

The importance of parental attitudes for locus of control among adolescents

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ABSTRACT

Introduction: The process of personality formation is closely related to the period of adolescence. One of the dimensions of personality – locus of control (LOC) can be defined as a person's beliefs about the locus of reinforcement control. Considering that the locus of control is formed as a result of social learning, the adolescent's perception of the relationship between his own behavior and its consequences may depend largely on his parents' attitudes toward him.

The aim of this study is to examine the relationship between parental attitudes and adolescents' locus of control.

Materials and methods: The study was conducted among 386 students aged 13–16 years ($M = 14.87$): 208 girls and 178 boys were included. The research instruments used in the study were

the Parental Attitude Scale (SPR-2) by M. Plopa and the Sense of Control Questionnaire – revised version (KBPK-R) by Krasowicz-Kupis and Wojnarska.

Results: According to the results of the study, parental attitudes are related to both the general level of locus of control in adolescents and the locus of control in a situation of success and failure.

Conclusions: The results of the study underscore the importance of parental attitudes and the role of parents in shaping adolescent personality. Research suggests that parental attitudes may be both a risk factor and a protective factor in the development of adolescent psychopathology.

Keywords: parent-child relationship; adolescent development; adolescent well-being; locus of control; internal-external control.

INTRODUCTION

Adolescence is a transitional period between childhood and adulthood [1]. It is a time of intense identity and personality development associated with a strong need for self-discovery and self-determination [2]. Awareness of one's own qualities, abilities, skills, and weaknesses allows an individual to behave in a consistent and stable manner regardless of the situation in which he or she finds himself or herself, and to maintain a positive self-esteem or sense of self-worth despite the appearance of difficulties. An adolescent's sense of self depends primarily on his or her relationship with peers and parents, who, by expressing their opinions and judgments, confirm or reject the adolescent's previous self-concepts [3]. Adolescence is associated with an acceleration in the rate at which adolescents gain autonomy and independence from their parents [4].

Parenting styles and attitudes

Parenting style involves the configuration of the parent's attitudes toward the child. It is defined as the context in which the child's socialization takes place [5]. It includes, among other things, the way decisions are made in the family, the formation of the child's independence, and the parent's control over the child. It is expressed in the way the parent makes demands, with a concomitant level of respect for the child's rights, needs, and feelings [6]. Importantly, parenting style is a characteristic of the parent, not the relationship between the parent and the child [5, 7]. One of the best known is Baumrind's (1966) typology of parenting styles, which identifies three styles: Permissive – a permissive, liberal style, with an

emotional bond between parent and child, but also characterized by little control and no demands; Authoritative – a democratic style, based on the warmth shown to the child and a positive emotional attitude, taking into account the needs of the child, but at the same time associated with control, clear rules and demands; and Authoritarian – overly controlling and demanding, distant, based on obedience and strictness, in which the opinion and needs of the child are not taken into account [8]. In Polish terminology there is a term „parental attitude”, which describes the parent's style of education or way of acting towards the child [9]. Parental attitude is a relatively fixed way of relating to the child. This attitude is based on cognitive, emotional, and behavioral components [3]. A Polish researcher, Plopa, proposes a six-dimensional typology of parental attitudes, in which he distinguishes the following attitudes: acceptance-rejection, autonomy, demanding, overprotective, and inconsistent. Each attitude is described on a continuum that expresses its intensity. The attitude of acceptance-rejection expresses the degree to which the parent shows warmth, trust, respect, interest, and subjectivity to the child. The second attitude, autonomy, determines the extent to which attention is paid to the child's independence and self-reliance, the ability to be free to make choices and take actions according to his or her developmental needs. The next attitude, demanding, determines the level of parental demands placed on the child, with the expectation of absolute fulfillment. An overprotective attitude is characterized by the expression of excessive concern for the child. The parent does not accept the fact that the child is growing up. A parent who exhibits an inconsistent attitude reacts in a contradictory and changeable manner, depending on immediate factors – current mood and personal issues [9]. Research shows that 25%

