

One-Person Households in Terms of Household Development Theory

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Abstract

Purpose: The aim of the paper is to present the concept of a life cycle of the family identified with a household in historical terms and also to indicate the presence of a one-person household in these concepts. Moreover, the purpose covers also an attempt to conceptualize the functioning of a one-person household in the household life cycle and formulate the proposal concerning a one-person household life cycle model.

Design/methodology/approach: The first part of the article presents the genesis and development of the family/household life cycle concept since the beginning of the 20th century in the aspect of one-person households. The second part of the article is an attempt to indicate the variables that should be used to create a model of one-person household life cycle functioning and a proposition of the author's concept.

Findings: To create a useful variable illustrating the stages of the life cycle of a one-person household, three characteristics should be taken into account, i.e. age, gender and education.

Research implications: The household life cycle can be the key to understanding how consumer behavior changes over time.

Practical implications: It seems that the potential of the one-person household life cycle concept can have practical application in economics, can inspire and guide new research, providing valuable information about one-person households.

Oryginality/value: The model presented in the study should provide a “sensitizing” conceptual framework for thinking how to improve previous models of the household life cycle and include one-person households in them.

Keywords: single-person households, households life cycle stages, consumption.

JEL: A14, B10, D1

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Jednoosobowe gospodarstwa domowe w teorii gospodarstwa domowego

Streszczenie

Cel: Celem artykułu jest przedstawienie w ujęciu historycznym koncepcji cyklu życia rodziny utożsamianej z gospodarstwem domowym, a także wskazanie obecności w tych koncepcjach jednoosobowego gospodarstwa domowego. Celem jest także próba konceptualizacji funkcjonowania jednoosobowego gospodarstwa domowego w cyklu życia gospodarstwa domowego i sformułowanie propozycji modelu cyklu życia jednoosobowego gospodarstwa domowego.

Projekt/metodologia/podejście: Pierwsza część artykułu przedstawia genezę i rozwój koncepcji cyklu życia rodziny/gospodarstwa domowego od początku XX wieku w aspekcie jednoosobowych gospodarstw domowych. Druga część artykułu to próba wskazania zmiennych, które należy wykorzystać do stworzenia modelu funkcjonowania jednoosobowego cyklu życia gospodarstwa domowego oraz propozycja koncepcji autora.

Wyniki: Aby stworzyć użyteczną zmienną ilustrującą etapy cyklu życia jednoosobowego gospodarstwa domowego, należy wziąć pod uwagę trzy cechy osób tworzących te gospodarstwa domowe, tj. wiek, płeć i wykształcenie.

Implikacje badawcze: Cykl życia gospodarstwa domowego może być kluczem do zrozumienia, jak zmieniają się zachowania konsumentów w czasie.

Praktyczne implikacje: Potencjał koncepcji jednoosobowego cyklu życia gospodarstwa domowego może mieć praktyczne zastosowanie w ekonomii, może inspirować i nadawać nowe kierunki badaniom, dostarczając cennych informacji na temat jednoosobowych gospodarstw domowych.

Originalność/wartość: Model przedstawiony w badaniu powinien stanowić „uwrażliwiające” ramy koncepcyjne do myślenia, w jaki sposób ulepszyć poprzednie modele cyklu życia gospodarstwa domowego i włączyć w nie jednoosobowe gospodarstwa domowe.

Słowa kluczowe: gospodarstwa domowe singli, fazy cyklu życia gospodarstwa domowego, konsumpcja.

1. Introduction

A household as an economic category is a specific economic entity operating in consumption (Zalega, 2016), based on family or non-family ties. The specific character of the household is expressed in meeting the needs of all its members, sharing the income and meals in a single family or another group of people. Most economic models do not equate households and traditional families. A family is a group of people joined together by marriage, parental or blood ties or adoption, whilst household members usually ignore the bonds of affinity and reproduction. Historically, a family was the basis of the household and that is why both categories were considered to be the same in most civilizations. Over time, however, (from the beginning of the 19th century) new family patterns and alternatives to married/family life were noticed. People living together in the household were not necessarily members of a traditional family. Particularly in Western countries, households increasingly began to include various forms of cohabitation, for example: non-married partners, divorced with children and new partners, same-sex couples (Commuri & Gentry, 2000) or one-person households.

Nowadays, young people remain single longer, and then a lot of them become singles after their first or subsequent marriage (Muraco, 2012), consensual union or cohabitation. An increase in the number of young and older people running a one-person household is observed, especially in the most developed countries. Norway, Denmark, Finland, Sweden, Germany and Estonia have the largest shares of one-person households among European countries. In 2018, in these countries, the share of one-person households in total households ranged from over 40% to nearly 46% and the increase in their share in 2005–2018 ranged from about 1 pp to over 9 pp. At the same time, in the countries of Central and Eastern Europe, the largest increase in the share of one-person households occurred in Romania – over 29 pp, in Bulgaria – 15 pp and in Latvia – 10 pp (Figure 1). During this period, in Poland, some stabilization was noted, and in Slovakia the share of these households was reduced by nearly 4 percentage points. However, an increase in this share values is forecast. The same phenomena are also observed in Asian countries (Lee, Noh, & Choi 2011; Dommaraju, 2015; Ronald, 2017), on both American continents (Melo et al., 2016; Queiroz & Coelho, 2019; Young & Lachapelle 2017; Tyvimaa & Kamruzzaman, 2019) and in Australia (Choi 2017; de Vaus & Qu, 2015).

