

Health and Life Satisfaction of Roman Catholic Pastoral Workers: Private Prayer has a Greater Impact than Public Prayer

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Abstract Studying 7390 Roman Catholic pastoral workers (42 % priests, 13 % deacons, 20 % pastoral assistants, 25 % parish expert workers), we intended to clarify (1) which forms of religious activities were practiced and were thus of importance to them, (2) whether these activities were related to their experience of the transcendent in daily life, and (3) and how these measures were related to their psychosomatic health, stress perception and life satisfaction. We found almost equal levels of the experience of the transcendent in daily life (DSES) and in private prayer, but there were differences, particularly with respect to public prayer forms (e.g., the Eucharist, Liturgy of the Hours). The frequency of spiritual practices showed either no significant or only some marginal associations with psychosomatic health, while DSES showed weak to moderate associations. This perception of transcendence was predicted best by private prayer and life satisfaction.

Keywords Perception of the transcendent · Prayer · Pastoral workers · Psychosomatic health · Life satisfaction

Introduction

There is a growing body of studies that argue that spirituality/religiosity is related to better health and lower levels of depression (reviewed by Bonelli and Koenig 2013; Unterrainer et al.

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2014; Moreira-Almeida et al. 2006; Weber and Pargament 2014). Specifically, Bonelli and Koenig's (2013) systematic review on the impact of religion/spirituality on mental health concluded that "religious involvement" was found to be associated with positive outcomes in terms of depression, substance abuse, and suicide.

What about the impact of prayer on the health and life satisfaction of Roman Catholic priests and non-ordained pastoral workers? In the present study we distinguish between public, official prayer forms such as the Eucharist and the Liturgy of the Hours (the *officium*) on the one hand and private, individually practiced prayer forms on the other. The Liturgy of the Hours constitutes the official prayer of the Church, which is usually prayed by diocesan priests not in community but on their own.

Pastoral workers are supposed to care professionally for others, drawing on their religious background that implies a commitment, i.e., both an inner motivation and an imperative to actively care for others in connection with religious or spiritual convictions (i.e., doing good, practicing love of neighbor, recognizing Christ's presence in others, spreading God's love). Therefore, they are expected and called to care for their own personal spirituality, which is regarded as a resource by both themselves and the institution. In fact, pastoral training programs emphasize spiritual formation.

A recent study of U.S. American Catholic priests reported "high levels of health and well-being" (Rossetti and Rhoades 2013). The underlying reasons are probably manifold. We are therefore interested in investigating whether and to what degree pastoral workers' engagement in different religious practices is related to both their perception of the transcendent in daily life and to their life satisfaction, psychosomatic health, and stress perception.

In a small, qualitative study by Isacco et al. (2015), 15 Catholic priests from the United States described their "relationship with God as central to their health and contributions to positive outcomes (e.g., sense of connection and support)" and reported the "importance of prayer for their mental health." In contrast, in a study enrolling 101 Catholic priests from India, Raj and Dean (2005) did not find significant associations between depression and burnout and involvement in spiritual activities. In a U.S. sample of 211 Catholic or Episcopalian deacons and priests, however, Thomas and Plante (2015) demonstrated better psychological health variables in deacons when compared to their priest counterparts (i.e., lower psychopathic deviate, psychasthenia, and schizophrenia). In a large sample of 8,574 ordained and non-ordained Catholic pastoral professionals from Germany, Frick et al. (2015) found that the participants' psychosomatic health indicators (i.e., depression, anxiety, somatization) or stress perception were marginally to weakly associated with daily spiritual experience scores (DSES), which indicate their perception of the transcendent in daily life.

Thus, in addition to pastoral workers' *perception* of the transcendent dimension in their life (experience), we wondered about their concrete engagement in spiritual practices (activities) that might be of further relevance for their health and life satisfaction. Specifically, we examine in the present analysis the relationship between different kinds of spiritual activities and their respective impact on the pastoral workers' perception of the transcendent in daily life and on their psychosomatic health, stress perception, and life satisfaction.

