

Attitudes and Behaviors Related to Franciscan-Inspired Spirituality and Their Associations with Compassion and Altruism in Franciscan Brothers and Sisters

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Abstract: In Christian tradition there are many different ‘schools’ of spirituality which address an ‘inner transformation’ referring to an individual experience of the Sacred. The focus of this study was to examine the ‘core’ component of Franciscan spirituality (life according to the Gospel) and the ‘transformative’ components (living with and for others in need and respectful commitment to the creation) in a group of brothers and sisters of the Franciscan family. In particular, the reflection on how this spirituality is connected with the perception of the divine in daily life, with feelings of awe and subsequent gratitude on the one hand and compassion and altruistic behavior on the other, was an essential aspect of the present work. Data from a cross-sectional study with standardized instruments among 388 Franciscan brothers and sisters (mean age 61 ± 25 years) showed that “Living from the Faith” and “Seeking God in Silence and Prayer” scored highest, followed by “Commitment to the Creation” and interpersonal factors such as “Peaceful Attitude/Respectful Treatment” and “Commitment to the Disadvantaged”. In all cases, women achieved significantly higher scores than men (with values of F between 5.3 and 23.5, $p < 0.05$). These dimensions were moderately to strongly associated with experiential aspects of spirituality (i.e., Perception of the Divine, Gratitude/Awe), particularly “Living from the Faith” ($r > 0.50$, $p < 0.0001$). With regard to the prosocial ‘outcomes’ (e.g., Compassion and Altruism), stepwise regression analyses showed that Compassion was best predicted by “Peaceful Attitude/Respectful Treatment” and Gratitude/Awe (both explain 27% of variance), and Altruism was best predicted by “Commitment to the Disadvantaged” and Gratitude/Awe (both explain 21% of variance). Mediator analyses with the standardized z -factor values showed that Gratitude/Awe is also a significant mediator of the effects of the Perception of the Divine (as a further significant predictor of prosocial behaviors) on Compassion ($\beta = 0.05 \pm 0.02$, $p < 0.01$) and Altruism ($\beta = 0.03 \pm 0.02$, $p = 0.04$). Surprisingly, “Commitment to the Disadvantaged” was only weakly linked to “Living from the Faith”. It could be shown that “Living from the Faith” was much more connected to Compassion as an intention rather than to Altruism as an action. “Living from the Faith”, as the fundamental aspect of Franciscan spirituality, mediated the effect of the Perception of the Divine on Compassion ($\beta = 0.08 \pm 0.03$, $p < 0.01$) and Altruism ($\beta = 0.06 \pm 0.03$, $p = 0.04$), as well as mediating the effect of Gratitude/Awe on Compassion ($\beta = 0.07 \pm 0.02$, $p < 0.01$) and Altruism ($\beta = 0.06 \pm 0.02$, $p < 0.01$). However, there are significant differences between more contemplative and charitably engaged Franciscans; “Living from the Faith” scored highest in contemplative brothers and sisters within the different branches of Franciscan orders when compared to more charitably engaged persons, while their “Commitment to the Disadvantaged” was significantly lower. These

differences could also be ascribed to the different charisms and missions of the Franciscan branches.

Keywords: Franciscan spirituality; compassion; altruism; Franciscans; religious order; faith

1. Introduction

In most areas of the world, the number of persons living in religious orders as monks or nuns (“members of the consecrated life”) is declining (Ebaugh 1993; Berrelleza et al. 2014; Palacios et al. 2015). Moreover, several of them perceive that the interest in their specifically Christian lifestyle and in the spiritual values they have to offer is fading, especially against the background of a generally decreasing interest in institutionalized religiosity in Western societies. These experiences can have a negative influence on their commitment as a religious person and on their decision to follow ethical and religious principles which may not be shared by other (non-religious) persons. Nevertheless, religious orders/communities are socially engaged for the sake of others, i.e., they are charitably engaged in running hospitals, welfare and health centers, retirement homes, homeless work, drug counseling, etc. Other religious orders/communities exist that are less charitably engaged but more contemplatively engaged by constant prayer for persons in need, eternal devotion of the Blessed Sacrament, etc. Despite criticism of the decisions and behavior of church dignitaries, it is particularly the church’s social and ecological engagement that is recognized and valued even by non-religious persons.

Among the different religious orders and communities, the Franciscans are recognized by their simple and authentic lifestyle that aims to imitate the life of Jesus without clinging on material possessions and recognizing the interdependence of all living beings. Franciscan spirituality refers to the life of medieval friar St. Francis of Assisi (1181/82–1226), founder of Franciscan orders (Blastic 1993), and the life of St. Clare of Assisi (1194–1253), one of his first followers and founder of the contemplative order of Poor Ladies/Poor Clares. As a process of inner transformation, St. Francis experienced God in all suffering people and in all creation. He regarded the world in ‘universal kinship’, considering the moon, sun, water, animals, and even death as his brothers and sisters in his ‘Canticle of the Sun’ (from around 1224), and therefore all aspects of creation were seen as opportunities to meet God. This transformation changed his perspective of the world and society, man and church (Dienberg 2009; Kuster 2016). The different Franciscan branches (i.e., Minors, Conventuals, Capuchins, Poor Clares, Third Order of St. Francis, etc.) refer to the same spiritual background rooted in the regulations of St. Francis and St. Clare. These rules of St. Francis influence the lifestyle of adherents as religious persons living in material and immaterial poverty and in solidarity with the poor and disadvantaged, despite specific differences within these branches (i.e., a charitable or contemplative way of living). Material and immaterial poverty and humility are regarded as core characteristics of the Franciscan life in following Christ (Peters 1995). The Franciscan view of poverty means to “avoid egoistic and self-centered attitudes and behaviors, to accept oneself as ‘dependent’” (Büssing et al. 2017). Because of this view of ‘being lesser’, God is sought out also in the poor and suffering people, and thus, “serving is the consequent reaction to the call of the world” (Büssing et al. 2017). All Franciscans branches “have a clear focus on living from the Gospel” with subsequent consequences for their life in the world, as they are “living with and for others in need and respectful engagement for the divine creation” (Büssing et al. 2017). For St. Francis, searching for the spirit of the Lord was a key attitude expressed by a life in poverty, humility, and fraternity (Dienberg 2016). This was also expressed by “attitudes of reverence and respect for the creation and all living beings, resulting in a peacemaking mindset” (Büssing et al. 2017). Even today, the process of spiritual transformation implies a change of perspective with the development of an attitude of service to a social and economic organization, the responsible assumption for the protection and preservation of the environment, and compassionate care for others (Francis 2015). These aspects can be seen as relevant issues of Franciscan-inspired spirituality.