of parenting couples are inconsistent in their parenting styles – mother and father have different styles [10]. Elstad and Stefansen report that daughters are more likely than sons to perceive their parents as demanding, while sons perceive their parents as more intrusive [11]. Parenting style is one of the factors influencing the development of an adolescent's personality and self-esteem. Parents' parenting styles may contribute to the normal development and psychological well-being of adolescents or be associated with the onset and severity of mental health problems in them. An appropriate parent-child relationship enables the child to acquire independence and autonomy [9]. Parental behaviors associated with overprotective and demanding attitudes inhibit the development of adolescent independence [12]. Parenting styles, primarily authoritarian and permissive, may be a determining factor in adolescents' risk for behavioral and emotional problems [13, 14, 15, 16, 17]. Some parenting styles (primarily authoritative and permissive) may also protect adolescents from developing psychopathology [13, 18, 19, 20]. Parental styles or attitudes are one of the important determinants of adolescent personality development. An important dimension of personality is locus of control (LOC), which is formed as a result of a person's lived experiences [21].

Locus of control (LOC)

One of the formative dimensions of personality during adolescence is locus of control (LOC), defined as an individual's belief in the locus of control over reinforcement [22, 23]. This concept is derived from Rotter's social learning theory, which allows us to understand how an individual perceives the relationship between his or her own behavior and its consequences. Behavior should be understood as the result of an individual's generalized expectations (regarding different situations) that are formed over the course of a lifetime under the influence of experience [24]. An individual has certain expectations of goal attainment that determine his or her commitment to behavior. These expectations are formed during adolescence, when the individual's belief about the relationship between behavior and subsequent reinforcement is solidified [24]. An individual engages in purposeful and deliberate activity to achieve a specific outcome [25]. As the experience unfolds, the individual observes whether the effect is dependent on him or her or on external factors. Depending on how a person perceives the relationship between his or her behavior and the consequences, an internal LOC and an external LOC can be distinguished [23]. A person with a sense of internal control (internal LOC) perceives a relationship between his or her own behavior and its consequences. He is convinced that an event is related to his behavior in a given situation. He sees the world as predictable, in which each behavior has a specific consequence [26]. He willingly undertakes activities and takes responsibility for them [27]. They prefer new and problematic situations that allow them to demonstrate their abilities. According to research, adolescents who believe in their own abilities and efforts have higher self-esteem [17, 28], are more resistant to stress and external social influences [29], and perform better in school [17, 30, 31]. A person with external LOC does not perceive a connection between behavior and subsequent reinforcement [32]. He believes that the results of his actions are a consequence of chance, fate, luck, prohibitions, the influence of other people, or unpredictable situations [24, 31]. He

perceives the world as unpredictable and fails to see the relationship between behavior and its consequences [26]. External LOC is associated with greater reliance on social norms and circumstances, less self-activity [31], and greater pessimism, which in turn accounts for greater susceptibility to depression [32]. Success is viewed as luck or as the result of someone else's intervention [21]. Efforts or new activities become meaningless because there is no way to change one's fate. According to reports from around the world, external LOC in adolescents may be associated with poorer academic performance [33] and a lower sense of belonging to a peer group [34]. However, in situations of failure, external LOC may be a protective factor against lowering self-esteem and reducing negative emotions by treating failure as the result of bad luck, hostile attitudes of others, or a task that is too difficult [21]. It is worth noting that adolescents, due to their developmentally strong self-criticism, generally attribute successes to environmental factors, while failures are attributed to their own internal characteristics [35].

Locus of control vs parental attitudes

Locus of control reinforcements are formed as a result of social learning. Parents are the primary persons who meet most of their children's needs, and their behaviors are an important source of these reinforcements for their children [21, 24]. Experiences within the family system may be associated with a child's perception of the relationship between his or her behavior and the consequences of his or her behavior [36]. Interestingly, previous research shows a significant but small correlation between parents' and children's locus of control [37], suggesting that not only parents' individual characteristics, but also their attitudes, parenting skills, and behaviors toward the child, i.e., parental attitudes, may be an important determinant of adolescents' locus of control. When parents are affectionate and responsive to their child's needs, children are more likely to explore new situations [25] and have a better understanding of the consequences of certain behaviors (they form an internal locus of control). Children who describe their parents as rejecting and disciplining through punishment are more likely to develop an external locus of control [25].

The purpose of this study is to determine the importance of adolescents' perceptions of their mothers' and fathers' parental attitudes on their sense of locus of control.

Research hypotheses

H1: More positive perceptions of mothers' and fathers' parental attitudes (attitudes of acceptance, autonomy) are associated with a more internal locus of control in adolescents.