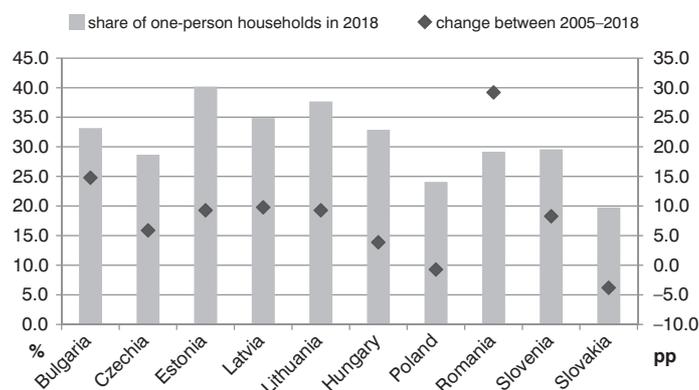


Fig. 1. Shares of one-person households in 2018 and their changes in 2005–2018 in the countries of Central and Eastern Europe. Source: Own work based on Eurostat database *Distribution of households by household size – EU-SILC survey [ilc_lvph03]*.

The increase in the number of one-person households is linked, inter alia, with population ageing. Multigenerational households are disappearing and a growing number of older people living alone is observed, especially widows (Ronald, 2017). Eurostat (2020) data show that in Europe the largest increase in the share of one-person households among people aged 65+ in 2005–2018 was recorded in Bulgaria (an increase of 8.7 pp),

in Latvia (5.6 pp), Lithuania (4.7 pp), and Denmark (4.3 pp). In Poland, one-person households set up by persons aged 65+ in 2019 constituted 13.2% (compared to 0.7 pp in 2005).

Due to the increasing popularity of a one-person household in various communities, it becomes necessary to take this phenomenon into consideration in economic theories. One of the theories related to a household is the household life cycle theory. The household life cycle is a concept that has been formulated in social sciences since the beginning of the 20th century. It is based on the assumption that human life is characterized by passing through a specific sequence of stages (phases) (Arndt, 1979). The concept provides frameworks for the study of households and individual units (Stampfl, 1978; O'Rand & Kreckler, 1990). This concept is widely used in economic literature, in the study of income, consumption (Arndt, 1979; Deaton 1992; Du & Kamakura 2006; Fischer & Marchand 2014; Gourinchas & Parker 2002; Neulinger & Simon, 2011; Ojima 2016; Watkins 2017), in explaining welfare of household members (McLanahan & Adams, 1987; Nelson, Kushlev, & Lyubomirsky, 2014; da Silva, Slongo, & Rohde, 2016; Neulinger & Radó, 2018), shopping styles (Neulinger & Kenesei, 2016; Kroeber-Riel & Gröppel-Klein, 2019), openness to novelties (Brown & Venkatesh, 2005; Brown, Venkatesh, & Bala 2006; Pannhorst & Dost, 2019). It provides the theoretical basis for understanding changes in consumer needs, consumption patterns, and decision-making in households (Lawson, 1991). It is also a segmentation tool (Van Rooyen & Du Plessis, 2003; Shannon et al., 2020). In empirical research, the concept of household life cycle is used as a determinant of behavior in the field of recreation and tourism (Danko & Schaninger, 1990a; Lawson, 1991; Backer, 2012; Hong et al., 2005), clothing and footwear (Germain, Carrier, & Beaudoin, 2014), transportation (Anowar, Eluru, & Miranda-Moreno, 2018; Bąkowski, 2016), healthcare (Cunningham, 1990; Hong & Kim, 2000), nutritional behavior (Piekut & Zwierzyk, 2007). Researchers in the 20th century (Lansing & Kish, 1957; Wells & Gubar, 1966; Danko & Schaninger, 1990) pointed out that the variable "household life cycle" is a much more sensitive determinant than other demographic and socio-economic indicators.

The variable "household life cycle" is applied especially in economics to analyze the economic behavior of household members undergoing the so-called "traditional stages" in their lives, considered by researchers as marriage and the appearance of children. The group of one-person households is often omitted in the household life cycle concepts, even in the latest economic analyses (Bryceson 2019; Lugauer, Ni, & Yin, 2019; Arri, Agus, & Padmi 2019), which seems to be wrong in the face of demographic and social changes.

The purpose of the article is to present the concept of life cycle of the family identified with a household in historical terms and also to indicate the presence of a one-person household in these concepts. Moreover, the

purpose covers also an attempt to conceptualize the functioning of a one-person household in the household life cycle and formulate the proposal concerning a one-person household life cycle model.

The first part of the article presents the genesis and development of the family/household life cycle concept since the beginning of the 20th century in the aspect of one-person households. So far, there has been no current overview of one-person households in economic sciences. The second part of the article is an attempt to indicate the variables that should be used to create a model of one-person household life cycle functioning and a proposition of the author's concept.

2. Origin and Development of the Household Life Cycle Concept

The assumption underlying the concept of the household life cycle is the fact that most people go through subsequent phases in their lives. Each of these phases distinguishes itself by a different financial situation and different consumption patterns (Wells & Gubar, 1966). The household life cycle theory proves that households pass through subsequent phases that, to a large extent, are connected with the biographical stages of the people (or single person) who make them up. Therefore, the concepts of the household life cycle assume that the transition to the next phase of the life cycle affects the living and consumption standards of household members. It results from differences in purchasing power, needs and motivations occurring at various stages of human life. The theoretical approach to the household life cycle has gained popularity since its early application in sociology (Loomis, 1936), and then in economic sciences (Clark, 1955).

