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Parental generativity. The concept and measurement

Abstract: According to Erik H. Erikson parental committal to children's development is one of the most important developmental task in the medium adulthood. In this stage society requires the person to play the role of a productive and contributing member of society. On the other hand variety of changes in adolescence and their peculiar cause that relationship between parents and adolescents is problematical, so parents' generativity is a potential that has a positive impact on the progress of the child's ontogenetic changes. It is also a manifestation of correctly progressing development of adults. Specific actions undertaken by parents, revealing their generativity, are related with showing interests, emotional and cognitive support of a child, accepting his increasing independence and offering help in new, difficult situations associated with physiological puberty and social maturation. Seeking methods supporting the development of adolescent children, adequate to their developmental needs, evokes developmental potential of parents. Taking into consideration the dual aspect underlying the generative activity, the following dimensions of parental generativity revealed towards adolescent children have been determined: interest, active help, consent and sense of creativity. The article shall present an original take on parental generativity and the process of constructing the Parental Generativity Scale.

Keywords: Parenting, questionnaire, middle adulthood, generativity

Introduction

In the model of psychosocial development put forward by Erik H. Erikson (1964, 1968, 1974, 1980, 1982, 1997), the seventh stage in the human life cycle, which falls on the period of life called by the author adulthood (now also called middle adulthood), reveals a crisis between striving for creativity and a sense of stagnation. Creativity, productivity, life-giving and generativity are terms that in the scientific literature are used interchangeably to denote a positive resolution of this crisis (Mostwin, 1985; Szczukiewicz, 1998; Witkowski, 1989, 2015; Wojciechowska, 2017). They refer to the focus of an individual on the act of creating.

Erikson (1980, p. 103; 1982, p. 67) emphasizes the usefulness of the term generativity as specific for this particular stage concentration on supporting the development of younger individuals. The author observes that neither the term "creativity" nor "productivity" can truly reflect the essence of this stage. Generativity incorporates both productivity and creativity for the benefit of the next generation (*generativity – generation*). As stressed by Erikson (1982), only creativity that serves

generative purposes has a developmental character. Lech Witkowski (2015, p. 281) has proposed to define the formula for identity in this stage of development in the following way: "I am what I can breathe life into". It has also been emphasized that generativity of adult individuals is expressed in the form of taking responsibility for next generations (Morselli & Passini, 2015), although already in adolescence and emerging adulthood it is positively related to social engagement (Lawford & Ramey, 2015).

Taking into consideration individuals toward whom generative actions are directed, parental generativity can be treated as a developmental form of functioning of adults who fulfill parental roles. The category of parental generativity refers to such constructs as parenting style (Baumrind, 1980; Carlson, Laczniak, & Wertley, 2011; Chambers, Power, & Durham, 2004; Kagitcibasi, 2007) and parental attitude (Plopa, 2005; Roe & Siegelman, 1963; Ziemska, 2009), but it applies more to the development of adults. Their functioning in parental roles is treated here as an activity that has a developmental potential. Parental generativity to a lesser extent than parenting style or parental attitude refers to effects of parents' actions for the child's functioning. The article presents the author's

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conceptualization of parental generativity and a proposition of a scale that measures it.

Theoretical assumptions

Generativity manifests itself as the focus on supporting the development of younger individuals and advising them. As a consequence, the characteristic type of human activity during middle adulthood is conveying personal experiences, life philosophy, values and beliefs to younger people. Knowledge accumulated over the person's lifetime and modified by her/his experiences, constitutes an important value to which younger generations can refer to. On the other hand, a middle-aged person, often doubting the effectiveness of her/his actions and confronting youthful dreams with real achievements, wants to feel needed. The person strives to create new things and ideas, and to participate in the social life. Her/his activities take on a social dimension in the form of creating different kinds of educational, legal or medical institutions that function in order to provide care and protection, and to cultivate prosocial values. Generativity gives this stage of development a social dimension, it emphasizes its intergenerational aspect. Care for passing on cultural, national or religious values is the foundation of the continuity of generations. It guarantees the preservation of customs and traditions. Erikson (1968, p. 139) defines generativity as "a driving power in human organization" that assures the continuation of important values in the society, whereas the period of adulthood is called by the author "the generational link" (Erikson, 1982, p. 66). In this meaning, individuals in middle adulthood are links between the passing generation of their aging parents and the maturing generation of their children. They become a tie that binds the generations. Every society owns their continuation and unique culture to those who care for keeping customs, legends and historical truths.

The person's altruistic approach to products of her/his activity and offspring takes the form of care that becomes a new vital power, a virtue in Erikson's terminology. It is an expression of concern for what is being and has been created. Erikson (1964) associates this new life energy with care for any products of love, but also of chance. This concern is a manifestation of an authentic engagement in caring for other people, an expression of the person being more interested in others than in oneself. It enables sharing one's knowledge and experiences with a kind attitude toward the listener and, at the same time, it gives the person a sense of being needed, and protects against loneliness. Care for the younger generation, for its education, upbringing and its future, becomes the main generator of development during this stage. Erikson (1982), referring to Hindi notions that correspond to care, gives us three terms: Restraint, Charity, Compassion. They are to emphasize the altruistic character of caring for younger generations. For, generativity requires sensitivity to capabilities and needs of other people.

