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ORIGINAL ARTICLE

Timeliness of the developmental tasks in adulthood among children of mothers suffering from schizophrenia

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BACKGROUND
Being raised by a mother suffering from schizophrenia may affect the fulfilment of developmental tasks. The aim of the study was to determine which psychological factors (attachment, emotion regulation) and social factors (parental care and social support) determine the implementation of developmental tasks, taking into account the age of the child at the time that schizophrenia was diagnosed in the mother (before 10 vs. over 10 years of age; B10y vs. O10y).

PARTICIPANTS AND PROCEDURE
The sample consisted of 47 (34 women) highly functioning adult offspring of mothers suffering from schizophrenia. They responded to self-report measures about their current functioning and gave retrospective information about their childhood.

RESULTS
The results show that the timeliness, inconsistency and excessive demands of the mother are higher in the O10y group than in the B10y group. The lack of awareness of experienced emotions, the need for support, inconsistency in the mother's parental attitude and diagnosis O10y were predictors of punctuality, while the available instrumental support, the need for support and the inconsistency of the parental style were found to be predictors of the acceleration of developmental tasks.

CONCLUSIONS
The results suggest that the group is heterogenous in terms of psychosocial functioning and developmental characteristics, so the type of support should also be diverse.

KEY WORDS
developmental tasks; mothers with schizophrenia; developmental psychopathology

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BACKGROUND

Various concepts and models of developmental psychopathology attempt to explain the determinants and mechanisms of health or mental disorders in children, adolescents and adults, pointing to the changing importance of biological, personality and social factors (family and non-family) at different stages of life (Cicchettii & Toth, 2009; Pfefferle & Spitznagel, 2009). The indeterministic development model assumes that development is a hierarchical process in which the individual, using biological, mental and environmental resources and capabilities on the one hand and dealing with risk factors on the other, develops individual predispositions and is involved in the implementation of development tasks indicated in specific socio-cultural conditions in subsequent phases. Earlier adaptation patterns form the basis for later, more complex psychosocial functioning (Sroufe et al., 2005). The functioning of a highly adapted – or otherwise – child during adolescence or in adulthood depends on the many interrelationships between biological, psychological and social factors both in life history and in the context of adult development (Cicchettii, 1984; Cicchettii & Toth, 2009; Sroufe, 1997).

In recent years, there has been a growing body of qualitative and quantitative research on the psychosocial development of children, young people and adults raised by mothers and/or fathers with serious mental disorders (Engur, 2016; Leinonen et al., 2003). Most of these studies were carried out on the descendants of people addicted to psychoactive substances, children and young people who were sexually abused or subject to physical violence, but relatively few were carried out on those who grew up with a mother or father with schizophrenia or other psychoses, e.g., an affective bipolar disorder (cf. Hall, 1996; Mattejat & Remschmidt, 2008). A review of the databases of scientific articles shows that it was not until the 1990s that the first, more systematic research on the psychosocial functioning of this group of people appeared, along with the diaries and autobiographies of people brought up by mothers or fathers with schizophrenia (cf. Brown & Roberts, 2000; Holley, 1998).

Until then, genetic, constitutional and lineage research had been carried out into the prevalence of mental disorders among the offspring of mentally ill parents (cf. Rutter & Quinton, 1984; Rutter & Plomin, 1997). The prevalence of fathers or mothers being brought up by a parent with schizophrenia is difficult to assess, as there is no comparative study taking into account the gender of the parents affected or the age of the child at the time of the diagnosis of the mental disorder in the parent. For example, a study by Foley and colleagues (2001) in Virginia found that approximately 26% of families had mental disorders in one or both parents, of which roughly 8% were estimated to have serious psychiatric disorders such as schizophrenia or bipolar affective disorders. The parental responsibilities of people with these disorders are particularly difficult for them because, on the one hand, they suffer from the symptoms of disease and social exclusion (van der Ende et al., 2016) and, on the other, they are under the threat of having their children taken away from them (Dipple et al., 2002; Johnson et al., 2001; Seeman, 2012).

The quality of parental roles is linked both to the ability to take care of the child, through an adequate commitment to maintaining an emotional bond with the child, and to setting specific requirements and exercising control over the child's behaviour. In the development model of children of parents with alcohol-related mental disorders, Jacob and Johnson (2000) assumed that the conditions of this process should be found, among others, in specific and non-specific aspects of their psychosocial functioning. The specific factors relate to the influence of the symptoms of mental disorders of parents on the tasks performed by them within roles, while the ones not specific to their cognitive, emotional and social maturity relate to shouldering the responsibilities of parenthood and functioning in a partnership.

The offspring of parents with severe mental disorders are most often exposed to stress associated with the low socio-economic status of the family (e.g., poverty, stigma and marginalisation of the family), low education and professional status of parents, loss of contact with parents due to the necessity of their hospitalisation or limitation of parental rights and high risk of experiencing neglect, physical and mental violence on the part of the sick parent (Ihle et al., 2001). The material status of a family with a mother and/or father suffering from a chronic mental disorder is significantly lower, contributing to stress levels in the family (cf. Luciano et al., 2014). Moreover, when assessing the specific stress in relation to the disordered parent directly related to the symptoms of mental disorders (such as psychosis), children stressed: the feeling of danger and disorientation resulting from the unpredictable behaviour of the parent, the feeling of guilt for the parent's condition and being responsible for his illness, difficulties communicating with the parents and with other adults as they were convinced of the need to keep secret what happened at home and a great sense of isolation and loneliness (cf. Mattejat & Remschmidt, 2008). When the mother has schizophrenia: (a) there is a likelihood of withdrawal and passivity, which is likely to include the child's needs, (b) delusions may involve the child and (c) the child is exposed to an inconsistent mixed affect from the mother (Goodman & Brumley, 1990). This contributes to the disruption of the child's development during the time of the mother's illness and may also have consequences at later stages of development.