H2: More negative perceptions of mothers' and fathers' parental attitudes (attitudes of demanding, overprotective, and inconsistent) are associated with a more external locus of control in adolescents.

MATERIALS AND METHODS

Research tools

The study used the Krasowicz-Kupis and Wojnarska Locus of Control Research Questionnaire-Revised Version (KBPK-R) [21], the

Plopa Parenting Attitudes Scale (SPR-2), and a self-administered questionnaire to collect sociodemographic data from adolescents.

The KBPK-R is designed to be used among adolescents between 13–18 years of age. The questionnaire consists of 43 items (38 diagnostic items) to assess the general locus of control (WO) and locus of control (LOC) in a situation of success (Success) and in a situation of failure (Failure). The revised version of the instrument has high reliability for the scales: WO, Success and Failure (α -Cronbach's ranges from 0.78 to 0.91), and satisfactory absolute stability for these scales.

SPR-2 is an instrument that measures adolescents' perceived parental attitudes toward their parents. It is designed to be administered to adolescents and adults between the ages of 13 – 20. The scale consists of 45 items that allow to check the intensity of the levels of 6 factors (attitudes): Acceptance-rejection attitude, overly demanding attitude, autonomy attitude, inconsistent attitude, and overly protective attitude. Each scale contains 9 statements. The respondent responds to statements on a five-point scale regarding the parent's behavior. The instrument has a very satisfactory level of reliability for all five parental attitudes (α -Cronbach's is above 0.80).

Procedure of the study

The study was conducted in 2019–2021 and was a questionnaire. The survey was conducted among seventh graders of elementary schools and second and third graders of middle schools in northwestern Poland, according to the accepted methodology and principles of scientific research. Principals, teachers, parents/guardians, and students were informed about the purpose and nature of the study and gave their informed consent to participate. The study used purposive-random (mixed) sampling: the selection of schools was purposive, while the selection of individual students within schools was random. The survey was anonymous and voluntary. It was carried out in groups, using the questionnaire method (paper and pencil) in the classrooms of the school, during two class periods (90 min in total). The study was approved by the Bioethics Committee (KB 16/2019).

Group

The study included 304 Caucasian adolescents (54.6% female) aged 13–16 years ($M = 15.04$; 13–23 years, 14–57 years, 15–108 years, 16–116 years) from medium (39.1%) and large (over 100,000 inhabitants – 37.1%) cities in northwestern Poland. Most of the respondents came from a complete family ($n = 225$). The largest number of respondents' mothers had higher education ($n = 182$), and the smallest number had primary education ($n = 8$). The results show that the educational level of the fathers was very similar – 135 fathers with higher education and 7 with primary education.

RESULTS

Analyses were conducted using IBM AMOS version 27. Two path models were analyzed – the first model considered the

relationship between parental attitudes and total LOC scores, while the second model considered the relationship between parental attitudes and the LOC dimensions of success and failure. Both models controlled for the effects of the child's gender on the parent's attitudes and the child's age on LOC. In addition, covariances between dimensions of parental attitudes were included in the models. The models were tested by fathers and mothers and then compared using the χ^2 difference test.

Following Hu and Bentler [38], the following were used as indicators of the goodness of fit of the model to the data: CMIN/DF < 5; RMSEA < 0.08; SRMR < 0.08; CFI > 0.9. Estimation was based on the maximum likelihood method. The significance level used was $\alpha = 0.05$.

Model 1- overall LOC score

The first model analyzed considered the relationship between a parent's attitude and a child's total LOC score. Goodness-of-fit indices indicated a good fit of the model to the data – overall model: $\chi^2 (16) = 17.75$; $p = 0.339$; CMIN/DF = 1.11; CFI = 0.999; RMSEA = 0.014 [90% CI = 0.000; 0.042]; SRMR = 0.026; for mothers: $\chi^2 (8) = 8.69$; $p = 0.369$; CMIN/DF = 1.09; CFI = 0.999; RMSEA = 0.017 [90% CI = 0.000; 0.071]; SRMR = 0.026; for fathers: $\chi^2 (8) = 9.05$; $p = 0.338$; CMIN/DF = 1.13; CFI = 0.999; RMSEA = 0.022 [90% CI = 0.000; 0.075]; SRMR = 0.036. Analysis using the χ^2 test for difference showed no significant differences between the models for mothers and fathers, $\chi^2 = 10.65$; $df = 11$; $p = 0.473$; $\Delta NFI = 0.006$. This means that the effect of attitude on LOC levels is independent of the gender of the parent. Models for mothers and fathers are discussed in the following section.

