



Lincoln Bishop
University

LB Research Online

Francis, L.J., Fabri, J.M.G., McKenna, U., de Freitas Guimarães, F., Silva, R.M.C.R.A., Figueiredo, A.S., Caldeira, S. and Pereira, E.R. (2025) *Psychological Type, Emotional Temperament, and Burnout Among Catholic Priests in Brazil: A Pilot Empirical Enquiry*. Pastoral Psychology. ISSN 0031 2789

This is an author accepted manuscript of an open access article published by Springer in its final form on 6th October 2025 at <https://doi.org/10.1007/s11089-025-01254-y> and made available under a [CC BY-NC 4.0 Deed](#) | [Creative Commons licence](#).

This version may differ slightly from the final published version.

Accepted 20.8.2025: *Pastoral Psychology*

Psychological type, emotional temperament, and burnout among Catholic priests in Brazil:

A pilot empirical enquiry

Leslie J. Francis*

Centre for Research in Intellectual and Developmental Disabilities (CIDD)

University of Warwick, Coventry, UK

World Religions and Education Research Unit

Bishop Grosseteste University, Lincoln, UK

<https://orcid.org/0000-0003-2946-9980>

Janaína Mengal Gomes Fabri

Faculty of Nursing, State University of Rio de Janeiro, Brazil

Health Care Sciences Program, Fluminense Federal University, Rio de Janeiro, Brazil

Health Sciences Institute, Portuguese Catholic University, Lisboa, Portugal

<http://orcid.org/0000-0002-4777-4746>

Ursula McKenna

World Religions and Education Research Unit

Bishop Grosseteste University, Lincoln, UK

<https://orcid.org/0000-0002-2625-7731>

Fabio de Freitas Guimarães

Institute of Psychology, Pontifical Gregorian University, Rome, Italy

<https://orcid.org/0000-0002-0085-356X>

Rose Mary Costa Rosa Andrade Silva

Health Care Sciences Program, Fluminense Federal University, Rio de Janeiro, Brazil

<https://orcid.org/0000-0001-9693-6791>

Amélia Simões Figueiredo

Health Sciences Institute, Portuguese Catholic University, Lisboa, Portugal

<https://orcid.org/0000-0003-2908-4052>

Sílvia Caldeira

Health Sciences Institute, Portuguese Catholic University, Lisboa, Portugal

<http://orcid.org/0000-0002-9804-2297>

Eliane Ramos Pereira

Health Care Sciences Program, Fluminense Federal University, Rio de Janeiro, Brazil

<http://orcid.org/0000-0002-6381-3979>

Author note:

*Corresponding author:

Leslie J. Francis

Centre for Research in Intellectual and Developmental Disabilities (CIDD)

The University of Warwick

Email: leslie.francis@warwick.ac.uk

IMPORTANT NOTE TO COPYEDITOR

Please note that this paper has been prepared taking into account the provision made by section 8.18 in APA7 style guide to avoid ambiguity in in-text citations. In view of the number of multi-authored references with the same lead author, the convention has been adopted of abbreviating references with four or more names in the form of Name, Name, et al. (date) and allowing references with three authors to stand in the form of Name, Name, and Name (date). Please allow this convention to stand.

Abstract

This study was designed to test the power of psychological type and emotional temperament to predict individual differences in self-perceived work-related psychological wellbeing and professional burnout among Catholic priests serving in Brazil. A snowball sample of 147 Catholic diocesan priests completed the Francis Burnout Inventory (FBI) and the Francis Psychological Type and Emotional Temperament Scales (FPTETS). The FBI employs the model of balanced affect, where negative affect is assessed by the Scale of Emotional Exhaustion in Ministry and where positive affect is assessed by the Satisfaction in Ministry Scale. The data demonstrated that extraversion and emotional volatility were key predictors of individual differences in levels of both positive affect and negative affect. Priests recording high introversion and high emotional volatility were more prone to experiencing burnout. Consistent with findings from research in other cultural contexts these data affirm the value of psychological profiling for identifying priests more susceptible to burnout.