Beyond the already mentioned distinction between public and private prayer, there is another dichotomy in our context, which is the difference between public commitment and personal initiative to practice spiritual activities. Ordained pastoral workers, i.e., priests (who usually live in celibacy) and deacons (who may be married), have promised to pray the Liturgy of the Hours on a daily basis. Priests are obliged by canon law to celebrate the Eucharist every day as far as possible. The aforementioned perception of the transcendent can be operationalized with the daily spiritual experience scale (DSES), which measures a person's experience

rather than particular beliefs or behaviours (Underwood 2011; Underwood and Teresi 2002). In contrast to measures that address the frequency of specific religious activities, the DSES addresses the “inner experience of spiritual feelings” that is an “integral part” of a religious or spiritual person’s life (Underwood and Teresi 2002). It does not address exceptional or dramatic mystical experiences but focuses on “experiences of relationship with, and awareness of, the divine or transcendent” (Underwood 2011). In their validation study of 233 women (53 % Catholics, 18 % Protestants, and 21 % Baptists), Underwood and Teresi (2002) observed a weak correlation between the DSES in its 16-item version and Short Form (36) Health Survey’s quality of life, a weak negative association with depression and stress perception scores, a moderately negative association with anxiety scores, and a moderately positive association with optimism scores. In a sample of 493 persons (Kalkstein and Tower 2009), the DSES scale was related to mental health and well-being (i.e., lower levels of depression, anxiety, loneliness). In our study of 8574 Catholic pastoral professionals, however, this relation was rather weak (Frick et al. 2015).

In sum, for this specific analysis we intended to clarify (1) which forms of religious activities were practiced by Catholic pastoral workers (engagement frequency), (2) whether these activities are related to the experience of the transcendent in daily life, and (3) how these measures of religiosity (frequency of religious activities and perception of the transcendent) were related to psychosomatic health, stress perception, and life satisfaction. Of particular interest is the differentiation of gender and profession. We assume that engagement in private prayer reflects an inner motivation to turn to God and should thus be related to the participants’ perception of the transcendent and to their life satisfaction. This interconnection might be stronger in priests than in non-ordained pastoral workers. Data on the self-perceived importance of these spiritual activities will be addressed in a separate future article.

Materials and methods

Participants

All individuals who participated in this anonymously conducted cross-sectional study, which was coordinated by the heads of the study group represented by Eckhard Frick (central coordinator), Klaus Baumann, Arndt Büssing, Christoph Jacobs, and Wolfgang Weig, were informed about the purpose of the study, assured of confidentiality and their right to withdraw at any time, and asked to provide informed consent by signing the provided questionnaires. They were recruited from all groups of Catholic pastoral workers in 22 of the 27 German dioceses (Frick et al. 2015). The response rate was 42 % (ranging from 16 to 52 %).

All were informed about the study by the personnel managers of the dioceses and invited in a separate letter written by the study authors to participate in the study. Participation was possible using a pencil-and-paper version or an online questionnaire.

Measures

Daily spiritual experiences

To measure pastoral workers’ perceptions of the transcendent in daily life, we used the Daily Spiritual Experience Scale (DSES) (Underwood 2011; Underwood and Teresi 2002). Its 6-

item version (DSES-6; $\alpha = 0.91$) uses the following items, i.e., feeling God's presence; feeling close to God, finding strength in my faith (religion); feeling deep inner peace; feeling God's love; and being touched by the beauty of creation (Underwood and Teresi 2002). Responses are scored on a 6-point scale ranging from *many times a day, every day, most days, some days, once in a while*, to *never /almost never*. Item scores were summarized.

Frequency of religious activities

We measured the frequency of different forms of obligatory and optional/private activities, such as the Liturgy of the Hours (*officium*), private prayers (apart from church services or the Liturgy of the Hours), celebration of the Holy Eucharist (Holy Communion), participation in the sacrament of reconciliation (personal confession), and participation in spiritual exercises.

Frequency of the Holy Eucharist (celebration/participation) may range from *daily, nearly daily, several times per week* to *mostly on the weekend*. Frequency of the Liturgy of the Hours ranges from *never, seldom, several times per week*, to *daily* for some, most, or all parts. The frequency of private prayer may range from *never/almost never, sometimes, on some days, several days a week, daily*, to *several times per day*. Frequency of one's own confession may range from *less than once per year, once per year, once every 6 months, once every 3 months, once per month*, to *nearly weekly*. Frequency of spiritual exercises may range from *once a year, usually once a year, sometimes, seldom, or almost never*. Items were recorded in such a way that way that higher scores represented higher engagement frequency.

Perceived stress scale

The Perceived Stress Scale (PSS) is a 10-item questionnaire that measures the self-perceived stress level in specific situations during the previous month (Cohen et al. 1983). Internal reliability of the original PSS was moderate ($\alpha = 0.78$) (Cohen et al. 1983). Specific items include having been upset because of something that happened unexpectedly, having felt unable to control the important things in life, having felt confident about one's ability to handle personal problems, having been angered because of things that happened that were outside of one's control, having been unable to cope with all the things that one had to do, etc. All items refer to emotions and thoughts and how often one may have felt or thought a certain way. The scores range from 1 (*never*) to 4 (*very often*); higher scores would thus indicate greater stress.