Model 1 – mothers

Figure 1 shows the standardized regression coefficients for Model 1 for maternal attitudes. The analysis revealed a significant effect of maternal acceptance ($\beta = 0.33$; $p < 0.001$) and demand ($\beta = -0.21$; $p = 0.008$) attitudes on the level of LOC. The higher the level of mothers' acceptance attitude and the lower the level of demand attitude, the more intrinsic the child's LOC. The other attitudes of the mothers were not related to the level of LOC in their children. Detailed parameter values are shown in Table 1.

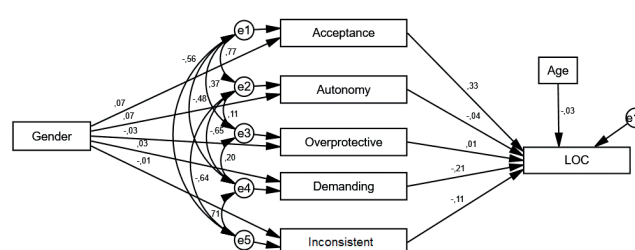


FIGURE 1. Standardized regression coefficients for model 1 for mothers' attitudes

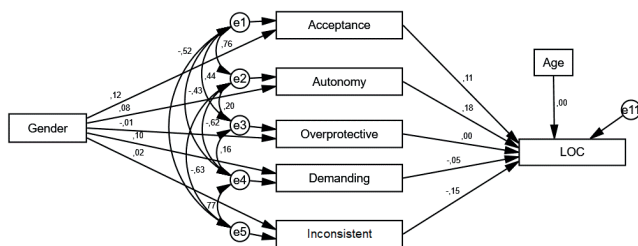
TABLE 1. Regression coefficients for pathways in model 1 for mothers' attitudes

X	Y	B	SE	CR	p	β
Gender	Acceptance	1.12	0.89	1.26	0.207	0.07
Gender	Autonomy	0.99	0.81	1.23	0.219	0.07
Gender	Overprotective	-0.44	0.81	-0.55	0.584	-0.03
Gender	Demanding	0.52	1.05	0.49	0.624	0.03
Gender	Inconsistent	-0.21	0.98	-0.22	0.827	-0.01
Age	KBPKR_WO	-0.20	0.30	-0.65	0.515	-0.03
Acceptance	KBPKR_WO	0.24	0.07	3.68	<0.001	0.33
Autonomy	KBPKR_WO	-0.04	0.08	-0.47	0.638	-0.04
Overprotective	KBPKR_WO	0.01	0.05	0.22	0.828	0.01
Demanding	KBPKR_WO	-0.13	0.05	-2.66	0.008	-0.21
Inconsistent	KBPKR_WO	-0.07	0.05	-1.45	0.147	-0.11

B – unstandardized regression coefficient; SE – standard error; CR – conversion rate; p – significance of the results; β – standardized regression coefficient

Model 1 – fathers

Figure 2 shows the standardized regression coefficients for Model 1 for fathers' attitudes. The analysis showed that there was no significant relationship between fathers' attitudes and – adolescents' LOC levels – only for autonomy was a positive relationship observed at the level of statistical trend ($\beta = 0.18$; $p = 0.077$). Detailed parameter values are shown in Table 2.

**FIGURE 2.** Standardized regression coefficients for model 1 for fathers' attitudes**TABLE 2.** Regression coefficients for pathways in model 1 for fathers' attitudes

X	Y	B	SE	CR	p	β
Gender	Acceptance	2.10	1.02	2.05	0.040	0.12
Gender	Autonomy	1.22	0.88	1.38	0.167	0.08
Gender	Overprotective	-0.11	1.00	-0.11	0.911	-0.01
Gender	Demanding	1.92	1.13	1.70	0.089	0.10
Gender	Inconsistent	0.34	1.08	0.32	0.752	0.02
Age	KBPKR_WO	0.01	0.33	0.02	0.988	0.00
Acceptance	KBPKR_WO	0.07	0.06	1.15	0.250	0.11
Autonomy	KBPKR_WO	0.13	0.08	1.77	0.077	0.18
Overprotective	KBPKR_WO	0.00	0.05	-0.01	0.991	0.00
Demanding	KBPKR_WO	-0.03	0.06	-0.56	0.574	-0.05
Inconsistent	KBPKR_WO	-0.09	0.06	-1.58	0.113	-0.15