Maturity of individuals in middle adulthood leads to the creation of responsibility for next generations regardless of possessing or not possessing own offspring. By the very fact of having children or desiring to have them one does not achieve generativity. Only the ability to support the development of younger individuals gives this stage a developmental character. Erikson observes that although the criterion of mental health in this stage refers to parenthood, "there are people who, from misfortune or because of special and genuine gifts in other directions, do not apply this driver to offspring but to other forms of altruistic concern and of creativity, which may absorb their kind of parental responsibility" (Erikson, 1980, p. 103). In that case, such individuals can direct their parental responsibility toward children of other people. Erikson (1982) remarks that in times when we easily diagnose sexual frustrations, we do not talk about generational frustration at all. Generativity can be treated as a developmental need, and an inability to satisfy it can be considered a disruption of the development.

A dangerous phenomenon associated with this stage is sense of stagnation. When it appears, the person's ability to create and care for the younger generation is low or there is a total lack of it. Such an individual rejects the role of an adult who conveys experiences. The person's interest centers around her/his emotions, needs, problems. Stagnation can also occur when the individual is creative and productive, but not in the generative manner, because over-concentration on oneself magnifies the inability to act for the benefit of other people. Stagnation expresses itself in interpersonal relations based on own benefits. Self-absorption is the opposite of generativity. Danuta Mostwin (1985), referring to Erikson's theory, writes about "self-sealing" that happens when the individual withdraws, limits oneself to the sphere of own matters and interests. The lack of undertaking generational tasks and an egocentric pursuit for the protection of one's knowledge and experiences is a source of personality impoverishment.

A manifestation of an exaggerated self-absorption can be various regresses to earlier states, for instance, in the form of intensified concentration on one's looks or obsessive need for intimacy. Erikson (1968, 1997) claims that a self-absorbed person starts to treat oneself as a child. Care and interest are directed then at personal experiences. Stagnation, defined by Erikson as the nucleus of pathology in this stadium, is related to a regress to former conflicts. It denotes "the unwillingness to include specified persons or group in one's generative concern – *one does not care to care for them*" (Erikson, 1982, p. 68), i.e., the rejection of readiness to care for other people, creations and ideas. When stagnation appears, the individual does not care to care for other people.

Intergenerational creativity, understood as generativity, has been also emphasized by continuators of Erikson's though. Dan McAdams (McAdams & de St. Aubin, 1992; McAdams, de St. Aubin, & Logan, 1993) underlines the complex character of generativity that integrates the psychosocial space. The model presented by the author comprises seven interrelated features: *cultural demand*, *inner desire* to take care of other people, *concern* for future generations, *belief* about rightfulness of actions undertaken

for the benefit of future generations, *commitment* expressed in goals and programs of activity, and *action*, which is the most important manifestation of generativity. The last feature of generativity listed by McAdams is *narration* about oneself, understood as constructing a history of one's life. It constitutes *the generativity script*, which is a part of a greater unit – the person's life history or personal myth. This myth underlies the adult's identity of a person who is concerned for future generations. The above features of generativity focus on the personal and cultural purpose of being concerned for future generations. *Cultural demand* along with *inner desire* constitute the motivational source of generativity.

Cheryl L. Bradley and James E. Marcia (1998) proposed a model of the generativity statuses, in which generativity is defined by two dimensions – involvement and inclusivity. The dimension of involvement pertains to the degree to which the person is actively concerned for own development and the progress of other people. It manifests itself in sense of responsibility for development, in sharing wisdom and skills, and in the ability to realize commitments. Inclusivity refers to the scope of inclusion and exclusion of people from caring activities, the ability to be authoritative rather than authoritarian. The combination of the above two criteria gives us five generativity statuses: from the generative status, which is presented by individuals highly involved in social problems, tolerant toward different ideas and traditions, and balancing concern for oneself with concern for other people, through the agentic, communal and conventional statuses, to the stagnant status, which is characterized by low levels of involvement and inclusivity.

John Kotre (1999) claims that generativity enables to transform an individual optics into a supra-individual perspective. The author, distinguishing four separate forms of generativity – biological, parental, technical and cultural – emphasizes altruism and the necessity to act for the benefit of next generations as their fundamental components. Parental generativity manifests itself in actions associated with taking care of offspring (not necessarily biological), rearing and disciplining the child/children, and conveying traditions. This kind of activity constitutes an important factor of identity formation in adults. Generativity can be treated as a category that partially overlaps with immortality (Kotre, 1995). The emphasized by Erikson need to be needed is considered by Kotre a symbolic quest for immortality.