In many theories, it is assumed that one of the important manifestations of correct psychosocial development, as well as mental health, is the timely fulfilment of development tasks by an individual at different stages of life (Brzezińska, 2005; Havighurst, 1981; Newman & Newman, 2009). Development tasks are understood as normative tasks based on social expectations concerning development stages, which should be achieved in certain phases of life, including in adulthood. In this research project, it has been supposed that the timeliness of achieving developmental tasks (understood as being done at a favourable time) in adults whose mothers were schizophrenic is a result of psychological factors – the internal operational models of attachment and emotion regulation strategies, as well as environmental factors – family (performing parental functions) and non-family (available and expected social support). The factors contribute to the disruption of the child's development during the time of the mother's illness. Based on developmental psychopathology and psychodynamic theories as a background, we may also expect consequences at later stages of development (long-term consequences). We, therefore, anticipate that in early adulthood, the achievement of developmental tasks (in the children of these mothers) will be impaired.

AIM OF THE STUDY AND HYPOTHESES

The research project assumes that being raised by a mother suffering from schizophrenia affects the timeliness of the implementation of developmental tasks. Consequently, the aim of the study was to identify which psychological factors (attachment, strategies of emotion regulation) and social factors (type of parental care and social support) determine the timeliness of the implementation of developmental tasks of adults whose mothers were ill with schizophrenia, taking into account the age of the child at the time the disease was diagnosed in the mother – before 10 years of age (B10y) vs. over 10 years of age (O10y). The tenth year of life was chosen because after 10 years of age, adolescent anxiety can begin and coping with it is less dependent on the relationship with parents and the family environment than with the difficulties of earlier developmental phases. Moreover, it was expected that people brought up by a mother who had developed schizophrenia before the child reached the age of 10 would have, compared to those whose mothers had developed schizophrenia after the child reached the age of 10, a greater delay or acceleration in the implementation of developmental tasks. These differences would result from the fact that adults brought up from early childhood by mothers with schizophrenia experienced to a greater extent, among other things, a lack of maternal responsiveness to their needs for dependency, and increasingly suffered from abandonment and a sudden withdrawal from emotional contact (Duncan & Browning, 2009; Riordan et al., 1999; Snellen et al., 1999). Internalised relations between a child and a mother create internal operational models of attachment which, on the one hand, moderates contact with other people and, on the other, affects the ability to regulate emotions (Diamond & Hicks, 2004; Hazan et al., 2004). During the acute phase of schizophrenia, the mother suddenly becomes inaccessible to the child or behaves incomprehensibly (bizarrely), which causes many negative emotions in the child, such as horror, anger and a sense of guilt, for which there is no one to soothe (especially in the absence of the father). Thus, the child can weaken these negative emotions by either taking on a parental role towards the mother and other family members (a parentification attitude that involves taking care of and controlling the parent and denying the desire for care, which can result in an acceleration of growing up and independence), or by distancing or isolating oneself from it, later on from one's peers and other people, which can be a source of greater control and security (in the future, this can delay the achievement of development tasks, especially those related to interpersonal relationships). Because inner models of attachment affect one's ability to regulate negative emotions, it was assumed that this variable may modify, to a significant extent, the dispositions to the greater or lesser timeliness of the implementation of developmental tasks in adulthood.

PARTICIPANTS AND PROCEDURE

PROCEDURE

The study group consisted of young adults brought up by mothers with schizophrenia. Persons participating in the study were recruited through interviews with patients and the families of patients of the Hospital for Nervous and Psychological Disorders, the Mental Health Clinic and in private psychiatric offices in large cities of western Poland. Persons who were authorised to contact the mental health institutions treating their mothers were examined. They were informed about the objectives of the study and assured of confidentiality and anonymity, and subsequently agreed to take part in the study. The research consisted of filling in a self-report questionnaire and a sociodemographic questionnaire concerning both the examined person and his/her mother's disease (course, frequency, behaviour, symptoms, treatment, and perception of warmth or distance in the mother's behaviour; cf. Mielcarek, 2014; Matuszak-Prymas, 2014). In total, more than 150 questionnaires were distributed, which

were submitted in envelopes by psychiatrists and psychologists in the aforementioned institutions to persons corresponding to the characteristics of the study group. Doctors and psychologists then collected the questionnaires and passed them on to the authors of the research. Finally, 47 questionnaires were returned, giving a response rate of 31%; we consider this to be low, especially considering the previous preparatory contact and continued contact with the person treating their mother. This group therefore seems rather difficult to examine. The project was approved by the Ethics Committee of the University of Zielona Góra (2/2019).

PARTICIPANTS

The study group consisted of 47 persons (34 women) aged from 18 to 38 (M = 26.3, SD = 5.21) who had mothers with a diagnosis of schizophrenia. The diagnosis of mothers was carried out by psychiatrists who have treated them in the past; however, the mothers' diagnosis was valid at the time of the study. Information about the moment of the mother's diagnosis comes from file information. The surveyed group was dominated by individuals with secondary education (56%), vocational and primary education (12%) and higher education (32%). Fourteen participants were married, six divorced, one widowed and the rest living alone (28 participants). The group of women and men did not differ in age ($t(42) = 1.08$, $p = .288$) or in any other variable taken into account in this study (Student's t-test and Mann-Whitney U test results were not significant), with the exception of anxiety, which was higher in the group of women ($U(45) = 132$, $p = .034$). The diagnosis of their mothers' schizophrenia was made before they had reached 10 years of age in 23 participants (B10y) and after 10 years of age in 24 persons (O10y). It is worth noting that these were people who experienced their mothers behaving differently during the most intense period of the disease and in the rest of the period according to the warmth vs. interpersonal distance (χ^2 continuity correction (30) = 78.00, $p < .001$). These people described their mothers as being distanced and, albeit less frequently, warm during the period of intensification of symptoms of schizophrenia. As we can see, the periods of maternal disease significantly change the image of the mother as a person and her potential availability to her child (Table 1).