Keywords: Catholic priests, psychological wellbeing, burnout, psychological type, balanced affect, neuroticism

Introduction

Pacciolla and Sanagiotto (2022) reported on a recent descriptive study addressing the burnout syndrome among Brazilian priests and religious, employing the Maslach Burnout Inventory (Maslach & Jackson, 1986). Their analyses indicated that Brazilian priests and religious have high/medium levels of emotional exhaustion, high levels of depersonalization, and high levels of personal achievement. This descriptive study also demonstrated significant differences according to age, time since religious consecration or priestly ordination, and number of hours worked. Drawing on this same set of data, Sanagiotto (2024) correlated the indices of burnout with the five psychopathological personality domains captured by the Short Form Personality Inventory for DSM (PID-5-SF; Maples et al., 2015). This analysis indicated that burnout is mostly predicted by negative affectivity and detachment. The important contribution of this study is that it draws attention to the vulnerability of Brazilian priests and religious to the burnout syndrome and to the need for further research to delve deeper into the psychological dynamics predisposing vulnerability to burnout and into the pastoral mechanisms that may offer informed preventative strategies.

In the current context research focused on the work-related psychological wellbeing and professional burnout among Catholic priests in Brazil is important for two reasons. According to Datafolha (2019), Brazil is not only considered to have the second-largest Christian population in the world after the United States of America, but Catholicism accounts for more than half of this Christian population (51.4%).

The aim of the present study is to build on the foundations put in place by Pacciolla and Sanagiotto (2022) and Sanagiotto (2024) and to do so by proposing three developments from their original study. The first development is to employ a different conceptualization and measurement of burnout, employing the Francis Burnout Inventory (Francis, Kaldor, et al., 2005) in place of the Maslach Burnout Inventory. The second development is to

incorporate a recognized measure of non-pathological personality within the research design. The third development is to focus specifically on Catholic priests rather than on a mixed sample of priests and religious, given that the experience of these two constituencies may be somewhat different. The theoretical basis for the first two of these developments needs to be introduced in some depth.

Conceptualization and measurement of burnout

The Maslach Burnout Inventory (Maslach & Jackson, 1986) conceptualizes and assesses burnout by three scales: emotional exhaustion (9 items), depersonalization (5 items), and personal accomplishment (8 items). Maslach (2003) conceptualizes the connection among these three indices as developmental or progressive. Burnout is initiated by emotional exhaustion; emotional exhaustion leads to the depersonalization of clients; the depersonalization of clients leads to withdrawal of affirmation and a sense of less personal accomplishment. While this may be an attractive theory, it is not one that immediately suggests preventative strategies. There is an inevitability about the relentless progression. Although the Maslach Burnout Inventory has been used in a number of studies conducted among clergy (for recent review see Crea et al., 2024), during the 1980s Rutledge and colleagues questioned the relevance of some of the items for application among clergy and proposed a reworking of these items for clergy studies (see Francis & Rutledge, 2000; Francis, Loudon, & Rutledge, 2004; Francis & Turton, 2004a, 2004b).

The Francis Burnout Inventory (Francis, Kaldor, et al., 2005) was designed *ad initio* specifically for use among clergy and is rooted in a different conceptualization of the nature of burnout. The Francis Burnout Inventory is rooted in a development of the theory of balanced affect as originally proposed by Bradburn (1969). The theory of balanced affect conceptualizes positive affect and negative affect as operating as partially independent systems. According to the theory, it is possible for individuals to experience at the same time

high levels of negative affect and high levels of positive affect. According to this theory, burnout occurs when high levels of negative affect are accompanied by low levels of positive affect, while high levels of positive affect can mitigate the deleterious effects of high levels of negative affect. The important implication of this model of balanced affect is that it proposes an intervention strategy, namely to work on the development of positive affect in order to soften the consequence of negative affect. In the Francis Burnout Inventory negative affect is assessed by the Scale of Emotional Exhaustion in Ministry (10 items), and positive affect is assessed by the Satisfaction in Ministry Scale (10 items).

A series of studies has now validated the balanced affect model of burnout as operationalized by the Francis Burnout Inventory by demonstrating the mitigating effects of satisfaction in ministry on the consequences of emotional exhaustion in ministry as reflected in outcome measures like thoughts of leaving ministry. These studies have been conducted among 744 clergy in The Presbyterian Church USA (Francis, Village, et al., 2011), 658 clergy in the Church of England (Francis, Laycock, & Brewster, 2017a), 155 Catholic priests in Italy (Francis, Laycock, & Crea, 2017), 95 Catholic priests and 61 religious sisters in Italy (Francis, Crea, & Laycock, 2017), 358 Anglican clergy in the Church in Wales (Village et al., 2018), 99 Anglican clergy in England (Francis, Laycock, & Ratter, 2019), 287 Catholic priests in Italy (Francis, Crea, & Laycock, 2021), 803 Methodist ministers in Great Britain (Francis, Village, & Haley, 2023), and Catholic priests in Portugal (Fabri et al., 2025a).

