of assertiveness in this relationship.

Participants and Sampling Procedure

The statistical population consisted of all female students enrolled in the second cycle of secondary education in Bojnurd, Iran, during the 2024 academic year. The total population included 4,962 students. Participants were selected using a single-stage cluster sampling method. First, secondary schools were randomly selected, and students from the selected school(s) participated in the study. The required sample size was estimated as 357 students. Participants were included based on their willingness to participate and completion of the research questionnaires.

MEASURES

Resistance to Peer Influence Scale

Resistance to peer influence was assessed using the Resistance to Peer Influence Scale (RPI) developed by Steinberg and Monahan (2007). This scale was designed to measure adolescents' ability to resist peer pressure and maintain independent decision-making in situations involving peer influence. The scale consists of 10 items, and participants respond to each item using a 4-point Likert-type scale ranging from completely true to completely false. Steinberg and Monahan (2007) examined the psychometric properties of the scale and reported acceptable reliability and validity indices. The internal consistency of the scale was satisfactory, with

Cronbach's alpha coefficients exceeding .70. In the present study, the scale was translated into Persian by the researchers and reviewed by language experts to ensure translation accuracy and conceptual equivalence. In a preliminary study, the internal consistency of the Persian version was acceptable (Cronbach's $\alpha = .71$).

Multidimensional Perfectionism Scale

Perfectionism was assessed using the Multidimensional Perfectionism Scale developed by Besharat (2003). This Persian version was designed to measure three dimensions of perfectionism, including self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism. The scale consists of 30 items, and participants rate their responses on a 5-point Likert-type scale. Besharat (2003) examined the psychometric properties of the scale and reported satisfactory internal consistency coefficients for the three dimensions. Cronbach's alpha coefficients were .92 for self-oriented perfectionism, .87 for other-oriented perfectionism, and .84 for socially prescribed perfectionism. Evidence for the concurrent validity of the scale was obtained through significant correlations between perfectionism dimensions and measures of interpersonal problems, psychological well-being, and the neuroticism and extraversion subscales of the NEO Personality Inventory. These findings supported the validity and reliability of the Persian version of the Multidimensional Perfectionism Scale.

Positive and Negative Perfectionism Scale

Positive and negative perfectionism were assessed using the Positive and Negative Perfectionism Scale developed by Terry-Short *et al.* (1995). This scale was designed to measure adaptive and maladaptive dimensions of perfectionism. The scale consists of 40 items, and participants respond to each item on a 5-point Likert-type scale ranging from completely agree

to completely disagree. The original psychometric evaluation of the scale demonstrated satisfactory reliability coefficients, with Cronbach's alpha coefficients of .90 and .87 for positive and negative perfectionism, respectively. Test-retest reliability was also reported as .86 (Besharat, 2003). These findings indicate that the scale has acceptable reliability for assessing different dimensions of perfectionistic tendencies.

Assertion Inventory

Assertiveness was measured using the Persian version of the Gambrill and Richey Assertion Inventory (Gambrill & Richey, 1975). The original 40-item inventory was adapted for Iranian culture, resulting in a 22-item version. The Persian version has demonstrated acceptable reliability ($\alpha = .82$; Gadari *et al.*, 2023).

Ethical Considerations

Participation in the study was voluntary, and participants were informed that they could decline to participate or withdraw from the study without any negative consequences. They were assured that the information they provided would be kept confidential and used solely for research purposes. To protect participants' privacy, the questionnaires were administered and collected anonymously, and no personally identifying information was recorded.

RESULTS

The study included 357 female high school students. Of the participants, 52 (14.5%) were 15 years old, 97 (27.0%) were 16 years old, 141 (39.8%) were 17 years old, and 67 (18.7%) were 18 years old.