Psychosomatic distress

To measure psychosomatic distress, Derogatis (2000) developed the 18-item Brief Symptom Inventory (BSI-18), a short form of the Symptom Check List (SCL-90-R). This instrument has three scales with 6 items each: somatization, depression, and anxiety. Specific items are feelings of worthlessness, loneliness, and being down, having no interest in anything, hopelessness about the future, pains in the heart and chest, nausea or upset stomach, nervousness, restlessness, being scared for no reason, spells of terror or panic. The German version has good reliability coefficients for the respective subscales (somatization: $\alpha = 0.79$; depression: $\alpha = 0.84$; anxiety: $\alpha = 0.84$) (Franke et al. 2011). All perceptions are scored on a 5-point Likert scale ranging from *not at all* to *very strong*.

Life satisfaction

To measure life satisfaction, we relied on the German version of Diener's Satisfaction with Life Scale (SWLS) (Diener et al. 1985). This 5-item scale ($\alpha = 0.92$) uses general phrasings such as "In most ways my life is close to my ideal", "The conditions of my life are excellent", "I am satisfied with my life", "So far I have gotten the important things I want in my life", and "If I could live my life over, I would change almost nothing". The extent of respondents' agreement or disagreement is indicated on a 7-point Likert scale ranging from *strongly agree* to *strongly disagree*.

Statistical analyses

Descriptive statistics as well as first-order correlations and regression analyses were computed with SPSS 22.0. Given the exploratory character of this study, the significance level was set at $p < .01$. With respect to classifying the strength of the observed correlations, we regarded $r > 0.5$ as a strong correlation, r between 0.3 and 0.5 as a moderate correlation, r between 0.2 and 0.3 as a weak correlation, and $r < 0.2$ as negligible or no correlation.

Results

Description of the sample

For this analysis, we refer to data of 7390 persons. Participants were priests (42 %), deacons (13 %), pastoral assistants (20 %), or parish expert workers (25 %). While priests and deacons were of male gender, parish assistants were either male or female and parish expert workers were predominantly female (see Table 1). Most pastoral workers were between 45 and 55 years old; within the group of priests and deacons there was a relatively large proportion of older persons (65–75 years of age), but within the group of pastoral assistants and parish expert workers there was a relatively large fraction of younger persons (25–35 years of age).

Although the differences are rather weak, pastoral assistants had the lowest transcendence perception scores and deacons the highest (see Table 1). Life satisfaction was slightly lower in priests and higher in deacons.

Engagement in religious activities/practices

In most cases, priests celebrate the Holy Mass every day, whereas deacons and non-ordained pastoral workers participate in it mostly on the weekend (see Table 2). At least some part or even the complete Liturgy of the Hours is prayed by most priests and deacons every day, yet, about one quarter of them do so seldom or never. In contrast, most pastoral assistants and parish expert workers pray the Liturgy of the Hours seldom or never. Private prayer is engaged in by all pastoral workers on a daily basis, particularly by deacons.

While the personal sacramental confession is of low relevance for the non-ordained (practiced predominantly less than once per year), it is of some relevance for deacons (55 % less than once per year) and of highest relevance for priests. Nevertheless, 31 % of priests practice it less than once per year. The frequency of pastoral workers' participation in spiritual exercises, meaning a retreat to renew their religious life, is nearly every year among priests,

Table 1 Sociodemographic characteristics of pastoral workers

		Priests (%)	Deacons (%)	Pastoral assistants (%)	Parish expert workers (%)	All pastoral workers (%)	p (Chi2)
Gender (%)	Male	100.0	100.0	53.7	21.9	71.3	<.0001
	Female	0.0	0.0	46.3	78.1	28.7	
Age (%)	25–35 years	3.2	0.7	10.1	12.7	6.7	<.0001
	35–45 years	15.4	7.0	18.1	19.3	15.9	
	45–55 years	33.2	31.4	40.3	42.6	36.8	
	55–65 years	24.3	37.4	29.0	23.7	26.8	
	65–75 years	23.8	23.4	2.5	1.7	13.9	
Transcendence Perception (DSES)	MW	4.14	4.24	3.96	4.08	4.10	<.0001 (F=25)
	SD	0.87	0.77	0.82	0.80	0.84	
Life Satisfaction	MW	26.5	27.7	27.5	27.1	27.0	<.0001 (F=19)
	SD	5.4	4.7	4.7	4.7	5.0	

while for all other professions the frequency of participation is significantly lower (see Table 2).