B – unstandardized regression coefficient; SE – standard error; CR – conversion rate; p – significance of the results; β – standardized regression coefficient

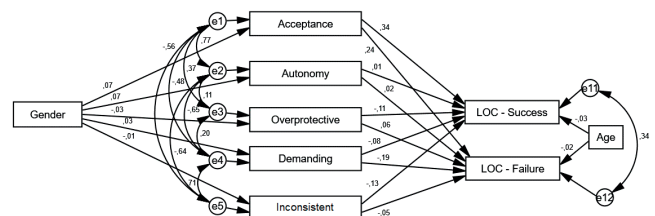
Model 2-success and failure

The second model examined the relationship between parental attitudes and LOC scores for adolescent success and failure. Goodness of fit indices indicated a good fit of the model to the data – overall model: $\chi^2 (18) = 21.81$; $p = 0.241$; CMIN/DF = 1.21; CFI = 0.998; RMSEA = 0.019 [90%CI = 0.000; 0.044]; SRMR = 0.026; for mothers: $\chi^2 (9) = 11.37$; $p = 0.251$; CMIN/DF = 1.26; CFI = 0.998; RMSEA = 0.030 [90%CI = 0.000; 0.075]; SRMR = 0.02; for fathers: $\chi^2 (9) = 10.43$; $p = 0.317$; CMIN/DF = 1.16; CFI = 0.998; RMSEA = 0.024 [90%CI = 0.000; 0.075]; SRMR = 0.034.

Analysis using the χ^2 test for difference showed no significant differences between the models for mothers and fathers, $\chi^2 = 24.65$; $df = 17$; $p = 0.103$; $\Delta NFI = 0.013$. This means that the effect of attitude on the LOC of success and failure is independent of the gender of the parent. Models for mothers and fathers are discussed in the following section.

Model 2 – mothers

Figure 3 shows the standardized regression coefficients for Model 2 for mothers' attitudes. The analysis revealed a significant effect of accepting attitude ($\beta = 0.34$; $p < 0.001$) on the LOC of success and of maternal acceptance ($\beta = 0.24$; $p = 0.012$) and demand ($\beta = -0.19$; $p = 0.023$) on the LOC of failure. The higher the level of accepting attitude, the higher the intrinsic LOC for success, and the higher the accepting attitude and lower the demanding attitude in mothers, the more intrinsic the LOC of failure. For the attitudes of protectiveness and inconsistency, negative associations were observed at the level of statistical trend with the LOC of success. The other attitudes of the mothers were not related to the LOC level of their children. Detailed parameter values are presented in Table 3.

**FIGURE 3.** Standardized regression coefficients for model 2 for mothers' attitudes**TABLE 3.** Regression coefficients for pathways in model 2 for mothers' attitudes

X	Y	B	SE	CR	p	β
Gender	Acceptance	1.12	0.89	1.26	0.207	0.07
Gender	Autonomy	0.99	0.81	1.23	0.219	0.07
Gender	Overprotective	-0.44	0.81	-0.55	0.584	-0.03
Gender	Demanding	0.52	1.05	0.49	0.624	0.03
Gender	Inconsistent	-0.21	0.98	-0.22	0.827	-0.01
Age	KBPKR_Success	-0.08	0.12	-0.63	0.528	-0.03
Acceptanc	KBPKR_Success	0.10	0.03	3.78	<0.001	0.34
Autonomy	KBPKR_Success	0.00	0.03	0.13	0.895	0.01
Overprotective	KBPKR_Success	-0.04	0.02	-1.77	0.077	-0.11

X	Y	B	SE	CR	p	β
Demanding	KBPKR_Success	-0.02	0.02	-0.96	0.336	-0.08
Inconsistent	KBPKR_Success	-0.04	0.02	-1.70	0.090	-0.13
Autonomy	KBPKR_Failure	0.01	0.03	0.17	0.867	0.02
Overprotective	KBPKR_Failure	0.02	0.02	0.99	0.321	0.06
Demanding	KBPKR_Failure	-0.05	0.02	-2.27	0.023	-0.19
Inconsistent	KBPKR_Failure	-0.01	0.02	-0.56	0.575	-0.05
Age	KBPKR_Failure	-0.05	0.13	-0.40	0.692	-0.02
Acceptance	KBPKR_Failure	0.07	0.03	2.51	0.012	0.24

B – unstandardized regression coefficient; SE – standard error; CR – conversion rate; p – significance of the results; β – standardized regression coefficient

Model 2 – fathers

Figure 4 shows the standardized regression coefficients for Model 2 for fathers' attitudes. The analysis revealed a significant effect of autonomy attitude ($\beta = 0.23$; $p = 0.028$) on LOC of success, and autonomy ($\beta = 0.25$; $p = 0.015$) and inconsistency ($\beta = -0.26$; $p = 0.005$) on LOC of failure. The higher the autonomy attitude, the higher the intrinsic LOC for success, and the higher the autonomy attitude and lower the inconsistency, the more intrinsic the LOC for failure. The fathers' other attitudes were not related to their children's LOC levels. Detailed parameter values are presented in Table 4.

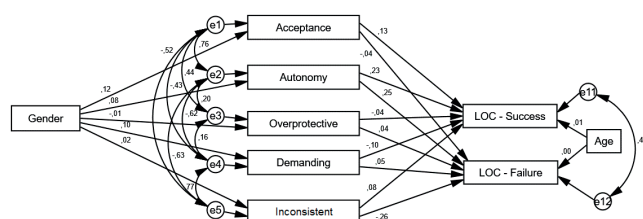


FIGURE 4. Standardized regression coefficients for model 2 for fathers' attitudes

TABLE 4. Regression coefficients for pathways in model 2 for fathers' attitudes

X	Y	B	SE	CR	p	β
Gender	Acceptance	2.10	1.02	2.05	0.040	0.12
Gender	Autonomy	1.22	0.88	1.38	0.167	0.08
Gender	Overprotective	-0.11	1.00	-0.11	0.911	-0.01
Gender	Demanding	1.92	1.13	1.70	0.089	0.10
Gender	Inconsistent	0.34	1.08	0.32	0.752	0.02
Age	KBPKR_Success	0.02	0.13	0.18	0.855	0.01
Acceptance	KBPKR_Success	0.03	0.03	1.25	0.212	0.13
Autonomy	KBPKR_Success	0.07	0.03	2.19	0.028	0.23
Overprotective	KBPKR_Success	-0.01	0.02	-0.55	0.583	-0.04
Demanding	KBPKR_Success	-0.02	0.02	-0.99	0.323	-0.10
Inconsistent	KBPKR_Success	0.02	0.02	0.83	0.409	0.08
Autonomy	KBPKR_Failure	0.08	0.03	2.44	0.015	0.25
Overprotective	KBPKR_Failure	0.01	0.02	0.56	0.575	0.04

X	Y	B	SE	CR	p	β
Demanding	KBPKR_Failure	0.01	0.02	0.52	0.606	0.05
Inconsistent	KBPKR_Failure	-0.07	0.02	-2.83	0.005	-0.26
Age	KBPKR_Failure	0.00	0.14	0.03	0.980	0.00
Acceptance	KBPKR_Failure	-0.01	0.03	-0.38	0.701	-0.04

B – unstandardized regression coefficient; SE – standard error; CR – conversion rate; p – significance of the results; β – standardized regression coefficient