Descriptive statistics and Pearson correlation coefficients for the study variables are presented in Table 1. Skewness and kurtosis values ranged from -0.73 to 0.73 and from -0.60 to 0.60, respectively,

Table 1: Descriptive Statistics and Correlations of the Study Variables With Assertiveness and Resistance to Peer Pressure

Variable	M	SD	Skewness	Kurtosis	1	2
1. Resistance to Peer Pressure	27.56	4.07	-0.53	0.60	—	.26***
2. Assertiveness	36.47	6.69	-0.67	-0.33	.26***	—
3. Negative Perfectionism	80.59	6.92	0.58	0.23	-.21***	.14***
4. Positive Perfectionism	66.47	7.73	-0.57	0.43	.24***	.09
5. Self-oriented Perfectionism	54.05	4.35	0.40	-0.38	.25***	-.12***
6. Other-oriented Perfectionism	35.19	3.45	0.15	-0.73	-.19***	.03
7. Socially Prescribed Perfectionism	11.50	2.25	-0.17	-0.29	-.01	.09

indicating that all variables were approximately normally distributed.

Resistance to peer pressure was positively correlated with assertiveness ($r = .26, p < .001$), positive perfectionism ($r = .24, p < .001$), and self-oriented perfectionism ($r = .25, p < .001$). In contrast, resistance to peer pressure showed significant negative correlations with negative perfectionism ($r = -.21, p < .001$) and other-oriented perfectionism ($r = -.19, p < .001$). The correlation between socially prescribed perfectionism and resistance to peer pressure was not statistically significant ($r = -.01, p > .05$).

Prior to the regression analyses, the assumptions of multicollinearity and normality of residuals were examined. Tolerance values ranged from .82 to .94, while variance inflation factor (VIF) values ranged from 1.06 to 1.22, indicating that multicollinearity was not a concern. Visual inspection of the standardized residuals further suggested that the residuals were approximately normally distributed.

Hierarchical multiple regression analyses were conducted to examine whether assertiveness moderated the associations between dimensions of perfectionism and resistance to peer pressure. Predictor variables were entered in three successive steps. In Step 1, each perfectionism dimension was entered. Assertiveness was entered in Step 2, followed by the interaction term between assertiveness and the respective perfectionism dimension in Step 3.

Table 2 presents the results of the hierarchical regression analyses examining the moderating role of

assertiveness in the relationships between perfectionism dimensions and resistance to peer pressure.

For negative perfectionism, the predictor was significantly and negatively associated with resistance to peer pressure at Step 1 ($\beta = -.21, p < .001$), accounting for 4% of the variance ($\Delta R^2 = .04, f^2 = .04$). The addition of assertiveness at Step 2 significantly increased the explained variance to 13% ($\Delta R^2 = .08, f^2 = .09$), with assertiveness showing a positive association with resistance to peer pressure ($\beta = .30, p < .001$). Importantly, the interaction between negative perfectionism and assertiveness was significant at Step 3 ($\beta = .36, p < .001$), producing an additional 9% of explained variance ($\Delta R^2 = .09, f^2 = .11$) and increasing the total explained variance to 22% ($R^2 = .22$). Thus, the association between negative perfectionism and resistance to peer pressure varied as a function of assertiveness.

A similar pattern emerged for positive perfectionism, although the moderating effect was substantially stronger. Positive perfectionism was positively associated with resistance to peer pressure at Step 1 ($\beta = .24, p < .001$), explaining 6% of the variance ($R^2 = .06, f^2 = .06$). Assertiveness contributed an additional 6% of explained variance at Step 2 ($\Delta R^2 = .06, f^2 = .07$), with a significant positive regression coefficient ($\beta = .24, p < .001$). The interaction between positive perfectionism and assertiveness was highly significant ($\beta = -.62, p < .001$) and accounted for an additional 25% of the variance ($\Delta R^2 = .25$). The corresponding effect size was large ($f^2 = .40$), and the full model explained 37% of the variance in resistance to peer pressure. This finding indicates that assertiveness

Table2: Hierarchical Regression Analyses Examining the Moderating Role of Assertiveness in the Relationship Between Perfectionism Dimensions and Resistance to Peer Pressure