The concept of the household life cycle was for the first time created by B. S. Rowntree (1902), who studied poverty patterns among urban households in England. It should be noted that originally the concepts concerned the family life cycle in terms of the functioning of a family as a household. Indeed, it is difficult to call a married couple going through subsequent stages in their lives the stage of household. Using empirical data, B.S. Rowntree (1902) distinguished seven classes of households with regard to the income level and the occupation of household members. According to the researcher, the basis of the household was a family with dependent children – between two and four. He described the differences in expenditure on basic products (housing, food, clothing, energy) in various household categories. This study was essential to the development of the household life cycle concept (Bauer & Auer-Srnka, 2012).

The subject of the household life cycle was discussed more broadly in the 1930s. In the first version of the concept, there was no stage involving a one-person household, which was due to the assumption that most people get married, and children are born. These concepts only included families, so they were family life cycle models. The fact of the appearance of children

and their subsequent development influenced the needs of households and thus the emerging expenses. P.A. Sorokin, C.C. Zimmerman and C.J. Galpin (1931) identified four stages in the family life cycle, based on the changing constellation of family members. They distinguished the stages of family life where each of the families included at least two people: (1) married couples just starting their independent economic existence; (2) couples with one or more children; (3) couples with one or more adult self-supporting children; (4) couples growing old. Three years later, E.L. Krikpatrick, M. Cowles and R. Tough (1934) presented a four-stage family life cycle based on the position of children in the educational system: (1) preschool family; (2) grade school family; (3) high school family; (4) all adult family.

C.P. Loomis, studying the differences between rural and urban families, presented in 1936 a four-stage cycle, taking child ages as a criterion for change: (1) childless couples of childbearing age; (2) families with children (the eldest under 14); (3) families with the oldest child over 14 and under 36; (4) old families (Loomis, 1936). Thus, the first concepts of the family life cycle referred to full families with children, optionally including young childless couples or older people after the children left.

In the 1940s, other researchers dealing with family life cycle issues increased the number of phases in their concepts, distinguishing seven stages. H.F. Bigelow (1941) proposed the following stages of family life cycle: (1) establishment; (2) child-bearing and preschool period; (3) elementary school period; (4) high school period; (5) college; (6) period of recovery; (7) period of retirement. P.C. Glick (1947), who understood the family life cycle as stages of married life, proposed the following stages: (1) first marriage; (2) birth of first child; (3) birth of last child; (4) marriage of first child; (5) marriage of last child; (6) death of husband or wife; (7) death of spouse. In turn, E.M. Duvall and R. Hill (1948) distinguished in the family life cycle: (1) childless; (2) expanding (birth of first to last child); (3) school age; (4) stable (birth of last child to launching); (5) contracting (first launched to last launched); (6) aging companions (no children at home); (7) one partner deceased.

In subsequent years, the concept of family life cycle was expanded by noticing the missing types of households. However, these concepts still concerned the family as functioning as a household. One of these extended concepts was proposed by R.H. Rodgers (1962). The researcher specified 10 stages in the family life cycle, and some of them were allocated to sub-stages: (1) childless couples; (2) families with infants (all children less than 36 months old); (3) preschool families: (a) with infants (oldest child: 3–6 years; youngest child: birth to 36 months), (b) all children: 3–6 years; (4) school-age families: (a) with infants (oldest child: 6–13 years; youngest child: birth to 36 months), (b) with preschoolers (oldest: 6–13 years; youngest: 3–6 years), (c) all children 6–13 years; (5) teen-age families: (a) with infants (oldest: 13–20 years; youngest: birth to 36 months), (b) with pre-

schoolers (oldest: 13–20 years; youngest: 3–6 years), (c) with school-agers (oldest: 13–20 years; youngest: 6–13 years), (d) all children 13–20 years; (6) young adult families: (a) with infants (oldest: over 20 years; youngest: birth to 36 months), (b) with preschoolers (oldest: over 20 years; youngest: 3–6 years), (c) with school-agers (oldest: over 20 years; youngest: 6–13), (d) all children over 20 years; (7) launching families: (a) with infants (first child launched; youngest: birth to 36 months), (b) with preschoolers (first child launched; youngest: 3–6 years), (c) with school-agers (first child launched; youngest: 6–13), (d) with teen-agers (first child launched; youngest: 13–20 years; (e) with young adults (first child launched; youngest: over 20 years); (8) middle years (all children launched to retirement of breadwinner); (9) aging couple (retirement to death of one spouse); (10) widowhood (death of first spouse to death of survivor).

Until the mid-1960s, in the analyzed concepts, a “one-person household” appeared sporadically as one of the possible categories of a household. In the concept of R.H. Rodgers (1962), this term was considered only in the phase of so-called widowhood, that is, it was still inscribed as one of the stages in the family life. In addition, R.L. Hill and R.H. Rodgers (1964) stated that persons running one-person households, regardless of whether they were divorced or widowed or were never married, should have similar spending patterns. After all, the needs deriving from the composition of the household should be similar for everyone in this group.

These concepts omitted a one-person household in the whole life cycle of the household as they placed the family at the center of the household. Nowadays, demographic and social changes have led to households set up by non-family members (as referred to by sociologists and psychologists). New types of households, previously not noted at all or noted relatively seldom, have appeared. Considering the household life cycle only through the prism of the family in empirical studies led to a large number of cases (households) that were not assigned to any of the phases, which resulted in the loss of a substantial part of information (Derrick & Lehfeld, 1980).

Among the cases eliminated from empirical studies were, *inter alia*, one-person households at different stages of life. Sometimes, however, as for example in the concept of R.H. Rodgers, the consumption behavior of one-person household members was considered in the same way as the behavior of people from larger households. Therefore, the biggest disadvantage of the early concepts was the omission of non-family households. In the 20th century, the operationalization of this concept changed constantly. It is also worth pointing out that the changes in forms of family life and the diversity of living conditions over time led to a more appropriate term for determining the household development process. The most convenient term in the life cycle concept for non-family households turned out to be the “household life cycle”, not the “family life cycle” (Du & Kamakura, 2006; Putler, Li, & Liu, 2007) because of the newly-established types of households.