Conceptualization and measurement of personality

Current literatures exploring connections between personality and individual differences in burnout among clergy embrace three somewhat different conceptualization of personality. The big five factors model of personality, as proposed by Costa and McCrae (1985) has been employed alongside the Maslach Burnout Inventory (Maslach & Jackson, 1986) by Miner (2007a, 2007b), Joseph et al. (2011), and Stephens (2020). This model discusses the five

factors of extraversion, neuroticism, openness, agreeableness, and conscientiousness. A criticism of this model is that it tends to conflate the two different notions of personality and character (Lloyd, 2015). The major three dimensions model of personality, as proposed by Eysenck and Eysenck (1975, 1991) has been employed alongside the Maslach Burnout Inventory (Maslach & Jackson, 1986) by Kay (2000), Rutledge and Francis (2004), Francis, Loudon, and Rutledge (2004), and Francis and Turton (2004a, 2004b). A criticism of this model is that it conflates intentionally the two different notions of personality and psychopathology (Eysenck & Eysenck, 1976).

While the conflation of personality and character or the conflation of personality and psychopathology may not necessarily be problematic within the psychology of individual differences, such conflation becomes problematic within the theology of individual differences as elucidated by Francis and Village (2015). It is for this reason that a third model of personality that avoids such conflation has become attractive within the field of clergy studies (see Francis, Haley, & McKenna, 2023). This third model of personality, known as psychological type theory, has its roots in the conceptualization of Jung (1971) and in the operationalization and development of Jung's ideas by a set of psychometric tools, including the Keirsey Temperament Sorter (Keirsey & Bates, 1978), the Myers-Briggs Type Indicator (Myers & McCaulley, 1985), and the Francis Psychological Type Scales (Francis, 2005; Francis, Laycock, & Brewster, 2017b).

Psychological type theory distinguishes between two cognitive processes: the perceiving process and the judging process. These two processes are then contextualized within a theory of psychological energy (orientation) and a theory concerning the way in which the outside world is approached (attitude). In psychological type theory the perceiving process, the judging process, the orientation, and the attitude toward the outside world are each characterized by two contrasting poles or types.

The perceiving process is concerned with identifying ways in which individuals take in information. Here the two types are defined as sensing and intuition. Sensing types focus on the present realities: they are practical people. Intuitive types focus on the future potentialities: they are visionary people. The judging process is concerned with identifying ways in which individuals evaluate information. Here the two types are defined as thinking and feeling. Thinking types are concerned with objective analysis and dispassionate logic: they are concerned with the good running of systems and organizations and put such strategic issues first. Feeling types are concerned with subjective evaluation and personal involvement: they are humane and warm-hearted people who are concerned with the wellbeing of others (Francis, 2005, pp. 60-64).

The orientations are concerned with identifying the source of psychological energy. Here the two types are defined as extraverts and introverts. Extravert types are energized in the outer world of people and things: they need to re-energize through the stimulation that they receive from people and places. Introvert types are energized by the inner world of ideas and reflection: they need to re-energize through the stimulation they receive from their own company and tranquility (Francis, 2005, pp. 59-60).

The attitudes toward the outer world are concerned with identifying which of the two processes (perceiving or judging) individuals prefer to exercise in the outer world. Here the two types are defined as perceiving and judging. Perceiving types employ their preferred perceiving function (sensing or intuition) in the outer world. Because their outer world is where the data gathering function is employed, perceiving types appear to others to be laid-back, flexible, spontaneous people. Judging types employ their preferred judging function (thinking or feeling) in the outer world. Because their outer world is where the data evaluating function is employed, judging types appear to others to be well-organized, decisive, and prepared people (Francis, 2005, pp. 64-65).

