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## The relationship between religious practice and quality of life among those at the threshold of older age

### ABSTRACT

The aim of this study was to examine the relationship between time devoted to religious practice and quality of life in a cohort of individuals aged 65 years. A random selection of 733 individuals resident in Kraków (421 women and 312 men) took part in this socio-medical study. Data was collected through face-to-face interviews using a structured questionnaire. Quality of life was measured using the following scales: Life Satisfaction Index, Geriatric Depression Scale, Groningen Activity Restrain Scale, SF-36. Time devoted to religious practice was based on time spent on prayer and religious services throughout the week, including Sundays. Nonparametric tests (Kruskal-Wallis and Jonckheere-Terpstra) were used for statistical analysis due to non-Gaussian distribution of the variables.

Greater participation in religious practices influences psycho-social dimensions of quality of life in older age.

**Key words:** older people, quality of life, religion.

### 1. Introduction

Religious practice, be it at an individual or population level, is a variable seldom used in studies on health (Mueller *et al.* 2001). However, gerontological studies are exceptional in this regard. They have found that religious practice, especially in older age, is connected with the widely understood concept of health, general wellbeing, lifestyle, and life quality. As a result, this variable may be used to explain significant differences in health status.

Recognizing that spirituality/religiosity may constitute one dimension of quality of life (QoL) led to significant changes in how individual religious practices are approached

(Bowling 1997). This religious dimension is reflective of one's life values, a sense of spiritual peace, and a set system of beliefs and principles, which determine one's life goals (Tobiasz-Adamczyk 2006).

The use of sociological concepts in medical research dates back to E. Durkheim's studies (2006), which found a relationship between suicide and the religion of the victim. His analyses found that religion influences internal group integration, therefore indirectly influencing an individual's decision to commit suicide.

Individual religious practices are difficult to measure. This fact is connected with difficulty in conceptualizing the notion of religiosity. There exist a number of definitions for religion, each focusing on the different forms in which this human activity may be presented (Kehrer 2004). Religiosity is typically measured as a function of one's participation in church practices, that is, in an institutional dimension (Luckmann 1996). It seems that in an age where changing religiosity (e.g., secularization, individualization, privatization of religion) can be observed in modern society (Mariański 1983; Berger 1997), studies should also incorporate subjective measures of religiosity. Such measures should be reflective of the meaning an individual attributes to their religion, including a self-rating as more or less religious (Borowik 2002). Both ritual (i.e., institutional) and subjective (i.e., individual religiosity) dimensions may be of significant value in socio-medical studies. Ritual aspects are connected with social participation and support, influencing health as well as QoL (Tobiasz-Adamczyk 2000).

When examining the relationship between religion and health, it is worth noting that health typically assumes a high place in the hierarchy of religious values, including in the value system of the Roman Catholic Church, the dominant religion in Polish society. Religion, in terms of faith, is used to interpret the meaning behind life and death, defining behavioral norms related to the human body, supporting those in physical pain as well as promoting health-conscious activities (Libiszowska-Zółkowska 1997).

Special for Polish religiosity is a high level of religious practice, especially participating in Sunday mass and the significance ascribed to religious rites of passage (e.g., baptism, marriage, and burial). Poles consider the ritual aspects of religion to be a more significant marker of Catholic identity than faith alone. The percentage of individuals identifying themselves as non-practicing is lower compared to those who identify themselves as non-religious. Also, a certain percentage of the population practice their religion because of the socio-cultural benefits of belonging to the Church (Borowik 2002). In this regard, studies should look beyond only ritual aspects and move towards defining the characteristic types of individual faith.

Considering the reflective nature of life's end stages, an increasing feeling of loneliness, and the need to resolve so-called "final matters", studies find an increase in religiosity in older age (Halicka and Halicki 2002). Older age marks a period of more intensive practices and involvement in different forms of institutional religiosity as well as an increasing interest in religious media (e.g., radio, press, television). It therefore seems that religiosity, which plays a significant role in the lives of older people, should be included as a variable in studies related to health and QoL, defined as "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (WHOQOL Group 1995). Still, such studies are relatively rare in Poland.