Next, we analyzed whether the magnitude of differences in the engagement in religious practices differs with respect to profession or age (see Table 3). Using standardized Z-factor values, we showed that several effects are indeed influenced by profession, age, and—with respect to the non-ordained—gender.

As a matter of fact, the Eucharist was of high relevance for priests (particularly the younger ones) but was of low relevance for the non-ordained (particularly for non-ordained males). The Liturgy of the Hours, the *officium* of the Catholic Church, was of relevance for the ordained (particularly the youngest and the oldest). Among the non-ordained, men had significantly lower engagement scores. Similar results were found for the sacramental confession. For annual spiritual exercises, the effects were less clear-cut—with the exception of young clergy, who have higher scores. With respect to “private prayer” there were no relevant differences between the professions, the genders among non-ordained persons, nor the age of participants except for lower praying scores for young non-ordained pastoral workers (see Table 3).

Interconnections between engagement in religious practices and transcendence perception in relation to psychosomatic health, stress perception, and life satisfaction

Interestingly, private prayers are only marginally related to the more ritualized activities. Perception of the transcendent correlates best (moderately) with private prayer. The Liturgy of the Hours and the sacramental confession correlate weakly, and celebrating Holy Mass and participating in spiritual exercises correlate only marginally with the DSES scale (see Table 4). Private prayer is only marginally related to public religious activities. Among priests, the perception of the transcendent is moderately related to private prayers ($r=0.36$), and the relation is stronger for laypersons ($r=0.42$). The frequency of pastoral workers’ religious activities correlates either not at all or only marginally with psychosomatic health, stress perception, or life satisfaction (see Table 4). Instead, their perception of the transcendent is

Table 2 Frequency of religious practices with respect to profession

		Priests (%)	Deacons (%)	Pastoral assistants (%)	Parish expert workers (%)	All pastoral workers (%)	p (Chi2)
Holy eucharist	daily	21.7	0.9	0.9	2.8	10.4	<.0001
	Nearly daily	45.5	4.5	2.1	3.7	21.6	
	Several times per week	25.7	25.1	11.3	21.0	21.7	
	Mostly at the weekend	7.2	69.6	85.7	72.4	46.4	
Prayer of hours	completely	17.0	17.1	0.7	2.5	10.1	<.0001
	Mostly	24.4	23.4	2.5	2.2	14.4	
	Some parts per day	21.0	19.6	5.6	6.6	14.2	
	Several times per week	11.2	15.5	5.2	5.8	9.2	
	Seldom	20.7	22.1	48.5	44.9	32.5	
	never	5.7	2.4	37.4	38.0	19.7	
Own confession	Nearly weekly	2.1	0.6	0.5	0.9	1.3	<.0001
	Once per month	9.7	3.4	1.0	1.8	5.4	
	Once per 3 months	17.7	6.7	2.6	3.5	10.1	
	Once per 6 months	19.0	11.5	4.0	7.0	12.4	
	Once per year	20.2	22.8	9.5	14.9	17.2	
	Less than once per year	31.3	54.8	82.5	72.0	53.7	
Spiritual exercises	Nearly every year	34.7	20.7	22.3	23.3	27.6	<.0001
	Usually once per years	27.4	21.8	21.7	21.9	24.2	
	Sometimes	15.9	19.4	22.8	20.4	18.8	
	Seldom	8.6	13.2	12.2	12.1	10.8	
	Nearly never	13.4	24.7	21.0	22.2	18.5	
Private prayer	Nearly never	1.5	1.1	2.0	1.9	1.6	<.0001
	sometimes	11.4	7.6	8.4	7.4	9.3	
	at some days	11.7	10.6	14.2	13.2	12.5	
	at several days	18.8	19.3	23.3	22.0	20.6	
	daily	36.9	35.5	34.0	35.9	35.9	
	Several times per day	19.6	25.9	18.1	19.7	20.1	

moderately negatively related to depression and stress perception on the one hand and positively to life satisfaction and frequency of private prayers on the other hand.

Celebrating Holy Mass and praying the Liturgy of the Hours (see Table 4) are each moderately associated with one's personal sacramental confession. Detailed analyses reveal that for priests the Liturgy of the Hours and confession are strongly related ($r=0.50$), while for pastoral assistants and parish expert workers this connection is rather moderate ($r=0.30$). However, the Liturgy of the Hours is weakly related to priests' life satisfaction ($r=0.22$) but not at all related to the life satisfaction of pastoral assistants and parish expert workers ($r=0.00$).