Critics of psychological type theory focus on two main areas. The first area concerns the theoretical roots of the approach. While other models of personality, like the big five factors (Costa & McCrea, 1985) and the three major dimensions (Eysenck & Eysenck, 1975) are rooted in empirical data reduction, psychological type theory is rooted in a conceptual model of cognitive functioning. Far from claiming to capture the essence of all human individual differences, psychological type theory focuses on a clearly defined component (see further Francis, 2005; Lloyd, 2008, 2024). The second area concerns the unsatisfactory psychometric properties of the core measure of psychological type theory, the Myers-Briggs Type Indicator (Myers & McCaulley, 1985) as not complying with standard psychometric practice (see further Francis, 2005; Lloyd, 2008, 2024). However, the Myers-Briggs Type Indicator was not in the first instance designed as a research tool but as a component within facilitated self-discovery. More recently, the Francis Psychological Type Scales were specifically designed to meet standard psychometric practice in operationalizing the constructs defined by psychological type theory (see Francis, Laycock, & Brewster, 2017b; Francis & Village, 2022a; Payne et al., 2021; Village, 2021).

The Francis Psychological Type Scales assess preferences for extraversion, introversion, sensing, intuition, thinking, feeling, judging, and perceiving by identifying ten clear characteristics associated with each preference and by pairing such characteristics in forced-choice format against the opposite preference. The resulting eight scale scores are then weighted to transform continuous scale scores into categorical preferences. The eight preferences are characterized by the following descriptors.

Extraverts: active, sociable, having many friends, like parties, energized by others, happier working in groups, socially involved, talkative, an extravert, speak before thinking.

Introverts: reflective, private, a few deep friendships, dislike parties, drained by too many people, happier working alone, socially detached, reserved, an introvert, think before speaking.

Sensing types: interested in facts, practical, the concrete, prefer to make, conventional, concerned about details, sensible, present realities, keep things as they are, down to earth.

Intuitive types: interested in theories, inspirational, the abstract, prefer to design, inventive, concerned for meaning, imaginative, future possibilities, improve things, up in the air.

Thinking types: justice, analytic, thinking, firm, critical, logical, truthful, skeptical, seek for truth, fair-minded.

Feeling types: harmony, sympathetic, feeling, gentle, affirming, humane, tactful, trusting, seek for peace, warm-hearted.

Judging types: happy with routine, structured, act on decisions, like to be in control, orderly, organized, punctual, like detailed planning, happier with certainty, systematic.

Perceiving types: unhappy with routine, open-ended, act on impulse, like to be adaptable, easy going, spontaneous, leisurely, dislike detailed planning, happier with uncertainty, casual.

Psychological type and professional burnout

In the wider research literature the connections between psychological type and burnout were documented by Reid (1999), Lemkau et al. (1988), and Myers et al. (1998, p. 238).

According to these studies introverts and thinking types emerged as more susceptible to burnout. In the literature on burnout among clergy, a series of nine studies has explored the connection between the two measures of emotional exhaustion in ministry and satisfaction in ministry proposed by the Francis Burnout Inventory (Francis, Kaldor, et al., 2005) and the four components of psychological type (the two orientations, the two perceiving functions,

the two judging functions, and the two attitudes) as assessed by the Francis Psychological Type Scales (Francis, 2005). These studies have been conducted among 748 clergy serving in the Presbyterian Church (USA) by Francis, Wulff, and Robbins (2008), among 3,715 clergy from Australia, England and New Zealand by Francis, Robbins, et al. (2009), among 521 clergy serving in rural ministry in the Church of England by Brewster, Francis, and Robbins (2011), among 874 clergywomen serving in the Church of England by Robbins and Francis (2010), among 134 lead elders within the Newfrontiers network of churches serving in the United Kingdom by Francis, Gubb, and Robbins (2012), among 212 Australian clergywomen drawn from 14 denominations or streams of churches by Robbins et al. (2012), among 266 clergymen serving in the Church in Wales by Francis, Payne, and Robbins (2013), among 155 Catholic priests serving in Italy by Francis and Crea (2015), and among 589 Canadian Baptist clergy by Durkee-Lloyd (2016).

In terms of emotional exhaustion all nine studies reported significantly higher scores recorded by introverts than by extraverts. Five of the nine studies also reported significantly higher scores recorded by thinking types than by feeling types. One of the nine studies reported significantly higher scores recorded by perceiving types than by judging types. In terms of satisfaction in ministry, eight of the nine studies reported significantly higher scores recorded by extraverts than by introverts. Five of the nine studies also reported significantly higher scores recorded by feeling types than by thinking types. Three of the nine studies reported significantly higher scores recorded by intuitive types than by sensing types. The clear message from these findings is that extraverts and feeling types fare better in ministry than introverts and thinking types.