Bill E. Peterson (2006) notes that although studies on generativity yield important information about parental generativity and caring for others, still little is known about the influence of parental generativity on offspring. The results of studies conducted by this author indicate that generativity correlates positively with sense of closeness to own children and with experienced similarity to them. Moreover, generativity of parents is moderately positively correlated with offspring's future perspective, and negatively correlated with the rejection of formal religiousness by children. In addition, it has been observed that offspring of more generative parents tend to be happier in life than offspring of less generative parents. Bill E. Peterson, Kimberly A. Smirles and Phyllis A. Wentworth (1997) have also found out that generative parents are perceived by their adolescent children as authoritative individuals.

So far, a number of different strategies of measuring generativity have been devised. They take the form of questionnaires, narrations or analyses of personal documents. In the first group of tools, there is, for instance, *The Erikson Generativity Scale* (EGS) developed by Rhon Ochse and Cornelis Plug (1986). It is a Likert-type scale, in which a set of citations from Erikson's texts, pertaining to the first seven crises, has been included. There are ten items in this questionnaire that serve as means of measuring generativity, e.g. *I help people to improve themselves*, *I enjoy guiding young people*, *I have a good influence on people*, *I do something of lasting value*. Another frequently applied tool in studies on generativity is *The Loyola Generativity Scale* (McAdams & de St. Aubin, 1992; McAdams, de St. Aubin, & Logan, 1993). This scale has been also used in studies on parental generativity, although it does not specialize in this type of generativity. The tool is composed of 20 items. Respondents are asked to mark on a four-point scale to what degree the given statement describes them. Examples of items included in the questionnaire are: *I try to pass along the knowledge I have gained through my experiences; I try to be creative in most things that I do; If I were unable to have children of my own, I would like to adopt children; I feel as though my contributions will exist after I die*. The LGS has been successfully applied in various cultural contexts (e.g., Hofer et al., 2008; Karacan, 2014). The scale correlates positively with *The Generative Behavior Checklist* (GBC, McAdams & de St. Aubin, 1992), which includes 65 items that explore adults' assessment of their generative activity in the recent past. According to the test procedure, respondents are asked to determine on a scale from 0 to 2 the frequency of engaging in such actions as: "read a story to a child", "attended a community or neighborhood meeting", "donated blood", and "produced a piece of art or craft", during the last two months. Each behavior corresponds to one of the three main behavioral areas of generativity – creating, maintaining, or offering.

Angela Schoklitsch and Urs Baumann (2011), referring to the four types of generativity distinguished by Kotre, introduced a differentiation between social and ecological generativity. The authors claim that achieving generativity is an evidence of a successful course of the process of aging. They observe that there is a lack of appropriate tools for measuring generativity in old age. The authors have proposed three new questionnaires for studying individuals in late adulthood. Two of them focus on generative concern in adults' life in general (Generative Concerns in the Life Review) and on current generative issues (Current Generative Concerns). Each scale includes 29 items that refer to four spheres of generativity: technical, cultural, social, and ecological. The third scale (Past Parental Generative Concerns) includes 19 items related to biological and parental generativity. This scale pertains to generative concerns directed at children.

Narration techniques most often take the form of partially-structured interviews, e.g., *The Generativity Status Measure* (GSM) developed by Cheryl L. Bradley and James E. Marcia (1998). Another example of a narration method is the analysis of reconstructions of events from a person's life (early memories, crucial experiences and turning points in life). The researcher assesses to what degree generative motives are present in the given narration and to what degree the given adult reconstructs the past using generative categories (McAdams, de St. Aubin, & Logan, 1993; Wilt, Cox, & McAdams, 2010).

A systematic analysis of contents of personal documents (e.g., letters, dairies) is a technique less frequently applied. An example of this method can be the case study conducted in order to explore psychosocial changes in the sphere of identity, intimacy and generativity during early adulthood of a British writer Vera Brittain (Franz, 1995; Peterson & Stewart, 1990).

The available tools for measuring generativity are based on self-perception and self-description. Some authors observe that such a manner of investigation limits measurement capacities of generativity which has an interpersonal character (Cox, Wilt, Olson, & McAdams, 2010; Pratt, Norris, Alisat, & Bisson, 2013). Moreover, it seems important, as pointed out by Morselli & Passini (2015), that the available tools do not accentuate enough the focus on future generations, which is an essential component of the concept of generativity.

The author's attempt to conceptualize parental generativity

The Eriksonian model of human development has become the basis for developing the author's conceptualization of parental generativity. Erikson writes about various forms of generativity, yet in the first place he puts parenthood. This argument justifies the supposition that the fundamental manifestation of development in the period of middle adulthood are generative activities realized in the context of family. This view is also shared by Maria Tyszkowa (1987, p. 70) who writes that "parenthood is the basic model for generative attitudes. Productiveness in other domains is (…) a derivative of the parental attitude, but it can never entirely replace parenthood in the development of an adult person". Also, the studies by McAdams (McAdams, de St. Aubin, & Logan, 1993) indicate that fathers manifest a higher level of generativity than men who have never had children.