Table 3 Frequency of religious activities of pastoral workers (standardized z factor values)

Range	Frequency of				
	Eucharist	Prayer of hours	Confession	Spiritual exercises	Private prayers
	1–4	1–6	1–6	1–5	1–6
All pastoral workers	MV 1.96	3.01	2.00	3.32	4.40
	SD 1.05	1.66	1.33	1.45	1.28
Profession					
Priests	ZV ^a 0.82	0.53	0.45	0.21	−0.02
	SD 0.82	0.93	1.08	0.95	1.02
Deacons	ZV ^a −0.57	0.54	−0.13	−0.22	0.14
	SD 0.59	0.89	0.87	1.02	0.97
Pastoral assistants	ZV ^a −0.75	−0.68	−0.52	−0.13	−0.05
	SD 0.47	0.60	0.62	0.99	0.99
Parish expert workers	ZV ^a −0.56	−0.63	−0.37	−0.13	0.01
	SD 0.66	0.69	0.75	1.01	0.97
<i>F</i> value	2532	1260	459	80	8
<i>p</i> value	<.0001	<.0001	<.0001	<.0001	<.0001
Gender (non-ordained)					
Men	ZV ^a −0.77	−0.75	−0.54	−0.26	−0.16
	SD 0.37	0.53	0.56	1.00	1.03
Women	ZV ^a −0.57	−0.60	−0.37	−0.06	0.07
	SD 0.67	0.70	0.76	1.00	0.94
<i>F</i> value	84	41	38	29	42
<i>p</i> value	<.0001	<.0001	<.0001	<.0001	<.0001
Age groups (ordained)					
25–35 years	ZV ^a 1.17	0.86	1.22	0.78	−0.05
	SD 0.78	0.89	1.06	0.62	1.04
35–45 years	ZV ^a 0.85	0.57	0.64	0.42	−0.05
	SD 0.90	0.91	1.10	0.86	1.03
45–55 years	ZV ^a 0.56	0.45	0.38	0.22	0.07
	SD 0.95	0.92	1.09	0.95	1.03
55–65 years	ZV ^a 0.36	0.46	0.16	0.06	0.05
	SD 0.96	0.92	1.00	0.99	1.01
65–75 years	ZV ^a 0.30	0.66	0.14	−0.25	−0.06
	SD 0.94	0.92	0.98	1.00	0.98
<i>F</i> value	50	12	45	65	3
<i>p</i> value	<.0001	<.0001	<.0001	<.0001	0.010
Age groups (non-ordained)					
25–35 years	ZV ^a −0.70	−0.69	−0.37	0.17	−0.33
	SD 0.50	0.58	0.73	0.91	1.00
35–45 years	ZV ^a −0.71	−0.70	−0.45	−0.18	−0.11
	SD 0.54	0.58	0.66	1.01	0.99
45–55 years	ZV ^a −0.66	−0.67	−0.47	−0.20	0.04
	SD 0.56	0.61	0.68	1.00	0.98

Table 3 (continued)

Range		Frequency of				
		Eucharist	Prayer of hours	Confession	Spiritual exercises	Private prayers
		1–4	1–6	1–6	1–5	1–6
55–65 years	ZV ^a	-0.61	-0.63	-0.42	-0.14	0.08
	SD	0.61	0.69	0.71	1.00	0.93
65–75 years	ZV ^a	0.14	0.25	-0.14	0.07	0.24
	SD	1.04	1.10	0.89	1.15	0.98
<i>F</i> value		34	35	4	11	16
<i>p</i> value		<.0001	<.0001	.004	<.0001	<.0001
Profession + Gender		1.1 (n.s.)	0.3 (n.s.)	0.3 (n.s.)	2.1 (n.s.)	0.0 (n.s.)
Profession + Age		6.9 (<.0001)	1.7 (n.s.)	3.6 (<.0001)	0.8 (n.s.)	0.3 (n.s.)
Gender + Age		6.4 (<.0001)	5.6 (<.0001)	4.2 (.002)	2.1 (n.s.)	5.1 (<.0001)

^a Standardized z factor values (ZV) [stronger effects were highlighted in bold]

Predictors of perception of the transcendent in daily life

Pastoral workers' perception of the transcendent is supposed to be highly relevant to themselves and their religious profession. Therefore, using regression analyses we attempted to elucidate which of the tested variables could be regarded as significant predictors. First, we analyzed the impact of specific spiritual practices and found that 18 % of DSES's variance could be explained by engagement frequency, with private praying as the best predictor. Next, we tested the impact of psychosomatic health affects (i.e., depression, anxiety, somatization) and stress perception on the perception of the transcendent and found that they explain 11 % of DSES's variance, whereas life satisfaction alone would explain 15 % of DSES's variance.