The wider research literature on burnout that has employed other models of personality has constantly drawn attention to the key importance of individual differences in the personality factor identified as emotionality or neuroticism. This finding has also been

consistent in research among clergy employing the big five factor model (Miner, 2007a, 2007b; Joseph et al., 2011; Stephens, 2020) or the major three dimensions model (Francis, Loudon, & Rutledge, 2004; Rutledge & Francis, 2004; Francis & Turton, 2004a, 2004b). For this reason Village and Francis (2023) introduced a fifth measure, a measure of emotionality, alongside the four established measures within the Francis Psychological Type Scales (FPTS), leading to the Francis Psychological Type and Emotional Temperament Scales (FPTETS). In this instrument the two preferences, styled as volatile types and as calm types, are characterized by the following descriptors:

Volatile types: emotional, discontented, feel insecure, have mood swings, get angry quickly, feel guilty about things, anxious about things, panic easily, frequently get irritated, easily bothered by things.

Calm types: unemotional, contented, feel secure, stay stable, remain placid, feel guilt free, at ease, stay calm, rarely get irritated, unbothered by things

Research aims

Against this background, the four specific aims of the present study were: to translate and cross-culturally adapt the Francis Psychological Type and Emotional Temperament Scales for use among Catholic priests in Brazil and to generate and test measures to assess the orientation, attitudes, perceiving process, judging process, and emotional temperament; to report on the psychological profile of Catholic priests in Brazil; to report on the levels of positive work-related affect and the levels of negative work-related affect among Catholic priests in Brazil; and to test the predictive power of the five scales of the Francis Psychological Type and Emotional Temperament Scales on the two scales proposed by the Francis Burnout Inventory: the Scale of Emotional Exhaustion in Ministry, and the Satisfaction in Ministry Scale.

Method

Procedure

Before the study reported in the present paper, recognized procedures had been followed for translating the Francis Psychological Type and Emotional Temperament Scales for application in Brazil. The stages adopted were those universally recommended by Beaton et al. (2007) for cross-cultural adaptation and validation, namely: assessment of conceptual and item equivalence; assessment of semantic and idiomatic equivalence; pre-test of the final version; presentation of the translated and adapted version of the instrument to the authors; and content validation. For the present study, data were collected from a snowball sample of 147 Catholic diocesan priests serving in Brazil. Data were collected using an anonymous online form hosted on the *LimeSurvey* Platform and sent by email or social media. Data were collected from March 2022 to August 2023.

Participants

Brazil is a very diverse country culturally, socially, and economically. The survey hosted on the online platform reached participants in all five regions of Brazil (Central-West, Northeast, North, South, and Southeast). Of the 157 Catholic priests serving in Brazil who participated in the survey, 147 completed both the measure of burnout and the measure of psychological type. In terms of age, 33% were under the age of forty, 39% were in their forties, 14% were in their fifties, 9% were in their sixties, and 5% were aged seventy or above; in terms of education, 30% held postgraduate specialization, 21% held masters degrees, and 8% held doctorates; in terms of race, 59% described themselves as white, 27% as brown, 10% as black, 3% as yellow, and 1% as indigenous.

Measures

Burnout was assessed by the Brazilian translation of the two scales proposed by the Francis Burnout Inventory (Fabri et al., 2025b). This instrument comprises two 10-item scales. The 10-item Scale of Emotional Exhaustion in Ministry (SEEM) assesses negative affect. The 10-

item Satisfaction in Ministry Scale (SIMS) assesses positive affect. Each item is rated on a five-point Likert scale: disagree strongly (1), disagree (2), not certain (3), agree (4), and agree strongly (5). Fabri et al. (2025b) reported the following Cronbach alphas for the two scales: SEEM, $\alpha = .83$; SIMS, $\alpha = .85$.

Personality was assessed by the new Brazilian translation of the 50 items proposed by the Francis Psychological Type and Emotional Temperament Scales (FPTETS: Village and Francis, 2023).

Analysis

The data were analyzed by means of the SPSS software using the frequency, reliability, correlation, and regression routines.

Results and discussion

- insert table 1 about here -

The first step in data analysis explored the scaling properties of the Brazilian Portuguese translation of the FPTETS. Not all items in this initial translation performed well. Therefore, reliability analyses were employed to identify the best sets of six items within each of the five groups of items. Table 1 presents the alpha coefficient for each set of six items, the correlations between each item and the sum of the other five items in the set, and the percentage endorsement of the choices reflecting extraversion, sensing, thinking, judging, and emotional instability. The two scales measuring the orientations (extraversion and introversion) and emotionality (volatile and calm) both achieved a good level of internal consistency reliability (orientations, $\alpha = .79$; emotionality, $\alpha = .77$). The other three scales achieved an adequate level of internal consistency reliability (perceiving process, $\alpha = .62$; judging process, $\alpha = .63$; attitudes, $\alpha = .65$).