According to a theoretical model (Figure 1) that describes the core component of Franciscan spirituality (Faith) and the transformative components (outcomes), the perception of the Sacred/Divine in one's life (as a core experience) can lead to a reflected decision to behave differently (ethics). It is clear that there is a responsibility to bring about change in the world, especially social and economic justice. Because of this responsibility, these perceptions, attitudes, and behaviors of 'being lesser' (in terms of material and immaterial poverty and humility) can make a difference in efforts to become an example that can guide this and future generations. As part of the underlying transformation process, a religious person living by faith sees the interconnection of the entire creation, and thus has a compassionate commitment to disadvantaged people and nature in the sense of a holistic ecology. This transformation process can either begin with the perception of the Sacred or with a compassionate encounter with suffering or disadvantaged people (seeing God in all His creation). Legend says that Giovanni di Pietro di Bernardone, later St. Francis, once rode past a leper from whom he was otherwise disgusted, but suddenly stopped, turned back, and kissed him (Spoto 2003). It is assumed that he recognized Christ in the face of the leper and he began to change his way of life. This recognition of the leper as a man and not as a socially excluded subject was an act of compassion.

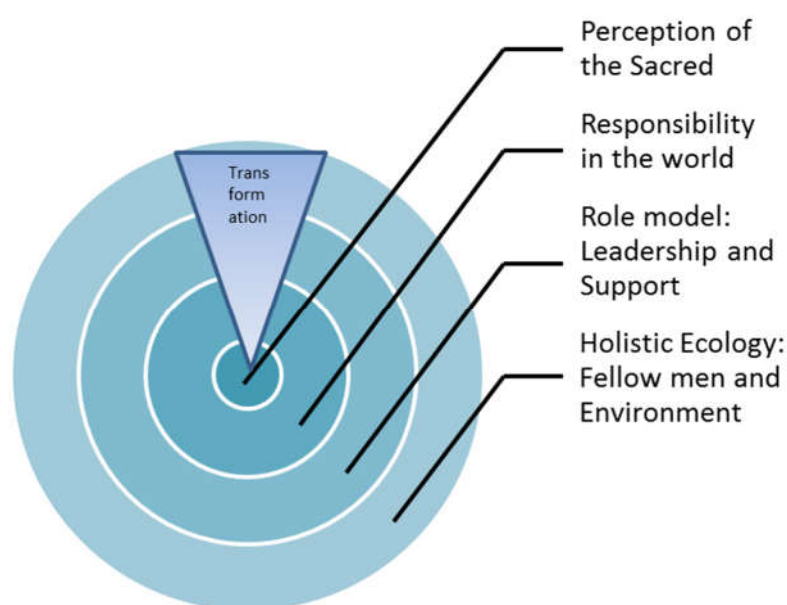


Figure 1. Transformative components of Franciscan-inspired spirituality.

These issues are all seen as relevant aspects of Franciscan-inspired spirituality. To measure respective attitudes and behaviors related to this form of spirituality, we recently developed an assessment instrument, the FraSpir questionnaire (Büssing et al. 2017). These attitudes and behaviors are of relevance not only for Franciscans, but also for laypersons with and without religious beliefs (Büssing et al. 2017). This instrument was intended to cover six theoretically derived main topics (ideals) which refer to specific aspects of Franciscan spirituality (Dienberg 2009, 2013; Dienberg and Warode 2015): living from the Gospel; searching for the Spirit of the Lord; attitude of (material and immaterial) poverty; awe and respect for creation; and considerate acting in the world, in terms of fraternal encounters and the support of disadvantaged persons on the one hand, and lasting and peace-bearing values on the other (Büssing et al. 2017). In a sample of laypeople (79%) and persons from religious communities (21%) ($N = 418$), an exploratory factor analysis pointed to four main factors with good internal reliability (Cronbach's alpha ranging from 0.79 to 0.97) (Büssing et al. 2017): "Living from the Faith/Searching for God"; "Peaceful Attitude/Respectful Treatment"; "Commitment to the Disadvantaged and Creation"; "Attitude of Poverty". We wanted to apply this instrument in a larger sample of brother and sisters from the Franciscan family and analyze the prevalence of the respective attitudes and behaviors.

We suggest that the abovementioned aspects of Franciscan-inspired spirituality show a positive association with the perception of the divine in daily life, as well as an association with feelings of awe and gratitude on the one hand, and compassion and altruistic behavior on the other. Compassion ('co-feeling') is a feeling for and as another person, which leads to caring intentions to alleviate the suffering of others (Jull 2001; Williams 2008). In Christian tradition, compassion is embodied by Jesus Christ, who can be encountered in all suffering beings (Matthew 25:35–45); it is also exemplified in the parable of the Good Samaritan (Luke 10:30–35). Compassion (as an intention) is the fundamental principle that leads to concrete actions of loving kindness and concrete care for a suffering person. Generative Altruism (as an action) is intrinsically motivated by compassion (as an intention) (Büssing et al. 2013) and involves non-conflictual pleasure in promoting the welfare of others, voluntarily and intentionally, without expecting an external reward (Piliavin and Charng 1990; Seelig and Rosof 2001). Altruism is considered to be associated with religiosity (i.e., values, personal relation to God, institutions, communal support, teachings of religious scriptures), but not exclusively (Pessi 2011). In German students (mean age 19 ± 3 years; 86% Christian denominations), generative altruism was only weakly associated with religious orientation in relation to prayer and trust in God ($r = 0.28$) (Büssing et al. 2013). In contrast, in Catholic adults from Italy (mean age 42 ± 14 years, 100% Catholics) who are charitably committed to others, compassion and altruism were moderately linked to perception of the divine (as an experiential indicator of spirituality) ($r = 0.32$ and 0.38 , respectively) (Büssing et al. 2018) as well as moderately linked to religious orientation in relation to prayer and trust in God ($r = 0.34$ and 0.35 , respectively, while their frequency of religious practices was only marginally associated with compassion ($r = 0.16$), but moderately associated with altruism ($r = 0.40$) (Büssing et al., unpublished). Therefore, these associations can also be influenced by one's individual, cultural, and religious background.

We further assume that the attitudes and behaviors inspired by Franciscan spirituality are related to the perception of the relevance of lifestyle as a religious person, especially in relation to the perception of living 'separately' from other people, such as the perceptions that others have an interest in their lifestyle and that their community has 'much to offer'.

2. Material and Methods

2.1. Enrolled Persons

Brothers and sisters from the Franciscan family (i.e., Franciscans, Capuchins, Minorites, Poor Clares, and contemporary groups of the Third Order of St. Francis) were invited by email to take part in an anonymous online survey. They were informed of the purpose of the study and received confidentiality and anonymity (we did not collect individual names, community names or IP addresses). By completing the German (30% of participants) or English language questionnaire (70% of participants), the participants agreed that their data will be evaluated anonymously. We assured them that it was not the intention to compare the different branches of the Franciscan family. The focus of this study was their shared values and attitudes rather than the 'differentiating' aspects related to the different branches.