Parental generativity has been defined as an activity of adult individuals in middle adulthood that expresses engagement in the realization of developmental tasks of own children. Usually when parents are in the period of middle adulthood, their children most often are in the phase of adolescence. In such a situation, an expression of parents' care is understanding the developmental needs of adolescents and supporting their development. Engagement expresses the subordination of oneself in the particular time and scope to the undertaken task. It constitutes an exit from or a break with egocentrism. An engaged person cares for what s/he does for the very subject of own activity and its purpose, and not for benefits that it yields. Orientation of an adult individual at selfless actions for the benefit of the younger generation is a sign of altruism, understood as conscious, voluntary and selfless care for the well-being of other people (Łobocki, 1998). Such actions make the person a creator who acts in favor of the development of both oneself and her/his children. Erikson (1974, p. 125) concludes one of his works with the words "*TAKE CARE*" that closely correspond to the developmental character of people's activity in the period of middle adulthood. In the context of the presented theoretical assumptions, one can formulate the following wish: *Help your growing up child in order to help yourself.*

Not every form of adults' engagement in developmental problems of their growing up children is a manifestation of generativity. Too low interest in activities of an adolescent can be interpreted as a sign of focusing mainly on one's own experiences. Erikson refers to it as excessive self-absorption. In turn, excessive focus on (fixation) parenting, which manifests itself in the form of over-engagement (Goldbrunner, 2010) or fetishization of the role (Będkowska-Heine, 2003), usually incorporates excessive control over the child and separation fear, and is a sign of intrusiveness of the adult, being an exaggerated, disturbed form of closeness (Chambers, Power, & Durham, 2004; Chrząstowski, 2010). Parents' style of functioning that endangers the child's development and, at the same time, is a manifestation of an incorrect development of the adults themselves, can be called aversive parenting (Bakiera, 2016). Boundaries of parents' engagement are in the first place determined by developmental needs of their children, and the ability to adjust generative actions is the result of correct (critical) reading of the children's needs and capabilities. Actions that correspond to the specificity of the stage, i.e., accepting the growing independence of the child and offering help in situations that are either new or associated with physiological and social maturation, constitute for the parents a task that activates the developmental potential of middle adulthood. Studies indicate that an optimal level of parents' engagement brings outcomes in the form of auto-creative experiences in adults and favorable conditions for the child's development determined, in the first place, by the parental attitude of acceptance (Bakiera, 2013).

Taking into consideration the above, the following dimensions of parental generativity manifested toward maturing children have been distinguished: *interest*, *active help*, *consent*, *sense of creativity*. The first three dimensions characterize behaviors of adults that can be the subject of an objectivized evaluation because conducted both by the parents and their adolescent children. The fourth dimension has a subjective character – it pertains exclusively to the parents' auto-perception. The dimensions of parental generativity have been presented in Table 1.

Out of three dimensions of generativity that are studied through the prism of parents' self-perception and the child's assessment, two (*Interest* and *Active Help*) refer to parental actions that are not related to the child's age.

Table 1. The dimensions and indicators of parental generativity

PARENTAL GENERATIVITY	
activity of adults in the period of middle adulthood that expresses engagement in the realization of developmental tasks of their children; concern for introducing the next generation to adult life	
Dimensions	Indicators
INTEREST (I)	
activities of the parents that show interest inźtheir maturing children	asking questions by the parents or listening to the child's relations about everyday events (e.g. conflicts with peers), problems, plans for the future, opinions on different subjects
ACTIVE HELP (AH)	
actions undertaken by the parents for the benefit of their maturing children, which prepare them for adulthood; providing concrete help	providing emotional and instrumental support – conveying information that facilitate the child coping in difficult situations, providing knowledge about adulthood, conveying one's own experiences, values, formulating directions/hints, helping in making decisions
CONSENT (C)	
activities of the parents that express their appreciation of the growing autonomy of their adolescent children	limiting the control over the child, granting total freedom in certain spheres of life (e.g. choosing interests), limiting radical orders and prohibitions in favor of common solutions
SENSE OF CREATIVITY (SC)	
perceiving own engagement in introducing the child to adult life as a valuable activity that yields sense of self-realization and protects against limiting oneself to the sphere of own preoccupations	feeling that introducing the child to adulthood mobilizes vital powers, possessing a sense of being active and needed; protection against self-absorption; conviction about the usefulness of own actions in preparing the child for adulthood

Source: Own elaboration.