Model	Step	Predictor	β	ΔR^2	R^2	f^2	p
1	1	Negative perfectionism	-.21***	.04	.04	.04	<.001
	2	Assertiveness	.30***	.08	.13	.09	<.001
	3	Negative Perfectionism $\times$ Assertiveness	.36***	.09	.22	.11	<.001
2	1	Positive perfectionism	.24***	.06	.06	.06	<.001
	2	Assertiveness	.24***	.06	.12	.07	<.001
	3	Positive Perfectionism $\times$ Assertiveness	-.62***	.25	.37	.40	<.001
3	1	Self-oriented perfectionism	.25***	.06	.06	.06	<.001
	2	Assertiveness	.30***	.09	.15	.11	<.001
	3	Self-oriented Perfectionism $\times$ Assertiveness	-.31***	.10	.25	.13	<.001
4	1	Other-oriented perfectionism	-.18***	.03	.03	.03	<.001
	2	Assertiveness	.27***	.07	.10	.07	<.001
	3	Other-oriented Perfectionism $\times$ Assertiveness	-.34***	.10	.21	.13	<.001

substantially altered the relationship between positive perfectionism and resistance to peer pressure.

For self-oriented perfectionism, the Step 1 model was significant, with self-oriented perfectionism positively predicting resistance to peer pressure ($\beta = .25$, $p < .001$) and accounting for 6% of the variance ($R^2 = .06$, $f^2 = .06$). Adding assertiveness significantly increased the explained variance by 9% ($\Delta R^2 = .09$, $f^2 = .11$), with assertiveness again emerging as a significant positive predictor ($\beta = .30$, $p < .001$). The interaction between self-oriented perfectionism and assertiveness was also significant ($\beta = -.31$, $p < .001$), accounting for an additional 10% of the variance ($\Delta R^2 = .10$, $f^2 = .13$). The final model explained 25% of the variance in resistance to peer pressure ($R^2 = .25$), indicating a meaningful moderating effect.

Finally, other-oriented perfectionism was negatively associated with resistance to peer pressure at Step 1 ($\beta = -.18$, $p < .001$), accounting for 3% of the variance ($R^2 = .03$, $f^2 = .03$). The addition of assertiveness at Step 2 significantly increased the explained variance by 7% ($\Delta R^2 = .07$, $f^2 = .07$), with assertiveness positively predicting resistance to peer pressure ($\beta = .27$, $p < .001$). At Step 3, the interaction between other-oriented perfectionism and assertiveness was significant ($\beta = -.34$, $p < .001$), explaining an additional 10% of the variance ($\Delta R^2 = .10$, $f^2 = .13$). The final model accounted for 21% of the variance in resistance to peer pressure ($R^2 = .21$).

Overall, the findings provide consistent evidence that assertiveness moderates the relationships between perfectionism and resistance to peer pressure. The magnitude of the interaction effects, however, varied considerably across perfectionism dimensions. The strongest moderation effect was observed for positive perfectionism ($f^2 = .40$), representing a large effect, whereas the interaction effects for negative perfectionism ($f^2 = .11$), self-oriented perfectionism ($f^2 = .13$), and other-oriented perfectionism ($f^2 = .13$) were comparatively smaller. These findings suggest that the role of assertiveness in shaping resistance to peer pressure is particularly pronounced in the context of positive perfectionism.

DISCUSSION

The present study examined whether assertiveness moderates the relationships between different dimensions of perfectionism and adolescents' resistance to peer pressure. The findings indicated that assertiveness significantly altered these relationships by strengthening the positive associations of positive and self-oriented perfectionism with resistance to peer pressure while attenuating the negative associations of

negative and other-oriented perfectionism. These findings support the multidimensional conceptualization of perfectionism proposed by Hewitt and Flett (1991), which distinguishes between adaptive and maladaptive dimensions of perfectionism, and are consistent with subsequent evidence indicating that different forms of perfectionism are associated with distinct motivational, emotional, and interpersonal outcomes (Stoeber & Otto, 2006). Collectively, the findings suggest that the influence of perfectionism on adolescents' responses to peer pressure cannot be fully understood without considering the interpersonal characteristics that shape the expression of perfectionistic tendencies in social contexts.