### 1.1. Aim

The aim of this study was to examine the relationship between the time devoted to religious practice during workdays plus Sunday and different dimensions of QoL in a cohort of individuals at the threshold of older age (i.e., 65 years). Results were also analyzed separately for men and women.

## 2. Methodology

Sociomedical studies were undertaken in a randomized sample of 733 Kraków residents (i.e., 421 women and 312 men), aged 65 years. Data were collected through face-to-face interviews conducted in the homes of study participants. A structured questionnaire, incorporating the following scales, was used to measure QoL: Life Satisfaction Index, Geriatric Depression Scale, Groningen Activity Restrain Scale, SF-36.

The Life Satisfaction Index (LSI) (Neugarten *et al.* 1961) is a scale measuring general wellbeing in the context of an aging individual. In this Index, psychological wellbeing is reflective of how the individual relates to being an older person and how they feel their state compares to similarly aged individuals. This scale was created to measure five aspects of one's life satisfaction: (1) zest vs. apathy, (2) resolution and fortitude, (3) congruence between desired and achieved goals, (4) self-concept, and (5) mood tone. Wellbeing is indicative of gaining pleasure in everyday activities, feeling purpose in one's life, satisfaction in having achieved one's most important goals, and a positive and optimistic image of one's self.

The Geriatric Depression Scale (GDS) was created with the aim of measuring depression in older people. The authors of this scale assumed that somatic symptoms are not representative indicators of depression in older age, hence basing this instrument on measuring emotional aspects of depression. This scale is made up of 30 questions, with the result acting as an marker of depression severity (MacDowell and Newell 1996).

The Groningen Activity Restraint Scale (GARS) measures individual functional status and everyday activity (Kempen *et al.* 1996).

Self-rated health status was measured using the Short Form-36 Health Survey (Ware and Sherbourne 1992). It is made up eight dimensions: (1) physical functioning related to health, (2) restrictions in physical role functioning due to (physical) health problems, (3) bodily pain, (4) social function, (5) psychological health, mood, (6) restrictions in role functions due to emotional problems, (7) vitality, energy, fatigue, (8) general health perception. It also measures changes in health status over the past year.

Lifestyle was measured on the basis of questions related to physical activity and dietary habits, including questions on alcohol consumption and smoking.

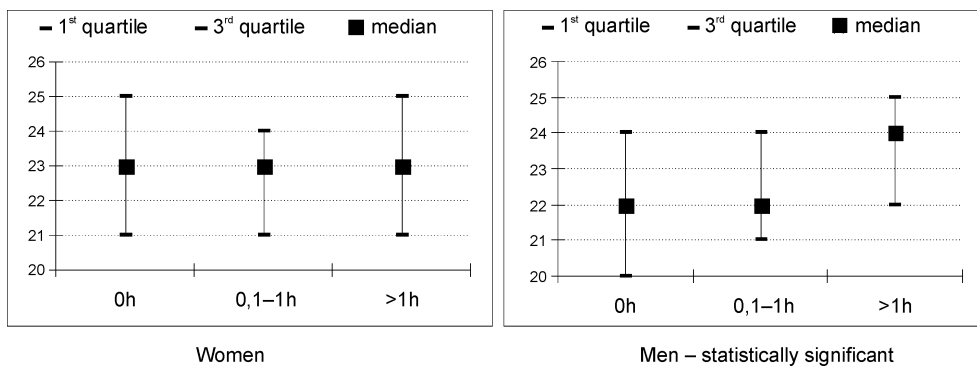
Involvement in religious practices was measured based on the amount of time devoted to prayer and participation in religious services on work days and Sundays.

In light of the non-standard distribution, non-parametric testing was used for statistical analysis: Kruskal-Wallis and Jonckheere-Terpstra. Testing was done using the SPSS packet for Windows.

### 3. Results

The following figures present results separately for both men and women. Compared to individuals not involved at all or not involved as intensively in religious practice, men who devoted more time to practicing on Sunday reported better psychological health and better mood (measured using the SF-36). No significant relationship between religious involvement and psychological health or wellbeing was found for women (Fig. 1).

**Figure 1.** The relationship between religious involvement and psychological health

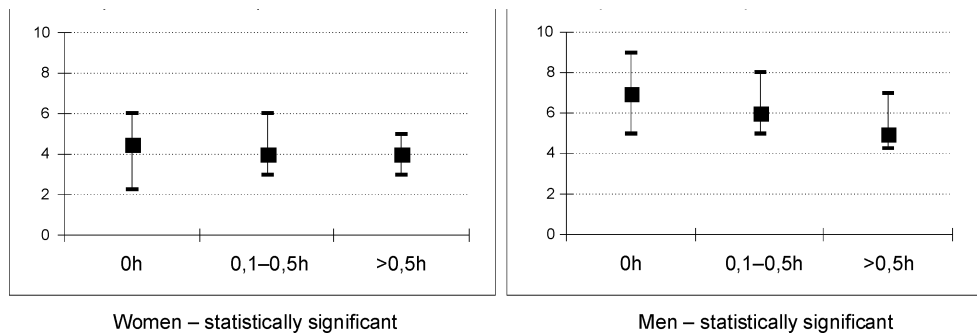


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Dependency was found between the size of one’s social network and undertaking in religious practices, where, for both sexes, an increased frequency of practicing was directly related to having a smaller social network. This relationship was stronger in men than in women (Fig. 2). Participation in community practices served a compensatory role for those people who lived alone and used the Church to acquire social contacts and support, otherwise missing from their families or immediate social environment.

**Figure 2.** The relationship between religious involvement and the size of social network

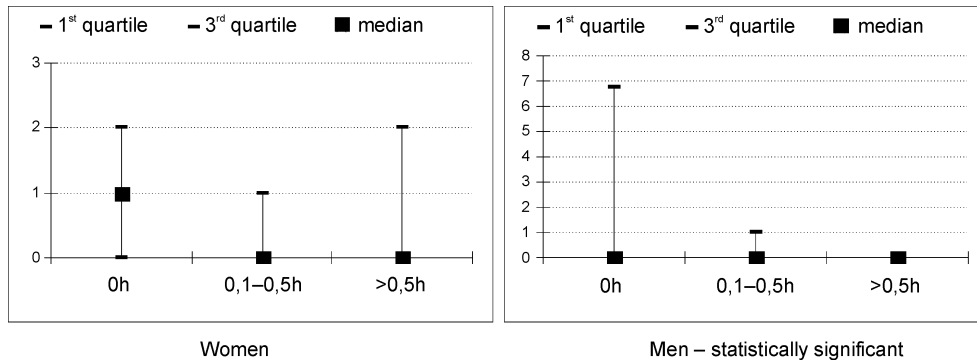


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Men enjoying better functional status devoted more time to religious practices, whereas functional status did not influence the frequency of practicing for women (Fig. 3).

**Figure 3.** The relationship between religious involvement and functional status

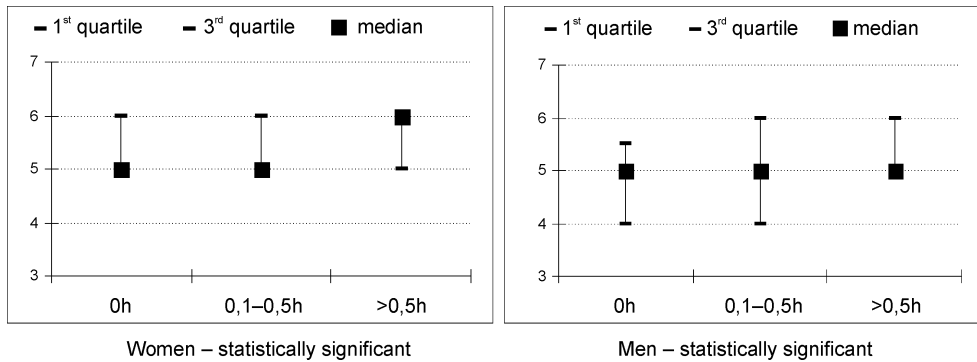


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A high level of religious practice was connected with leading a more health-conscious lifestyle, for both men and women. Individuals more involved in their religion ascribed greater significance to physical fitness and reported more healthy dietary habits (Fig. 4).

**Figure 4.** The relationship between religious involvement and health-conscious lifestyle

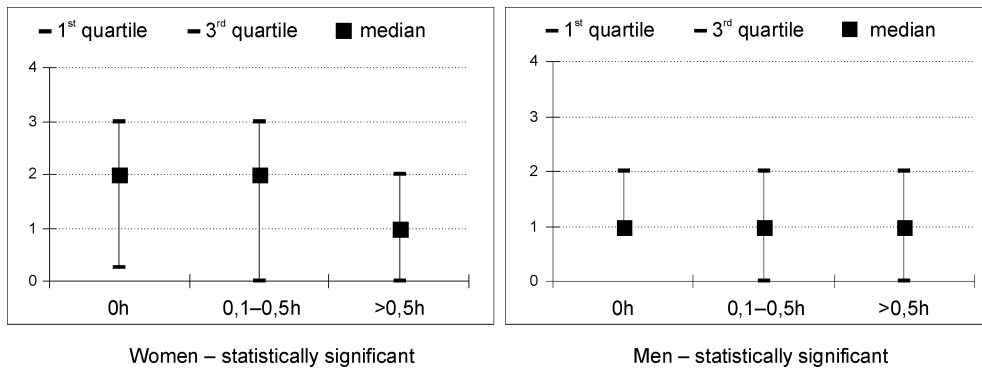


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Men and women who described themselves as less religious reported experiencing greater stress in their social environment (Fig. 5).

**Figure 5.** The relationship between religious involvement and stress (environment)

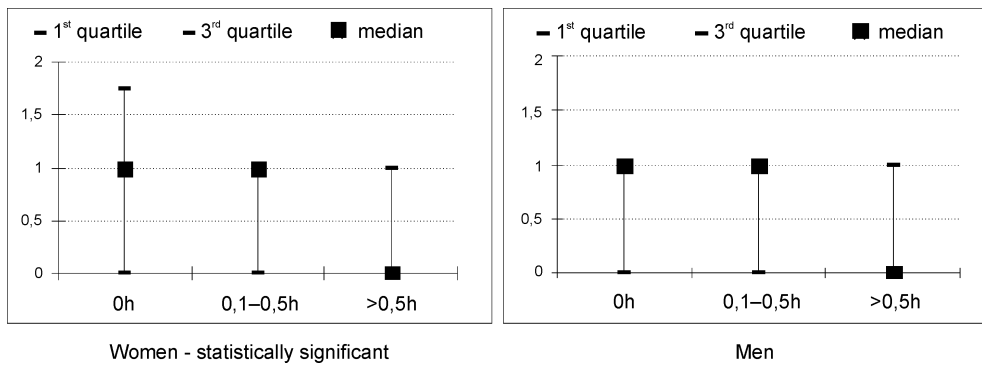


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A similar dependency was observed for stress concerning one’s relationship with their partner, where those practicing more often experienced less stress than those not practicing or practicing less often (Fig. 6).