Thus, all the dimensions on their own would explain some amount of variance in pastoral workers' perception of the transcendent, but most of the variance remains unexplained. Therefore, we performed a stepwise regression analysis that included all these variables. With the exception of anxiety, all these variables would explain 31 % of variance, with life satisfaction and private prayer as the best predicting variables (both together would explain 26 % of DSES's variance). Due to the differences described above between the ordained and non-ordained, we performed stepwise regression analyses with both samples independently (see Table 5). In the subgroup of priests and deacons, eight of the aforementioned variables would explain 31 % of DSES's variance (with life satisfaction and private prayer as the best predictors), while five of these variables would explain 27 % of DSES's variance in non-ordained pastoral workers (with private prayer and life satisfaction as the best predictors) (see Tables 5).

Discussion

In our sample of different pastoral professions, we showed that priests, deacons, and laypersons in pastoral ministry have two important resources in common: an almost equal level of the experience of the transcendent in daily life and an equal level of private prayer. The

Table 4 Correlations between measures of religiosity, psychosomatic health and life satisfaction associated variables in pastoral workers

	Frequency of					Perception of the transcendent
	Holy eucharist	Prayer of hours	Own confession	Spiritual exercises	Private prayers	
All pastoral workers						
Frequency of religious activities *						
Holy Eucharist	1.000	0.286**	0.417**	0.235**	0.121**	0.157**
Prayer of Hours		1.000	0.420**	0.207**	0.172**	0.231**
Confession			1.000	0.302**	0.183**	0.203**
Spiritual Exercises				1.000	0.151**	0.180**
Private Prayers					1.000	0.371**
Psychosomatic health *						
Depression	-0.035	-0.108**	-0.029	-0.058**	-0.136**	-0.306**
Anxiety	-0.006	-0.082**	-0.021	-0.038	-0.058**	-0.194**
Somatization	-0.018	-0.052**	-0.028	-0.050**	-0.024	-0.106**
Perceived Stress	-0.003	-0.081**	-0.004	-0.030	-0.108**	-0.300**
Life Satisfaction	0.042	0.142**	0.059**	0.075**	0.126**	0.396**
Priests						
Frequency of religious activities						
Holy Eucharist	1.000	0.306**	0.365**	0.208**	0.166**	0.223**
Prayer of Hours		1.000	0.496**	0.244**	0.154**	0.250**
Confession			1.000	0.382**	0.187**	0.244**
Spiritual Exercises				1.000	0.136**	0.184**
Private Prayers					1.000	0.362**
Psychosomatic health						
Depression	-0.101**	-0.147**	-0.064**	-0.089**	-0.144**	-0.303**
Anxiety	-0.037*	-0.101**	-0.025	-0.047	-0.064**	-0.208**
Somatization	-0.090**	-0.087**	-0.048	-0.081**	-0.049**	-0.095**
Perceived Stress	-0.039	-0.114**	-0.027	-0.058**	-0.119**	-0.305**
Satisfaction with Life	0.114**	0.221**	0.135**	0.117**	0.166**	0.434**
Non-ordained pastoral workers						
Frequency of religious activities						
Holy Eucharist	1.000	0.329**	0.412**	0.199**	0.203**	0.176**
Prayer of Hours		1.000	0.297**	0.243**	0.205**	0.166**
Confession			1.000	0.262**	0.246**	0.179**
Spiritual Exercises				1.000	0.185**	0.196**
Private Prayers					1.000	0.418**
Psychosomatic health						
Depression	0.006	-0.007	0.038*	0.026	-0.052**	-0.226**
Anxiety	-0.005	-0.005	0.011	-0.005	-0.013	-0.144**
Somatization	0.033	0.026	0.010	-0.001	0.031	-0.082**
Perceived Stress	-0.016	-0.006	0.031	-0.013	-0.068**	-0.223**
Satisfaction with Life	0.032	-0.004	0.001	0.020	0.067**	0.312**

* Partial correlation (controlled for gender and profession); ** $p < .001$ All moderate correlations ($r > 0.3$) are highlighted (bold)

Table 5 Predictors of ordained and non-ordained pastoral workers' perception of the transcendent (stepwise regression analysis)

	Beta	T	<i>p</i>	Collinearity statistics	
				Tolerance	VIF
Priests and deacons					
Dependent variable: DSES					
Model 8: $F=235$; $p<.000$; $R^2=0.31$					
(constant)		19.972	.000		
Life satisfaction	0.297	18.380	.000	0.639	1.566
Frequency Private prayer	0.235	17.681	.000	0.946	1.057
Frequency Sacramental Confession	0.079	5.124	.000	0.695	1.440
Depression	-0.134	-7.364	.000	0.508	1.970
Frequency Prayer of Hours	0.070	4.758	.000	0.771	1.297
Somatization	0.082	5.437	.000	0.730	1.369
Stress perception	-0.082	-4.885	.000	0.594	1.683
Frequency Holy Eucharist	0.050	3.475	.001	0.819	1.221
Non-ordained pastoral workers					
Dependent variable: DSES					
Model 5: $F=181$; $p<.000$; $R^2=0.27$					
(constant)		15.119	.000		
Frequency private prayer	0.353	19.819	.000	0.929	1.076
Life satisfaction	0.240	12.441	.000	0.790	1.266
Frequency Prayer of Hours	0.079	4.253	.000	0.862	1.161
Stress perception	-0.089	-4.596	.000	0.788	1.269
Frequency Sacramental Confession	0.078	4.187	.000	0.859	1.164

Only the best prediction models were presented

differences are mainly due to profession and age—and among the non-ordained also to gender—particularly with respect to public prayer forms, i.e., the Eucharist (Holy Mass), the Liturgy of the Hours, and the sacramental confession, which are of stronger relevance among priests, particularly the younger ones.

The second question refers to the relation of such spiritual or religious practices to the perception of the transcendent in pastoral workers' daily lives. Interestingly, for the non-ordained it is exclusively their private prayer that is best related to their perception of the transcendent. This may be due to the fact that lay pastoral workers usually participate in the Eucharist on Sundays, while private prayer may be a part of daily life.

Notably, for priests, in addition to their private prayer (which is most closely related to their perception of the transcendent), the Liturgy of the Hours, sacramental confession, and the Holy Mass are associated with the perception of the transcendent to a lower degree. Annual retreats are not closely associated with pastoral workers' perception of the transcendent. When controlled for gender and profession, the moderate correlation between the DSES and private prayer still remains ($r=0.37$).

In sum, private prayer is of strongest relevance for the perception of the transcendent, not the public forms of prayer. In this study, for the sake of simplicity, we distinguish public and private religious activities. Such a dichotomy might be misleading; for example, it might suggest that

public religious activities are less personally “felt” prayers than private or spontaneous ones. On the other hand, such a dichotomy comes closer to the reality of religious activities as safeguarded by institutionalized traditions and spiritual wisdom as well as of the wide range of religious practices that are expressions of individual spiritual insights and desires.

This finding does not necessarily contradict the relevance of public, “official”, and ritualized forms in general and for the individual in particular. It indicates that the formal aspects of religiosity cannot necessarily be regarded as the usual facilitators for a sense of the transcendent among pastoral workers. As a matter of fact, the study was composed of highly religious people. Regression analyses confirmed that the best predictors of pastoral workers’ perception of the transcendent in their lives were their life satisfaction and private prayer (taken together, they explain 26 % of DSES’s variance).

Our third research question refers to the interconnections between the frequency of religious activities and the perception of the transcendent compared to psychosomatic health, stress perception, and life satisfaction. Pastoral workers’ perception of the transcendent is related to their life satisfaction (which was determined to be an important predictor of this transcendence perception), to lower stress perception, and to less depressive symptoms. Interestingly, the frequency of spiritual practices showed either no significant or only some marginal associations. This means that it is not the specific kind of spiritual practice but the “inner experience” of the transcendent that is a resource for psychosomatic health and well-being.

Considering these results related to our three research questions, it may be useful to ask more precisely, What exactly does the DSES in its 6-item version measure? The items address feelings of God’s presence or God’s love, feelings of being close to God, and finding strength in one’s faith on the one hand, as well as feelings of deep inner peace and of being touched by the beauty of creation (Underwood 2011; Underwood and Teresi 2002). This means that the scale addresses the experiential and emotional details of spirituality in a person’s daily life rather than specific cognitive aspects; it reflects an inner congruence or harmony with the transcendent and feelings of being close to the transcendent. Thus, it is likely that private prayer is related to the DSES scores, because this kind of prayer is more often a direct turning to God in terms of a “communication”.

What about the Holy Mass and the Liturgy of the Hours in this regard? With respect to Catholic teaching, these are forms of “communication” with God, too; the sacrament of the Eucharist (Holy Mass), in particular, is supposed to be a direct, sacramental encounter with Jesus Christ. For non-ordained pastoral workers, we found only a marginal association between their DSES scores and their attendance of the Holy Mass. For priests, this association was surprisingly weak. This indicates that the two variables are not directly related. As such, this result shows a considerable gap between official church teaching and personal experience in our sample, although for priests and deacons, at least, the Eucharist and the Liturgy of the Hours might be regarded as part of their religious identity and mission due to their public commitment in their ordination. How can this gap be better understood?

Official, public practices of prayer like the Liturgy of the Hours and the Eucharist (Holy Mass) carry the strong potential for participants to become accustomed to and familiar with the rituals, which has markedly ambivalent results. First, the practices may convey a sense of belonging, security, and being at home. Habituation, however, may imply a loss of inner involvement or disposition and an increase in routinized functioning. Secondly, this first ambivalence may be aggravated by the public promise and duty to pray publicly. Such aspects of habituation may decrease the vital sense of the transcendent. This seems to have been frequently the case in our sample. Along with this decrease in their sense of the transcendent, persons may feel less

challenged to change. Such a challenge to change, however, toward increased love for God and neighbor in daily relationships and activities seems to be an essential part of what Christian religion and spirituality is about. In consequence, there may be loss of a (joyful) thrust towards religiously motivated self-transcendence in the pastoral workers.

In previous studies (Büssing et al. 2013; Frick et al. 2015), we have shown that pastoral workers and specifically priests may experience phases of spiritual dryness that may affect their professional work, although this is not necessarily the case. Nevertheless, such spiritual dryness was a (negative) predictor for their health conditions. Moreover, spiritual dryness as a marker of crisis might be considered a threat to spiritual growth and especially to personal spirituality. An ancient spiritual tradition reaching back to Evagrius Ponticus and John Cassian (4th century CE), has described “acedia” (sloth, boredom, darkness) as a frequent major impediment on the spiritual journey. Early Christian monks, in their commitment to the spiritual life, experienced and distinguished the varieties of “temptations” to flee from spiritual challenges. In particular, they discovered the temptation to rationalize their tendencies to flee from their spiritual commitment.

Outstanding spiritual persons such as Mother Theresa of Calcutta have experienced similar personal and institutional struggles (Zagano and Gillespie 2010) but persevered and spiritually grew in their vocational commitment. Our results confirm other studies that show the importance of a vibrant spiritual life for life satisfaction and several health factors (Isacco et al. 2014; Isacco et al. 2015; Rossetti, 2011; Turton and Francis 2007). Hence, it seems to be of great importance to strengthen pastoral workers’ spiritual resources.

Limitations

For this study, we had a response rate of 42 %, which is quite high for comparable studies without any incentives and without any obligation to participate (voluntary participation). Due to the high number of participants from 22 out of 27 dioceses, we see this sample as representative of Catholic pastoral workers in Germany. Of course, a quantitative design has its own limitations with regard to the quality of subjective experience in general and of spiritual practices or of spiritual developments in particular. Therefore, self-reported information can be biased; respondents’ answers might either too positive (due to social desirability) or too negative (to let off steam). To overcome this problem, we also performed qualitative interviews with a large number of pastoral workers in order to further substantiate the current findings. These data, which will be published in a future paper, indicate that the pastoral workers responded quite sincerely and reliably. Moreover, one has to keep in mind that statistically significant differences might not necessarily be of clinical relevance. Therefore, we have added standardized Z-values to describe the differences between the analyzed subgroups and have highlighted only the moderate to strong associations between the tested variables in the correlation analyses.

Conclusion

Prayer entails a connection to the transcendent (Jors et al., 2015). Our results show that the perception of the transcendent is an important resource for pastoral workers in regard to both their health and their life satisfaction. In addition, we have shown that private and public prayer among pastoral workers are experienced differently. In fact, prayer is multidimensional as a process of growth and requires mindfulness, engagement, and perseverance, particularly in times of spiritual dryness. Our data indicate that private prayer is highly relevant to the experience of the transcendent in daily life. An important aspect of pastoral workers’ lives

might be to value the dimension of experience of the transcendent through prayer, which—as a resource—seems to be highly significant.

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