Table 1

Characteristics of mothers according to the study participants (N = 47)

Mother's hospitalisation	Number	%
Time of mother's schizophrenia onset		
Before birth	5	10.6
Between 0 and 3 years of age	7	14.9
Between 3 and 10 years of age	11	23.4
Over 10 years of age	24	51.1
Course of schizophrenia		
One episode	1	2.1
Once every few years	19	40.4
Once a year	16	34.0
Most of the time	11	23.4
Treatment		
No	3	6.4
Yes	44	93.6
Mother's hospitalisation		
None	4	8.5
Once	6	12.8
Several times	32	68.1
Regularly	5	10.6
Mother's intake of medication		
Did not take any medication	22	46.8
Sporadically	13	27.7
Regularly	7	14.9
I do not know	3	6.4
Behaviours in healthy periods / behaviours in periods of illness (significant differences in frequencies: χ^2 continuity correction (30) = 78.00, $p < .001$)		
Very warm	11/2	23.4/4.2
Warm	15/3	31.9/6.4
Rather warm	5/0	10.6/0
Hard to say	6/4	12.6/8.5
Rather cold	5/5	10.6/10.6
Cold	1/15	2.1/31.9
Very cold	3/17	6.4/36.2

MEASURES

Questionnaire on the Timeliness of the Implementation of Life Tasks in Adulthood. The developmental task is understood as an objective that emerges during a specific period of a person's life, and that remains

in a dynamic relationship with task characteristics for the previous and next period of life (Brzezińska & Kaczan, 2011a, b). Timeliness is understood as the achievement of developmental tasks at the same time as these tasks are achieved by peers. Early mastery of these tasks (crisis resolution) is assumed to be rewarding and to foster healthy and confident growth in society and, in the event of late or unsatisfactory control, to contribute to dissatisfaction, frustration and the risk of social exclusion. The questionnaire consists of 25 items covering areas such as: relationships with people and family, learning and work, as well as leisure time and time for oneself. Peers are the point of reference in the assessment of timeliness; the respondents are supposed to assess to what extent life events occurred to them earlier or later in comparison with their peers. It can also be said that a given task has not appeared to be as important in a person's life so far. Consequently, the tool determines the participants' acceleration (W3), timeliness (W4), and delay (W5) of development tasks, as well as normativity of life events (W1). The questionnaire has good reliability and validity, as reported by Brzezińska and Kaczan (2011a).

Experiences in Close Relationships Scale (ECR; Brennan et al., 1998; Rajewska-Rynkowska, 2007). The questionnaire consists of 36 statements (in two sub-scales representing the basic dimensions of the attachment: avoidance and anxiety) and concerns experiences in relationships, to which the subject responds using the 7-point Likert scale from 1 (*I strongly disagree*) to 7 (*I strongly agree*). The combination of the scores on these dimensions may indicate one of the four types of attachment (Bartholomew & Horowitz, 1991): confident, absorbed, anxious and rejecting; in this study, however, we used dimensional scores. High results in the dimension of 'anxiety' are responsible for absorbing relationships and fears of abandonment, while low results express a relatively constant sense of being accepted by a relationship partner. In the 'avoidance' dimension, high results correspond to a tendency to reject or avoid close relationships, and low results correspond to a positive attitude to dependency and closeness in relationships (Brennan et al., 1998). The reliability factor of Cronbach's α in the Polish version of the ECR questionnaire for the 'avoidance' scale in the selected final version is .95; for the 'anxiety' scale it is .86.

Scale of Parental Attitudes – "My mother" version (SPA – "My mother"; Plopa, 2008). This scale was used to assess the type of parental responsibilities taken by mothers. Parental attitudes are assessed here from the offspring's perspective (remembering autobiographical experiences) and to determine the parent's 5-dimensional behaviour towards the child: 1) attitude of acceptance or rejection – the parent unconditionally accepts, a friendly system exists between the parent and the child and there is mutual interaction or, in contrast, the child is not secure with the parent, the parent does not respect the child and does not satisfy their needs; 2) autonomy – the parent treats the child as an adult, the child's behaviour is accepted and the parent respects the child's privacy and secrets; the parent encourages the child to be independent; in conflict situations, the parent does not impose his/her own opinion on views he/she does not agree with; the parent is very tolerant in terms of making acquaintances and closer relations; 3) excessive protection – excessive care of the parent for the child; the parent does not accept when the child is growing up and needs to connect to children their own age, all attempts to make the child independent are taken away with fear and uncertainty; the parent is afraid of the child's future and excessively interferes in the child's life, which may result in conflicts; 4) excessive requirements – the parent treats the child strictly (rigid model of education), constantly demands obedience; the child must treat the parent as an authority and listen to his or her instructions; 5) inconsistency – changing attitude of the parent towards the child depending on the circumstances; the parent is accepting yet engages in the child's life too often and their attitude can change to a limiting one (screaming, nervousness, punishment); the child perceives the parent as too volatile to establish a stable relationship with. The participants shall respond to 75 of the replies to the questionnaire by selecting one of the five answers provided. If the claim agrees with the mother's description, this means the position is 'true'; if it does not agree then it is 'false'. The reliability of the questionnaire was determined by a retesting technique and an absolute stability factor was calculated. Stability in the "My mother" version was estimated with Pearson's and ranges from .81 to .92 ($p < .001$). The scale has satisfactory reliability indicators (Cronbach's α for individual scales is in the range of .73-.88).

The Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004; Brzezińska et al., 2014) was used to assess problems in emotional regulation. The scale originates from clinical studies on the role of emotional deficits in the genesis and clinical picture of various forms of mental disorders, such as addictions, anxiety disorders, complex post-traumatic disorders and personality disorders (cf. Górska & Jasielska, 2010; Gratz & Roemer, 2004; Gratz et al., 2006). The scale consists of 36 items included in six scales, providing information on the following manifestations of emotional disorders: 1 – no acceptance of experienced emotions (NONACCEPT); 2 – difficulties in engaging in goal-oriented behaviour (GOALS); 3 – difficulties in impulse control (IMPULSE); 4 – lack of awareness of experienced emotions (AWARENESS); 5 – limited access to adaptive emotion control strategies that modulate the intensity of experienced

emotions (STRATEGIES); and 6 – lack of differentiation and understanding of experienced emotions (CLARITY). Each position in all scales is estimated by the participants on the Likert scale, scored from 1 (*almost never*) to 5 (*almost always*). The high reliability of the DERS scale is confirmed by the high internal consistency rate for the overall scale, with a Cronbach's α of .93; for each sub-scale, the Cronbach's α is greater than .80 (for details see Gratz & Roemer, 2004).