**Figure 6.** The relationship between religious involvement and stress (partner)

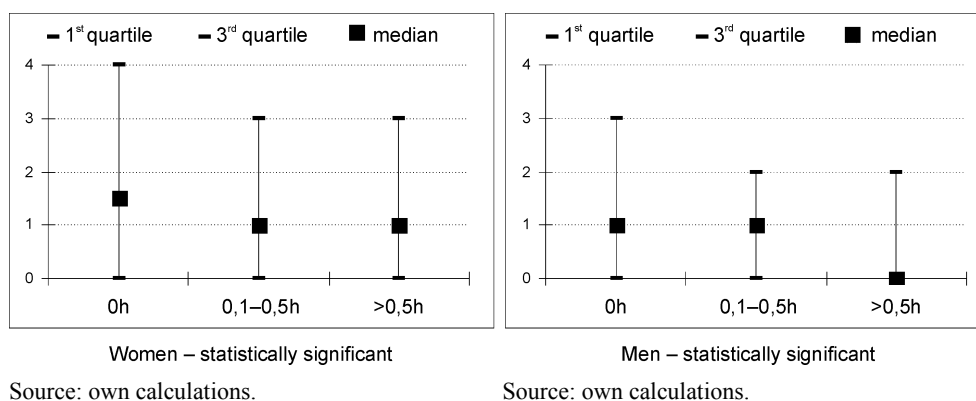


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Individuals more involved in practicing also experienced less stress in contacts with their closest family members. Noteworthy is that women, more often than men, experienced greater stress in their relations with other individuals (Fig. 7).

**Figure 7.** The relationship between religious involvement and stress (family)



#### 4. Discussion

Earlier socio-medical studies have confirmed a relationship between religiosity and different dimensions of QoL. Any such discussion should inevitably reference the vast number of studies concerning the positive influence of religion on health. Gardner and Lyon (1982) found that, in certain religious groups, religion may be related to cancer risk, where those more involved in their religion were diagnosed with cancer less often than non-religious individuals. The relationship between religion and hypertension has also been confirmed, where less religious individuals report a greater number of hypertension-related complications and higher blood pressure values, compared to more religious individuals (Jarvis and Northcutt 1987; Levin and Vanderpool 1987). These findings are dependent on the influence of religion on individual lifestyle.

Religion weighs on the lifestyle development of its members. Studies have shown that religious participation may decrease the number of health-damaging behaviors, such as smoking, alcohol consumption, or high risk sexual practices (Gardner and Lyon 1982). It is typically connected with positive dietary habits and better personal hygiene. Those who seldom or not at all participate in services more often use cigarettes and consume greater quantities of alcohol than those who remain religiously active (Brown and Gary 1994; Ahmed *et al.* 1994).

Levin and Schiller (1987) compared different religious groups and found that the members of these faiths (i.e., Church of Jesus Christ of Latter Day Saints, Seventh Day Adventists, Orthodox Jews), whose lifestyles are strictly governed by the tenets of their respective religion, had a decreased risk of being diagnosed with cardiovascular disease, hypertension, stroke, uterine and cervical cancer, as well as a decreased incidence of colitis and enteritis. The members of these faiths also reported better self-rated health. It

is worth adding that similar results were observed for clergy members, irrespective of religious affiliation. Greater participation in religious services was also correlated with a decreased incidence of trichomoniasis (i.e., venereal disease), tuberculosis, atherosclerotic and degenerative heart disease, and other cardiovascular diseases (Levin and Vanderpool 1989).

It was also found that religiosity shortens post-operative convalescence, where no religious involvement, paired with a lack of social activity, increased mortality risk six-months following cardiac surgery (Oxman *et al.* 1995). Byrd (1988) observed a positive affect arising from prayer among patients with coronary artery disease.

The relationship between religiosity and psychological health is also well documented. Koenig (Koenig *et al.* 1998; 2001) found that a relationship exists between religious involvement and depression, where a decreased incidence of this disease was noted among more religious individuals. Such persons also felt that they made wise life choices, feeling that religion aided them in making these decisions. They also rarely reported experiencing stressful life situations. The relationship between religiosity and presenting with clinical symptoms of depression was also observed by Ellison (1995), who measured religiosity as participation in public services and private activities (e.g., praying, reading the Bible). These studies found that individuals not affiliated with any Church had a significantly higher incidence of depression compared to those who belonged to a religious organization. Another study by the same author (Ellison 1991) also found that individuals who declared themselves as deeply religious self-rated themselves as happier and more satisfied with life. The results of a study by Brown *et al.* (Brown *et al.* 1990) found that level of religiosity was inversely proportional to the presentation of anxiety symptoms. Individual who are active religiously also report higher self-esteem and greater self-worth than inactive individuals (Watters 1992). Individuals citing themselves as deeply religious were more often able to add sense to their lives and to see their own futures in a more positive light (Idler 2003).