W.C. Wells and G. Gubar (1966) were the first to introduce a greater number of phases representing one-person households in the family life cycle concept. These researchers took into consideration 9 categories in the family life cycle, based on the age of parents and their youngest children as well as, for the household head: marital status and employment status. They also introduced a heterogeneous category, so-called “other” households. The concept presented by W.C. Wells and G. Gubar met with the greatest approval and popularity in economic and marketing research. They compared the other early concepts of the family life cycle (Danko & Schaninger 1990a) and included the following phases: (1) Bachelor Stage (young, single, not living at home); (2) Newly Married Couples (young, no children); (3) Full Nest I (young, couple, dependent children: youngest child under six); (4) Full Nest II (young couple, dependent children: youngest child six or over); (5) Full Nest III (older, couple, dependent children); (6) Empty Nest I (older, couple, dependent children, household head in labor force); (7) Empty Nest II (older, couple, no children living at home, household head retired); (8) Solitary Survivor I (older, single, in labor force); (9) Solitary Survivor II (older, single, retired); (10) others.

W.C. Wells and G. Gubar (1966) exploited previous studies (Lansing & Morgan, 1955; Katona, 1960) in creating their family/household life cycle concept. In their view, households including one-person households could be assigned to the following phases: 1st – represented by young people (up to 45 years old) as well as 8th and 9th – represented by widowed or divorced older people, diversified due to their professional activity. Thus, the Wells-Gubar concept of one-person households did not include the groups of middle-aged and elderly never-married people. The authors grounded their concept in a nuclear family model, popular in Western (American) culture in the mid-twentieth century, consisting of marriage with children (O’Rand & Krecker, 1990), so this cycle still corresponded to the concept of the family life cycle rather than to the household life cycle. However, the implementation of the “other” category suggests the emergence of more than just family households.

In the next concept, according to E.M. Duvall (1971), one-person households appeared in the first phase, but in the elderly phase the category of single-person households was combined with older people running a household together. The concept applied the following main criteria: persons’ age, their professional activity and the presence of children. E.M. Duvall made a significant contribution to the development of the concept of the household life cycle and up till now her concept is used in empirical studies of other researchers (Arri, Agus, & Padmi, 2019), although she treated one-person households only as a category in the household life cycle. In the concept of E.M. Duvall, there were the following stages of the household life cycle:

- young person living alone;

- married couples without children;
- childbearing families (oldest child under 30 months) and families with pre-school children (oldest 2.5–6 years old);
- families with school children (oldest 6–12 years old);
- families with teen-agers (oldest 13–20 years old);
- families as launching centers (first child gone to last child's leaving home);
- middle-aged parents (empty nest to retirement);
- aging family members (retirement to death of both spouses);
- others.

Wells and Grubar's and Duvall's concepts included the phases of one-person households, but only at the beginning of the "adult life path" (young singles) and at the end (older people after the death of their spouse). These concepts did not include running a one-person household throughout the lifetime of the individual or several times in the course of entire life. This was probably due to the fact that the demographic trend referring to people setting up one-person households at that time was weak.

At the turn of the 1980s, a trend towards the establishment of one-person households began to be observed in North America. In 1977, L.H. Wortzel (1977), analyzing the behavior of young singles, noticed that their actions were increasingly focused on a person, on the development and enrichment of personal experiences, instead of looking for partners and preparing for marriage. E.D. Macklin (1980) indicated that the percentage of one-person households was increasing (in the US, 17.1% in 1970 and 22.0% in 1978), which raised the need to include this kind of households in social analyses. In turn, D. Yankelovich (1981) noted the individualization of lifestyles and consumption patterns; at the same time, F.W. Derrick and A.K. Lehfeld (1980) indicated numerous restrictions on the use of the household life cycle concept. It was pointed out that single adults who had never married were completely omitted in the concept of the household life cycle or possibly appeared as young singles and then as professionally active or retired old singles. Thus, persons running one-person households, when considering consumption patterns or other economic aspects of the household functioning, were assigned to the life cycle of households in a traditional sense (married couples) without considering the real-world alternative life cycle (Stampfl, 1978), and that is why researchers lacked a large amount of information on the financial situation and consumption of these households. Insights on demographic change led to the emergence of one-person households at different life stages in subsequent life cycle concepts.

After 1970s, household life cycle concepts took into account various social changes. Household life cycle concepts in that period showed individual people's life paths (Bauer & Auer-Srnka, 2012). P.E. Murphy and W.A. Staples (1979), noting changes in family composition and lifestyle,

including increasing divorce rates, both decreasing fertility rates and family sizes, decided to modify the traditional family life cycle, *inter alia*, by including the term of “one-person household”. The abovementioned researchers proposed several changes in the previous Wells-Gubar concept. For distinguishing the types of households, they used the following features: the person’s age (in the case of multi-person households – the woman’s age), marital status, and the age of children (if children existed). They also indicated stages in the development of a family without children, which distinguished their concept from others. In their theory, they introduced new types of households and new age limits for dependent children (infants, young children aged 4–12, youth) and demonstrated the potential flow of people and families throughout the life cycle. Still, they did not include non-traditional household types, e.g. one-person households of the never-married elderly. The life cycle of the household proposed by P.E. Murphy and W. A. Staples included the following phases: (1) young single, (2) young married without children, (3) other young: a. young-divorced without children, b. young married with children: (i) infant, (ii) young (4–12 years old), (iii) adolescent, c. young divorced with children: (i) infant, (ii) young (4–12 years old), (iii) adolescent, (4) middle-aged person: a. middle-aged married without children, b. middle-aged divorced without dependent children, c. middle-aged married with children: (i) young, (ii) adolescent, d. middle-aged divorced with children: (i) young, (ii) adolescent, e. middle-aged married without dependent children, f. middle-aged divorced without dependent children; (5) older: a. older married, b. older unmarried: (i) divorced, (ii) widowed.

Subsequent researchers – M.C. Gilly and B.M. Enis (1982) – tried to redefine the concept of the household life cycle in order to minimize the category of “unclassified households”. In their concept, the stages of the household life cycle were based on three features: (1) age, (2) marital status, and (3) children’s age and presence/absence in the household. The Gilly-Enis household life cycle covered three categories: young (under 35), middle-aged (35-64) and older (over 64). These age categories were based on the age of the woman in the household (if she existed). It was assumed then that 35 seemed to be the age when giving birth to children became more risky. The same age categories were used by P.E. Murphy and W.A. Staples. In the Gilly-Enis concept, the approach to the term of “marriage” was liberal.

The category of couples included every couple living together (also same-sex couples) who intended to remain in such a relationship for longer time. So the marriage act was not necessary. It was a significant change compared to the concept of the household life cycle in the traditional model, but it reflected changes in the contemporary society. On the other hand, every person living alone was accepted regardless of previous marital and family experiences (Gilly & Enis, 1982).

Thus, the Gilly-Enis concept covered four types of households in three age groups throughout their lives: a one-person household, a household of a couple with no children, a household of a couple with dependent children, and a one-person household with dependent children. In this concept, a one-person household goes through three stages according to the age of the person running it. The model represents the option of running a one-person household throughout the entire life, which means the one-person household life cycle was indicated.

The first stage included people under the age of 35, the second stage those aged 35 to 64, and the third stage those aged 65 and over. At all stages of the life cycle, the marital status of the person constituting a one-person household was not important in the discussed concept (Gilly & Enis, 1982). The Gilly-Enis model has also been open to criticism, but is still accepted and used in economic literature (Cornwell, Lawson, & Newton, 2006; Putler, Li, & Liu, 2007; Yan & Zhou, 2016, Pilny & Siems, 2019), similarly also to the model proposed by P.E. Murphy and W.A. Staples (Algarni, 2017). In contrast to the concept presented by W.C. Wells and G. Gubar, P.E. Murphy and W. A. Staples' (1979) and M. C. Gilly and B.M. Enis' (1982) models described consumer movements between life cycle stages (Bauer & Auer-Srnka, 2012).

R.E. Wilkes (1995) presented a 15-stage hybrid of the household life cycle typologies by W.C. Wells and G. Gubar (1966) and by M.C. Gilly and B.M. Enis (1982), taking into account non-traditional forms of families. In his concept, he pointed out that changes in the family situation are significantly linked to changes in consumer behavior. As households move from one stage of the life cycle to another, their resources are reallocated to adapt to changed household conditions and needs. The results presented by R.E. Wilkes did not confirm the necessity for the separation of three age groups for one-person households and households with one adult and dependent children, as was proposed in the previous concept of Gilly and Enis (1982). His research recommended distinguishing one, two or at most three groups in these two types of households, depending on the analyzed good or service. R.E. Wilkes (1995) emphasized that the number of household types included in the concepts of the household life cycle should be adapted to the analyzed good or service. And so, for example, he demonstrated that expenditures, e.g. for tools and small household appliances, furniture, travel and women's clothing, reflected greater variability for different types of one-person households. He also noted that spending on these products was slightly higher among middle-aged divorced singles, and then decreased among older singles. Young singles spent more on entertainment, eating out, sports equipment, men's clothing, alcohol, while older singles invested more in house (flat) renovation, insurance and medical care. The results of R.E. Wilkes also suggested that the simple division of one-person households into three age groups (35, 35–64, 65+), as in the case of Gilly and

Enis (1982), might not accurately reflect consumption spending patterns. For example, when comparing one-person households up to the age of 35, it was noted that expenditure on some goods increased sharply with the transition to another household category, for example from the category of never-married young singles to young divorced singles (e.g. eating out, sports equipment, men's clothing and alcohol), but expenditures on other goods decreased (e.g. cars and women's clothing). R.E. Wilkes pointed out that although both types of singles were grouped together in the concept of Gilly and Enis (1982), the results showed completely different expenditure patterns for these two types of households. People moving from the group of young marriages to divorced young are often forced to set up a new household, with purchases depending to some extent on the items remaining in the household after divorce.

Initially, household life cycle concepts were developed and applied by researchers from the United States of America, Canada and Western Europe. Over time, they were adopted by researchers from other countries who drew attention to the necessity of adjusting them to the internal demographic and social conditions of each community. I. Redondo-Belon, M. Roya-Vela and J. Aldas-Manzano (2001) introduced small changes in the Gilly-Enis model, adapting it to Spanish households. Empirical validation of the concept of the household life cycle in its cultural context was also carried out by researchers from South Africa (Van Rooyen & Du Plessis, 2003).

In subsequent years, the concept of the household life cycle was modified and expanded to take into account the development of modern societies, such as a growing number of older people (Hamermesh, 1984; Krisjanous, 2001) or single parents (Hill, 1986; Sundeen, 1990). Thus, concepts formulated in the 20th century (Murphy & Staples, 1979; Gilly & Enis, 1982) referred to the family life cycle, while further studies (Du & Kamakura, 2006) considered also households, i.e. household life cycles, including one-person households.

Concepts from the 21st century rely mainly on earlier defined ideas, with some modifications. New research directions have been proposed (Du & Kamakura, 2006) so that the concept of the household life cycle is to a greater extent practice-oriented. R.Y. Du and W.A. Kamakura (2006) created a life cycle concept based on statistical data describing various aspects of household functioning in the United States of America. The sub-group of young one-person households was combined into one group together with households of couples without dependent children, with the age range of 22–30 years. Then this type of households may go into the phase of a full family or one-person household of unrelated or divorced without children, in the age range of 26–42. At the final phases, there are one-person households of divorced or unrelated per-

sons, the so-called empty nests of people aged 49–71 and widowed ones aged 66–84.

In Polish economic literature, suggestions for the concept of family/household life cycle and analyses using this variable were already present in the 1970s (Wiśniewski, 1973; Górecki & Starzec, 1976). In subsequent decades of the 20th century, there were few studies using the family life cycle, often in the demographic aspect (Strzelecki, 1989; Wierzchośławski, 1988, 1991). The reasons for the lack of economic research using the family life cycle include an insufficient amount of source data, which made it impossible to conduct longitudinal research relying upon tracking a selected type of households over time (Bednarek, 1989). E. Frątczak dealt broadly with the life cycle of the household in the 1990s (Frątczak, Józwiak, & Paszek 1991; Frątczak, 1991; Frątczak, 1999). Since the 1990s, there has been more research in economics that use household life cycle concepts. The analyses focused primarily on the phases including the so-called traditional families (Niemczyk, 1993; Lisowska, 1998; Rakowski, 1996; Gutkowska & Laskowski, 1999; Fatuła, 2000; Gutkowska, Ozimek, & Laskowski, 2001; Piekut & Zwierzyk, 2007). In the concepts of the household life cycle, one-person households appeared in the first and last phase (Gutkowska, Ozimek, & Laskowski 2001; Bywalec & Rudnicki, 2002). In scientific works from the second decade of the 21st century, one-person households appear in the life cycle mainly in the aspect of senility and research on single life (Szukalski & Szatur-Jaworska, 2014; Ziębińska, 2017; Pannhorst & Dost, 2019).

On the basis of the review of Polish and global research, taking into account current socio-demographic trends, one can state a shortage of the following aspects: 1. the concept of a household life cycle including one-person households as a separate type of household, and also 2. empirical analyses relating to one-person household phases.

It seems that nowadays, with the extended statistical and econometric apparatus, the use of the household life cycle variable may not always be justified, but on the other hand it can be seen that its inclusion in numerous analyses may prove fruitful due to the capacity of this variable. Some authors (Wilkes, 1995) indicate that defining life stages in advance restricts researchers to several demographic data, usually at two or three levels. However, with large data sets, for example using individual data from the GUS (CSO) household budget survey, it is possible to come across the problem of the “test power trap”. This results from the fact that with large databases, even a small difference in average expenditure may turn out to be statistically significant. Hence, small correlation coefficients may prove statistically significant for large data sets. Therefore, it might be worth combining features, e.g. age, gender and education level of a person representing a household, to form one aggregate variable.

3. Conceptualization of a One-Person Household in the Household Life Cycle

This part of the paper is the result of analyses conducted on one-person households with the application of individual data from the GUS (CSO) survey of household budgets and the author's own research on one-person households in Płock and Płock powiat. The results of the analyses and own research have been published (Piekut 2018a, 2018b, 2018c, 2019a, 2019b).

The behavior of household members affects the subsequent stages of the household's life cycle. The determinant of each stage in the household's life cycle are household characteristics, e.g. age, marital status, and professional activity. Taking these features into account helps predict the consumption behavior of people creating households. Thus, the value of the household life cycle construct can be a predictive tool (Putler, Li, & Liu, 2007). Throughout the process of a one-person household (and also a household in general sense), various changes and specific transitions between life stages occur. These changes are signaled in the results of research on consumption patterns of one-person households run by people who have never been married (Piekut, 2018c). Consumption patterns for never-married people varied due to, among others, age, gender and education level of the people creating these households. Other consumption patterns have been observed among those never-married under the age of 40 and other among the ones over 40. Patterns of consumption also distinguished never-married men from women, although only for those over 40, which is also confirmed by other results of the author's own research (Piekut, 2018b, 2019a, 2019b). Among people with secondary or higher education, different consumption patterns were observed compared to people with a lower level of education, which was confirmed for all one-person households (Piekut, 2019a, 2019b), as well as for those who were never married (2018c) and divorced persons (Piekut, 2018a). Regression models for one-person households (Piekut, 2019b), confirmed the validity of age, gender and education as the determinants of the level of disposable income and consumption expenditure. In turn, other researchers have demonstrated that creating categories in the life cycle of a household is beneficial – from the point of view of economic analyses (consumer behavior, financial situation) – to include variables such as marital status, age of both adults and child (Derrick & Lehfeld, 1980), or professional activity (Xiao, 1996).

Based on the analyses carried out for the purposes of the aforementioned scientific papers, it was considered that for building a variable 'household life cycle', it would be advisable to use three features: age, gender and education level of the household member. These analyses (Piekut, 2019b) also showed that an important feature in determining the level of income and expenditure in one-person households was the socio-economic group. However, this feature was not included, because it is the result of a partial

compilation of such variables as education level (blue-collar and white-collar employees) and age (working persons, retirees, pensioners).

Regarding age ranges, it is recommended to divide one-person households into three groups, i.e. up to the age of 50, between 50 and 70, and over 70. Previous analyses (Piekut, 2019b) showed that the age of 40 is a dividing line between people representing different living standards, and the age of 50 polarizes households in terms of the level of expenditure on consumption. Some studies (Dąbrowska et al., 2018) suggested the age of 45 as a dividing line for households in terms of consumption behavior, which may also be reasonable. In one-person households of people up to the age of 50, different kinds of consumption behavior were found compared to households operated by people over the age of 50 (Piekut, 2018c, 2019b). It was also noticed that in households run by people aged 70 and over, the standard of living falls and consumption patterns change (Piekut, 2018c, 2019b).

The definition of such age categories may raise doubts, at least due to their disproportionality, and therefore it was decided to verify previous analyses. Therefore, one-person households were again divided according to the age of the person running them. Statistically significant differences¹ in expenditure on individual categories of consumer goods and services between groups of one-person households separated by the age of the person running them were checked. In subsequent divisions, the ages forming the boundaries of the ranges were assumed as follows: (1) 30, 50, 70; (2) 45, 65; (3) 50, 65; (4) 45, 70; (5) 40, 70; (6) 50, 70. The best results, i.e. the largest number of statistically significant differences between groups of households in expenditure on individual categories of goods and services were observed in the last division, where one group was comprised of households run by persons up to the age of 50 and subsequent groups were households of people aged 50 to 70 and households of people aged 70 and over. In contrast, after distinguishing the group of people up to 30 years old, no statistically significant differences were observed between groups up to 30 and up to 50 in the level of expenditure on alcoholic beverages and tobacco products, furnishings, household equipment and routine household maintenance, health and other expenses on consumer goods and services. Thus, the data verification and previous studies (Piekut, 2018c, 2019b) have proved the age of 50 as the first dividing line. Indeed, in the studies conducted by other authors (Gilly & Enis, 1982; Du & Kamakura, 2006), smaller age ranges were indicated; the age limit for the first group was 30 or 35. It should be noted, however, that the studies of the above-mentioned authors were published over a dozen years ago and consumption behaviors undergo modifications. For example, the youth time is getting more and more extended, hence perhaps the consumption behavior of people in their twenties and thirties is similar to those in their 40s. The results of these divisions into age groups and the author's previous own analyses

have shown that consumer behavior as well as the standard of living significantly change after the age of 50. It should be noted, however, that in analyzing the categories of expenditure on consumer goods and services individually, the breakdown by age of respondents may not be sufficient. When analyzing individual categories of consumer expenditure, it may be more appropriate to reduce or increase the types of households according to the age of the person running them. For example, it was noticed that expenditure on food and non-alcoholic beverages of people aged up to 30 statistically significantly differed from other people, which would suggest separating people of this age.

With regard to the gender of respondents, all analyses and previously published studies showed differences between women and men with respect to the standard of living and consumption patterns (Piekut, 2018a, 2018b, 2018c, 2019a, 2019b), so it is necessary to take gender into account in household life cycle theories in relation to one-person households.

The education level is a determinant of both the standard of living and consumption behavior of persons running one-person households. And although in the concepts of the household life cycle, the features that make up this variable usually have a demographic background, social characteristics are also worth considering. In the 1970s, researchers (Elder, 1978) emphasized the role of education and professional career in the household life cycle. They proposed adopting a life orientation that includes changes in family structure as well as its members' individual development. The authors argued that the concept of the household life cycle must take into account changes in the course of life and the time of events and life transitions. With age, a person multiplies his or her life and professional experience, and can also achieve a higher level of education. It seems appropriate to include the variable 'level of education', as it determines the quality of life and consumption patterns in one-person households (Piekut, 2019b). It is proposed to divide one-person households into three groups according to the level of education, i.e. (i) people with lower education (having at most basic vocational education); (ii) with secondary or post-secondary education and (iii) with higher education. In the author's own analyses (Piekut, 2018c; Piekut, 2019b), the level of education was an important factor in diversifying the standard of living and consumption patterns. The combination of one-person households run by people with at most lower secondary education levels with households run by the ones with a basic vocational education level is justified by the lack of statistically significant differences between these groups of households at the level of eight out of twelve categories of expenditure on consumer goods and services.

On the basis of the author's own analyses published in previous scientific studies and carried out just for preparing this article, the model of functioning of a one-person household in the life cycle of the household can be proposed, as illustrated in Figure 2.

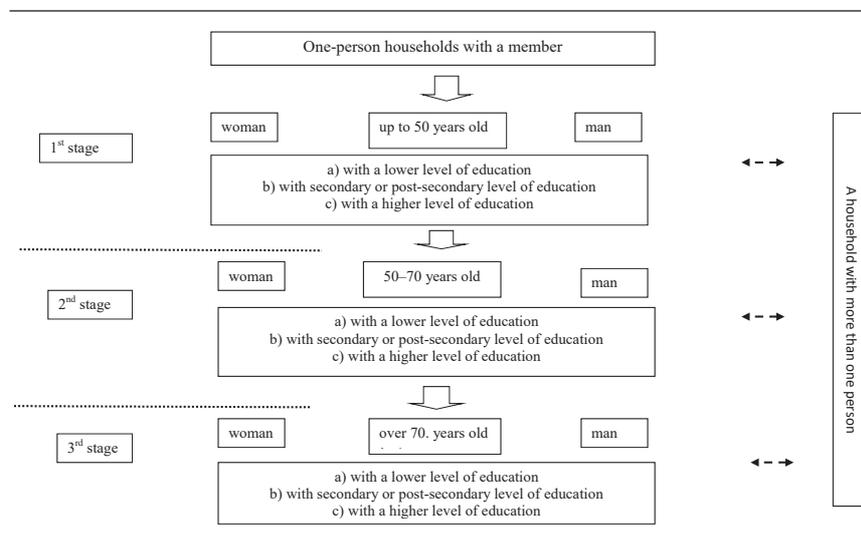


Figure 2. Functioning of a one-person household in the household life cycle. Source: Own work based on Piekut (2018a, 2018b, 2018c, 2019a, 2019b) and analysis of household budget research data.

In the household life cycle, a one-person household can be considered as: 1) continuous, i.e. the person creating the household runs it alone throughout all the life stages, or 2) discontinuous, i.e. the person creating the household in previous stages of life runs a households consisting of a larger number of people.

Throughout the household life cycle, individuals develop (e.g. by increasing the level of education, increasing life experiences) and various changes occur for them in their financial base, in consumption in the area of the household functioning related to e.g. sources of obtained income. For such a model of one-person household, not only classification of these households is important but also the life paths of people in these households.

On the basis of the author's own analyses (Piekut, 2018a, 2018b, 2018c, 2019a, 2019b), it can be stated that in the life cycle of a one-person household, there are specific transitions between subsequent stages of an individual's life, which are expressed in changes in income and consumption situations. These transitions can cause changes in individuals' perception (of themselves, the world) and in the organization of their resources (Hopkins, Roster, & Wood, 2006), consumption, and professional activity. The transitions between the stages of the life cycle are considered to be crucial and causing changes in lifestyle and consumption patterns (Wilkes, 1995; Hopkins, Roster, & Wood, 2006). The conducted own analyses (Piekut, 2019b) did not show a significant impact on the consumption situation of the variable 'marital status of the person running a one-person household'.

However, some studies (Kim & Ju, 2018; Dinescu et al., 2016) confirm the impact of the marital status variable on consumption. It seems that it is worth looking at the consumption situation of people after different experiences of being or not in relationships.

The use of the household life cycle concept in empirical studies relating to living standards and meeting consumer needs may not only be cognitively interesting, but also be a guide to social policy by designation the types of households exposed to exclusion from various spheres of life or threatened by pauperization².

This concept is also a useful tool for market segmentation which facilitates the adaptation of enterprises' products to the needs of customers, and thus can lead to increased profitability of business entities (McDonald & Dunbar, 2003; Cooil, Aksoy, & Keiningham, 2008). The need for market segmentation results from the increasingly diversifying consumer requirements, technological progress and intensification of product competition and it is particularly important in highly competitive markets (Dolnicar, Freitag, & Randle, 2005). The growing number of one-person households is an important prerequisite for taking them into account in economic analyses, among others in analyzes using theories of household development.

4. Conclusion

The multidisciplinary household life cycle concept is successfully applied in economic sciences. This concept has developed considerably since the moment of its introduction into science. Theoretical and methodological advances have resulted in new insights of practical relevance, including the emergence of a one-person household, initially as one of the stages, and later the entire life cycle model for one-person households.

However, it is difficult to say whether the author managed to present the most important theories and studies of the household life cycle. Nevertheless, the conclusions resulting from the presented content and an attempt to conceptualize the functioning of a one-person household in the household life cycle can significantly affect the methodology for designing further research and encourage research efforts in this topic. The presented analyses show that to create a useful variable illustrating the stages of the life cycle of a one-person household, three characteristics of those who make up these households should be taken into account, i.e. age, gender and education. However, if the survey covers all categories of expenditure on consumer goods and services, it is worth dividing one-person households into the mentioned three groups considering the age and education of the respondents. Considering each category of consumer expenditure separately, it is possible to increase or decrease the number of household divisions. Distinguishing the development phases of a one-person household has numerous advantages, but also limitations; hence it

is important to introduce in these analyses hybrid concepts that take into account extended typologies of households, as well as to relate them to the categories of goods and services purchased and to measure their variability in individual types of households.

It should also be borne in mind that the analyses concern Polish one-person households operating in the second decade of the 21st century and may differ from households from other communities, which is also signaled by other studies (Shannon et al., 2020).

According to E. M. Duvall (1988), it can be stated that household life cycle patterns are heterogeneous and there is not only one unique life cycle model, but those typical for a given community are worth creating. In the long term, an in-depth understanding of how living standards and consumption change over the course of consumers' life is required (Harrison, Veeck, & Gentry, 2011), and also – facing the increasing numbers of one-person households – it is important to recognize the changes in consumption behavior and living standards in these households. The household life cycle can be the key to understanding how consumer behavior changes over time. It seems that the potential of the one-person household life cycle concept can have practical application in economics, can inspire and guide new research, providing valuable information about one-person households.

In the author's opinion, this paper will encourage researchers studying the standard of living and consumption behavior to theoretically and empirically develop the concept of a household's life cycle, including one-person households. The model presented in the study should provide a "sensitizing" conceptual framework for thinking how to improve previous models of the household life cycle and include a one-person household in them. Further research directions should be focused, among others, on the attempt to include the marital status of the person running the household in the characteristics of a one-person household. It would also be interesting to undertake research on consumer behavior and standard of living of persons running a one-person household from the perspective of their previous partnership/marriage relations and the duration of these relationships.

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Endnotes

- ¹ Statistically significant differences were determined with Tukey test for unequal sample sizes; assuming $p < 0.05$, at $\alpha = 0.05$.
- ² The disposable income disparity in one-person households measured in 2017 by the Gini coefficient amounted to nearly 32% and was higher than in households without

dependent children and single parents with dependent children (GUS, 2018). Over 22% of one-person households have expenses below the minimum subsistence level (GUS, 2019).

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