These dimensions correspond to remarks on generativity formulated by other authors (Kotre, 1999; Peterson, 2006; Schoklitsch & Baumann, 2011). They express, moreover, Erikson's view (1964) on virtue that develops under the influence of generativity. For, concern is a manifestation of an authentic engagement in caring about other people, an expression of being more interested in others than in oneself. In order to care about somebody, one has to know (*Interest*) the person's needs and authentically, not only declaratively, help this person (*Active Help*). In turn, the dimension of *Consent* has been introduced due to the specificity of adolescence. One of the key needs of an adolescence, which defines her/his development at this stage, is the need of becoming independent of her/his parents (Rodríguez de la Sierra & Schachter, 2013; Spielhagen & Schwartz, 2014). Adolescence is a time of particular responsivity to problems associated with self--definition. For this reason, the help from parents, adjusted to changes that take place in the functioning of adolescents, is necessary in this period. Adolescents' behavior often forces their parents to modify their stereotypical behaviors, to search for new manners of cognitive and emotional connecting with critically-predisposed adolescents, and to constantly update their knowledge. Such activity of adults can be treated as an expression of generative concern. The attitude of adult individuals that refers to a rule called by Erikson "delegating authority", i.e., allowing young individuals to participate in decision-making, is a manifestation of their concern for introducing the younger generation to social roles of adulthood. A behavior based on imposing manners of interpreting reality and directive conveying values considered by adults to be the only righteous ones, bears the marks of authoritism, i.e., ritualism, which can potentially develop in middle adulthood. It manifests itself in using rigid discipline toward other participants of the family and professional life. Authoritism, according to Erikson, is a distorted form of generational ritualization that can be observed in adults' actions that respond to developmentally important needs of young people, and that prepare them for undertaking the roles of adulthood. It incorporates such forms as parenting, teaching and curing. Real generativity, with characteristic true concern for the development of next generations, comprises an authentic authority. Abusing power by adults contradicts caring. The fourth dimension (*Sense of Creativity*) corresponds to Erikson's belief (1968, p. 138) that "a mature man needs to be needed".

Method

Participants

In the study of which results were used to conduct analyses pertaining to the Parental Generativity Scale, adults and their adolescent children took part. Only two-

-parent families were included in the study. In the analysis of the results, information obtained from 183 individuals were taken into consideration: 61 women, 61 men, and 61 adolescents, who formed 61 families. The group of the investigated adolescents was composed of 39 girls and 22 boys. The investigated parents were in the period of middle adulthood ($M = 46.07$ $SD = 4.18$), and their children – at the turn of early and late adolescence ($M = 17.29$ $SD = 1.52$). The majority of the investigated parents had two children (72.13%), whereas the smallest group constituted the parents with one child (8.2%). 19.67% of the parents had three children. In the case of more than half of the families with more than one child, the investigated adolescents were the oldest sibling (51.78%). 44.64% of them were the youngest child in the family. The majority of the parents had secondary education (49.6%), the next group constituted those with higher education (33.6%). None of the investigated adults had primary education.

Procedures

The study was conducted in two stages. First, the adolescents were investigated. They were high-school students from Poznan (the fifth most populated city in Poland, over 540.000 inhabitants). The examinations of the adolescents – after receiving the consent from the minors' parents – were conducted collectively at schools during classes, with a passive presence of a teacher or with the teacher absent. Each time, the meetings with students were conducted after receiving the school headmaster's consent. At the beginning of each investigation procedure, the students received the printed PGS sheets and they were asked to hand over the participant consent forms to their parents. The parents were asked to fill out the questionnaires on their own and send them back to the researcher via traditional mail. The parents would send the questionnaires in separate, pre-paid envelops.

The sampling procedure was two-stage and it had a purposeful-random character. The basic criterion in the purposeful sampling, was the fact of being a parent (the exclusion criterion was the deprivation or limitation of parental rights) and the participants' age, indicating the adults' and their children's life phase. In the case of the children, the period of adolescence was chosen, which is the time of making important life decisions and particular sensitivity to problems connected with self-definition. The specificity of this period is the reason why special help from parents, adjusted to changes that take place in the functioning of adolescents, is essential during this time. Random, in turn, was the selection of schools and investigated individuals. The individuals who agreed to take part in the study most frequently expressed the following motivation: wanting to help the researcher, believing that such studies are useful, interest in the issue of investigation, and interest in a psychological test. The individuals who refused to take part in the study would most frequently say that they did not have time, or that they were unwilling to reveal information that in their opinion were too intimate.

Results

The aim of the present study is to validate the Parental Generativity Scale. Referring to the dimensions of parental generativity presented above, the author attempted to develop a questionnaire for measuring its level. The process of constructing the test was multistage. First, the investigated construct was specified, and fields of its contents were described. Defining the measured traits and their content fields made it possible to describe fields of content manifestation. After preparing a set of statements characteristic of particular dimensions of generativity, a panel of competent judges, composed of five psychologists, was asked to take part in the procedure. The judges received definitions of particular dimensions of generativity (Table 1) and were asked to assess to what degree the provided statements should belong to the particular scales. Calculations of inter-rater reliability were conducted with the use of Lawshe's content validity ratio (Hornowska, 2010).

In order to assess theoretical validity of the scale (factorial validity), exploratory factor analysis was conducted. The obtained values of Kaiser-Mayer-Olkin's coefficient (the measure of sampling adequacy) for the parents (0.815) and the adolescents (0.913) turned out to be high. For this reason, it was justifiable to assume that the test items are connected to one another and can create strong common factors. Also, the results of Bartlett's tests of sphericity (SG-r: $chi^2 = 1627.37$ $df = 496$ $p < 0.001$; SG-d: $chi^2 = 3506.12$ $df = 276$ $p < 0.001$) enabled the rejection of a hypothesis about the existence of an identity matrix for which characteristic would be the lack of a common factor. The interpretation of the factorial structure of SGR-p and SGR-a speaks in favor of the four-factor composition of the Parental Generativity Scale in the version for parents (the factors explain 55.38% of variance) and the three--factor composition in the version for adolescents (53.67% of variance). In the version for the parents, all test items included in the subscale *Active Help* obtained high factor loadings for the component I. This component explains 34.46% of the variance. The items that are included in the subscale *Sense of Creativity* achieve the highest loadings for the component II which explains 8.8% of the variance. The items that create the *Interest* subscale are defined in the first place by the factor III (6.12% of the variance). The component IV is described by the items from the subscale *Consent* (6% of the variance). The applied criterion of saturation of the item with the given factor, is the loading value above 0.5. In all cases, the level of saturation exceeds 0.5 (Table 2). In the version for the adolescents, the component I explains 37.33% of the variance. It can be assumed – comparably to the version for the parents – that this component corresponds to the subscale *Active Help*. The items that form the subscale *Consent* obtain the highest factor loadings for the component II. This component explains 10.92% of the variance. The factor III is defined in the first place by the items that pertain to *Interest* (5.42% of the variance).

Simultaneously, the analysis of the results showed that two factors were defined not only by the items that referred

Table 2. Items and factor loadings in the Parental Generativity Scale (N = 183)

No	Items – PGSp	I	II	III	IV
1	Every behavior of my daughter/son is under my constant control				.51
2	My daughter/son should follow all my advice without any discussion				.50
3	I listen carefully to what my daughter/son says about her-/himself			.78	
4	I explain to my daughter/son how s/he can avoid failures	.72			
5	My daughter/son has to submit unconditionally to all of my requirements		.51		.50
6	I let my daughter/son make entirely independent choices and develop her/his interests				.74
7	Introducing my daughter/son to adult life protects me against ruminating on my own problems		.61		
8	I ask my daughter/son about her/his contacts with peers			.62	
9	I inform my daughter/son how I acted in different situations, I give examples from my own life	.57			
10	I ask my daughter/son about her/his plans for the future	.68			
11	Preparing my daughter/son for adulthood makes me feel needed	.50	.68		
12	I listen attentively when my daughter/son talks about important events from her/his life			.84	
13	When my daughter/son has doubts, I advise her/him what s/he can do	.69			
14	Introducing my daughter/son to adulthood makes me feel I'm doing something valuable, useful		.74		
15	I ask my daughter/son whether s/he has any problems	.69		.53	
16	I give my daughter/son information helpful in coping with difficult situations	.83			
17	Preparing my daughter/son for adulthood triggers my activity	.57	.73		
18	I agree to my daughter/son's contacts with peers				.60
19	I listen patiently to my daughter/son's confessions			.81	
20	I discuss many issues that pertain to my daughter/son with her/him	.65			
21	I convey to my daughter/son values by which s/he should live	.78			
22	I listen attentively when my daughter/son talks about her/his colleagues			.71	
23	I comfort my daughter/son when s/he has problems	.58			
24	I advise my daughter/son when s/he makes important decisions	.74			
25	I feel that introducing my daughter/son to adulthood makes me feel stronger		.79		
26	I explain to my daughter/son what s/he can expect in the future	.66			
27	I let my daughter/son decide about her/his looks				.67
28	I listen with interest to opinions of my daughter/son on different subjects	.69		.54	
29	Focusing on my daughter/son's maturing makes me not think about my personal problems		.69		
30	I let my daughter/son have her/his own opinions				.65
31	Raising my adolescent daughter/ son makes me feel needed		.58		
32	I feel that my behavior toward my daughter/son helps her/him prepare for adult life		.56		

Table 2 cont.