Berlin Social Support Scales (BSSS; Łuszczyńska et al., 2006). This scale was used to assess the dimensions of social support, understood as the resources and assistance provided by other people, taking into account emotional, instrumental and informational dimensions. In order to assess social support in persons participating in the study, the following sub-scales were used: 1) perceived available support (emotional and instrumental); 2) need for support; and 3) looking for support. In total, the questionnaire consisted of 17 items. The responses to the statements were made on a 4-point scale from 1 (*completely untrue*) to 4 (*completely true*). The questionnaire is high in reliability and moderate in validity (see details in: Łuszczyńska et al., 2006).

RESULTS

In order to describe and compare groups of subjects categorised by the time of their mother's schizophrenia diagnosis (before 10 years of age – B10y and over 10 years of age – O10y), the means and standard deviations of all variables were calculated, and the means in these groups were compared using Student's *t*-test (in the case of violation of the assumption of normality and/or equal variances the Mann-Whitney *U* test was used) with the magnitude of the effect according to Cohen's *d* (see Table 2). We decided to accept the significance level of .10 due to the fact that, taking into account the small size of the examined group, there is a risk of rejecting the true hypothesis (assuming a zero hypothesis when it is true, a type II error; in order to maintain acceptable test power (power > 50%), a more liberal assumption was made for a type I error, setting the threshold at $\alpha = .10$). We are aware that the power is low, but we could not increase the sample due to difficult access to test persons, and remaining under the assumption of $\alpha = .05$ would result in the power being lower than 39%.

Difficult availability of the participants (related to the examination procedure and requiring disclosure of information not only about themselves, but also about their mothers) led to a deeper analysis of the results, considering information about the effect size in terms of first priority. In order to better identify and solve the problem of the risk of obtaining a true but not significant result, confidence intervals for the achieved values of the effect sizes were calculated. In the following analyses, the results were only reported if their 90% range did not include zero. The results show statistically significant differences at the $p < .05$ level between the groups determined by the time of their mother's diagnosis in the area of timeliness ($d = .63$), but also inconsistency ($d = .64$) and excessive requirements ($d = .87$) in parental style. The timeliness, inconsistency and excessive demands of the mother are significantly higher in the O10y group than in the B10y group. It is also worth mentioning that participants from the B10y group are more avoidant when an attachment is considered ($d = .73$) and have a greater acceleration of developmental tasks ($d = .58$), but also evaluate their mothers as more accepting ($d = .56$), and themselves as having less need for support ($d = .54$) than the O10y group.

Next, groups of factors determining three aspects of timeliness were identified (timeliness, acceleration and delay). Firstly, in order to comprehensively answer the question about the role of psychological and social factors, a multivariate regression analysis was performed, in which the explained variable was the timeliness of developmental tasks, and the explaining variables were as follows: attachment, strategies of emotional regulation, social support and parental attitudes. Variables such as difficulties regulating emotions in terms of a lack of awareness of emotions experienced (AWARENESS) and a lack of differentiation and understanding of the emotions experienced (CLARITY), as well as the need for support and two parental attitudes – requirements and inconsistency – have been included in the regression model; this is because they are not collinear, their data are not homoscedastic and their auto-correlations are not relevant (observation errors are independent).

Secondly, the dichotomous variable showing whether their mother's schizophrenia was diagnosed B10y or O10y was also included (see Table 3). The proposed regression model broadly explains the relationship between the variables ($F(6, 40) = 6.38$, $p < .001$). More precisely, on the basis of regression coefficients, it can be stated that the lack of awareness of experienced emotions (AWARENESS), the need for support, inconsistency in the mother's parental attitude and O10y are related to a higher timeliness in developmental tasks. Simultaneously, the lack of differentiation and understanding of emotions experienced (CLARITY) and the higher demands of the mother on the child are negatively related to the timeliness; the tested model determines more than 41% variability in the timeliness of development tasks.

Furthermore, in order to explain the delay of the developmental tasks, the most important factor is the lack of differentiation and understanding of the emotions experienced (CLARITY) ($F(1, 46) = 12.70$, $p < .001$, $r = .47$, $p < .001$), which explains 20% of the variance in the delay. The variable of the child's age

Table 2

Comparison of two groups of participants distinguished on the basis of the time at which the mother's schizophrenia was diagnosed (before or after the child reached 10 years of age)