The present study found that assertiveness was positively associated with adolescents' resistance to peer pressure. This finding is consistent with previous research indicating that assertive adolescents are better able to express their opinions, refuse inappropriate requests, and maintain personal boundaries while preserving positive interpersonal relationships (Alberti & Emmons, 2017). During adolescence, peer relationships become increasingly influential, and resisting inappropriate peer influence requires not only confidence in one's own judgments but also the interpersonal skills needed to communicate disagreement effectively. Accordingly, adolescents with higher levels of assertiveness are more likely to act in accordance with their own values and goals rather than conforming to external social pressures.

This finding is also consistent with the developmental model proposed by Steinberg and Monahan (2007), who conceptualized resistance to peer influence as an important developmental competence that increases with psychological maturity. Their findings suggest that adolescents gradually become less susceptible to peer pressure as they develop greater autonomy and self-regulatory capacity. Assertiveness may facilitate this developmental process by enabling adolescents to express disagreement confidently and tolerate potential social disapproval without abandoning their personal beliefs. Therefore, the positive association observed in the present study supports the view that assertiveness represents an important interpersonal competence that contributes to healthier social adjustment during adolescence.

The present study further demonstrated that assertiveness strengthened the positive associations of positive perfectionism and self-oriented perfectionism with adolescents' resistance to peer pressure. This finding suggests that the adaptive value of these dimensions of perfectionism depends partly on

adolescents' ability to translate high personal standards into effective interpersonal behavior. According to Hewitt and Flett (1991), self-oriented perfectionism is characterized by internally motivated striving for excellence and the pursuit of personally meaningful standards. Likewise, Stoeber and Otto (2006) argued that adaptive perfectionistic strivings are generally associated with conscientiousness, persistence, and achievement-oriented motivation rather than with fear of failure or excessive concern about external evaluation. Adolescents with these characteristics may therefore be more inclined to make independent decisions and remain committed to personally endorsed goals.

However, maintaining personal standards in the face of peer influence requires more than motivation alone. Adolescents frequently encounter situations in which acting consistently with their own values involves refusing peers, expressing disagreement, or tolerating temporary social disapproval. In such contexts, assertiveness appears to provide the interpersonal skills necessary for translating adaptive perfectionistic tendencies into behavior. This interpretation is consistent with Self-Determination Theory, which proposes that autonomous behavior is more likely when individuals regulate their actions according to internalized values rather than external pressures (Ryan & Deci, 2020). Accordingly, adolescents who combine adaptive perfectionistic striving with strong assertiveness may be better equipped to maintain their personal goals and resist conformity when confronted with peer pressure.

The present study also demonstrated that assertiveness attenuated the negative associations of negative perfectionism and other-oriented perfectionism with adolescents' resistance to peer pressure. This finding suggests that the adverse interpersonal consequences of maladaptive perfectionism are not inevitable but may be reduced when adolescents possess adequate interpersonal skills. Previous research has consistently shown that maladaptive forms of perfectionism are characterized by excessive self-criticism, heightened sensitivity to evaluation, fear of making mistakes, and greater vulnerability to psychological distress (Hewitt & Flett, 1991; Limburg *et al.*, 2017). These characteristics may increase adolescents' dependence on social approval and make them more likely to comply with peer expectations, even when such expectations conflict with their own preferences or values.

A possible explanation for the present findings is that assertiveness enables adolescents to regulate the interpersonal expression of maladaptive perfectionistic tendencies. Rather than avoiding disagreement or

seeking approval at any cost, assertive adolescents are more capable of communicating their opinions, refusing inappropriate requests, and maintaining interpersonal boundaries while preserving social relationships (Alberti & Emmons, 2017). Consequently, assertiveness may reduce the extent to which maladaptive perfectionistic characteristics translate into conformity with peer pressure. This interpretation is consistent with resilience theory, which proposes that protective factors do not eliminate risk but instead modify the impact of risk factors on developmental outcomes (Masten, 2014). Accordingly, the findings suggest that assertiveness may represent a potentially protective interpersonal resource that is associated with weaker negative relationships between maladaptive perfectionism and adolescents' resistance to peer pressure.

The non-significant finding for socially prescribed perfectionism also deserves consideration. One possible explanation is that this form of perfectionism reflects adolescents' perceptions of others' expectations rather than a direct tendency to conform to them. Although these perceptions may increase concerns about social evaluation, they may not necessarily lead to greater susceptibility to peer pressure. The relationship may also depend on factors such as interpersonal skills, personal values, and the specific social context. Future research could examine whether factors such as social support, fear of negative evaluation, family expectations, and peer-group norms help explain this relationship.

Overall, the present study extends the existing literature by demonstrating that the relationship between perfectionism and adolescents' resistance to peer pressure cannot be adequately explained by the direct effects of personality characteristics alone. Instead, the findings indicate that assertiveness modifies the way different dimensions of perfectionism are expressed in interpersonal contexts, highlighting the importance of considering interactions between personality traits and social competencies when examining adolescent adjustment. This interactional pattern may help explain why previous studies have reported inconsistent findings regarding the adaptive and maladaptive consequences of perfectionism across different social and developmental contexts (Stoeber & Otto, 2006; Limburg *et al.*, 2017).

From a broader developmental perspective, these findings support contemporary models emphasizing that adolescent adjustment results from the dynamic interplay between individual characteristics and protective psychosocial resources rather than from isolated personality traits (Bronfenbrenner & Morris, 2006; Masten, 2014). Accordingly, assertiveness

should not be viewed merely as an independent predictor of resistance to peer pressure but as an interpersonal competence that shapes the behavioral expression of perfectionistic tendencies. By integrating the literature on multidimensional perfectionism with research on resistance to peer influence, the present study provides a more comprehensive framework for understanding individual differences in adolescents' responses to peer pressure and offers a useful direction for future research on positive youth development.

The findings have practical implications for educational and psychological interventions. School psychologists, counselors, and mental health professionals may consider incorporating assertiveness training into programs aimed at helping adolescents cope with peer pressure. Activities such as role-playing, practicing how to refuse inappropriate requests, expressing disagreement, and setting interpersonal boundaries may be particularly useful. These skills could be integrated into school counseling and social-emotional learning programs. However, given the correlational design of the present study, intervention studies are needed to determine whether strengthening assertiveness can actually improve adolescents' resistance to peer pressure.

Cultural context should also be considered when interpreting these findings. Perfectionism, assertiveness, and responses to peer pressure may be shaped by family expectations and social norms. In cultures where conformity and social harmony are highly valued, adolescents may experience peer pressure differently, and direct disagreement may not always be encouraged. Therefore, the relationships observed in this study may vary across cultural settings. Cross-cultural research is needed to determine whether the moderating role of assertiveness is consistent across different societies.

Several limitations should be considered. First, the cross-sectional correlational design does not allow causal conclusions about the relationships among perfectionism, assertiveness, and resistance to peer pressure. Second, all variables were measured using self-report questionnaires, which may be affected by response bias and common method variance. Third, the sample consisted only of female high school students from Bojnord, Iran, which limits the generalizability of the findings to male adolescents and other geographical and cultural settings. Finally, socioeconomic and detailed family characteristics were not collected, so their potential influence on the observed relationships could not be examined. Future studies should use more diverse samples, include both

male and female adolescents, and employ longitudinal or experimental designs to further examine these relationships.

CONCLUSION

In conclusion, the present study provides evidence that assertiveness plays a significant moderating role in the relationship between perfectionism and adolescents' resistance to peer pressure. While adaptive dimensions of perfectionism were associated with greater resistance to peer influence and maladaptive dimensions showed the opposite pattern, these relationships varied according to adolescents' levels of assertiveness. The findings suggest that assertiveness functions as a protective interpersonal resource that facilitates autonomous decision-making and mitigates the negative interpersonal consequences of maladaptive perfectionism. Promoting assertive communication skills may therefore represent an effective strategy for enhancing adolescents' resilience to peer pressure and fostering healthier psychosocial development.

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CONFLICT OF INTEREST

The author declared no conflicts of interest.

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DATA AVAILABILITY

The datasets generated during the current study are available from the corresponding author on reasonable request.

REFERENCES

- [1] Alberti, R. E., & Emmons, M. L. (2017). *Your perfect right: Assertiveness and equality in your life and relationships* (10th ed.). New Harbinger Publications.
- [2] Besharat, M. A. (2003). Reliability and validity of the Positive and Negative Perfectionism Scale. *Journal of Psychological Science*, 2(8), 346-359.
- [3] Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology* (6th ed., Vol. 1, pp. 793-828). John Wiley & Sons.
- [4] Gadari S, Farokhzadian J, Shahrbabaki PM. Effectiveness of Virtual Resilience Training on Assertiveness in Student Girls Aged 9-10 Years: A 1-Month Follow-Up. *The Journal of School Nursing*. 2023; 39(4): 313-320.
<https://doi.org/10.1177/10598405211013522>
- [5] Gambrell, E. D., & Richey, C. A. (1975). An assertion inventory for use in assessment and research. *Behavior*

- Therapy, 6(4), 550-561.
[https://doi.org/10.1016/S0005-7894\(75\)80013-X](https://doi.org/10.1016/S0005-7894(75)80013-X)
- [6] Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, 60(3), 456-470.
<https://doi.org/10.1037/0022-3514.60.3.456>
- [7] Limburg, K., Watson, H. J., Hagger, M. S., & Egan, S. J. (2017). The relationship between perfectionism and psychopathology: A meta-analysis. *Journal of Clinical Psychology*, 73(10), 1301-1326.
<https://doi.org/10.1002/jclp.22435>
- [8] Masten, A. S. (2014). *Ordinary magic: Resilience in development*. Guilford Press.
- [9] Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860.
<https://doi.org/10.1016/j.cedpsych.2020.101860>
- [10] Steinberg, L., & Monahan, K. C. (2007). Age differences in resistance to peer influence. *Developmental Psychology*, 43(6), 1531-1543.
<https://doi.org/10.1037/0012-1649.43.6.1531>
- [11] Stoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. *Personality and Social Psychology Review*, 10(4), 295-319.
https://doi.org/10.1207/s15327957pspr1004_2
- [12] Chein, J., Albert, D., O'Brien, L., Uckert, K., & Steinberg, L. (2011). Peers increase adolescent risk taking by enhancing activity in the brain's reward circuitry. *Developmental Science*, 14(2), F1-F10.
<https://doi.org/10.1111/j.1467-7687.2010.01035.x>
- [13] Flett, G. L., & Hewitt, P. L. (1995). The multidimensional perfectionism scale: Development and validation. *Journal of Personality Assessment*, 64(3), 488-509.
- [14] Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology: A Journal of Human Behavior*, 15(1), 27-33.
- [15] Lee, J., & Bonk, C. J. (2016). Social network analysis of peer relationships and online interactions in a blended class using blogs. *The Internet and Higher Education*, 28, 35-44.
<https://doi.org/10.1016/j.iheduc.2015.09.001>
- [16] Mello, Z. R., Walker, E. B., Finan, L. J., Stiasny, A., Wiggers, I. C., McBroom, K. A., & Worrell, F. C. (2018). Time perspective, psychological outcomes, and risky behavior among runaway adolescents. *Applied Developmental Science*, 22(3), 233-243.
<https://doi.org/10.1080/10888691.2016.1276455>
- [17] Mohammadi, M., Farid, A., Habibi Kalibar, R., & Mesrabadi, J. (2021). Effectiveness of assertiveness training on assertion and social problem solving of male students who are victims of bullying. *Journal of Psychological Studies*.
- [18] Omura, M., Maguire, J., Levett-Jones, T., & Stone, T. E. (2017). The effectiveness of assertiveness communication training programs for healthcare professionals and students: A systematic review. *International journal of nursing studies*, 76, 120-128.
<https://doi.org/10.1016/j.ijnurstu.2017.09.001>
- [19] Pei, R., Lauharatanahirun, N., Cascio, C. N., O'Donnell, M. B., Shope, J. T., Simons-Morton, B. G., ... & Falk, E. B. (2020). Neural processes during adolescent risky decision making are associated with conformity to peer influence. *Developmental cognitive neuroscience*, 44, 100794.
<https://doi.org/10.1016/j.dcn.2020.100794>
- [20] Saito, M. (2021). Assertiveness of psychiatric day care users in Japan. *Journal of Rural Medicine*, 16(1), 29-34.
<https://doi.org/10.2185/jrm.2020-009>
- [21] Sherman, L. E., Greenfield, P. M., Hernandez, L. M., & Dapretto, M. (2018). Peer influence via instagram: effects on brain and behavior in adolescence and young adulthood. *Child development*, 89(1), 37-47.
<https://doi.org/10.1111/cdev.12838>
- [22] Somerville, L. H. (2013). The teenage brain: Sensitivity to social evaluation. *Current Directions in Psychological Science*, 22(2), 121-127.
<https://doi.org/10.1177/0963721413476512>
- [23] Somerville, L. H., Jones, R. M., & Casey, B. J. (2010). A time of change: Behavioral and neural correlates of adolescent sensitivity to appetitive and aversive environmental cues. *Brain and Cognition*, 72(1), 124-133.
<https://doi.org/10.1016/j.bandc.2009.07.003>
- [24] Speed, B. C., Goldstein, B. L., & Goldfried, M. R. (2018). Assertiveness training: A forgotten evidence-based treatment. *Clinical Psychology: Science and Practice*, 25(1), e12216.
<https://doi.org/10.1111/cpsp.12216>
- [25] Steinberg, L. (2008). A social neuroscience perspective on adolescent risk-taking. *Developmental Review*, 28(1), 78-106.
<https://doi.org/10.1016/j.dr.2007.08.002>
- [26] Steinberg, L. (2014). Age of opportunity: Lessons from the new science of adolescence. Houghton Mifflin Harcourt.
- [27] Steinberg, L., Icenogle, G., Shulman, E. P., Breiner, K., Chein, J., Bacchini, D., ... Takash, H. M. S. (2018). Around the world, adolescence is a time of heightened sensation seeking and immature self-regulation. *Developmental Science*, 21(2), e12532.
<https://doi.org/10.1111/desc.12532>
- [28] Stoeber, J. (2018). *The psychology of perfectionism: Theory, research, applications*. Routledge.
<https://doi.org/10.4324/9781315536255>
- [29] Terry-Short, L. A., Owens, R. G., Slade, P. D., & Dewey, M. E. (1995). Positive and negative perfectionism. *Personality and individual differences*, 18(5), 663-668.
[https://doi.org/10.1016/0191-8869\(94\)00192-U](https://doi.org/10.1016/0191-8869(94)00192-U)
- [30] Wentzel, K. R., Jablansky, S., & Scalise, N. R. (2021). Peer relationships and motivation in adolescence. *Educational Psychologist*, 56(1), 1-16.
<https://doi.org/10.1080/00461520.2015.1114890>
- [31] Wojciechowski, T. W. (2018). The Interaction Between the Development of Deviant Peer Influence and Resistance to Peer Influence: Relevance for Predicting Offending in Early Adulthood. *Journal of Developmental and Life-Course Criminology*, 4(3), 322-342.
<https://doi.org/10.1007/s40865-018-0086-9>

<https://doi.org/10.12974/2313-1047.2026.13.03>

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