The item endorsements generally indicated a stronger preference among the priests for extraversion over introversion, with more than half of the priests regarding themselves as

being energized by others (66%), as being socially involved (56%), and as liking parties (55%). The item endorsement consistently indicated a strong preference for sensing over intuition, with more than two thirds of them preferring the concrete (88%) over the abstract, regarding themselves as down to earth (85%) rather than up in the air, seeing themselves as practical (73%) rather than inspirational, and as being sensible (68%) rather than imaginative. The item endorsement generally indicated a stronger preference for feeling than for thinking, with more than half of the priests seeing themselves as humane (73%) rather than logical, regarding themselves as trusting (70%) rather than skeptical, being affirming (59%) rather than critical, and being warm-hearted (55%) rather than fair-minded. The item endorsement generally indicated a stronger preference for judging than for perceiving, with 94% of the priests being happier with certainty than with uncertainty, 75% regarding themselves as punctual rather than leisurely, and 63% seeing themselves as systematic rather than casual. The item endorsement consistently framed these priests as calm rather than volatile, with 81% regarding themselves as staying calm, 66% as feeling secure, 62% as remaining placid, and 60% as staying stable.

- insert table 2 about here -

Table 2 completes the description of the five six-item scales developed for the FPTETS by presenting the means and standard deviations. Table 2 also presents the mean scale scores for the Scale of Emotional Exhaustion in Ministry ($\alpha = .80$) and for the Satisfaction in Ministry Scale ($\alpha = .91$).

- insert table 3 about here -

The second stage in data analysis turns attention to the responses of the Catholic priests to the two scales proposed by the Francis Burnout Inventory (Satisfaction in Ministry Scale and Scale of Emotional Exhaustion in Ministry) in terms of the correlations between each item and the sum of the other nine items in the scale, and in terms of item endorsement

as the sum of the agree and agree strongly responses. With regard to the Satisfaction in Ministry Scale, the item endorsement demonstrates a relatively high level of positive work-related affect, with at least two thirds of the priests endorsing every item: 78% felt that they deal very effectively with the problems of the people in their current ministry; 71% gain a lot of personal satisfaction from working with people in their current ministry; 71% feel that their ministry is really appreciated by people; 70% feel that their pastoral ministry has a positive influence on people's lives; 70% agree that the ministry gives real purpose and meaning to their life; 69% feel that their teaching ministry has a positive influence on people's faith; 69% gain a lot of personal satisfaction from fulfilling their ministry roles; 68% are really glad that they entered the ministry; 67% feel that they have accomplished many worthwhile things in their current ministry; and 67% feel very positive about their current ministry.

With regard to the Scale of Emotional Exhaustion in Ministry, the item endorsement demonstrates quite a high level of negative work-related affect with at least one third of the priests affirming: that fatigue and irritation are part of their daily experience (47%); that they feel drained by fulfilling their ministry roles (42%); that they find themselves frustrated in their attempts to accomplish tasks important to them (40%); that they are feeling negative or cynical about the people with whom they work (39%); that they are less patient with those among whom they minister than they used to be (38%); that they have been discouraged by the lack of support for them (37%); and that they find themselves spending less and less time with those among whom they minister (33%). At least one in five of the priests affirm: that they are becoming less flexible in their dealings with those among whom they minister (29%); that their humor has a cynical and biting tone (29%); and that they are invaded by a sadness they cannot explain (20%).

- insert table 4 about here -

The third stage in data analysis turns attention to the correlations between the five scales of the FPTETS and the two scales of the FBI. The correlations presented in table 4 demonstrate that scores recorded on the Scale of Emotional Exhaustion in Ministry are higher among the emotionally volatile ($r = .34$), among introverts ($r = -.25$), among thinking types ($r = .21$), and among intuitive types ($r = -.20$). Scores recorded on the Satisfaction in Ministry Scale are higher among the emotionally calm ($r = -.20$), among feeling types ($r = -.20$), and among extraverts ($r = .18$). Table 4 also presents the correlations of age and educational level with both the Scale of Emotional Exhaustion in Ministry and the Satisfaction in Ministry Scale. None of these correlations is statistically significant. This finding demonstrates that there is no need to re-examine the correlations between the personality variables and the affect variables controlling for age and for educational level.

