The Intensity of Religiousness in Young Persons:

A cross-sectional study

Die Stärke der Religiosität von Jugendlichen:

eine Querschnittsstudie

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Abstract

The intensity of religious affiliation in young persons should be examined. For this purpose a questionnaire with 18 items was distributed to 160 young persons. A modified religious socialisation index by Huber was chosen to measure religious socialisation. With Huber's „centrality scale" it is possible to measure the system of constructs within Abrahamic religions. The regularity and intensity of a religious construct system can provide a valid measure of its centrality within the personality.

Keywords

socialisation index, centrality scale, religion, denomination

Kurzzusammenfassung

Die Stärke der Religiosität von Jugendlichen wurde anhand eines Fragebogens mit 18 Items bei 160 jungen Personen untersucht. Der Religions-Sozialisations-Index von Huber wurde modifiziert, um die religiöse Sozialisation zu messen. Mit der „Zentralitätsskala" von Huber ist es möglich, das System innerhalb abrahamitischen Religionen zu analysieren. Die Regelmäßigkeit und Stärke eines religiösen Konstrukts ist ein valides Instrument zur Messung der Zentralität innerhalb einer Persönlichkeit.

Schlüsselwörter

Sozialisationsindex, Zentralitätsskala, Religion, Konfession

1. Introduction and the centrality scale as survey instrument

Deep in their hearts, young persons are religious. They are capable of understanding "more than everything", that goes beyond our material world, the transcendent and to make contact with it. (…) In all Abrahamic religions this "more than everything" is termed "God". God cannot be discussed "factually" because God is not a "thing" (…). The language of religion is the language of fantasy and poetry, symbols and metaphors, since the primary experience of God exists far from language and is always expressed in words retrospectively so that people can in fact speak to each other about it (Rees, 2003, p. 2)

When measuring religiousness it is important to take cultural context into account. In German-speaking countries there are no established instruments of measurement to record religiousness. One of the most important approaches to religio-psychological research comes from Huber.

The general intensities of theoretical defined core dimensions of religiosity can be analysed by the centrality scale. All representative aspects with respect to a religious live should be taken into account to achieve a combined measurement for the centrality of religiosity (Huber & Huber, 2012, p. 711).

Furthermore in operationalising, Allport's distinction between intrinsically and extrinsically motivated religiousness has been proven as particularly relevant. Huber favours centrality in the sense of Allport's intrinsic religious motivation and questions the substance of religiousness separately: "Religious experience and behaviour is a function of centrality and the substance of the religious system of constructs" (Huber, 2003, p. 80).

The approach of Glock (1973) focuses on religion from a sociological point of view: the ritualistic, the ideological the intellectual as well as the consequential and the experiential dimensions are the main research subjects.

The general importance of religion just for one person is not the main object of investigation at Glock's model. His concept does not work with one-item scales, but nevertheless his five core-dimensions can be understood as channels which also include personal religious constructs (Huber & Huber, 2012, p. 713).

Allport distinguishes between intrinsic and extrinsic religious orientation. An intrinsically oriented person considers religion as an ultimate end in itself; it is a master motive in life. Religious beliefs and values are internalized within reservation, and other needs and goals are accommodated, reorganized, and brought in harmony with these religious contents. Importantly, an intrinsic religious orientation "floods the whole life with motivation and meaning"(Allport, 1966, p. 455).

By contrast, an extrinsically oriented individual approaches religion in a utilitarian or instrumental fashion: it helps one to attain self-centred ends. Furthermore, religion is lightly held, oversimplified, not reflected upon, and "not well integrated in the deeper life of the subject" (Allport, 1950, p. 59).

Stefan Huber (2003, p.13 & p. 92) analysed various models of religiousness via the development of his questionnaire on religion, faith and spirituality and found the measurement tools of

Gordon W. Allport and Charles Y. Glock particularly appropriate for this purpose. These measurement tools build on theoretical models of religiousness; Glock places particular emphasis on the forms of expression that exist in all religious cultures, such as ideology, knowledge, prayer and religious services and also cognitive engagement with religious topics.

For Huber (2003, p. 17), religiousness is a system of personal constructs that are to be understood as subjective patterns of explanation. According to Huber (2003, p. 18 & p. 331): "… it is not enough to ask afterwards how often someone puts on the ‚religious glasses', it is also necessary to ask afterwards how exactly these glasses are tinted. The contentual tint can perhaps be the picture of a punishing or a benevolent God."

These exact individual meanings within religiousness and their connection to the various theoretical reflections on the notion of religiousness were only superficially understandable with the use of most conventional measurement instruments. He wants to understand both psychological centralities related to personality and also theological content alongside one another as psychologically meaningful parameters of the religious system of constructs. Hence it was consequently deduced that the regularity and intensity of the activation of a religious construct system should be a valid measure of the centrality of religiousness in a personality. Huber (2003, p. 18 & p. 331) integrates both Allport's and Glock's approaches and at the same time makes the measurement of theological content and patterns of explanation possible.

Huber (2003, p. 17) bases his assumptions on the models of Glock (the regularity and intensity of the use of religious expression influence its central position in a person's personality) and Allport (alongside the growth of centrality, the intrinsic religious motivation of a person also increases), which represents for him an ideal synthesis of the understanding of religiousness. As Allport mixes his own religious beliefs with psychological constructs and assesses religiousness in accordance, this leads Huber towards problems in the operationalization of extrinsic orientation.

In Abrahamic religions God is the central religious symbol, his existence is undisputed and as a consequence, entire theological studies and patterns of explanation are connected with Him. The centrality scale developed by Huber is, within Abrahamic religious construct systems, the one which is most open to different elaborations on content. The centrality of religiousness that consequently captures the position of a religious construct system within a person's self- and world- view is defined by Huber in terms of five fundamental forms of religious expression:

1. cognitive interest in religion
2. religious ideology
3. prayer
4. religious knowledge
5. religious services

The centrality scale comprises the total value of the five forms of expression. Huber postulates that in people with a high level of religiousness, the intensity of religiousness is shown to be high in all dimensions and these can strongly correlate and obscure the multidimensional structure. Therefore a certain dependency dominates between the dimensions, and hence an overall scale can be established.

On the centrality scale, an indicator for the total value is used to demonstrate the intensity of the central position within a personal religious system of constructs. Thereby, according to Allport, a high centrality means a functional autonomous intrinsic orientation.

The questionnaire was developed from the „Questionnaire on Religion, Faith and Spirituality", by Stefan Huber (unpublished, University of Freiburg, Switzerland).

The higher the raw value in the questionnaire, the higher the centrality scale. Based on the theoretical background, this means that religious actions (following from extrinsic motives) increasingly drive the centrality of the religion within the personality of a person and therefore increase intrinsic motivation.

Every person possesses constructs that have an orienting function. Those which refer to something ultimate will be identified as religious. The strength of experience or behaviour according to a system of constructs is dependant on the dominance of the constructs. Huber defines this strength of a system as centrality, which, for a religious system of constructs, can be identified as objective relevance of religiousness. With the help of the centrality scale it should be researched whether the forms of expression from young persons within the ages of 11 and 14 years depending on their denomination / religion are distinguishing. The questionnaire used is based on Benesch (2013, p. 88).

2. Methods and Statistical analysis of young persons within the ages of 11-14 years

Since there exist no former studies to analyse the intensity of the religiousness of young persons, it was necessary to set an explorative cross-sectional study. The main question focused on possible differences of the centrality scale depending on religion / denomination.

Following indicators have been used:

• metric variables: the arithmetic mean and the standard deviation;

• ordinal variables: the frequency distribution and the median;

• nominal variables: the frequency distribution and the mode (most commonly occurring value).

The Kolmogorov-Smirnov-Test assists in the decision as to whether the total score of the centrality scale has a normal distribution. For the comparison of groups of metric variables the unpaired t test has been used. For categorical variables the chi-square test has been used. A simple analysis of variance with post-hoc-Test according to Tukey has been carried out for the religion comparison in the centrality scale. For the dependant variable centrality scale, a correlation analysis on the basis of Pearson and a covariance approach has been carried out. P-values smaller than 0.05 have been indicated as significant. All statistical analysis has been carried out with SPSS Version 19.0.

2.1 Univariate and bivariate analysis

When planning the sample size, it was assumed that the effect size between Roman Catholic and Islamic young persons on the centrality scale is 0.7. From a significance level of 5%, a power of 80% and a random sample relationship of 2:1, a sample size of 25 (for Islamic youngsters) is indicated and 51 (for Roman Catholic). In accordance with this planned sample size, a questionnaire on the topic of religiousness was distributed to 160 young persons between the ages of 11 and 14 years, involving the largest religions in Austria: Roman Catholic, Orthodox, Islamic and Protestant. The sampling was performed with a random selection of schools and classes. These 160 questionnaires were completed by 75 girls (who make up 46.9%) and by 85 boys (53.1%). The religions / denominations are divided into Roman Catholic (78 youngsters = 48.75%), Orthodox (46 youngsters = 28.75%), Islamic (28

youngsters = 17.5%) and Protestant (8 young-sters = 8.0%). In table 1 this distribution is displayed according to gender.

It appears that there is no significant correlation between religious affiliation and gender according to the chi square test (p=0.638).

number		religion confession				total
		roman-catholic	orthodox	islamic	evangelical	
gender	girls	36	20	16	3	75
	boys	42	26	12	5	85
total		78	46	28	8	160

Table 1: Distribution of gender and religion confession

Children within the ages of 11 to 14 years were surveyed. Table 2 in turn shows the distribution of the religion / denomination, this time according to age. It appears that there is no significant distinction between age and religious affiliation according to the simple variance analysis (p=0.607).

number		religion confession				total
		roman-catholic	orthodox	islamic	evangelical	
age	11	9	9	4	0	22
	12	17	11	9	2	39
	13	23	12	4	4	43
	14	29	14	11	2	56
total		78	46	28	8	160

Table 2: Distribution of Age and religion confession

In the questionnaire the young persons were also asked if they had siblings. This was answered by 158 youngsters – the data are shown in the frequency table 3. On average the adolescents had 1.92 siblings; the standard deviation is 1.426.

number of siblings	frequency	percent
0	12	7,6
1	65	41,1
2	41	25,9
3	18	11,4
4	13	8,2
5	7	4,4
6	0	0,0
7	1	0,6
8	0	0,0
9	1	0,6
total	158	100,0

Table 3: Frequency table to number of siblings

The centrality scale currently results from the aggregate score of 18 items. No imputations were used in the calculation of the aggregate score, hence the resulting sample size is 140.

Cronbach's Alpha totals 0.944, which can be interpreted as excellent. The centrality scale theoretically has a minimum value of 18 and a maximum value of 90. The boxplot in figure 1 presents the centrality as follows:
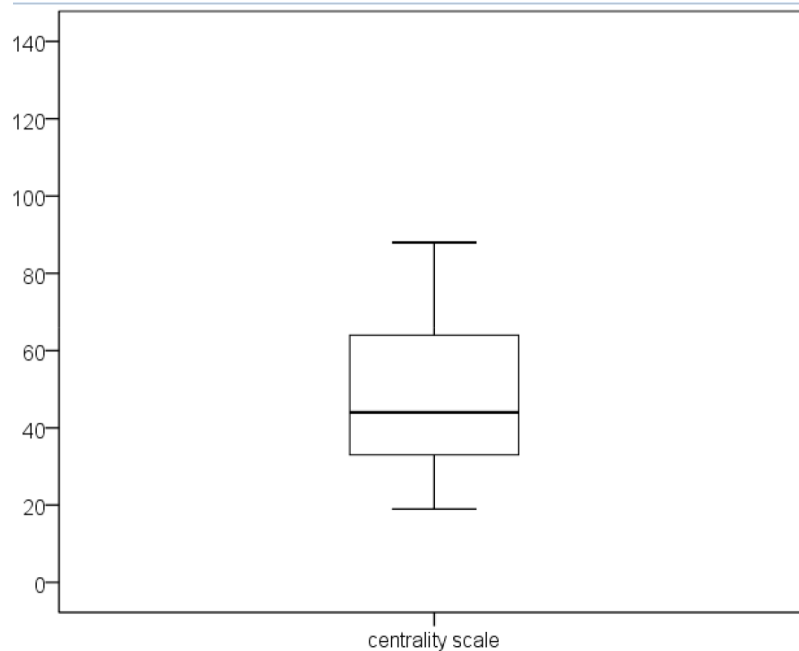

Figure 1

The minimum is 19, the maximum 88 with a mean of 47.49 and a standard deviation of 16.994. As the hypothesis that the centrality scale is normally distributed on the basis of the Kolmogorov-Smirnov test cannot be denied (p=0.051), parametric testing methods will be used.

The centrality scale does not distinguish between gender. The arithmetic means are both roughly the same (for girls 48.66, for boys 46.56), as are the standard deviations (for girls 16.3, for boys 17.6), the p-Value comes out at 0.470 following the unpaired t test.

Exciting results were found in relation to the question of the correlation between the centrality scale and the age and the number of siblings. The correlation coefficient according to Pearson between the centrality scale and the number of siblings shows a middle positive correlation of 0.245 (p=0.004). This means the more siblings a child has, the greater is the centrality scale.

The connection between age and the centrality scale will be calculated in terms of correlation according to Pearson. No correlation is shown (r=0.081, p=0.339). There is no correlation between the centrality scale and age.

Insightful partial results are shown from the observation of the centrality scale depending on religion / denomination. The simple analysis of variance gives a significant result (p<0.001). The post-hoc test according to Tukey reveals that Roman Catholic can be distinguished from Protestant, Islamic and Orthodox (p=0.047). No differences were found between Islamic and

Protestant. The boxplots in figure 2 chart these results.

Figure 2 clearly shows that centrality is lowest in Roman Catholic young persons and strongest for Islamic young persons. The narrow dispersion in Islamic young persons is highly interesting, whereas in Protestant and Orthodox young persons a large dispersion is apparent. If each item is observed, and especially the difference between Roman Catholic and Islamic young persons within this, the Mann-Whitney-U test for 15 of the 18 items demonstrates a p-value of at most 0.001. Joint visits to church or a Mosque with a parent and the contemplation of injustice in the world are excluded. In the other items the responses of Roman Catholic and Islamic young persons are contrary.
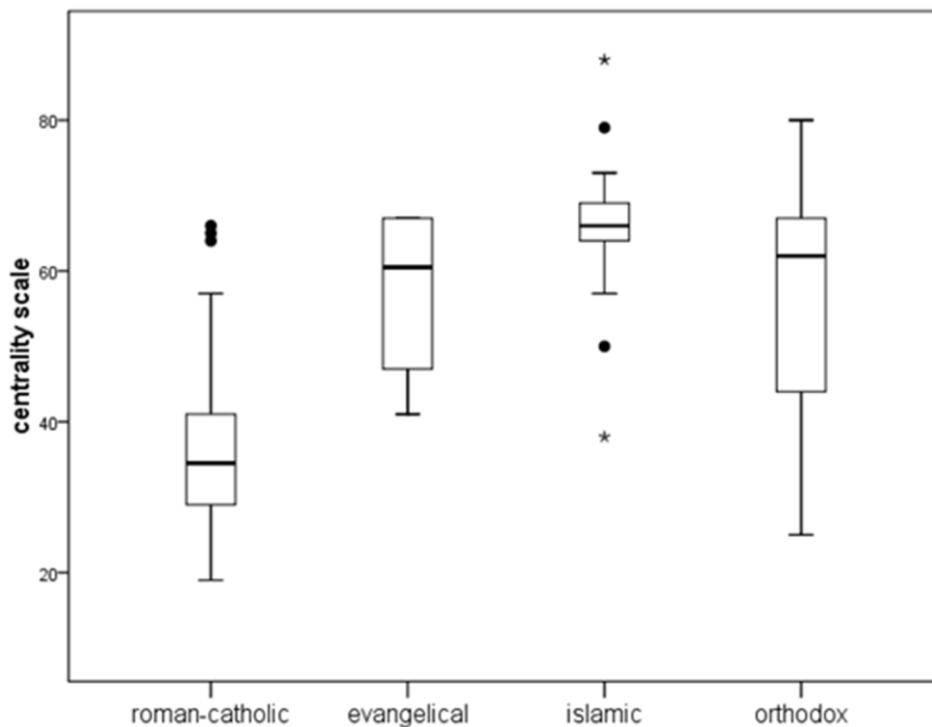

Figure 2

2.2 Multivariate analysis

Needless to say, it could also be that the differences in centrality can be explained due to reasons of age, gender or number of siblings. It is indeed true that age and gender are not significantly dependant on religious affiliation but for the number of siblings a significant result concerning the dependency on religious affiliation can be observed (p<0.001). In order to exclude this, a covariance analysis will be carried out. The independent variables are the covariables age and number of siblings, the two factors are religious affiliation and gender and the dependent variable is the centrality. The model strongly verifies that only religious denomination is significant (p<0.001), all other influencing factors have a p-value of at least 0.185. Although the number of siblings and religious affiliation are interlinked, the number of siblings cannot contribute any further explanation to the difference in the centrality scale depending on religious affiliation.

3. Conclusion and Discussion of the results

The accuracy of the results is given via the size of the sample, especially due to the separation of the centrality scale – Roman Catholic in contrast with the other denominations/ religions. The age group of 11 to 14 years is an exciting collective with regard to their religiousness. In this age group the centrality scale is virtually homogenous and it does not allow any room for gender-dependent differences. This age group is classifiable in formal thinking according to Piaget. Here the perception of God "in Heaven" will be changeable, at least for most young persons. These perceptions will now increasingly be replaced by the scientific worldview – with the result that – God sometimes will be absolutely inconceivable and the belief in God will be questioned. Experience of the world now goes beyond the family and faith must exist within complex relationships.

A longitudinal study could be initiated to observe further progression. Also individual case studies in conjunction with biographical interviews could be of interest. The age group could be extended on the one hand to include 8 to 10 year-olds in primary school in order to investigate whether such similar differences dominate in this group. Benesch discovered that the centrality scale is much higher at Roman Catholic children in the age of 8 to 10 years than to the age of 11 to 14 years (Benesch, 2013, p. 89).

The upper secondary school year from the ages of 15 years to 19 years could reveal a radical change in the centrality scale. It would be to be expected that the age structure in this broad area would exert influence on the centrality scale.

For teachers, the results demonstrate alternative courses of action to push the meaningfulness of religious education in school. According to the quantitative analysis results, consideration and appropriate individual support should be given to religious education. Benesch revealed the corrected coefficient of determination of 75.8% with regards to religious learning with the centrality scale and the interest on the Holy Bible (Benesch, 2014, p. 185).

The internal results show very clearly differences between Roman Catholic and Islamic youngsters. Exact opposite opinions are very frequently taken. Perhaps a similar outcome could have been expected but the intensive clarity of the results may be a little surprisingly. Exactly which influencing factors caused the outcome would be to be identified in a next step. Possible influencing factors could be the intensity of the practice of religion in the family. This would mean that as long as both the young persons and the parents were surveyed separately using the centrality scale, similarities and differences here should be discoverable. Further sociodemographic questions could be helpful for explanation, like for example country of origin or the country where the young persons have mostly been resident. To raise these influencing factors and connect them with denominations and religions as well as the centrality scale outlines a large research field which shows great promise for further research. So only Benesch demonstrates the personal assessment due to the centrality scale, of a religious education had occurred (Benesch, 2014, p. 185).

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