Studies also took place concerning the relationship between religiosity and longevity (Stawbridge *et al.* 1997; Koenig *et al.* 1999). These studies found that individuals who went to Church at least once per week had a significantly smaller mortality risk than non-practicing individuals. Helm, *et al.* (2000) found that private religious activities (e.g., prayer, meditation, reading the Bible), were precursors to longevity. La Cour, *et al.* (2005) posited a significant and direct relationship between ascribing great value to one's own religious affiliation and longevity as well as regularly participating in religious services and longevity. Similar results were achieved by Oman and Reed (1998) as well as Hummer, *et al.* (1999).

The relationship between religiosity and social support has also been repeatedly studied. In light of studies undertaken by Taylor and Chatters (1988) and Hatch (1991), members of a faith community are important sources of support, especially for older aged individuals. Participation in faith-based organizations, as a source of social support, was an important predictor of positive wellbeing among those studied by Ortega *et al.* (1983) and Walls and Zarit (1991). Frequently going to church may lead to the creation of a network of social relations and interactions, which may be especially significant for individuals dealing with social isolation (Ellison and George 1994; Bradley 1995). Older people often look to Church for social contacts, otherwise lacking in their homes and/or



local communities. Participating in the work of religious groups may be a source of social support connected with self-help groups (Idler 1987), often becoming a substitute or additional source of social capital, especially in problematic situations, when the individual needs support from others. This is very important in older age, when social capital tends to decrease (Havranek *et al.* 2004; Muldoon and King 1995; Sulmasy 2002).

Religion helps the individual deal with stressful situations. Stawbridge, *et al.* (1998) found that being involved in a religion, both in terms of organizational (i.e., going to Church) and individual (i.e., praying, beliefs) aspects, serves as a buffer against experiencing strong stresses both in and outside one's family. Family harmony and feeling solidarity with one's family is highly valued in religious value systems. Belong to a religious group somewhat obligates its members to promoting these values (Ellison 1991). Religiosity is an important source of individual capital for dealing with stresses associated with one's environment (Koenig *et al.* 2001).

The socio-medical studies presented in this publication reinforce the relationship between religiosity and different dimensions of health and QoL. While international studies find significant similarities, studies examining the relationship between religiosity and health are relatively rare in Poland. This fact should not escape the guise of researchers examining QoL in older age, especially in Poland, where the percentage of religiously active individuals aged 65 years and over is very large. Detailed studies should make sure to signal the differences which exist between men and women.

## 5. Conclusions

We find our two main conclusions of our study:

- greater participation in religious practices influences psycho-social dimensions of QoL in older aged individuals, resulting in their increased involvement in a health-promoting lifestyle;
- the relationship between being religiously active and QoL in older age is most defined for men.

## Literature

- Ahmed, F., Brown, D.R., Gary, L.E. and Saadatmend, F. (1994). Religious Predictors of Cigarette Smoking: Findings for African American Women of Childbearing age. *Behavioral Medicine* 20: 34–43.
- Berger, P.L. (1997). *Święty baldachim. Elementy socjologicznej teorii religii*. Kraków, Nomos.
- Borowik, I. (2002). Przemiany religijności polskiego społeczeństwa. In: M. Marody (ed.), *Wymiary życia społecznego. Polska na przełomie XX i XXI wieku*. Warszawa, Wydawnictwo Naukowe Scholar.
- Bowling, A. (1997). *Measuring Health – a Review of Quality of Life Measurement Scales*. Buckingham, Open University Press.
- Bradley, D.E. (1995). Religious Involvement and Social Resources: Evidence from the American Changing Lives Data. *Journal for the Scientific Study of Religion* 34: 259–267.

- Brown, D.R. and Gary, L.E. 1994. Religious Involvement and Health Status among African American Males. *Journal of the National Medical Association* 86: 825–831.
- Brown, D.R., Ndubuisi, S.C. and Gary, L.E. (1990). Religion and Psychological Distress among Blacks. *Journal of Religion and Health* 29: 55–68.
- Byrd, R.C. (1988). Positive Therapeutic Effects of Intercessory Prayer in a Coronary Care Unit Population. *S. Med. J.* 81: 826–829.
- Cour la, P., Avlund, K. and Schultz-Larsen, K. (2005). Religion and Survival in a Secular Region. A Twenty Year Follow-up of 734 Danish Adults Born in 1914. *Social Science and Medicine* 62: 157–164.
- Durkheim, E. (2006). *Samobójstwo. Studium z socjologii*. Warszawa, Oficyna Naukowa.
- Ellison, C.G. (1991). Religious Involvement and Subjective Well-Being. *Journal of Health and Social Behavior* 32: 80–99.
- Ellison, C.G. (1995). Race, Religious Involvement and Depressive Symptomatology in a Southeastern US Community. *Social Science and Medicine* 40: 1561–1572.
- Ellison, C.G. and George, L.K. (1994). Religious Involvement, Social Ties and Social Support in a Southeastern Community. *Journal of the Scientific Study of Religion* 33: 46–60.
- Gardner, J.W. and Lyon, J.L. (1982). Cancer in Utah Mormon Women by Church Activity Level. *American Journal of Epidemiology* 116: 285–265.
- Halicka, M. and Halicki, J. (2003). Integracja społeczna i aktywność ludzi starszych. In: B. Synak (ed.), *Polska starość*. Gdańsk, Wydawnictwo Uniwersytetu Gdańskiego: 189–218.
- Hatch, L.R. (1991). Informal Support Patterns of Older African American and White Women. *Research on Aging* 13: 144–170.
- Havranek, E.P., Spertus, J.A., Masoudi, F.A., Jones, P.G. and Rumsfeld, J.S. (2004). Predictors of the onset of Depressive Symptoms in Patients with Heart Failure. *J. Am. Coll. Cardiol* 44: 2333–2338.
- Helm, H.M., Hays, J.C., Flint, E.P., Koenig, H.G. and Blazer, D.G. (2000). Does Private Religious Activity Prolong Survival? A Six-year Follow-up Study of 3,851 Older Adults. *Journal of Gerontology* 55A: 400–405.
- Hummer, R.A., Rogers, R.G., Nam, C.B. and Ellison, C.G. (1999). Religious Involvement and U.S. Adult Mortality. *Demography* 36: 273–285.
- Idler, E.L. (1987). Religious Involvement and the Health of the Elderly: Some Hypotheses and Initial Test. *Social Forces* 66: 226–238.
- Idler, E.L. (2003). Measuring Multiple Dimensions of Religion and Spirituality for Health Research. *Research on Aging* 25: 327–365.
- Jarvis, G.K. and Northcutt, H.C. (1987). Religion and Differences in Morbidity and Mortality. *Social Sciences and Medicine* 25: 813–824.
- Kehrer, G. (2004). *Wprowadzenie do socjologii religii*. Kraków, Nomos.
- Kempen, G.I.J.M., Miedema, I., Ormel, J. and Molenaar, W. (1996). The Assessment of Disability with the Groningen Activity Restriction Scale: Conceptual Framework and Psychometric Properties. *Social Science and Medicine* 43: 1601–1610.
- Koenig, H.G., George, L.K. and Peterson, B.L. (1998). Religiosity and Remission of Depression in Medically Ill Older Patients. *American Journal of Psychiatry* 155: 536–542.
- Koenig, H.G., Hays, J.C. and Larson, D.B. (1999). Does religious Attendance Prolong Survival? A Six-year Follow-up Study of 3 968 Older Adults. *J. Gerontol. A. Biol. Sci. Med. Sci.* 54A: M370–M376.
- Koenig H.G., McCullough, M. and Larson, D.B. (2001). *Handbook of Religion and Health*. Oxford, Oxford University Press.
- Levin, J.S. and Schiller, P.L. (1987). Is There a Religious Factor in Health? *J. Religion Hlth* 26: 9–36.
- Levin, J.S. and Vanderpool, H.Y. (1987). Is Religion Therapeutically Significant for Hypertension? *Social Sciences and Medicine* 29: 69–78.
- Levin, J.S. and Vanderpool, H.Y. (1989). Is Frequent Religious Attendance Really Conducive to Better Health?: Toward an Epidemiology of Religion. *Social Sciences and Medicine* 24: 589–600.

- Libiszowska-Żółkowska, M. (1997). Zdrowie w religijnym systemie wartości i prozdrowotnej aktywności kościoła katolickiego. *Promocja Zdrowia. Nauki Społeczne i Medycyna* 4: 22–36.
- Luckmann, T. (1996). *Niewidzialna religia*. Kraków, Nomos.
- MacDowell, L. and Newell, C. (1996). *Measuring Health*, Oxford, Oxford University Press.
- Mariański, J. (1983). *Socjologia religii. Wybór tekstów*. Kraków Wydawnictwo WAM.
- Mueller, P.S., Plecak, D.J. and Rummans, T.A. (2001). Religious Involvement, Spirituality and Medicine: Implications for Clinical Practice. *Mayo Clinic Proceedings* 76: 1225–1235.
- Muldoon, M. and King, N. (1995). Spirituality, Health Care and Bioethics. *J. Relig. Health* 34: 329–349.
- Neugarten, B.L., Havighurst, R.J. and Tobin, S.S. (1961). The Measurement of Life Satisfaction. *Journal of Gerontology* 16: 134–143.
- Oman, D. and Reed, D. (1998). Religion and Mortality among the Community-dwelling Elderly. *Am. J. Public Health* 88: 1469–1475.
- Ortega, S.T., Crutchfield, R.D. and Rushing, W.A. (1983). Race Differences in Elderly Personal Well-being. *The Gerontologist* 26: 637–642.
- Oxman, T.E., Freeman, D.H. and Manheimer, E.D. (1995). Lack of Social Participation or Religious Strength and Comfort as Risk Factor for Death after Cardiac Surgery in the Elderly. *Psychosomatic Medicine* 57: 5–15.
- Stawbridge, W.J., Cohen, R.D., Shema, S.J. and Kaplan, G.A. (1997). Frequent Attendance at Religious Services and Mortality over 28 years. *American Journal of Public Health* 87: 957–961.
- Strawbridge, W., Shema, S.J., Cohen, R.D., Roberts, R.E. and Kaplan, G.A. (1998). Religiosity Buffers Some Stressors on Depression but Exacerbates Others. *The Journal of Gerontology* 53: 118–126.
- Sulmasy, D.P. (2002). A Biopsychosocial-spiritual Model for the Care of Patients at the end of Life. *Gerontologist* 42: 24–33.
- Taylor, R.J. and Chatters, L.M. (1988). Church Members as a Source of Informal Support. *Review of Religious Research* 30: 193–202.
- Tobiasz-Adamczyk, B. (2000). *Wybrane elementy socjologii zdrowia i choroby*. Kraków, Wydawnictwo Uniwersytetu Jagiellońskiego.
- Tobiasz-Adamczyk, B. (2006). Geneza zdrowia, koncepcje i ewolucja pojęcia jakości życia. In: K. Kawecka-Jaszcz, M. Klocek and B. Tobiasz-Adamczyk (eds.), *Jakość życia w chorobach układu sercowo-naczyniowego, metody pomiaru i znaczenie kliniczne*. Poznań, Wydawnictwo Termedia, 9–43.
- Walls, C.T. and Zarit, S.H. (1991). Informal Support from Black Churches and the Well-being of Elderly Blacks. *The Gerontologist* 31: 490–495.
- Ware, J.E. and Sherbourne, C.D. (1992). The MOS 36-item Short-Form Health Survey (SF-36). Conceptual Framework and Item Selection. *Med. Care* 30: 473–483.
- Watters, W. (1992). *Deadly Doctrine: Health, Illness and Christian God-Talk*. Buffalo, N.Y. Prometheus.
- WHOQOL Group (1995). The World Health Organisation Quality of Life Assessment (WHOQOL): Position Paper from the World Health Organisation. *Social Science and Medicine* 41: 1403–1409.

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