The respective communities were identified through their websites and were asked for permission to participate. However, several websites or email addresses of communities were no longer valid, and some local communities were already closed. Due to the high age of most brothers and sisters, lack of internet presence and/or their rather contemplative life, we could not reach them all. Some commented directly that they were not interested in participating. Therefore, this study is not representative of all Franciscan branches, but gives an insight in more general aspects of Franciscan-spirituality associated attitudes and behaviors.

2.2. Measures

2.2.1. Franciscan Spirituality Questionnaire (FraSpir)

The Franciscan Spirituality questionnaire (FraSpir) uses 26 items and has four subscales: “Living from the Faith/Searching for God”; “Peaceful Attitude/Respectful Treatment”; “Commitment to the Disadvantaged and Creation”; and “Attitude of Poverty” (Büssing et al. 2017). Their internal reliability coefficient Cronbach’s alpha of the primary version ranges from 0.79 to 0.97 (Büssing et al. 2017). All items were evaluated on a five-point scale of dis-/agreement (0—does not apply at all; 1—does not truly apply; 2—half and half (neither yes nor no); 3—applies quite a bit; 4—applies very much).

Since the FraSpir questionnaire was validated in a sample of laypersons and religious persons, we re-evaluated its factorial structure in this sample of Franciscan brothers and sisters. However, the three items of the factor “Attitude of Poverty” in this sample had a poor item correlation and were thus eliminated from the item pool. Exploratory factor analysis of the other items revealed five main factors with eigenvalues >1 (Table 1). The items of the primary factor “Living from the Faith/Searching for God” are divided into two sub-constructs: “Living from the Faith” (six items) and “Seeking God in Silence and Prayer” (three items). The factor “Commitment to the Disadvantaged and Creation” is also divided into two sub-constructs: “Commitment to the Disadvantaged” (three items) and “Commitment to the Creation” (three items). The factor “Peaceful Attitude/Respectful Treatment” remained stable with six items. The internal consistency of the first four factors is good (Cronbach’s alpha ranging from 0.82 to 0.85), while that of the fifth factor in this sample is less satisfactory (Cronbach’s alpha = 0.64) (Table 1). Apart from the deleted factor “Attitude of Poverty”, the factorial structure of the FraSpir in this sample is much closer to the underlying theoretical concept than the four-factor structure in the more heterogeneous group of laypersons and religious persons (Büssing et al. 2017). This variant is called FraSpir RO (religious orders).

2.2.2. Perception of Religious Lifestyle

The assumptions of Franciscan brothers and sisters that their community lives ‘separately’ from the people around them, that people care a lot about their lifestyle, and that they have so much to offer to the world were addressed with three single items. These were evaluated on a five-point scale ranging from disagreement to agreement (0—does not apply at all; 1—does not truly apply; 2—half and half (neither yes nor no); 3—applies quite a bit; 4—applies very much).

2.2.3. Transcendence Perception (DSES-6)

The Daily Spiritual Experience Scale was developed as a measure of the perception of the transcendence in daily life; in this case, the items measure experience rather than certain beliefs or behaviors (Underwood and Teresi 2002; Underwood 2011). Here we used the six-item version (DSES-6; Cronbach’s alpha = 0.91) including specific items such as the sense of the presence of God, God’s love, the desire to be closer to God (union), finding strength/consolation in God, and being touched by the beauty of creation (Underwood and Teresi 2002). The answer categories from 1 to 6 represent: many times a day, every day, most days, some days, once in a while, and never/almost never. Item scores were finally summed up.

2.2.4. Gratitude and Awe (GrAw-7)

To measure feelings of awe and subsequent feelings of gratitude, we used the seven-item Gratitude/Awe (GrAw) scale (Büssing et al. 2018). This scale addresses the “emotional response to an immediate and ‘captured’ experience, and not an emotional response in response to goodwill of a person” (Büssing et al. 2018). Examples of items are “In certain places, I become very quiet and devout”; “I stop and am captivated by the beauty of nature”; “I pause and stay spellbound at the moment”; “I stop and then think of so many things for which I’m really grateful”. The internal

reliability of these items is good (Cronbach's $\alpha = 0.83$). All items were evaluated on a four-point scale (0—never; 1—seldom; 2—often; 3—regularly). The results were total values from 0 to 21.

2.2.5. Compassion (SCBCS)

Compassion, as a perception and as an attitude, was measured using the Santa Clara Brief Compassion Scale (SCBCS; Hwang et al. 2008). The five items have a very good internal congruence (Cronbach's $\alpha = 0.90$). Specific items are “When I hear about someone (a stranger) going through a difficult time, I feel a great deal of compassion for him or her”; “I tend to feel compassion for people, even though I do not know them”; and “I often have tender feelings toward people (strangers) when they seem to be in need”. The SCBCS scores ranged from 1 (not at all true to me) to 7 (very true of me).

Table 1. Factorial structure of the FraSpir RO (Franciscan Spirituality—religious orders) questionnaire in this sample.

	Living from the Faith	Peaceful Attitude/Respectful Treatment	Commitment to the Disadvantaged	Seeking God in Silence and Prayer	Commitment to the Creation
Cronbach's alpha	0.845	0.835	0.805	0.723	0.631
f1 My faith is my orientation in life	0.799				
f2 I live in accordance with my religious beliefs	0.771				
f4 My faith/spirituality gives meaning to my life	0.760				
f5 I try to track down the divine in the world	0.675				
f6 I have a sense of the Sacred in my life	0.631				0.333
f11 I feel a longing for nearness to God	0.563			0.408	
f24 I check my attitudes and views, because others might be right		0.772			
f23 I understand the positions and opinions of other people and to accept them internally		0.737			
f22 I try to put myself into others and wonder how I would feel in their situation		0.711	0.304		
f26 In conflicts, I always try to find ways of reconciliation		0.665			
f25 I actively go to people who are not on good terms with me, and try to clarify the causes		0.612		0.409	
f21 I am conscious of the fact that I deal with others well and respectfully	0.355	0.543			
f15 I actively engage for the well-being of disadvantaged people			0.831		
f20 I actively engage in the social field			0.789		
f18 I try to find ways to help people in need		0.306	0.762		
f8 I maintain times of silence before God				0.767	
f9 Before important decisions, I seek advice in prayer	0.363			0.694	
f10 I always try to remain a seeker	0.388			0.526	
f14 I am awed by the beauty of God's creation (i.e., persons, animals, plants, landscapes etc.)	0.311				0.686
f16 I am actively involved in the protection and maintenance of creation			0.526		0.635
f12 I maintain humble dealings with the resources entrusted to me					0.634

Extraction method: main component analysis; Varimax rotation with Kaiser normalization (rotation converged in six iterations); these five factors explain 63% of variance.