Variable	B10y – before 10 years of age of the child (n = 23)		O10y – over 10 years of age of the child (n = 24)		Intergroup differences		
	M	*SD*	*M*	*SD*	*t/U*	*p*	Cohen's *d*
Developmental tasks – Questionnaire on Timeliness of the Implementation of Life Tasks in Adulthood							
Sense of normativity (W1)	73.00	18.70	82.00	8.47	$U(45) = 206$	.125	−.63
Sense of acceleration (W3)	40.91	33.23	24.58	22.25	$U(45) = 345$	.097	.58
Sense of punctuality (W4)	35.43	22.00	50.46	25.37	$t(45) = -2.17$	.036	−.63
Sense of delay (W5)	17.74	21.53	19.33	31.63	$U(45) = 296$	.659	−.06
Experiences in Close Relationships Scale – ECR							
Anxiety	4.13	2.13	3.64	1.29	$U(45) = 290$	.782	.28
Avoidance	3.55	2.35	2.24	1.04	$U(45) = 361$	.074	.73
Difficulties in Emotion Regulation Scale – DERS							
NONACCEPT	2.39	1.29	2.19	1.15	$U(45) = 309$	.488	.16
GOALS	2.67	1.33	2.98	1.02	$U(45) = 246$	.528	−.27
IMPULSE	2.29	0.94	2.46	0.94	$t(45) = -0.65$	.519	−.19
AWARENESS	2.85	1.00	3.02	0.67	$t(45) = -0.70$	.487	−.20
STRATEGIES	2.37	1.07	2.46	0.89	$U(45) = 257$	.693	−.09
CLARITY	2.02	1.22	1.88	0.61	$U(45) = 259$	.724	.13
Scale of Parental Attitudes – "My mother" version (SPA – "My mother")							
Acceptance-rejection	47.61	17.46	39.08	12.97	$t(45) = 1.91$	.063	.56
Autonomy	41.00	13.69	35.42	7.16	$U(45) = 347$	.133	.51
Excessive protection	45.39	12.14	47.67	12.52	$t(45) = -0.63$	.530	−.18
Excessive requirements	43.78	13.45	54.71	11.55	$t(45) = -2.99$	.004	−.87
Inconsistency	41.30	15.68	51.46	16.07	$t(45) = -2.19$	.034	−.64
Berlin Social Support Scale – BSSS							
Perceived available emotional support	3.03	0.77	3.12	0.56	$U(45) = 271$	.923	−.13
Perceived available instrumental support	3.07	0.86	3.32	0.60	$U(45) = 236$	.338	−.35
Need for support	2.49	0.78	2.93	0.83	$U(45) = 189$	.065	−.54
Seeking support	2.59	0.94	2.86	0.89	$U(45) = 228$	.310	−.29

at the time of the mother's schizophrenia diagnosis (B10y or O10y) remains insignificant and does not change the characteristics of this model.

Thirdly, the available instrumental support (positively related to the acceleration), the need for support and the inconsistency of the mother's parental style turned out to be significant variables when explaining the acceleration; the last two variables are negatively related to the acceleration (cf. Table 4). This model comprehensively explains the relationship between the variables ($F(3, 44) = 6.78$, $p < .001$), and 27% explains the variability in the acceleration.

Table 3

Summary of multiple linear regression analyses for the intrapsychic and external determinants of sense of developmental task timeliness (N = 47)

Predictor	Estimate	SE	*t*	*p*	Stand. estimate	95% CI	
						Lower	Upper
Intercept	47.16	22.49	2.10	.042			
DERS_AWARENESS	8.96	3.60	2.49	.017	0.31	0.06	0.06
DERS_CLARITY	−15.23	3.68	−4.14	< .001	−0.58	−0.87	−0.30
BSSS_need for support	8.60	3.59	2.39	.021	0.29	0.05	0.53
SPA – "My mother" excessive requirements	−0.89	0.33	−2.72	.010	−0.49	−0.85	−0.13
SPA – "My mother" inconsistency	0.43	0.24	1.79	.080	0.29	−0.04	0.61
B10y & O10y	13.09	6.42	2.04	.048	0.27	0.00	0.53
Adj. R^2 = .41, $F(6, 40)$ = 6.38, p < .001							

Table 4

Summary of multiple linear regression analyses for the external and internal determinants of the sense of developmental task acceleration (N = 47)

Predictor	Estimate	SE	*t*	*p*	Stand. estimate	95% CI	
						Lower	Upper
Intercept	46.55	17.02	2.74	.009			
BSSS_perceived instrumental support	21.02	6.27	3.35	.002	0.54	0.22	0.87
BSSS_need for support	−19.48	4.90	−3.97	< .001	−0.57	−0.85	−0.28
SPA – "My mother" inconsistency	−0.60	0.25	−2.41	.020	−0.35	−0.64	−0.57
Adj. R^2 = .27, $F(3, 44)$ = 6.78, p < .001							

DISCUSSION

THE TIME OF THE MOTHER'S SCHIZOPHRENIA ONSET AS A DIFFERENTIATING VARIABLE

The aim of the study was to determine whether adults whose mothers had developed schizophrenia before the age of 10 (B10y) differed from those whose mothers had developed schizophrenia after the age of 10 (O10y) in terms of their timeliness (as well as acceleration and delay) of development tasks and its associated conditions in terms of intrapsychic and extrapsychic factors (family and non-family factors). In Poland, adult children of mothers suffering from schizophrenia, especially daughters, are the persons most often authorised to contact the mental health institutions treating their mothers. Analyses showed that people from the O10y group had a higher timeliness in carrying out developmental tasks than those from the B10y group (d = .63). Moreover, those who were brought up for a longer time by their schizophrenic mother had a greater acceleration of development tasks (d = .58). At the same time, the O10y group perceived mothers to be more (relative to the B10y group) inconsistent (d = .64), sometimes accepting, sometimes rejecting or demanding (d = .87) and accepting only if children have complied with their imposed standards (d = .56). Thus, the O10y group evaluated mothers as more severe, especially when expressing their anger at the stress of the disease and its consequences experienced in their childhood or present situation.

Older children were perhaps more aware of their mothers' stress and negative emotions than younger children, who face far more incomprehensible and bizarre behaviour from their mothers. On the other hand, participants from the B10y group assessed their mothers as more accepting (d = .56), and at the same time perceived themselves as less in need of support (d = .54). Such an appraisal points to possible denial of the stress associated with the mother's disease, as well as to the idealisation of the mother and a likely tendency to ascribe themselves greater independence from others.

One of the earliest narrative research studies of Dunn (1993), and later Duncan and Browning (2009), on adults brought up by a mother or father with schizophrenia showed slightly different results. It was observed that the vast majority of women and men, regardless of the age at which their parents became ill, indicated chaos, incomprehensibility and unpredictability introduced by the sick parent into everyday life and family relationships. In the latter research, almost all the subjects (except two persons) were raised by their mother or father, who became schizophrenic prior to their 10th birthday (cf. Duncan & Browning, 2009, Table 1, p. 80). Our research has shown that the B10y group revealed a possibly more significant level of denial and idealisation of their childhood experiences than the O10y group.

In our study, it appears that, contrary to expectations, the compared groups of adults did not differ in their level of fear of loss and abandonment in close relationships, while, as expected, persons from the B10y group showed a greater intensity of avoiding close relationships with people (d = .73). It can therefore be assumed that adults from the O10y group are more positively disposed towards close, intimate relationships than those from the B10y group. The aforementioned Duncan and Browning studies (2009) also showed that people brought up by schizophrenic parents from early and late childhood had serious problems with establishing intimate relationships not only in childhood, but also in adulthood. The fear of mental illness and/or stigma may play an important role in functioning in social relationships, as shown by Hall's research (1996). It is worth noting that participants from both groups similarly assessed the availability of emotional and instrumental support in the social environment and highly valued their efforts to obtain social support. In contrast, participants from the B10y group showed a lower need for social support than persons from the O10y group (d = .54).

To summarise, comparison of the results of both groups allows the formulation of a hypothesis that people brought up from early childhood by mothers suffering from schizophrenia experience such a high level of anxiety that more archaic, primary defence mechanisms (e.g., dissociation, splitting) were activated, thus resulting in a greater idealisation of themselves (acceleration of development tasks) and their mothers (sense of acceptance given by them), whilst simultaneously exhibiting greater avoidance of close relationships and a lower need for support outside the family. Those who have experienced relationships with a mother suffering from schizophrenia since late childhood (the O10y group) are more annoyed by her unpredictable and chaotic behaviour, are less likely to avoid close relationships, are more in need of social support and more realistic in their timeliness of developmental tasks.

FACTORS DETERMINING THE TIMELINESS OF DEVELOPMENTAL TASKS

Answering the question of the role of intra-psychic and social factors (family and non-family) in explaining the determinants of the timeliness of the implementation of developmental tasks in the entire participant population, it was found that some of the factors may be predictors of the timeliness (social and psychological factors) or the delay in the implementation of tasks (emotional regulation), while other factors were important for explaining the acceleration of developmental tasks (social factors).

It has been demonstrated that the lack of awareness of experienced emotions remains positively correlated with timeliness and that the lack of differentiation and understanding of experienced feelings is negatively correlated with the timeliness of achieving developmental tasks during adulthood. This means that the more difficulty in understanding one's feelings, the higher the reported timeliness. At the same time, the less the person differentiates and understands feelings, the lower is their observed timeliness. Moreover, the recognition of emotions is the only factor connected with the delay of development tasks, independently explaining 20% of the variance of the delay. Perhaps it is the case that experiencing negative emotions in all their complexity is so dominant and engaging that it hinders the implementation of developmental tasks or is a source of a developmental delay in relation to the reference group. We also note that the greater the need for support and the greater the inconsistency in the mother's parental attitude, the higher is the timeliness. This is difficult to interpret, unless we assume that the need to use support in stressful situations, i.e., in the face of the consequences of the mother's chaos, results in even greater feelings of other people as possible buffers of stress. Moreover, the later onset of the mother's schizophrenia (O10y) proved to be a factor which increased the timeliness of developmental tasks in adulthood, but was not related to the acceleration and delay (in the regression models tested in this study).

As regards the possibility of predicting acceleration in the implementation of development tasks, the results show that it is connected to social factors, such as a higher perception of instrumental support, a lower demand for support and a lower inconsistency of the parent. This means that even those who do not benefit from the emotional support of others (perhaps as a result of the parent's idealisation) are in a better economic situation and so may feel that their development is accelerated in comparison to their peers.

CONCLUSIONS

In conclusion, it should be stressed that the results obtained concerning the timeliness of developmental tasks among adults whose mothers had schizophrenia during their early childhood or adolescence show that different variables explain the timeliness and delay, while others accelerate the achievement of essential developmental tasks. It appears that their timeliness and delay can be predicted by difficulties in emotional regulation, while the acceleration is predicted by their perceived availability of instrumental support, with a reduced need for support. In personality psychology, the ability to regulate emotions is seen as an important determinant of health and mental disorders, as well as psychosocial adaptation (Dougherty et al., 2017; Messman-Moore & Bhuptani, 2017).

The above results also bring about a reflection on the area of assistance for the offspring of mothers with schizophrenia. This group is heterogeneous in terms of psychosocial functioning, and a different set of factors determines their implementation of development tasks. For this reason, it is necessary to make specific assumptions about the type of support, depending on the age of the child. It could be that children who have experienced their mother's illness before the age of 10 may have experienced her psychological inaccessibility as a relational trauma and use more primitive defensive mechanisms based on dissociation and express psychopathology in an internalised way and may thus be infrequently identified by a community as needing help. On the other hand, a group of people with a later diagnosis in their mothers may have conscious anger, and the trajectory of the development of psychopathology may resemble an externalisation path (Aldao et al., 2016; Carragher et al., 2015). Moreover, an important factor conducive to the implementation of developmental tasks is the social response to the need for support – when a child is born to a mother suffering from schizophrenia, it is important to maintain contact with carers (other family members and institutional support), who will be able to contribute to the reduction of stress associated with inconsistency and chaos in the family.

LIMITATIONS

Due to the difficulties involved in inviting people to the study, the group is relatively small and its participants are probably the most adapted group of offspring of mothers with schizophrenia. They were obtained, among other things, on the basis of their designation as persons authorised to contact the mental health care institutions treating their mothers. Because of the 31% response rate the representativeness of the respondents is low. It also seems biased towards a group of women with higher levels of education, which lowers the generalisability of the results. Thus, our conclusions should be treated as a contribution to further hypotheses. The limitations on the accuracy of the conclusion are also linked to the examination procedure itself, which is of a retrospective nature. Different distortions are likely to occur due to active defensive mechanisms and strategies dealing with past stress in relation to a schizophrenic mother, as well as their current attitudes towards the parent. However, the importance of the problem of discovering the intrapersonal and social mechanisms underlying the psychosocial functioning of children, adolescents and adults from families in which one or both parents suffer from serious mental disorders justifies retrospective examinations due to the complete lack of longitudinal studies. The results presented here should be considered as preliminary. There is a possibility that the findings are largely due to a non-specific effect of severe psychopathology in general. Thus in future studies should concentrate on comparison with a group of mothers afflicted with another severe illness (e.g., bipolar illness, major depression, or other health condition).

References

Aldao, A., Gee, D. G., De Los Reyes, A., & Seager, I. (2016). Emotion regulation as a transdiagnostic factor in the development of internalizing and externalizing psychopathology: Current and future directions. *Development and Psychopathology, 28*, 927–946. https://doi.org/10.1017/S0954579416000638

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: a test of a four-category model. *Journal of Personality and Social Psychology, 61*, 226–244. https://doi.org/10.1037//0022-3514.61.2.226

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult romantic attachment: an integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). Guilford Press.

Brown, M. J., & Roberts, D. P. (2000). *Growing up with a schizophrenic mother.* McFarland & Com.

Brzezińska, A. (2005). *Społeczna psychologia rozwoju* [Social developmental psychology]. Wydawnictwo Naukowe Scholar.

Brzezińska, A., & Kaczan, R. (2011a). Kwestionariusz Poczucie punktualności zdarzeń życiowych – PPZŻ: podstawy teoretyczne [Sense of Life Events Punctuality Questionnaire: theoretical basics]. In W. Zeidler (Ed.), *Kwestionariusze w psychologii. Postępy, zastosowania, problemy* [Questionnaires in psychology. Advancement, application, problems] (pp. 475–504). Vizja Press & IT.

Brzezińska, A., & Kaczan, R. (2011b). Kwestionariusz Poczucie punktualności zdarzeń życiowych – PPZŻ: podstawy teoretyczne [Sense of Life Events Punctuality Questionnaire: theoretical basics]. In W. Zeidler (Ed.), *Kwestionariusze w psychologii. Postępy, zastosowania, problemy* [Questionnaires in psychology. Advancement, application, problems] (pp. 505–520). Vizja Press & IT.

Brzezińska, A. I., Piotrowski, K., & Czub, T. (2014). Statusy tożsamości a style tożsamości i funkcjonowanie emocjonalne uczniów szkół zawodowych [Identity statuses and identity styles and emotional functioning among vocational schools students]. *Psychologia Rozwojowa, 19*, 51–71.

Carragher, N., Krueger, R. F., Eaton, N. R., & Slade, T. (2015). Disorders without borders: Current and future directions in the meta-structure of mental disorders. *Social Psychiatry and Psychiatric Epidemiology, 50*, 339–350. https://doi.org/10.1007/s00127-014-1004-z

Cicchetti, D. (1984). The emergence of developmental psychopathology. *Child Development, 55*, 1–7.

Cicchetti, D., & Toth S. L. (2009). The past achievements and future promises of developmental psychopathology: The coming of age of discipline. *Journal of Child Psychology and Psychiatry, 50*, 16–25. https://doi.org/10.1111/j.1469-7610.2008.01979.x

Diamond, L. M., & Hicks, A. M. (2004). Psychobiological perspectives on attachment: Implications for health over the lifespan. In W. S. Rholes & J. A. Simpson (Eds.), *Adult attachment: Theory, research, and clinical implications* (pp. 240–263). Guilford.

Dipple, H., Smith, S., Andrews, H., & Evans, B. (2002). The experience of motherhood in women with severe and enduring mental illness. *Social Psychiatry and Psychiatric Epidemiology, 37*, 336–340. https://doi.org/10.1007/s00127-002-0559-2

Dougherty, L. R., Barrios, C. S., Carlson, G. A., & Klein, D.N. (2017). Predictors of later psychopathology in young children with disruptive mood dysregulation disorder. *Journal of Child and Adolescent Psychopharmacology, 27*, 396–402. https://doi.org/10.1089/cap.2016.0144

Duncan, G., & Browning, J. (2009). Adult attachment in children raised by parents with schizophrenia. *Journal of Adult Development, 16*, 76–86. https://doi.org/10.1007/s10804-009-9054-2

Dunn, B. (1993). Growing up with a psychotic mother: a retrospective study. *American Journal of Orthopsychiatry, 63*, 177–189. https://doi.org/10.1037/h0079423

Engur, B. (2016). Parents with psychosis: Impact on parenting & parent-child relationship. *Journal of Child & Adolescent Behavior, 5*, 327. https://doi.org/10.4172/2375-4494.1000327

Foley, D. L., Pickles, A., Simonoff, E., Maes, H. H., Silberg, J. L., Hewitt, J. K., & Eaves, L. J. (2001). Parental concordance and comorbidity for psychiatric disorder and associated risks for current psychiatric symptoms and disorders in a community sample of juvenile twins. *Journal of Child Psychology and Psychiatry, 42*, 381–394.

Goodman, S. H., & Brumley, H. E. (1990). Schizophrenic and depressed mothers: Relational deficits in parenting. *Developmental Psychology, 26*, 31–39. https://doi.org/10.1037/0012-1649.26.1.31

Górska, D., & Jasielska, A. (2010). Konceptualizacja przetwarzania emocjonalnego i jego pomiar – badania nad polską wersją skali przetwarzania emocjonalnego Bakera i współpracowników [Conceptualization of emotional processing and its measurement – research on the Polish version of the emotional processing scale by Baker and colleagues]. *Studia Psychologiczne, 48*, 75–87.

Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment, 26*, 41–54. https://doi.org/10.1023/B:JOBA.0000007455.08539.94

Gratz, K. L., Rosenthal, M. Z., Tull, M. T., Lejuez, C. W., & Gunderson, J. G. (2006). An experimental investigation of emotion dysregulation in borderline personality disorder. *Journal of Abnormal Psychology, 115*, 850–855. https://doi.org/10.1037/0021-843X.115.4.850

Hall, A. (1996). Parental psychiatric disorder and the developing child. In M. Göpfert, J. Webster, & M. V. Seeman (Eds.), *Parental psychiatric disorder. Distressed parents and their families* (2nd ed., pp. 22–49). Cambridge University Press.

Havighurst, R. J. (1981). *Developmental tasks and education*. Longman.

Hazan, C., Gur-Yaish, N., & Campa, M. (2004). What does it mean to be attached? In W. S. Rholes & J. A. Simpson (Eds.), *Adult attachment: Theory, research, and clinical implications* (pp. 55–85). Guilford.

Holley, T. E. (1998). *My mother's keeper: a daughter's memoir of growing up in the shadow of schizophrenia*. William Morrow.

Ihle, W., Esser, G., Martin, M. H., Blanz, B., Reis, O., & Meyer-Probst, B. (2001). Prevalence, course, and risk factors for mental disorders in young adults and their parents in East and West Ger-

many. *American Behaviour Science, 44*, 1918–1936. https://doi.org/10.1177/00027640121958221

Jacob, T., & Johnson, S. (2000). Styl sprawowania funkcji rodzicielskich a nasilenie problemów alkoholowych [The style of exercising parental functions and the intensification of alcohol problems]. In R. Durda (Ed.), *Alkohol a zdrowie. Badania nad dziećmi alkoholików* [Alcohol and health. Research on children of alcoholics] (pp. 56–71). PARPA

Johnson, J. G., Cohen, P., Kasen, S., Smailes, E., & Brook, J. S. (2001). Association of maladaptive parental behavior with psychiatric disorder among parents and their offspring. *Archives of General Psychiatry, 58*, 453–460. https://doi.org/10.1001/archpsyc.58.5.453

Leinonen, J. A., Solantaus, T. S., & Punamaki, R. L. (2003). Parental mental health and children's adjustment: The quality of marital interaction and parenting as mediating factors. *Journal of Child Psychology and Psychiatry, 44*, 227–241. https://doi.org/10.1111/1469-7610.t01-1-00116

Luciano, A., Nicholson, J., & Meara, E. (2014). The economic status of parents with serious mental illness in the United States. *Psychiatric Rehabilitation Journal, 37*, 242–250. https://doi.org/10.1037/prj0000087

Łuszczyńska, A., Kowalska, M., Mazurkiewicz, M., & Schwarzer, R. (2006). Berlin Social Support Scales (BSSS): Polish version of BSSS and preliminary results on its psychometric properties. *Studia Psychologiczne, 3*, 17–27.

Mattejat, F., & Remschmidt, H. (2008). The children of mentally ill parents. *Deutsches Arzteblatt International, 105*, 413–418. https://doi.org/10.3238/arztebl.2008.0413

Matuszak-Prymas, K. (2014). *The satisfaction with life of young adults from families with mental disorders*. Adam Mickiewicz University. Unpublished manuscript.

Messman-Moore, T. L., & Bhuptani, P. H. (2017). A review of the long-term impact of child maltreatment on posttraumatic stress disorder and its comorbidities: an emotion dysregulation perspective. *Clinical Psychology: Science and Practice, 24*, 154–169. https://doi.org/10.1111/cpsp.12193

Mielcarek, M. (2014). *Timeliness of the tasks of development in young adults from families with mental disorders*. Adam Mickiewicz University. Unpublished manuscript.

Newman, B., & Newman, F. (2009). *Development through life: a psychosocial approach* (10th ed.). Wadsworth Cengage Learning.

Pfefferle, S. G., & Spitznagel, E. L. (2009). Children's mental health service use and maternal mental health: a path analytic model. *Children and Youth Services Review, 31*, 378–382. https://doi.org/10.1016/j.childyouth.2008.09.003

Plopa, M. (2008). *Skala Postaw Rodzicielskich* [Scale of Parental Attitudes]. Vizja Press & IT.

Rajewska-Rynkowska, K. (2007). *Schematy przywiązania do obiektu religijnego w kontekście aktywacji myśli o śmierci* [Schemes of attachment to a religious object in the context of activating the thought of death]. Unpublished doctoral dissertation. Institute of Psychology, Adam Mickiewicz University.

Riordan, D., Appleby, L., & Faragher, B. (1999). Mother-infant interaction in post-partum women with schizophrenia and affective disorders. *Psychological Medicine, 29*, 991–995. https://doi.org/10.1017/s0033291798007727

Rutter, M., & Plomin, R. (1997). Opportunities for psychiatry from genetic findings. *British Journal of Psychiatry, 171*, 209–219. https://doi.org/10.1192/bjp.171.3.209

Rutter, M., & Quinton, D. (1984). Parental psychiatric disorder: Effects on children. *Psychological Medicine, 14*, 853–880. https://doi.org/10.1017/s0033291700019838

Seeman, M. V. (2012). Intervention to prevent child custody loss in mothers with schizophrenia. *Schizophrenia Research and Treatment, 2012*, 796763. https://doi.org/10.1155/2012/796763

Snellen, M., Mack, K., & Trauer, T. (1999). Schizophrenia, mental state, and mother-infant interaction: Examining the relationship. *Australian and New Zealand Journal of Psychiatry, 33*, 902–911. https://doi.org/10.1046/j.1440-1614.1999.00641.x

Sroufe, L. A. (1997). Psychopathology as an outcome of development. *Development and Psychopathology, 9*, 251–268. https://doi.org/10.1017/s0954579497002046

Sroufe, L. A., Egeland, B., Carlson, E. A. & Collins, W. A. (2005). *The development of the person: The Minnesota study of risk and adaptation from birth to adulthood*. Guilford Publications.

van der Ende, P. C., van Busschbach, J. T., Nicholson, J., Korevaar, E. L., & van Weeghel, J. (2016). Strategies for parenting by mothers and fathers with a mental illness. *Journal of Psychiatric and Mental Health Nursing, 23*, 86–97. https://doi.org/10.1111/jpm.12283