No	Items – PGSa	I	II	III
1	My parents listen carefully to what I say about myself	.74		
2	My parents explain to me how to avoid failures	.68		
3	My parents let me make entirely independent choices and develop my interests		.57	.51
4	My parents inform me how they acted in different situations, they give examples from their own life	.53		
5	My parents ask me about my contacts with peers	.63		.50
6	My parents radically impose their advice on me and want me to follow it		.83	
7	When I have doubts, my parents advise me what I can do	.71		
8	My parents ask me about my plans for the future	.52		.58
9	I can discuss many personal issues with my parents	.65		
10	My parents listen attentively when I talk about important events from my life			.77
11	My parents give me information helpful in coping with difficult situations	.78		.54
12	My parents ask me whether I have any problems			.76
13	My parents impose their will on me		.79	
14	My parents convey to me values by which I should live	.67		
15	My parents focus on me too much		.51	
16	My parents listen patiently to my confessions	.76		
17	My parents comfort me when I have problems	.81		
18	My parents let me decide about my looks		.52	.72
19	My parents listen attentively when I talk about my colleagues	.54		.74
20	My parents explain to me what I can expect in the future	.67		
21	My parents let me have my own views		.67	
22	My parents listen with interest to my opinions on different subjects	.69		.56
23	My parents agree to my contacts with peers		.78	
24	My parents advise me when I make important decisions	.70		

PGSp – version for the parents; PGSa – version for the adolescents

Source: Own elaboration

to the particular subscale (these items obtained high loads for two factors), which brought the author's attention to the issue of the so-called purity of measurement. Taking this issue into consideration – again with the help of the competent judges – the decision to exclude these items from the subscales on the basis of theoretical reliability, has been made.

An assessment of reliability of the scales was conducted, using the internal consistency method and calculating Cronbach's α (Table 3). The obtained coefficients turned out to be satisfactory, suggesting that the PGS is an internally consistent tool.

In line with the conceptualization presented above, parental generativity is analyzed both in the objective and subjective aspect, which means that calculating the global indicator of parental generativity requires examining both parents and their children. In the objective aspect, the

Table 3. Cronbach's α reliability coefficients for the PGS

	PGSp	PGSa
Interest	.88	.89
Active Help	.87	.87
Consent	.75	.79
Sense of Creativity	.86	–

PGSp – version for the parents; PGSa – version for the adolescents

Source: Own analysis.

parents' functioning is determined in the following areas: *interest*, *active help* and *consent*. Investigated individuals evaluate here their own behaviors toward their maturing children (version for parents) and the parents' behaviors

(separately behaviors of mothers and fathers) toward themselves (version for adolescents). The Parental Generativity Scale in the version for parents (PGS-p) is composed of four 8-item scales that are named after the respective dimensions of generativity: *Interest*, *Active Help*, *Consent* and *Sense of Creativity*. The Parental Generativity Scale in the version for adolescents (PGS-a) does not include items that explore the parents' subjective sense of creativity, therefore it is composed of three 8-item scales. The test items have the form of affirmative sentences. Each item is equipped with a 7-point estimative scale (the scoring range is 1–7), with the extremes described in the following way: 1 – "it is never like that", 7 – "it is always like that". For several items in the scale inverted scoring has been applied, which means that before commencing to count the score, the researcher has to change the scoring for these items according to the key. The total score is calculated by summing the points obtained by the investigated adult and her/his teenage child at whom the generative behaviors are directed, i.e., it constitutes the sum of points from both versions of the scale – the possible sum range is [56, 392].

In line with the own concept of parental generativity, its components are not independent of one another. Therefore, it was necessary to reflect the relationships between the components of generativity, both in the study involving the parents (the scales marked with *p*) and their children (the scales marked with *a*). I anticipated that intercorrelations between the distinguished aspects of generativity, as well as their correlations with the general result, would be high. Appropriate coefficients have been presented in Table 4. The obtained values confirmed our expectations. All correlations between the scales are statistically significant. The highest correlation can be

observed between *Interest* and the general result. The lowest intercorrelations occur in the case of the scale that measures *Sense of Creativity*.

The data that were used to conduct the presented analyses pertaining to the PGS come from the studies reported in this article. The questionnaire in its present form was also applied in other studies (Bakiera, 2012; Bakiera & Bręński, 2017), which shed some light on relations with external variables. These studies demonstrate that the PGS correlates with indicators of emotional relations in the family measured with the use of *The Bene-Anthony Family Relations Test*. These correlations are high, both with regard to parents' perception of relations (FRTp) and perception of their adolescent children (FRTa). The PGS correlates weakly with marital satisfaction measured with the use of *Kwestionariusz Dobranego Małżeństwa* (KDM-2) by Mieczysław Plopa and Jan Rostowski. There is also a correlation between the PGS and general satisfaction with life measured with the use of *The Satisfaction with Life Scale* (SWLS) developed by Ed Diener, Robert Emmons, Randa Larson and Sharon Griffen, in the Polish adaptation by Zygfryd Juczyński. Also, the relations between the PGS and perception of parenthood were investigated. For this purpose, *The Wheel Questionnaire* (WQ), also known as Shalit's *Wheel*, was applied. The questionnaire enables determining three indicators: reduction index (R), which indicates the level of coherence in perceiving parenthood; emotionality index (E), which expresses the level of emotional involvement in parenthood, and evaluative inclination index (I), which provides information about the meaning of parenthood. The PGS proves to have differentiated relations with particular measures of Shalit's *"Wheel"*. The subscale of the PGS that correlates strongest with all measures of the WQ, is *Sense of*

Table 4. Intercorrelations in the PGS

	PGS	Ip	Ia	I	AHp	AHa	AH	Cp	Ca	C	SC
PGS	–										
Ip	.78**	–									
Ia	.83**	.49**	–								
I	.93**	.81**	.91**	–							
AHp	.74**	.76**	.40**	.63**	–						
AHa	.79**	.39**	.80**	.72**	.41**	–					
AH	.91**	.64**	.75**	.81**	.78**	.89**	–				
Cp	.54**	.64**	.22*	.46**	.52**	.21*	.40**	–			
Ca	.71**	.35**	.65**	.60**	.35**	.58**	.58**	.27**	–		
C	.80**	.57**	.60**	.68**	.51**	.55**	.63**	.67**	.90**	–	
SC	.63**	.50**	.35**	.47**	.50**	.34**	.48**	.29**	.28**	.35**	–

** *p* < .01;   * *p* < .05

p – version for the parents;   a – version for the adolescents

Source: Own analysis.

Table 5. PGS and others measures

	KDM-2	FRTp	FRTa	SWLS	WQ – R	WQ – E	WQ – I
PGS	.28*	.57**	.64**	.33**	.33**	.08	.36**
PGS – I	.26*	.51**	.64**	.33**	.28**	.12	.22*
PGS – AH	.34*	.52**	.55**	.36**	.21*	.04	.18
PGS – C	.29*	.52**	.56**	.15	.13	-.14	.02
PGS – SC	.40**	.34**	.32**	.33**	.31**	.21*	.42**

** $p < .01$;   * $p < .05$

Source: Bakiera, 2012; Bakiera & Brȩński, 2017.

Creativity. The correlation coefficients have been presented in Table 5.

The results of various analyses, both theoretical and empirical, suggest that the discussed tool for measuring parental generativity has satisfactory psychometric parameters. Further studies should take into account different variables in order to verify external validity of the PGS.

Conclusions

Generativity of people in middle adulthood, being an intentional activity, is induced and directed by two kinds of goals. The first goal arises from the need for being needed, whereas the second one is associated with concern for introducing the younger generation to adulthood. Taking into consideration the interpersonal function of generativity, we can speak, therefore, about its dual character (Bakiera, 2012). Studies show that the highest level of generativity can be observed in individuals in the period of middle adulthood (McAdams, de St. Aubin, & Logan, 1993), and that this quality is strongly related to positive social involvement and openness to experience (Cox et al., 2010). Adults at this age are most often parents of adolescent children. Their actions of generative character constitute the context of development of their children during the transition from childhood to adulthood. As observed by Merz, Schuengel and Schulze (2008), children, being an important source of support for their parents, can also become attachment figures. Mutual contacts are an opportunity for both sides to meet the essential need for being needed. The specificity of the period of adolescence makes parents revise their views on the needs of their child, and provokes changes in cognitive and emotional structures and in their behavior. Adolescents' criticism, for example, being such a characteristic trait of this period of development, can be considered to be a factor that triggers new forms of acting in parents, i.e., a factor of their development. Critical remarks of girls and boys addressed to their parents, force the adults to reflect on their knowledge, values, views and own behavior. Such a reflection can stimulate a change in the functioning of the adults.

The presented scale takes into account this mentioned two-subject nature of generativity, both in the contents of the statements that constitute it and in the examination procedure. The requirement to take part in the study for both adults and their children, is an attempt to avoid a declarative, self-descriptive measurement of adults' generativity. The proposed PGS questionnaire combines the subjective perspective of adults with an objective optics, thanks to investigating also the addressees of parental generativity. This procedure does not occur in the previous studies. Although conducting a study in which both the parents and their children participate is much more complicated, the effect in the form of objectified results seems to be worth making an effort. Moreover, the SGR (as opposed to the scale by Schoklitsch and Baumann) pertains to generativity currently manifested by the parents towards their teenage children, which is why the risk of memory transfer is smaller.

The data obtained in the study were applied to construct a two-stage tool for investigating parental generativity – The Parental Generativity Scale. The tool enables the investigation of both parents (32 items) and their adolescent children (24 items). So far, in studies on parental generativity researchers applied tools that referred to the general character of generativity (e.g., Karacan, 2014; Peterson, 2006) or they conducted a retrospective evaluation of parental generativity in the investigation of older individuals (Schoklitsch & Baumann, 2011). The presented scale has been designed for the investigation of generativity of parents of adolescent children. The version for the adolescents includes statements that refer to their parents' functioning. The adolescent is asked to react to these statement on separate scales for the mother and the father. The global result that describes the level of parental generativity, is the sum of scores obtained by both the adult and the person's adolescent child. The obtained results seem to support the validity of the four-factor composition of the Parental Generativity Scale in the version for adults and the three-factor composition in the version for adolescents.

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