2.2.6. Altruism (GALS)

Altruism, as a behavior and the consequence of intentional compassion, was measured with the seven-item Generative Altruism Scale (GALS) (Büssing et al. 2013). Specific items are “I help others even when there is no direct benefit”; “When I see individuals in need, I think about how to relieve their distress or meet their needs”; and “When I see individuals in need, I ask them how I can help”, etc. All items were scored on a four-point scale measuring the intensity of the respective attitude or behavior (0—never; 1—sometimes; 2—often; 3—very often).

2.3. Statistical Analyses

SPSS 23.0 was used to calculate descriptive statistics, internal consistency (Cronbach’s coefficient α), and factor analyses (principal component analysis using Varimax rotation with Kaiser’s normalization) as well as analyses of variance (ANOVA), first order correlations, and stepwise regression analyses.

Mediation modeling was carried out with SPSS 23.0 according to the conceptual theory of Hayes (2013). Since the values of the variables are at very different intervals, we chose the standardized z-factor variables to adjust the mediation models.

Due to the exploratory nature of this study, the significance level of ANOVA and correlation analyses were set at $p < 0.01$. Regarding the classification of the strength of the observed correlations, we considered $r > 0.5$ as a strong correlation, an r between 0.3 and 0.5 as a moderate correlation, an r between 0.2 and 0.3 as a weak correlation, and $r < 0.2$ as negligible or no correlation.

3. Results

3.1. Participants

We enrolled 388 brothers and sisters from the Franciscan family (Table 2). Among them, 55.5% were male and 44.5% female; their mean age was 61 ± 25 years (range 25 to 88 years); women were on average 4 years older than men ($F = 5.7$, $p = 0.018$). Ninety-one were from German-speaking countries (Germany, Austria, Switzerland), 25 from Italy, 24 from Ireland and England, 104 from the USA, 31 from Canada, 19 from Australia, 11 from Hong Kong, 9 from Kenya, and 74 from other countries. The majority of respondents were from the Franciscan (Minors), Capuchin, and Poor Clare branches of the Franciscan family, while one third were from other branches (including the Franciscan Friars of Renewal). We did not follow the normal division of the Franciscan family, but referred to the number of persons in the major responding groups.

Most see themselves as more charitable (88%), 12% as more contemplative persons (Table 2). In terms of gender, 9% of male and 14% of female participants considered themselves as contemplative; this difference is not statistically significant. Further, although the proportion of contemplative persons within the branch of Poor Clares was somewhat higher (23%) compared to the other Franciscan groups (ranging from 9 to 13%), these differences were not statistically significant.

The statement that they live in their community rather ‘separated’ from the people in their area was answered positively by 31% (44% would not agree and 25% were undecided) (Table 2). Sixty-three percent said that people care a lot about their lifestyle (11% disagreed and 27% were unsure about it); yet, 89% said that they had so much to offer to the world (3% disagreed and 8% were undecided).

Table 2. Description of the sample (N = 388).

	Scores
Age (years) (Mean \pm SD)	61 \pm 25
Gender (%)	
Women	45.5
Men	55.5
Franciscan Communities (%)	
Franciscans (m/f)	31
Capuchins (m)	27
Poor Clares (f)	9
Other (m/f)	33
Self-perception (% agreement)	
Charitably engaged person	88
Contemplative person	12
Perception of religious lifestyle (% agreement)	
Community lives rather ‘separated’ from the people in our area	31
People care a lot about our lifestyle	63
Community has so much to offer to the world	89

3.2. Expression of FraSpir Attitudes and Behaviors in the Sample

The core dimensions of “Living from the Faith” and “Seeking God in Silence and Prayer” were most highly valued in the group, especially among women (Table 3). “Commitment to the Creation” also scored high, while the interpersonal factors “Peaceful Attitude/Respectful Treatment” and “Commitment to the Disadvantaged” scored lower, but still at a high level. The strongest gender differences were found in the dimension “Seeking God in Silence and Prayer”, which were higher for women than for men.

Table 3. Expression of FraSpir RO scores in the sample.

		Living from the Faith	Seeking God in Silence and Prayer	Peaceful Attitude/Respectful Treatment	Commitment to the Disadvantaged	Commitment to the Creation
	Range	0–4	0–4	0–4	0–4	0–4
All (n = 373)	Mean	3.62	3.38	3.04	2.91	3.10
	SD	0.47	0.63	0.06	0.81	0.63
All (n = 373)	z-Mean *	0.02	0.01	0.01	−0.01	0.00
	z-SD *	0.94	0.99	0.99	1.00	1.00
Gender						
Men (n = 207)	z-Mean	−0.12	−0.21	−0.13	−0.12	−0.11
	z-SD	1.00	0.99	0.96	1.00	0.97
Women (n = 166)	z-Mean	0.19	0.28	0.18	0.14	0.13
	z-SD	0.84	0.92	1.00	0.98	1.03
F value		10.19	23.46	9.18	6.66	5.33
p value		0.002	<0.0001	0.003	0.010	0.021
Self-view						
Charitable (n = 310)	z-Mean	−0.02	−0.03	0.02	0.05	0.02
	z-SD	0.98	0.99	0.97	0.98	1.00
Contemplative (n = 42)	z-Mean	0.32	0.35	−0.15	−0.30	−0.04
	z-SD	0.78	0.78	1.10	1.14	1.09
F value		4.71	5.96	1.09	4.45	0.10
p value		0.031	0.015	n.s.	0.036	n.s.

* Standardized z-factor values; moderate to strong effects are highlighted (bold). n.s. — not significant

“Living from the Faith” and “Seeking God in Silence and Prayer” performed significantly better among people who see themselves as more committed to contemplation than to charity, while “Commitment to the Disadvantaged” performed significantly lower among contemplative people (Table 3).

3.3. *FraSpir Attitudes and Behaviors and Their Relation to Experiential Forms of Spirituality*

According to the underlying concept, the experiential aspects of spirituality (e.g., “Perception of the Sacred” and “Gratitude/Awe”) were strongly connected to “Living from the Faith” (Table 4). Although “Seeking God in Silence and Prayer” was also strongly associated with “Living from the Faith”, this variable was only moderately related to the experiential aspects.

The interpersonal (diakonic) ‘outcomes’ (e.g., “Peaceful Attitude/Respectful Treatment” and “Commitment to the Disadvantaged”) were moderately related to the experiential aspects of spirituality (e.g., “Perception of the Sacred” and “Gratitude/Awe”), while the nature-related ‘outcome’ (e.g., “Commitment to the Creation”) was strongly related to “Gratitude/Awe” and moderately related to the perception of the sacred as well.

3.4. *FraSpir Attitudes and Behaviors and Their Relationship to Perceptions of Religious Lifestyle*

The perception that the own community lives ‘separately’ from the people in their area showed no significant associations with the outcomes of FraSpir RO scores (Table 4). Instead, there were weak to moderate associations with the view that people are interested in their religious lifestyle as Franciscans and that they have so much to offer to others. The strongest positive correlation was found for “Peaceful Attitude/Respectful Treatment” and the perception that the community has much to offer to the world.

3.5. *FraSpir Attitudes and Behaviors and Their Relationship to Commitment, Compassion, and Altruism*

As “Commitment to the Disadvantaged” was in fact weakly linked to the core aspects of Franciscan spirituality (e.g., “Living from the Faith” and “Seeking God in Silence and Prayer”), according to our model (Figure 1), then it was important to analyze these dimensions with respect to compassion as an ideal and altruism as a subsequent concrete activity. As Table 4 shows, the clear statements of the factor “Living from the Faith” were much more connected to Compassion than to Altruism, while the contemplative approach “Seeking God in Silence and Prayer” was only weakly related to Compassion and Altruism. Rather, it was the “Peaceful Attitude/Respectful Treatment” that was moderately associated with Compassion and Altruism (Table 4). Surprisingly, Compassion was much more positively linked to “Commitment to the Creation” than to “Commitment to the Disadvantaged”. Detailed analyses showed that item f12 in particular (“I maintain a humble dealing with the resources entrusted to me”) from the scale “Commitment to the Creation” correlated best with Compassion ($r = 0.37$), but only weakly with Altruism ($r = 0.17$), while from the scale “Commitment to the Disadvantaged”, item f18 (“I try to find ways to help people in need”) correlated best with Compassion ($r = 0.38$) and Altruism ($r = 0.37$).

Gradual regression analyses (with the variables that showed a significant impact so far) showed that brothers’ and sisters’ Compassion (as an ideal) can be predicted by seven variables, best by Gratitude/Awe and “Peaceful Attitude/Respectful Treatment” (Table 5), both of which explained 27% of variance. The next five variables (including “Commitment to the Creation” and Perception of the Divine) added 7% of explained variance to the model. Interestingly, “Seeking God in Silence and Prayer” was a negative predictor in this model. Altruism (as a concrete behavior) was predicted by five variables, best by “Commitment to the Disadvantaged” and Gratitude/Awe (Table 4), both of which explained 21% of variance. The other three added 4% of explained variance to the model. Here, “Commitment to the Creation” had a negative influence on this prediction model. In both models, the perception that the community had so much to offer was one of the most significant predictors, while “Living from the Faith” was not significant.

Table 4. Correlation between FraSpir RO attitudes and behaviors and external measures.

	Mean ± SD (Theoretical Range)	Living from the Faith	Seeking God in Silence and Prayer	Peaceful Attitude/Respectful Treatment	Commitment to the Disadvantaged	Commitment to the Creation
Franciscan-inspired spirituality (FraSpir RO)						
Living from the Faith	3.6 ± 0.6 (0–4)	1.000				
Seeking God in Silence and Prayer	3.4 ± 0.6 (0–4)	0.612 **	1.000			
Peaceful Attitude/Respectful Treatment	3.0 ± 0.6 (0–4)	0.454 **	0.430 **	1.000		
Commitment to the Disadvantaged	2.9 ± 0.8 (0–4)	0.262 **	0.258 **	0.480 **	1.000	
Commitment to the Creation	3.1 ± 0.6 (0–4)	0.398 **	0.422 **	0.538 **	0.482 **	1.000
Experiential aspects of spirituality						
Perception of the Divine (DSES-6)	27.8 ± 5.8 (6–36)	0.512 **	0.376 **	0.474 **	0.336 **	0.446 **
Gratitude/Awe (GrAw-7)	16.5 ± 3.4 (0–21)	0.513 **	0.388 **	0.421 **	0.325 **	0.506 **
Perception of religious lifestyle						
FS1 Community lives ‘separated’	1.8 ± 1.2 (0–4)	0.023	0.030	−0.047	−0.120	−0.007
FS2 Community has so much to offer	3.4 ± 0.8 (0–4)	0.301 **	0.271 **	0.330 **	0.231 **	0.315 **
FS3 People care a lot about our lifestyle	2.8 ± 1.0 (0–4)	0.296 **	0.253 **	0.264 **	0.213 **	0.309 **
Prosocial care for others						
Compassion (SCBCS)	6.1 ± 0.5 (1–7)	0.321 **	0.233 **	0.448 **	0.365 **	0.449 **
Altruism (GALS)	1.6 ± 0.5 (0–3)	0.262 **	0.208 **	0.383 **	0.369 **	0.234 **

** $p < 0.001$ (Spearman rho); moderate to strong correlations are highlighted (bold).

Table 5. Predictors of Compassion and Altruism (stepwise regression analyses).

Dependent Variable: Compassion			
Model 7: $F = 23.9$, $p < 0.001$; $R^2 = 0.34$			
	Beta	T	p
(constant)		12.211	0.000
Peaceful Attitude/Respectful Treatment (FraSpr RO)	0.182	2.891	0.004
Gratitude/Awe (GrAw-7)	0.218	3.754	0.000
Commitment to the Creation (FraSpir RO)	0.155	2.617	0.009
FS2 Community has so much to offer to the world	0.149	2.997	0.003
Seeking God (FraSpir RO)	−0.168	−3.027	0.003
Perception of the Divine (DSES)	0.125	2.115	0.035
Commitment to the Disadvantaged (FraSpir RO)	0.106	1.972	0.049
Not significant in the model: Living from the Faith (FraSpir RO)			
Dependent Variable: Altruism			
Model 5: $F = 21.0$, $p < 0.001$; $R^2 = 0.25$			
	Beta	T	p
(constant)		1.380	0.169
Commitment to the Disadvantaged (FraSpir RO)	0.259	4.386	0.000
Gratitude/Awe (GrAw-7)	0.250	4.388	0.000
Peaceful Attitude/Respectful Treatment (FraSpr RO)	0.181	2.803	0.005
Commitment to the Creation (FraSpir RO)	−0.156	−2.458	0.015
FS2 Community has so much to offer to the world	0.115	2.191	0.029
Not significant in the model: Living from the Faith (FraSpir RO), Seeking God (FraSpir RO), Perception of the Divine (DSES)			

3.6. Mediator Analyses with Compassion and Altruism as Outcomes

Mediation analysis allows the researcher to investigate not only a direct effect of one variable on another, but also indirect effects that a variable can have on a model. We therefore wanted to analyze whether Gratitude/Awe, which belongs to the best predictors of Altruism and Compassion, could be a mediator of the effect of the Perception of the Divine in daily life (as regressor X) on Compassion and Altruism (as outcome Y). A simple mediation model was used for two scenarios—first, a simple regression to Compassion (Y1), and second to Altruism (Y2) (Table 6). All three statistical models were significant—total, direct, and indirect (Figure 2). The indirect effect of the Perception of the Divine (DSES-6; X) on Compassion (Y1) mediated by Gratitude/Awe (M) was 0.05 ± 0.02 ($p < 0.01$), corresponding to 13.5% of the total effect model, and that on Altruism (Y2) mediated by Gratitude/Awe (M) was 0.03 ± 0.02 ($p = 0.04$), corresponding to 10% of the total effect model. One should not be distracted by the small values for the total amount of declared variance in these models (R^2); since only simple regression models are used with mediators, it is natural that the expected declared variance is not very large.

Table 6. Model coefficients for Compassion and Altruism mediated by Gratitude/Awe.

Variables	Mediator (Gratitude/Awe)			Y1 (Compassion)			Y2 (Altruism)		
	β	SE	p	β	SE	p	β	SE	p
X (DSES)	0.22	0.04	<0.001	0.32	0.05	<0.001	0.26	0.05	<0.001
M (GrAw)	-	-	-	0.25	0.06	<0.001	0.14	0.06	0.02
Constant	-0.01	0.04	0.87	-0.01	0.05	0.97	0.01	0.05	0.93
R ² = 0.07			R ² = 0.19			R ² = 0.10			
F(1,327) = 25.89, $p < 0.001$			F(2,326) = 38.66, $p < 0.001$			F(2,322) = 18.48, $p < 0.001$			

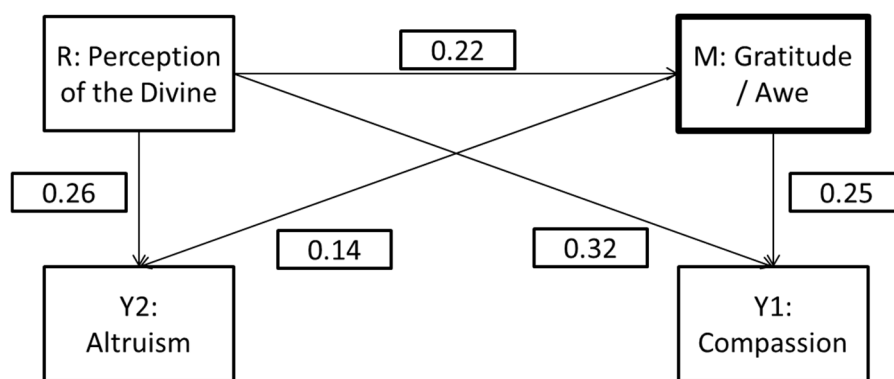


Figure 2. Mediation model (direct model) for Compassion (Y1) and Altruism (Y2) mediated by Gratitude/Awe (M) and the Perception of the Divine as a regressor (R). Scores are β values.

Another question is whether “Living from the Faith” (as the core of Franciscan spirituality) is the mediator of the effect of either the Perception of the Divine (X1) or Gratitude/Awe (X2) on Compassion and Altruism as outcomes (Y). With the Perception of the Divine (X1) as a regressor, all three statistical models were significant (Table 7, Figure 3). The indirect effect of the Perception of the Divine (DSES-6; X) on Compassion (Y1) mediated by “Living from the Faith” (M) was 0.08 ± 0.03 ($p < 0.01$), which corresponds to 21% of the total effect model, and that on Altruism (Y2) mediated by “Living from the Faith” (M) was 0.06 ± 0.03 ($p = 0.04$), which also represents 21% of the total effect model (Table 7). With Gratitude/Awe (X2) as a regressor, all three statistical models were also significant (Table 8, Figure 4). The indirect effect of Gratitude/Awe (GrAw; X) on Compassion (Y1) mediated by “Living from the Faith” (M) was 0.07 ± 0.02 ($p < 0.01$), which corresponds to 24% of the total effect model, and that on Altruism (Y2) mediated by “Living from the Faith” (M) was 0.06 ± 0.02 ($p < 0.01$), which corresponds to 33% of the total effect model (Table 7).

Table 7. Model coefficients for Compassion and Altruism mediated by “Living from the Faith” and the Perception of the Divine (DSES) as a regressor.

Variables	Mediator “Living from the Faith”			Y1 (Compassion)			Y2 (Altruism)		
	β	SE	p	β	SE	p	β	SE	p
X1 (DSES)	0.49	0.05	<0.001	0.30	0.06	<0.001	0.22	0.06	<0.01
M (Living from Faith)	-	-	-	0.16	0.06	<0.01	0.13	0.06	0.03
Constant	0.01	0.05	0.82	-0.01	0.05	0.96	0.01	0.05	0.99
	$R^2 = 0.26$			$R^2 = 0.16$			$R^2 = 0.10$		
	$F(1,324) = 112.22, p < 0.001$			$F(2,328) = 32.18, p < 0.001$			$F(2,323) = 18.11, p < 0.001$		

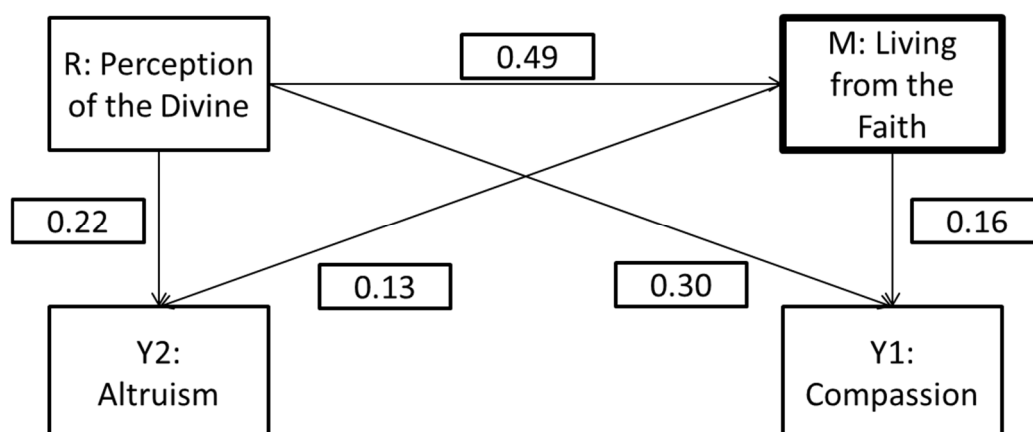


Figure 3. Mediation Model (direct model) for Compassion (Y1) and Altruism (Y2) mediated by “Living from the Faith” (M) and Perception of the Divine as regressor (R). Scores are β values.

Table 8. Model coefficients for Compassion and Altruism mediated by “Living from the Faith” and Gratitude/Awe (GrA was used as a regressor).

Variables	Mediator			Y1			Y2		
	“Living from the Faith”			(Compassion)			(Altruism)		
	β	SE	<i>p</i>	β	SE	<i>p</i>	β	SE	<i>p</i>
X2 (GrAw)	0.30	0.06	<0.001	0.22	0.06	<0.01	0.12	0.06	0.06
M (Living from Faith)	-	-	-	0.23	0.05	<0.001	0.22	0.05	<0.01
Constant	0.01	0.05	0.90	0.01	0.05	0.87	0.01	0.05	0.99
	R ² = 0.07			R ² = 0.12			R ² = 0.07		
	<i>F</i> (1,339) = 26.96, <i>p</i> < 0.001			<i>F</i> (2,338) = 23.67, <i>p</i> < 0.001			<i>F</i> (2,334) = 12.70, <i>p</i> < 0.001		

intentional item f12 (“I maintain a humble dealing with the resources entrusted to me”) ($r = 0.36$) or the concrete behavior item f16 (“I am actively involved in the protection and maintenance of creation”) ($r = 0.28$). Thus, for the brothers and sisters in this sample, it seems to be much easier to be touched by the beauty of nature than by other people.

With regard to the transformative prosocial ‘outcomes’ (i.e., Compassion and Altruism), the FraSpir attitudes and behaviors correlated much more with Compassion than with Altruism as a behavior. However, the ‘core’ dimensions of Franciscan spirituality (i.e., “Living from the Faith” and “Seeking God in Silence and Prayer”) were weakly to moderately related to both prosocial variables, while the ‘outcome’ variables of Franciscan spirituality were much more strongly to moderately related. This is essentially in line with previous findings of young adults from Germany (Büssing et al. 2013) and charitable Catholic adults from Italy (Büssing et al. 2018). Surprisingly, however, the connection between “Living from the Faith” and Compassion was found to be much stronger in Franciscan brother and sisters than the connection with Altruism.

Gradual regression analyses showed that Compassion was best predicted by “Peaceful Attitude/Respectful Treatment” and Gratitude/Awe, while Altruism was best predicted by “Commitment to the Disadvantaged” and Gratitude/Awe; in both models, “Living from the Faith” was not one of the significant variables, but Perception of the Sacred was in the sense of Compassion. Why “Seeking God” was found to be a negative predictor of Compassion in the regression model is unclear. Perhaps this variable refers to a direct encounter with God in prayer and silence, but not to a turn towards others. This corresponds to the finding that those persons who see themselves more as contemplative than charitable persons had a significantly lower “Commitment to the Disadvantaged” and a stronger attitude of “Living from the Faith” and “Seeking God in Silence and Prayer”. Praying (e.g., for others) as an act of loving kindness and Christian *agape* (God-inspired altruistic love to others) are much more a question of spiritual turning towards others than Christian *caritas* (concrete acts of active charity). Obviously, the way in which the brothers and sisters live their life as religious people (‘religious lifestyle’) influences whether and how they can meet with others and work for others.

So far, we have seen that the underlying experiential aspect of their faith (i.e., Perception of the Divine) can lead to different behaviors and commitments. The question is whether the experience of wondering awe and the subsequent feelings of gratitude can influence the effects of the Perception of the Divine on prosocial behavior. In fact, mediator analyses showed that Gratitude/Awe mediates the effects of the Perception of the Divine on Compassion and Altruism. Here the mediating effect on Compassion was greater than that on Altruism. We also wanted to clarify whether “Living from the Faith” as a fundamental aspect of Franciscan spirituality conveys the effect of the Perception of the Divine on prosocial behavior on the one hand, and the effect of Gratitude/Awe on prosocial behavior on the other. In both models, we were able to confirm these mediation effects of “Living from the Faith”. The indirect effects of “Living from the Faith” were stronger than the mediating effects of Gratitude/Awe.

Franciscan brothers and sisters also have to deal with the fact that their community is getting older and that there are few novices (Ebaugh 1993; Berrelleza et al. 2014; Palacios et al. 2015). In addition, there are some experiences that lend the feeling that they are living ‘separately’ from the people in their area and that others are not too much interested in religious topics. However, we found that this perception of ‘separation’ is not significantly related to the charitable aspects of Franciscan-inspired spirituality. Rather, it was crucial that (the few) people who did not agree that people care a lot about their specific lifestyle as religious persons or that their community nevertheless has “so much to offer” had significantly lower FraSpir RO scores compared to the majority of respondents who agreed with both statements. The effect sizes of the standardized z-factor values were quite high and ranged from -0.33 (SD 1.20) to -0.79 (SD 1.10) for people who thought others did not care about their lifestyle and -0.19 (SD 0.99) to -1.02 (SD 1.88) for people who felt they had so much to offer to others. This indicates that their negative view had a negative effect on their spirituality and commitment. If they assume that they and their community still have much to give, they could also be role models for responsible actions in the world in the sense of a holistic

ecology (Figure 1). This would respond to the invitation of Pope Francis, who stated that “educators are needed who are capable of developing an ethics of ecology, and helping people, through effective pedagogy, to grow in solidarity, responsibility and compassionate care” (Pope Francis, *Laudato Si'*, 210). He argued that, above all, Christian communities are responsible for “raising people’s awareness” to “provide an education in responsible simplicity of life, in grateful contemplation of God’s world, and in concern for the needs of the poor and the protection of the environment” (Pope Francis, *Laudato Si'*, 214). These are the aspects of Franciscan-inspired spirituality covered in this study that are relevant to the connection between faith, experience, and commitment.

Limitations

We do not assume that the study population is representative for all Franciscans worldwide. There are several different branches of the Franciscan family, and not all responded to our call to participate. Moreover, as we did not compare data of these different branches, we thus cannot draw any further conclusions related to their specific missions. Furthermore, with this sample, apart from influences which might be due the different missions of the branches, we cannot analyze possible cultural influences. Here, larger studies are needed.

We are aware that the strategy of snowball sampling and the decision to conduct an online survey could have meant that only those brothers and sisters with internet access had a chance to respond. Through a letter of invitation, we also offered the opportunity to receive the questionnaire in paper form; however, only 17 persons took advantage of this opportunity (4%).

In relation to the relatively high mean age of the participants (61 ± 25 years), one could also argue that elderly people have less access to the internet, and we cannot rule out this proposal. However, in our sample, 33% of the participants were >70 years of age.

Furthermore, the cross-sectional design of the study does not allow any causal conclusions about observed effects that are only correlative.

5. Conclusions

The results of this study on Franciscan brothers and sisters have shown a complex interplay of core elements of faith and experiential aspects of spirituality, affecting their ideals and intentions to behave differently, and leading to a compassionate and responsible approach to the divine creation (e.g., environment and people). However, it was surprising that “Commitment to the Disadvantaged” was weakly only linked to the core aspects of Franciscan spirituality (e.g., “Living from the Faith” and “Seeking God in Silence and Prayer”). It could be shown that “Living from the Faith” was much more connected to Compassion as an intention rather than to Altruism as an action, while the contemplative approach of “Seeking God in Silence and Prayer” was only weakly related to Compassion and Altruism. Mediation analyses revealed that “Living from the Faith” conveys the positive effect of perceiving the sacred in life on prosocial behavior on the one hand, and the effect of Gratitude/Awe on prosocial behavior on the other. Thus, this core aspect of Franciscan spirituality modulates the positive influence of the perceptive aspects of spirituality on prosocial behavior. Interestingly, this core aspect scored highest in contemplative brothers and sisters within the different branches of Franciscan orders when compared to more charitably engaged persons; however, their “Commitment to the Disadvantaged” scores were significantly lower. These differences could also be ascribed to the different charisms and missions of the Franciscan branches.

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References

- Berrelleza, Erick, Mary L. Gautier, and Mark M. Gray. 2014. *Population Trends among Religious Institutes of Women*. CARA—Center for Applied Research in the Apostolate. Special Report Fall 2014, pp. 1–8. Available online: <https://cara.georgetown.edu/product/population-trends-among-religious-institutes-of-women-fall-2014/> (accessed on 21 July 2018).
- Blastic, Michael. 1993. Franciscan Spirituality. In *The New Dictionary of Catholic Spirituality*. Edited by Michael Downey. Collegeville: The Liturgical Press, pp. 408–18. ISBN 978-0-814-65525-2.
- Büssing, Arndt, Phillip Kerkseick, Andreas Günther, and Klaus Baumann. 2013. Altruism in Adolescents and Young Adults: Validation of an Instrument to Measure Generative Altruism with Structural Equation Modeling. *International Journal of Children's Spirituality* 18: 335–50.
- Büssing, Arndt, Markus Warode, Mareike Gerundt, and Thomas Dienberg. 2017. Validation of a novel instrument to measure elements of Franciscan-inspired spirituality in a general population and in religious persons. *Religions* 8: 197. doi:10.3390/rel8090197.
- Büssing, Arndt, Federico Baiocco, and Klaus Baumann. 2018. Spiritual dryness in Catholic lay persons working as volunteers is related to reduced life satisfaction rather than to indicators of spirituality. *Pastoral Psychology* 67: 1–15. doi:10.1007/s11089-017-0798-5.
- Dienberg, Thomas. 2009. Das Leben nach dem Evangelium. Modernes Management und die Regel des heiligen Franziskus. *Wissenschaft und Weisheit* 71: 196–227.
- Dienberg, Thomas. 2013. *Economia e spiritualità. Regola francescana e cultura d'impresa*. Bologna: Edizioni Dehoniane.
- Dienberg, Thomas. 2016. *Leiten—Von der Kunst des Dienens*. Franziskanische Akzente. Würzburg: Echter-Verlag. ISBN 978-3429039356.
- Dienberg, Thomas, and Markus Warode. 2015. Evangelical Poverty and the “Fraternal Franciscan Economy”—New aspects for a reflected business education. Paper presented at the 9th International Conference on Catholic Social Thought and Business Education, Prosperity, Poverty and the Purpose of Business. Rediscovering Integral Human Development in the Catholic Social Tradition, Manila, Philippines, 26–28 February 2015.
- Ebaugh, Helen Rose. 1993. The Growth and Decline of Catholic Religious Orders of Women Worldwide: The Impact of Women's Opportunity Structures. *Journal for the Scientific Study of Religion* 32: 68–75.
- Francis, Pope. 2015. *Encyclical Letter LAUDATO SI' of the Holy Father Francis on the Care of Our Common Home*. Libreria Editrice Vaticana. Available online: http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html (accessed on 21 July 2018).
- Hayes, Andrew F. 2013. *Introduction to Mediation, Moderation, and Conditional Process Analysis*. New York: The Guilford Press.
- Hwang, Jeong Yeon, Thomas Plante, and Katy Lackey. 2008. The Development of the Santa Clara Brief Compassion Scale: An Abbreviation of Sprecher and Fehr's Compassionate Love Scale. *Pastoral Psychology* 56: 421–28.
- Jull, Andre. 2001. Compassion: A concept exploration. *Nursing Praxis in New Zealand* 17: 16–23.
- Kuster, Niklaus. 2016. *Franziskus. Rebell und Heiliger*. Freiburg: Herder. ISBN 978-3-451-30153-7
- Palacios, Santiago Sordo, Thomas P. Gaunt, and Mary L. Gautier. 2015. *Population Trends among Religious Institutes of Men*. CARA—Center for Applied Research in the Apostolate. Special Report Fall 2015, pp. 1–8. Available online: <https://cara.georgetown.edu/product/religious-institutes-of-men-trends-special-report-fall-2015/> (accessed on 21 July 2018).
- Pessi, Anne Borgitta. 2011. Religiosity and Altruism: Exploring the Link and its Relation to Happiness. *Journal of Contemporary Religion* 26: 1–18.
- Peters, Frank. 1995. *Aus Liebe zur Liebe. Der Glaubensweg des Menschen als Nachfolge Christi in der Spiritualität des hl. Franziskus von Assisi*. Kevelaer: Butzon & Bercker. ISBN 978-3-7666-9947-3.
- Piliavin, Jane Allyn, and Hong-Wen Charnng. 1990. Altruism: A Review of Recent Theory and Research. *Annual Review of Sociology* 16: 27–65.
- Seelig, Beth J., and Lisa S. Rosof. 2001. Normal and Pathological Altruism. *Journal of the American Psychoanalytic Association* 49: 933–59.
- Spoto, Donald. 2003. *Reluctant Saint: The Life of Francis of Assisi*. London: Penguin Books. ISBN 0142196258.

- Underwood, Lynn G. 2011. The Daily Spiritual Experience Scale: Overview and Results. *Religions* 2: 29–50.
- Underwood, Lynn G., and Teresi, Jeanne A. 2002. The Daily Spiritual Experience Scale: Development, Theoretical Description, Reliability, Exploratory Factor Analysis, and Preliminary Construct Validity Using Health-Related Data. *Annals of Behavioral Medicine* 24: 22–33.
- Williams, Christopher R. 2008. Compassion, Suffering and the Self. A Moral Psychology of Social Justice. *Current Sociology* 56: 5–24.



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