Limitations

The first main limitation with the present study is that not all items in the initial translation of the Francis Psychological Type and Emotional Temperament Scales were successful. This is not uncommon with the cross-cultural translation of psychological measures. Although the translation did not support the recovery of the five ten-item scales, it permitted the creation of a satisfactory set of six-item scales. Further work is now needed to revise and test the translation of additional items. Meanwhile, however, these six-item scales have worked sufficiently well in this pilot study to provide data that can stand alongside and build on the more extensive work conducted and reported on the English-language version.

Conclusion

The present study was designed to test the power of psychological type and emotional temperament to predict individual differences in self-perceived work-related psychological wellbeing and professional burnout among Catholic priests in Brazil, as assessed by the balanced affect conceptualization of psychological wellbeing operationalized by the Francis

Burnout Inventory. In order to progress this primary objective, four specific research aims were identified. These aims were examined on data provided by a snowball sample of 147 diocesan Catholic priests serving in Brazil who completed the Brazilian translation of the Francis Burnout Inventory and the Brazilian translation of the Francis Psychological Type and Emotional Temperament Scales.

The first aim was to translate and cross-culturally adapt the Francis Psychological Type and Emotional Temperament Scales for use among Catholic priests in Brazil and to generate and test measures to assess the orientations (introversion and extraversion), the attitudes (judging and perceiving), the perceiving process (sensing and intuition), the judging process (thinking and feeling), and emotional temperament (calm and volatile). While unable to recover the five ten-item scales, five six-item scales have been generated and can be commended for further use. Further research is now needed to build on these foundations to develop and test a wider set of items.

The second aim was to report on the psychological type profile of Catholic priests in Brazil. On the basis of the six-item scales and interpretation of the endorsement of the individual items, in terms of psychological type these priests displayed preferences for extraversion, for sensing, for feeling, and for judging. The preferences for sensing, feeling, and judging are consistent with recent findings among Catholic priests in Australia, Italy, the UK, and the USA, but the preference for extraversion is not reported in these other cultural contexts (for review see Francis & Village, 2022b). In terms of emotional temperament they emerged as calm rather than as volatile. Further research is now needed to develop and to calibrate the Francis Psychological Type and Emotional Temperament Scales in Brazil before these findings can be considered secure.

The third aim was to report on the levels of positive work-related affect and the levels of negative work-related affect among Catholic priest in Brazil. This pilot study reported high

levels of positive affect, alongside high levels of negative affect. For example, two thirds reported that they were really glad that they had entered the ministry (68%), while nearly half reported that fatigue and irritation were part of their daily experience (47%). Compared with findings from Catholic priests in Italy as reported by Francis, Crea, and Laycock (2021), in Brazil positive affect is lower and negative affect is higher. Further research is now needed to test these findings among a wider and more systematic sample of Catholic priests in Brazil.

The fourth aim was to test the predictive power of the five scales of the Francis Psychological Type and Emotional Temperament Scales on the two scales of the Francis Burnout Inventory. The data confirmed the general consensus of previous studies (see Francis, 2018) that the two personality constructs most indicative of propensity to poor work-related psychological wellbeing are the orientations (extraversion and introversion) and the emotional temperaments (calm and volatile). **The greater vulnerability experienced by introverts arises as a direct consequence of the public facing nature of their role:** priestly ministry may involve a great deal of interactions with people and with events, and introverts find this more draining. **The greater vulnerability experienced by the emotionally volatile arises as a direct consequence of the pastoral involvement of their role:** priestly ministry may involve a wide range of emotional challenges and these may cause greater discomfort for the emotionally volatile. Routine psychological profiling during initial and ongoing priestly formation may be helpful in identifying candidates more likely to be vulnerable to burnout (volatile introverts). The purpose of such identification should not be to discourage their priestly vocation but to equip them to anticipate their vulnerability and to be able to navigate such vulnerability wisely. **In practice, this involves enhanced self-awareness and knowledge of appropriate and effective coping strategies.** Further research is now needed within seminaries in Brazil to explore these matters further **within that specific cultural and ecclesial context.**

References

- Beaton, D. E., Bombardier, C., Guillemin, F., Ferraz, M.B. (2007). