

## IMPLICIT ATTITUDES TOWARDS OLDER PEOPLE IN POLAND

Ludmila Zajac-Lamparska\*

### Abstract

The overriding aim of the article is to discuss research results about the affective and cognitive character of implicit attitudes to the older people in Poland and the differences in this area among people from the age groups of early, middle and late adulthood.

The sample comprised 90 subjects, divided into three age sub-groups (N = 30; including 15 women and 15 men), representing early adulthood with a mean age of 28 years, middle adulthood with a mean age of 50 years and late adulthood with a mean age of 70 years.

An experimental method based on priming paradigm was used. Target stimuli were the pictures of elderly and young people's faces. The priming stimuli consisted of words referring to features belonging to one of the two affective categories (positive vs. negative) and to one of the two semantic categories (stereotypically attributed vs. non-attributed to old people).

The findings suggest that implicit attitudes towards older adults in Poland are neither negative nor positive. However, there is a tendency to perceive older people in a stereotypical way, which is the greatest in the age group of older adults. Moreover, negative stereotypes of the elderly people are stronger than the positive ones.

*Keywords:* implicit attitudes, age stereotypes, ageism

\* Institute of Psychology, Kazimierz Wielki University, Bydgoszcz, Poland

## Introduction

**The social position of older adults and its specificity in Poland.** The present position and the social perception of older adults in society is ambiguous. On the one hand, psychologists, sociologists, pedagogues, and other researchers have long been pointing to the issue of a negative social perception of the elderly people as well as negative attitudes toward this particular age group (e.g. Burgess, 1960; Graham, & Backer, 1989; Schmidt, & Boland, 1986; Susułowska, 1989; Tuckman, & Lorge, 1953). The introduction of such terms as ageism (Butler, 1969) and gerontophobia (Bunzel, 1972) and their continual presence in the scientific literature (e.g. Nelson, 2002; Palmore, 2005; Woolf, 1998) testify to the magnitude and importance of the stated problem. The issue of ageism coupled with stereotyping, prejudice, and discrimination based on age can all be found in the research findings of many empirical studies (e.g. Butler, 1980; Bowd, 2003; Clapham, & Fulford, 1997; Cuddy, & Fishke, 2004; Hagestad, & Uhlenberg, 2006; Hummert, Garstka, Shaner, & Strahm, 1994; Jelenec, & Steffens, 2002; Kite, & Johnson, 1988; Kite, & Smith Wagner, 2004; Nelson, 2002; McCann, & Giles, 2004; Palmore, 1999; Perlmutter, & Hall, 1992; Rupp, Vodanovich, & Crede, 2005, 2006).

On the other hand, the disadvantageous position of the elderly people seems to have changed. The changes include the social status and the living conditions of the elderly adults, and, which is also important, the styles of life in old age, the scope and types of activity undertaken by seniors (Perlmutter, & Hall, 1992). Consequently the social perception and the attitudes toward elderly people has changed respectively. At least some of research show attitudes towards the old people lacking in stereotyping, positive or at least neutral in their character (Jelenec & Steffens, 2002; Kite & Johnson, 1988; Kite et al., 2005; Mellor, Chew, &

Greenhill, 2007; StatementNo 2429 CBOS, 2000; Perlmutter,&Hall, 1992; Trempała, & Zajac-Lamparska, 2007).

In Poland the change of elderly adults' lifestyle, discussed previously, progresses fairly slowly. An analysis of a survey carried out in 1999-2001 by the Polish Society of Gerontology showed many changes concerning older adults after the political and economic reforms begun in 1989 due to the political system transformation (Synak, 2002; 2003), but not all of them are positive. For instance pensioners' cost of living increased, however pensions failed to match this increase. Moreover, there have been significant improvements in nursing home care, hospitalization, and social insurance, but older adults' self-assessments of their health have declined (Leszko, Zajac-Lamparska, & Trempała, 2015). According to *PolSenior* research project, although the health status and physical capacity of significant part of the elderly people allow them to maintain the independence, the activity level in this age group is fairly low (Mossakowska, Więcek&Błędowski, 2012; <http://polsenior.iimcb.gov.pl/en/home>). Research by Social Diagnosis 2013 revealed also that the physical and social activity of respondents aged 60 and older decreases with age. In comparison to younger adults, older adults spend much more time watching TV (on average 60% more) and are twice less likely to play sports (although some sports, like Nordic walking, jogging or cycling are as popular as among younger). Moreover, the elderly people are much less likely to go to the movie theater, concert, restaurants, cafe or pubs and to participate in social meetings (Czapiński, 2013; Czapiński&Panek, 2014). One of the greatest examples of engaging older people in Poland are Universities of the Third Age. At present there are nearly 100 Universities of the Third Age in Poland, having about 25.000 participants. However, older adults attending that Universities form a specific group. Their level of formal education is much higher than that one represented by the whole population of elderly

people in Poland and their financial situation is relatively good. In addition, more than half of those people are also members of other social organizations (Zgliczyński, 2012). In general, there is a significant relationship between various forms of elderly people's activity (familial, physical, and social) and their educational attainment. Older people having higher education (college degree) show the highest organizational activity, and the lowest level of passive pastimes (Czapiński, 2013; Czapiński,&Panek, 2014). It can be concluded that positive lifestyle changes are observed in Poland mostly in well-educated elderly people having at least average financial status.

**The attitudes towards older adults among people in different ages.** Assumptions about relation between attitudes to the elderly and age are also ambiguous. The reason for that is the fact that the age factor in research into attitudes toward seniors can be taken into account in various ways (Zajac-Lamparska, 2012).

Firstly, the age factor constitutes a criterion for age stratification, which is treated as being a basic rule of the social life organization (Riley, 1985; Turner, 1989, 1998; Irwin, 1998; Wrosch&Frund, 2001). As a result of age stratification seniors can constitute the so-called in-group (for people at older ages) or the out-group (for younger generations). The in-group and out-group division is connected with favouring the in-group over the out-group, the more positive assessment of the in-group included (Brewer, 1996; Whitley & Kite, 2010). Thus said, the elderly should perceive seniors in a more positive way and take a more positive attitude to them than people from other age groups. However, as the meta-analysis conducted by Kite and colleagues shows (2005) research results are not so synonymous. The majority of them in actual fact confirm the presented regularity, however one part of the results speaks volumes about an

opposite tendency, whereas another part speaks volumes about a lack of age-related differences in terms of attitudes toward the elderly.

Secondly, age also indicates an affinity to a generation/to a particular birth cohort. It shows that attitudes toward seniors in people belonging to different generations were shaped by discrete underpinnings, i.e. historical, cultural and social ones. Positive change in social positions of the elderly, which has been taking place over the past few years, is one of the aspects of the dissimilarity. In this context one can draw a conclusion that the people from the youngest age group should take the most positive attitude toward seniors.

**The implicit attitudes towards older adults and the mechanisms forming these attitudes.** Following the majority of theoretical perspectives an attitude can be defined as a summary evaluation of any object (attitude object) including affective, behavioral and/or cognitive reactions (Bohner, & Wänke, 2002). The subject matter of the majority of research studies are explicit attitudes towards elderly people. These attitudes are declared and controlled consciously, whereas implicit attitudes manifest themselves in automatic, spontaneous, and unconscious behavior. Wilson, Lindsey and Schooler (2000) in their definition of an implicit attitude list the following characteristics: (1) the sources of it are not conscious; (2) the activation of it is automatic; (3) it impacts unconscious, uncontrolled reactions and behaviors that reflects the person's attitude of which the person is unaware and not try to control. According to the classical definition by A. Greenwald an implicit attitude mediates favorable or unfavorable feelings, thoughts or actions toward social objects (Greenwald, & Banaji, 1995). The procedure of affective priming or the Implicit Association Test (IAT) by Greenwald show more negative attitudes towards elderly people than, for instance, the questionnaire by Kogan, measuring explicit attitudes (Jelenec, & Steffens, 2002). However, another findings suggest that young and

old adults do not reveal automatic ageism (Chasteen, Schwarz,& Park, 2002). So far, there were no Polish research regarding implicit attitudes towards the older adults.

The dual-attitude model (DAM) hypothesis proposes that there are four types of dual attitudes – four mechanisms that form the implicit attitudes. These mechanisms are as follows: (a) the formation of implicit attitudes through motivated overriding, (b) the formation of implicit attitudes through automatic overriding, (c) the formation of implicit attitudes through repression, (d) the formation of implicit attitudes through automatic system.

In the case of motivated and automatic overriding, implicit attitudes result from changes in explicit attitudes consciously declared. The point of departure for motivated overriding is a lack of acceptance for the explicit attitude with the motivation to override it that emerges in the process. The mechanism of motivated overriding is often described as typical of prejudice and stereotyping, behaviors socially and culturally disapproved of and thus requiring a motivation for a change in explicit attitudes (Wilson et al., 2000). When attitudes change, the old, unwanted attitude is not replaced with the new one, but rather remains as an implicit attitude. Consequently the new, accepted explicit attitude will prevail whenever an individual has a sufficient cognitive capacity to control one's behavior and attitudes expressed through such behavior, and whenever a person is motivated to exert such control. In the remaining instances e.g. in the case of automatic behaviors and those reflecting a person's attitudes of which he or she is not aware of, such behavior will be influenced by the implicit attitude.

The mechanism of motivated overriding can be directly translated into the process of implicit attitude construction toward elderly people. Ageism has long been faced with social criticism, which can generate motivation for a more favorable change in attitudes toward the elderly. The findings of previously cited research prove a favorable attitude toward seniors declared by the

respondents. With the motivated overriding process in mind, it can be concluded that despite the changes in explicit attitudes toward the elderly, the implicit attitudes remain to be negative and stereotyping in character.

The second mechanism listed above, referring to the construction of implicit attitudes through overriding, is automatic overriding. In this instance, again, an implicit attitude is formed due to a change in an explicit attitude. However the difference is that in the case of automatic overriding there is a lack of motivation to modify an attitude. Attitude change occurs automatically with no intention and conscious control of an individual. Such a change may result from new information about the attitude object or a new experience concerning the object. By referring the mechanism of automatic overriding to implicit attitudes toward the elderly, and taking into consideration the fact that explicit attitudes toward the elderly have undergone some positive changes, it can be concluded, again, that implicit attitudes remain most probably negative and stereotyping.

Another mechanism leading to the construction of an implicit attitude is repression. The process of repression occurs when a given attitude is threatening or endangering for an individual and thus blocks access to one's awareness. On the outside the person displays an opposite attitude or manifests none. It is difficult to associate this mechanism with attitudes towards older people, although it can occur in the age group of late adulthood. In late adulthood ageist attitude refers to one's own age group which might make it appear to be threatening or unacceptable, and is therefore repressed. Repression becomes then another potential mechanism whereby unconscious, implicit attitudes toward the elderly are more negative than explicit conscious evaluations. However, the mechanism only refers to the late adulthood age group and it can

enhance the discrepancy between explicit and implicit attitudes among the members of this age group due to the previously described mechanisms.

The last mechanism of implicit attitudes construction is their automatic activation. This is the only mechanism which does not necessarily need to cause discrepancy between explicit and implicit attitudes. Automatically activated attitudes occur independently of explicit responses formed through conscious retrieval. Both processes are parallel with the only difference being that in the former case an individual is not aware of the overriding attitude and its underlying factors, and does not control the process. In the latter case, though, just the opposite is true – an individual is both aware and in control of emerging evaluations. From the distinction between the automatic and reflective systems of attitude formation follows that ultimately explicit attitudes depend greatly on an individual, while implicit attitudes are totally effected by the factors forming them automatically. Among the factors in question we find culture, socialization and personal affective experiences (Devine, 1989). As the consequence of their influence, associations are formed, which, in turn, are also automatically activated.

The nature of implicit responses toward the elderly formed that way will depend on the roots of automatically triggered responses. When it comes to the influence of culture and socialization, it is worth noticing that only recently have some changes occurred in how the elderly are perceived in terms of their social position and age group. Presumably, they did not influence the attitudes formed automatically in people from age groups<sup>1</sup> of middle and late adulthood. It is more likely that the formation of their attitudes remained under the influence of old people and old age stereotypes as well as a negative bias and prejudice toward this particular age group. In respect of young adults, the situation is different – there the positive changes in the elderly people's social situation and position may have been the source of automatically formed



implicit attitudes toward the elderly. It is quite likely then that the implicit attitudes toward the elderly in young adults will not be negative and stereotyping. Consequently there will not be any difference between attitudes formed through the reflective and automatic systems – both the explicit and implicit attitudes toward the elderly<sup>2</sup> will be positive.

Ultimately, it can be hypothesized that implicit attitudes towards older adults are negative and stereotypical at least in the age groups of middle and late adulthood.

**The aim of the study.** The overriding aim of the study was to investigate the implicit attitudes to the older adults among people in Poland. Within the framework of the research project a question has been raised as to the character of implicit attitudes (positive vs. negative and stereotyping vs. non-stereotyping) and the differences in this regard among people from the age groups of early, middle and late adulthood.

On the basis of an analysis of theoretical underpinnings and available research results one can form the following preliminary expectations about attitudes to the elderly among people in Poland: (1) Implicit attitudes toward the older adults in Poland are of negative and stereotyping character, (2) The younger the age group is, the less negative and stereotyping character is applicable to attitudes toward the older adults.

## Method

**Participants.** The sample consisted of 90 subjects, divided into three age sub-groups, representing early adulthood (20 – 40 years old, mean age: 28, N=30; including 15 women and 15 men), middle adulthood (41 – 60 years old, mean age: 50, N=30; including 15 women and 15 men) and late adulthood (above 60 years of age, mean age: 70 years, N=30; including 15 women and 15 men).

**Procedure.** An experimental method based on priming paradigm (Bohner&Wänke, 2004; Olson & Fazio, 2009) was used. In order to conduct the study a computer program designed by Zając-Lamparska was introduced. Both semantic and affective priming were used in the study. Target stimuli were the pictures of elderly people's faces (over 60 years of age) and young people's faces (18-25 years old), in equal number of men and women. The priming stimuli consisted of words referring to human features. Each word belonged to one of the two affective categories (words denoting positive and negative features) and simultaneously to one of the two semantic categories (words denoting features stereotypically attributed vs. non-attributed to old people). Ultimately there were four word categories, i.e. (1) words denoting negative features, stereotypically attributed to the elderly people; (2) words denoting negative features, stereotypically non-attributed to the elderly people; (3) words denoting positive features, stereotypically attributed to the elderly; (4) words denoting positive features, stereotypically non-attributed to the elderly people. All the words came from ACL adjective test of H. B. Gough and A. B. Heilbrune. The accuracy of word selection for each category was estimated by means of unanimity of competent expert's opinions: (a) for semantic categories (words denoting features stereotypically attributed to elderly people vs. young people): Kendall's  $W=0.80$ ,  $p < 0.001$ ; (b) for affective categories (words denoting positive features vs. negative features): Kendall's  $W=0,85$ ,  $p < 0,001$ . In the study each picture of every category was primed by word categories.

Since in order to measure implicit attitudes, indirect measures (e.g. people participating in the study are not aware of the fact that their attitudes are measured) are used, the instruction was to perform categorizing tasks based on classifying people (faces) that appeared on the monitor either as old or young, by pressing respective buttons on the computer keyboard.

The indicators of implicit responses toward the elderly in the present study were based on the comparison of reaction times to the pictures of elderly people<sup>3</sup> with respect to the priming stimulus (word), therein: (a) shorter time reaction to the pictures of the elderly primed by words denoting negative features, indicated a negative attitude, in contrast to the words denoting positive features, (b) shorter average reaction time to the pictures of the elderly primed by words denoting features stereotypically attributed to elderly people, indicated stereotyping attitude, in contrast to the words denoting features attributed to young people.

**Data Analysis.** To data analysis the mixed-design ANOVA was applied. The within-subjects factors were: the affective nature of the priming stimulus (positive vs. negative features), the semantic nature of the priming stimulus (stereotyping vs. non-stereotyping features) and the gender of the photographed models (male vs. female), and the between-subjects factors was the age group (early, middle and late adulthood). The analysis were conducted using STATISTICA10 software.

### Findings

The analysis showed that implicit attitudes towards older adults are neither negative nor positive. The average reaction time to the photographs of elderly people did not differ significantly whether the photograph was preceded by a word denoting a negative or positive feature:  $F[1, 87]=0.235$ ;  $p=0.629$ ;  $\eta^2p = 0.003$ , which means that none of the categories paved the way for responses to the photographs of the seniors. This effect is independent on age of research participants:  $F[2, 87] = 0.003$ ;  $p = 0.997$ ;  $\eta^2p = 0.0001$ .

When it comes to stereotyping vs. non-stereotyping implicit attitudes toward the elderly people, based on the findings obtained in the study it can be concluded that there is a tendency to

stereotype the older persons. The evidence being a significantly shorter average reaction time to the photographs of the elderly preceded by words stereotypically attributed to the elderly:  $F[1, 87] = 38.252$ ;  $p < .001$ ;  $\eta^2 p = 0.305$ . Moreover this effect is moderated by certain factors: the age of research participants:  $F[2, 87] = 5.350$ ;  $p < .01$ ;  $\eta^2 p = 0.109$ , and the affective nature of the priming words  $F[1, 87] = 3.971$ ;  $p < 0.05$ ;  $\eta^2 p = 0.044$ .

Figure 1

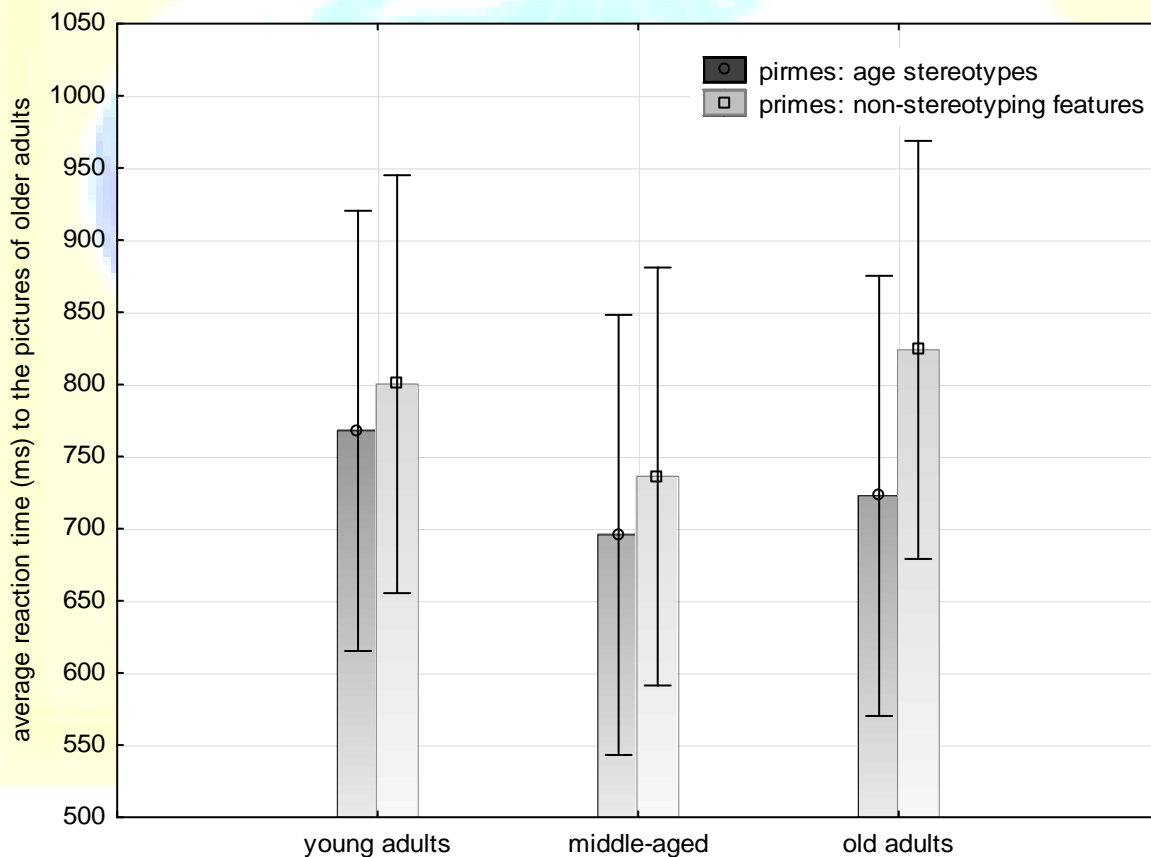


Figure 1. The comparison of average reaction time (ms) to the pictures of older adults priming by the words denoting age stereotypes vs. non-stereotyping features in groups of young, middle-aged and old adults

In terms of age, the greatest tendency to stereotype older people occurs in the age group of old adults (see Figure 1). The post-hoc analyses (Sheffe Test and Tukey's HSD) reveal that statistically significant shorter average reaction time after the features (words) stereotypically attributed to the older people is present only among old adults (for both post-hoc tests:  $p < .001$ ).

Figure 2

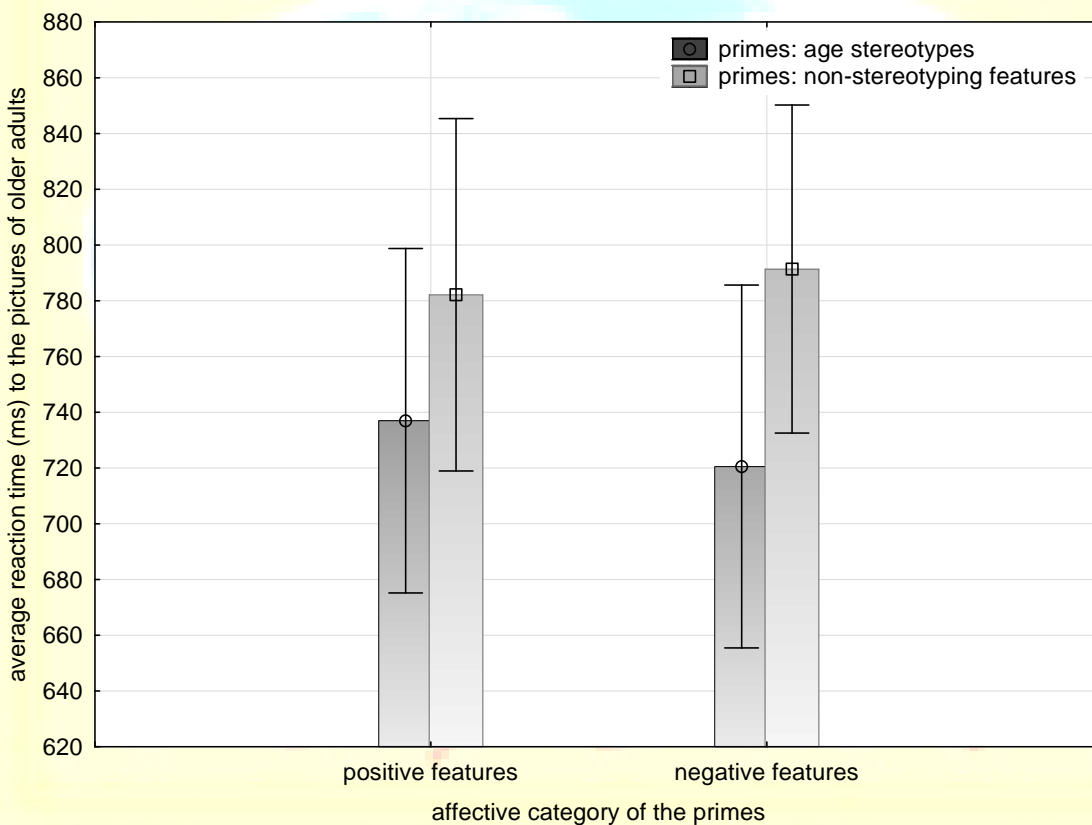


Figure 2. The comparison of average reaction time (ms) to the pictures of older adults priming by the words denoting positive and negative age stereotypes vs. positive and negative non-stereotyping features

Moreover, the affective category of features modifies the influence of their semantic category in such way that the shortening of the reaction time after words denoting features

stereotypically attributed to elderly people is greater for the negative features than for the positive (see Figure 2). But the effect size is small ( $\eta^2p = 0.044$ ). The same time, as show the post-hoc analyses (Sheffe Test and Tukey's HSD), the differences between average reaction time after words denoting and non-denoting age stereotypes are statistically significant ( $p < .001$ ) in both cases: negative and positive features. It means that, although there are both negative and positive age stereotypes, the negative are stronger.

## Discussion

The findings suggest that the implicit attitudes towards the older people in Polish society are affectively neutral, or more specifically: neither negative, nor positive. Therefore the expected negative and ageist character of implicit attitudes did not emerge. Nevertheless, an in-depth analysis of the findings obtained in the study does not allow for such clear-cut interpretation. The tendency for negative and positive stereotyping of the elderly people emerged, especially in the group of older adults. This “neither negative, nor positive” implicit attitude toward the older adults may be indicative of not so much neutral as ambivalent attitude, i.e. positive and negative at the same time. It can be further assumed that even an implicit stereotype of an elderly person emerged in the findings obtained in the study (Boduroglu, Yoon, Luo & Park, 2006; Cuddy, Norton & Fishke, 2005; de Paula Couto & Koller, 2012; Macia, Lahmam, Baali, Boëtsch & Chapuis-Lucciani, 2009). The attitude shall be characterized by affective consistency, while a stereotype, also the implicit one, can be, by its nature, affectively ambivalent as well as cognitively inconsistent (Greenwald & Banaji, 1995). It shall be assumed that the activation of either the positive or negative aspect shall depend on the activation of specific associative patterns at a particular moment i.e., a kind of “matching” between external stimulation and an associative model stored in memory (according to associative-propositional

evaluation model, APE; Gawronski&Bodenhausen, 2006). The character of the activated associative patterns will determine (automatic) behavior of an individual.

Comparing the attitudes shown across age groups of early, middle, and late adulthood, indicates that in an optimal way (affectively neutral and non-stereotyping) young and middle-aged adults assume attitudes toward the elderly. The outcome is in line with predictions based on theoretical premises. It needs to be stressed that the defined tendencies across age groups are not intra-individual in character for the study was crosswise not longitudinal. The defined differences between age groups are indicative of the generation gap. A neutral affective character of attitudes and a lack of stereotyping among two younger groups, especially young adults, may be an indication of new explicit convictions about the elderly people as well as automatic associations which are the basis for implicit attitudes in this cohort. Their development can be associated with the influence of the group-specific factors<sup>4</sup> such as education, different experience with old people, their social position and style of life, and finally negative (generally) assessments of any form of stereotyping, prejudice and discrimination. The research findings in question may be viewed as an indication of a decreasing and fading tendency to stereotype the elderly across the consecutive birth cohorts.

In the context of the above interpretation the research findings can be considered optimistic, but the concern is the tendency to stereotypical perception of their own age group among the older adults. Moreover, taking into account the third mechanism forming the implicit attitudes (repression), this tendency may not disclose until the period of late adulthood, when a person begins to belong to the group of "older people". Thus, although today absent, it can reveal among young and middle-aged people in their future. The tendency to stereotypical perception of one's own age group can have various negative consequences, starting with the lowered self-

esteem and quality of life (especially in the case of negative stereotypes), involuntary stereotyping of one's own activities and decisions (Rodin & Langer 1980; Susułowska 1989; Perlmutter & Hall 1992). The conclusion which can be drawn from the research for the psychological practice is that there is a need not only to undertake action in order to improve the image of the elderly and their relationship with the younger generations, but also the need to work on the senior's attitude towards old age and the relation they have with their own old age.

Acknowledgements: to Karolina Pejka-Balcer for data collection.





**References:**

Ajzen, I.&Fishbein, M. (1980). *Understanding attitudesandpredictingsocialbehavior*. Engelwood Cliffs. New York, NY: Prentice-Hall.

Boduroglu, A., Yoon, C., Luo, T.& Park D. C. (2006). Age-related stereotypes: A comparisonof American and Chinese cultures. *Gerontology*, 52, 324-333. doi: 10.1159/000094614

Bohner, G.&Wänke, M. (2002). *Attitudes and attitude change*. Hove, UK: Psychology Press.

Bowd, A. D. (2003). Stereotypes ofelderlyperson in narrative jokes. *Research on aging*, 25, 22-35.doi: 10.1177/0164027502238341

Brewer, M. B. (1996). When stereotypes lead to stereotyping: the use of stereotypes in person perception. In: C. N. Macrae, Ch. Stonger& M. Hewstone (Eds.), *Stereotype and stereotyping*(pp. 254-275). New York, NY: The Guilford Press.

Bunzel, J. (1972). Note on thehistoryof a concept: Gerontophobia. *The Gerontologist*, 12, 116-203.doi:10.1093/geront/12.2\_Part\_1.116

Burgess, E. W. (1960). Aging in western culture. In: E. W. Burgess (Ed.), *Aging in western societies*(pp. 3-28). Chicago, IL: University of Chicago Press.

Butler, R. N. (1969). Ageism: Another form of bigotry. *The Gerontologist*, 9, 243-246.

Butler, R.N. (1980). Ageism: A Forward. *Journal of Social Issues*, 36, 8-11.

Chasteen, A. L., Schwarz N.& Park D. C. (2002). The activation of aging stereotypes in younger and older adults. *Journal of Gerontology: Psychological Sciences*, 57B, 540-547. doi: 10.1093/geronb/57.6.P540

Clapham, M. M. &Fulford, M. D (1997). Age bias in assessment center ratings. *Journal of Managerial Issues*,9, 373-87.

Cuddy, A. J. C. & Fishke, S. T. (2004). Doddering but dear: Process, content, and function in stereotyping of older persons. In: T. D. Nelson (Ed.), *Ageism. Stereotyping and prejudice against older persons* (pp. 3-26). Cambridge, UK: MIT Press.

Cuddy, A. J. C., Norton, M. I. & Fishke, S. T. (2005). This old stereotype: The pervasiveness and persistence of the elderly stereotype. *Journal of Social Issues*, 61, 267-285. doi: 10.1111/j.1540-4560.2005.00405.x

de Paula Couto, M. C. P. & Koller, S. H. (2012). Warmth and competence: Stereotypes of the elderly among young adults and older persons in Brazil. *International Perspectives in Psychology: Research, Practice, Consultation*, 1, 52-62. doi:10.1037/a0027118

Devine, P. G. (1989). Stereotypes and prejudice: their automatic and controlled components. *Journal of Personality and Social Psychology*, 56, 5-18. doi:10.1037/0022-3514.56.1.5

Fazio, R. H. (1990). The MODE model as integrative framework. *Advances in Experimental Social Psychology*, 23, 75-109. doi: 10.1016/S0065-2601(08)60318-4

Gawronski, B. & Bodenhausen, G. V. (2006). Associative and propositional processes in evaluation: An integrative review of implicit and explicit attitude change. *Psychological Bulletin*, 132, 692-731. doi:10.1037/0033-2909.132.5.692

Graham, I. D. & Backer, P. M. (1989). Status, age and gender: perceptions of old and young people. *Canadian Journal of Aging*, 8, 255-267. doi: 10.1017/S0714980800008886

Greenwald, A. G. & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, 102, 4-27. doi: 10.1037//0033-295X.102.1.4

Hagestad, G. O. & Uhlenberg, P. (2006). Should we be concerned about age segregation? Some theoretical and empirical explorations. *Research on Aging*, 28, 6, 638-653. doi:10.1177/0164027506291872

Hummert, M. L., Garstka, T. A., Shaner, J. L. & Strahm S. (1994). Stereotypes of the elderly held by young, middle-aged, and elderly adults. *Journal of Gerontology*, 49, 240-249. doi:10.1093/geronj/49.5.P240

Irwin, S. (1998). Age, generation and inequality: A reply to reply. *The British Journal of Sociology*, 49, 2, 305-310.

Jelenec, P. & Steffens, M. C. (2002). Implicit attitudes toward elderly women and men, *Current Research in Social Psychology*, 7, 275-293. Retrieved 22 November, 2012, from <http://lime.weeg.uiowa.edu/~grpproc/crisp/crisp.7.16.html>

Kite, M. E. & Johnson, B. T. (1988). Attitudes toward older and younger adults: A meta-analysis. *Psychology and Aging*, 3, 233-244. doi: 10.1037/0882-7974.3.3.233

Kite, M. E. & Smith Wagner, L. (2004). Attitudes toward older adults. In: T. D. Nelson (Ed.), *Ageism. Stereotyping and prejudice against older persons* (pp. 129-162). Cambridge, UK: MIT Press.

Kite, M. E., Stockdale, G. D., Whitley Jr., B. E., Johnson, B. T. (2005). Attitudes Toward Younger and Older Adults: An Updated Meta-Analytic Review. *Journal of Social Issues*, 61, 2, 241-266. doi: 10.1111/j.1540-4560.2005.00404.x

Kogan, N. (1961a). Attitudes toward old people: The development of a scale and an examination of correlates. *Journal of Abnormal and Social Psychology*, 62, 1, 44-54. doi: 10.1037/h0048053

Kogan, N. (1961b). Attitudes toward old people in an older sample. *Journal of Abnormal and Social Psychology*, 62, 3, 616-622. doi: 10.1037/h0048356

Krzyżowski, L. (2011). In the trap of intergenerational solidarity: Family care in Poland's ageing society. *Polish Sociological Review*, 173, 55-78.

Leszko, M., Zajęc-Lamparska, L., & Trempała, J. (2015). Aging in Poland. *The Gerontologist* (after acceptance, in press).

Macia, E., Lahmam, A., Baali, A. Boëtsch, G. & Chapuis-Lucciani, N. (2009). Perception of age stereotypes and self-perception of aging: A comparison of French and Moroccan populations. *Journal of Cross-Cultural Gerontology*, 24, 391-410. doi: 0.1007/s10823-009-9103-0

McCann, R. & Giles, H. (2004). Ageism in the workplace: A communication perspective. In: T. D. Nelson (Ed.), *Ageism. Stereotyping and prejudice against older persons*, 163-200. Cambridge, UK: MIT Press.

Mellor, P., Chew, D. & Greenhill, J. (2007). Nurses' attitudes toward elderly people and knowledge of gerontic care in a multi-purpose health service (MPHS). *The Australian Journal of Advanced Nursing*, 24, 37-41.

Mossakowska, M., Więcęk, A., & Błędowski, P. (2012). *Aspekty medyczne, psychologiczne, socjologiczne i ekonomiczne starzenia się ludzi w Polsce*. [Medical, psychological, sociological and economic aspects of aging of people in Poland]. Warszawa: Termedia.

Nelson, T. D. (2002). *The psychology of prejudice*. New York, NY: Allyn & Becon.

Nelson, T. D. (Ed.) (2004). *Ageism. Stereotyping and prejudice against older persons*. Cambridge, UK: MIT Press.

Olson, M. A. & Fazio, R. H. (2009). Implicit and explicit measures of attitudes: The perspective of the MODE model. In: R. E. Petty, R. H. Fazio, P. Briñol (Eds.), *Attitudes: Insights from the new implicit measures* (pp. 19-63). New York, NY: Psychology Press.

Palmore, E. (1999). *Ageism. Negative and positive*. New York, NY: Springer Publishing Company.

Palmore, E. (2005). Three decades of research on ageism. *Generations. Journal of the American Society on Ageing*, 29, 87-90.

Perlmutter, M.& Hall, E. (1992). *Adult development and aging*. New York, NY: John Wiley and Sons.

Rembowski, J. (1984). *Psychological problems of human aging*. Warsaw - Poznan, Poland: PWN. (oryginal: Rembowski, J. (1984). *Psychologiczne problemy starzenia się człowieka*. Warszawa - Poznań, Polska: PWN.)

Rodin, J. & Langer, E. (1980). Aging labels: the decline of control and the fall of self-esteem. *Journal of Social Issues*, 36, 12-29.doi: 10.1111/j.1540-4560.1980.tb02019.x

Rupp, D. E., Vodanovich, S. J.&Crede M. (2005). The multi-dimensional nature of ageism: Construct validity and group differences. *Journal of Social Psychology*, 145, 335-362.doi: 10.3200/SOCP.145.3.335-362

Rupp, D. E., Vodanovich, S. J.&Crede M. (2006). Age bias in the workplace: The impact of ageism and causal attributions. *Journal of Applied Social Psychology*, 36, 6, 1337-1364.doi: 0.1111/j.0021-9029.2006.00062.x

Schmidt, D. F.& Boland, S. M. (1986). Structure of perceptions of older adults: Evidence for multiple stereotypes. *Psychology and Aging*, 1, 255-260.doi: 10.1037/0882-7974.1.3.255

Statement No 2429 CBOS (2000). *The Poles towards the elderly and their own aging*. (oryginal: Komunikat nr 2429 CBOS (2000). *Polacy wobec ludzi starych i własnej starości*.) Retrieved 22

November, 2012, from [http://www.cbos.pl/SPISKOM.POL/2009/K\\_157\\_09.pdf](http://www.cbos.pl/SPISKOM.POL/2009/K_157_09.pdf)

Susułowska, M. (1989). *Psychology of aging and old age*. Warsaw, Poland: PWN. (oryginal:

Susułowska, M. (1989). *Psychologia starzenia się i starości*. Warszawa, Polska: PWN.)

Anonymus&Anonymus(2007).

Synak, B. (2003). Polska starość – próba zarysowania diagnozy i kierunku przemian [Polishaging. Attempt to present an outline of the diagnosis and direction of the changes]. *Praca Socjalna*, 2, 12-23.

Synak, B. (2002). *Polska Starość* [PolishAging]. Gdańsk: Wydawnictwo UG.

Trempała, J., Zając-Lamparska, L. (2007). Attitudes towards older people: intergenerational differences. *The Review of Psychology*, 50, 4, 447-462. (original: Trempała, J., Zając-Lamparska, L. (2007). Postawy wobec osób starszych: różnice międzypokoleniowe. *Przegląd Psychologiczny*, 50, 4, 447-462.

Tuckman, J. & Lorge, I. (1953). Attitudes toward old people. *Journal of Social Psychology*, 37, 249-260.

Turner, B. S. (1989). Ageing, status politics and sociological theory. *The British Journal of Sociology*, 40, 4, 588-606.

Turner, B. S. (1998). Aging and generational conflicts: A reply to Sarah Irwin. *The British Journal of Sociology*, 49, 2, 299-304.

Whitley, B. E. Jr. & Kite, M. E. (2010). *The psychology of prejudice and discrimination* (2<sup>nd</sup> ed.). Belmont, Ca: Wadsworth.

Wilson, T. D., Lindsey, S. & Schooler, T. Y. (2000). A Model of Dual Attitudes. *Psychological Review*, 107, 101-126. doi: 10.1037//0033-295X.107.1.101

Woolf, L. M. (1998). *Ageism*. Webster University. Retrieved 22 November, 2012, from Linda M.

Woolf Ageism Web site: [www.webster.edu/~woolfm/ageism.html](http://www.webster.edu/~woolfm/ageism.html)

Wrosch, C. & Freund A. M. (2001). Self-regulation of normative and non-normative developmental challenges. *Human Development*, 44, 5, 264-283. doi: 10.1159/000057066

Zajac-Lamparska, L. (2012). The attitudes towards ageing and elderly among seniors and their grandchildren: differences and liaisons between generations. *Society and Family*, 31, 2, 80-91.

(original: Zajac-Lamparska, L. (2012). Stosunek wobec starości i ludzi starszych wśród seniorów oraz ich wnuków: różnice i powiązania międzypokoleniowe. *Spoleczeństwo i Rodzina*, 31, 2, 80-91.)

Zgliczyński, W. (2012). Aktywność społeczna osób starych w Polsce w ramach wolontariatu i uniwersytetów trzeciego wieku [The social activity of older people in Poland through volunteering and Universities of the Third Age]. *Studia BAS*, 2, 30, Warszawa: Biuro Analiz Sejmowych Kancelarii Sejmu.

#### Footnotes

<sup>1</sup> In this case age groups are referred to as birth cohorts as the belonging to a give cohort determines common socio-cultural experiences.

<sup>2</sup> This additionally eliminates motivated and automatic overriding, mechanisms whereby implicit responses are formed.

<sup>3</sup> Only reaction times to the picture of the elderly were compared, pictures of young people were introduced in order to perform the categorizing task.

<sup>4</sup> Not clearly noticeable in the life experience of former generations.

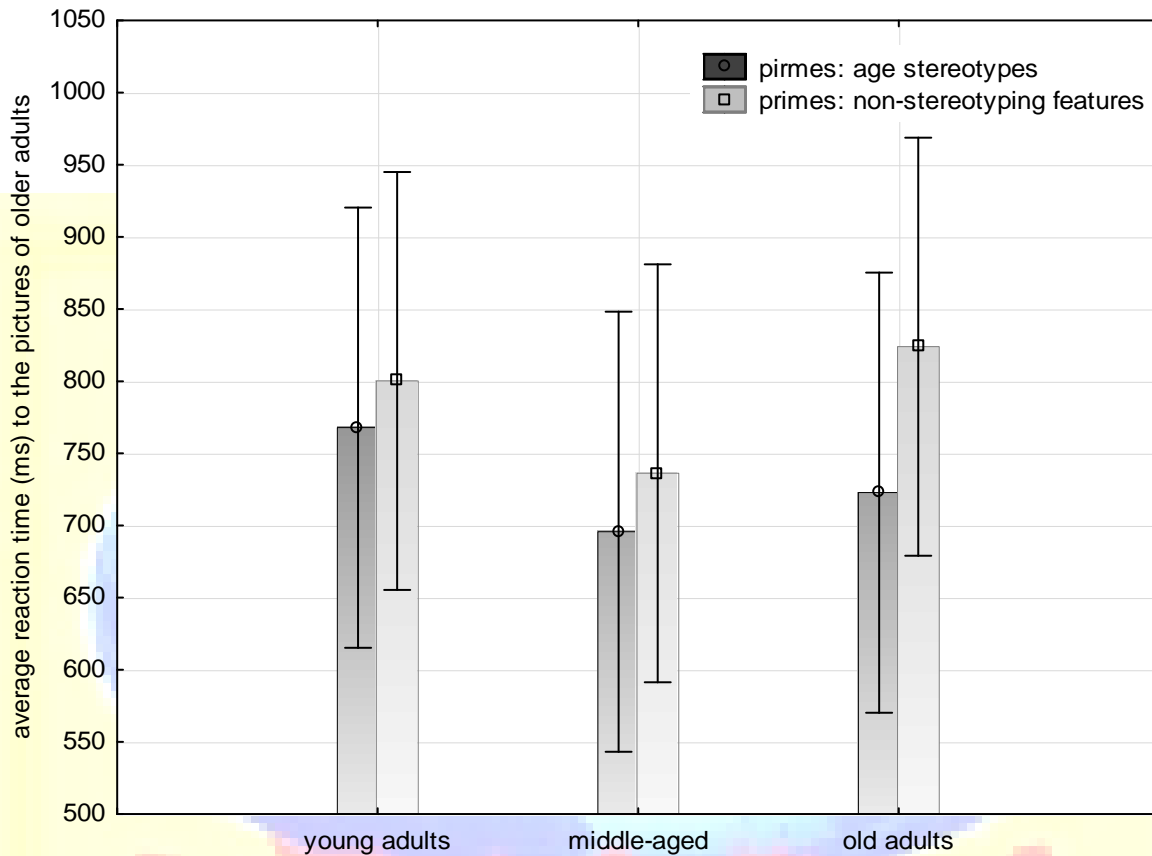


Figure 1. The comparison of average reaction time (ms) to the pictures of older adults priming by the words denoting age stereotypes vs. non-stereotyping features in groups of young, middle-aged and old adults



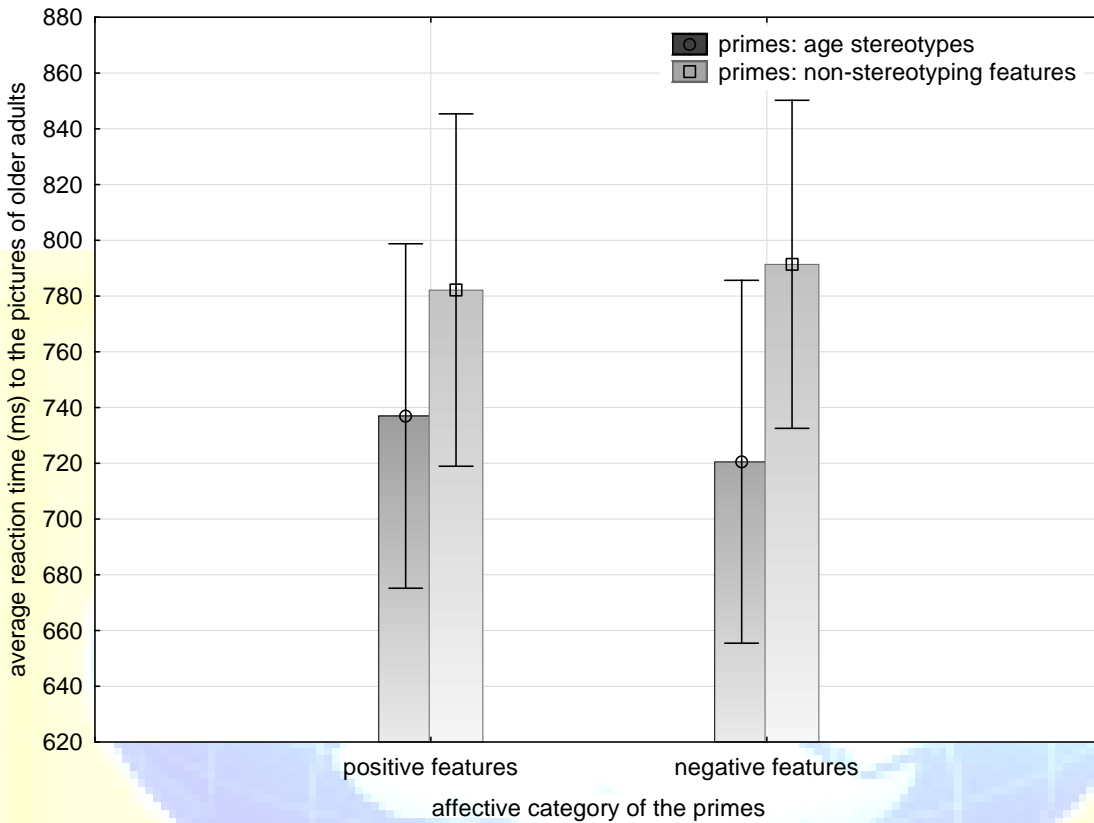


Figure 2. The comparison of average reaction time (ms) to the pictures of older adults priming by the words denoting positive and negative age stereotypes vs. positive and negative non-stereotyping features