DISCUSSION

Locus of control may be significantly related to adolescents' social, emotional, and educational functioning [31]. Given that locus of control is formed as a result of social learning [22, 23], parental behavior may be related to the child's perception of the relationship between behavior and its consequences. The present study aimed to determine the importance of perceived parental attitudes of mothers and fathers on locus of control in a group of Polish adolescents. Statistical analyses conducted indicate that parental attitudes of mothers and fathers play different roles in the formation of adolescents' locus of control. It was shown that there is a relationship between mothers' attitude of acceptance and the formation of children's internal locus of control – the higher the mothers' attitude of acceptance, the more internal LOC the adolescent has. The attitude of mothers, understood as full of warmth, acceptance, and providing a sense of security [39], promotes the formation of a locus of control and influence over one's own behavior in adolescents. Subsequent analyses have shown that the lower the intensity of mothers' overly demanding attitudes, the more intrinsic a general locus of control can be observed in adolescents. Similar results were obtained in relation to the locus of control in situations of failure and success. The mother's excessive demands, or the mother's ruthless enforcement of strict rules and punishment of children for not following them, are associated with the feeling that the adolescent's life (behavior) depends less on them and more on fate or other people. The results also showed that adolescents' locus of control is more internal in situations of failure and more external in situations of success. This means that adolescents are more likely to attribute failures to their abilities and behaviors, while they associate successes with favorable environmental conditions and the support of others. The results obtained are similar to those of other authors. They found significant relationships between internal locus of control and authoritative parenting style based on love and warmth [40], and external LOC and higher intensity of authoritarian style characterized by harshness and rejecting family environment [27, 41]. Subsequent analyses of mothers' attitudes indicate the importance of an accepting attitude in the development of locus of control in both success and failure situations – the greater the intensity of the accepting attitude, the greater the internal locus of control. This means that this attitude can, on the one hand, play a protective role by making the adolescent believe in his or her own abilities and skills (a success situation) or by building

motivation for change (a failure situation), and, on the other hand, promote lower self-esteem (a failure situation), which is a risk factor for the development of psychopathology. Subsequent analysis results show a statistical trend defining the association of overprotective and inconsistent attitudes among mothers with LOC. Mothers who express excessive concern for the child, do not accept the fact that the adolescent is growing up, and react with anxiety to emerging changes in the child's behavior promote the development of a more external locus of control. Adolescents raised in overprotective families show less self-activity and greater dependence on social norms. The limited development of autonomy and the lack of opportunities to explore the world independently lead adolescents to perceive the world as unpredictable and hostile [3, 42]. This is consistent with the characteristics of the external locus of control [31]. The results of our own study are consistent with worldwide scientific reports [13, 43]. The inconsistent attitude of mothers, which is associated with unpredictable responses depending on mood and personal issues, also promotes the development of the external locus of control (at the level of statistical tendency). Adolescents raised in inconsistent families are prone to inconsistency in parenting interactions, may have difficulty predicting the behavior of others, and are more likely to look for the causes of their behavior in external stimuli [24]. Statistical analyses related to fathers' parenting attitudes indicate the importance of autonomy attitudes in the development of both general locus of control and LOC in situations of adolescent failure and success. A parent characterized by a high intensity of autonomy attitude allows the child to explore the world independently. An attitude of autonomy promotes the child's independence [44, 45], which is associated with seeing the relationship between one's behavior and its consequences (a more internal sense of locus of control).

CONCLUSION

The study conducted, as well as studies by other authors, illustrate the importance of parental attitudes in the development of locus of control. Parental attitudes are important for locus of control as early as the preschool years [24]. Based on the results of our own and other worldwide studies, it can be concluded that mothers' attitudes of acceptance and fathers' attitudes of autonomy (Baumrind's authoritative attitudes) are important for the proper development of children and adolescents. The presence of at least one parent with an authoritative attitude positively influences the formation of self-esteem, emotional stability, and the level of adaptation to the current situation in adolescents [46]. These characteristics are significantly associated with internal locus of control [27]. Attitudes associated with excessive demands, inconsistency, or overprotection (Baumrind's authoritarian and permissive attitudes) are associated with poorer psychosocial functioning in adolescents, including lower self-esteem, poorer academic performance, and lower self-efficacy [27]. This may affect adolescents' poorer functioning in their peer group and the emergence of

difficulties in completing developmental tasks during adolescence. The results of the study can make a practical contribution to knowledge about adolescents' sense of locus of control and the importance of parents' attitudes towards their children in the process of forming a locus of control.

LIMITATIONS

The main limitation of the study was the duration of the research procedure. The study began during the period of educational reform, but due to the COVID-19 pandemic and limited access to schools during this period, the study had to be interrupted and resumed after the students returned to full-time schooling. Another limitation was the nature of the questionnaire. In future research, it is worth considering adopting a long-term model and looking for mediators in the relationships between parental attitudes and adolescents' sense of control. It would also be worthwhile to expand the age range of adolescents surveyed (from early to late adolescence).

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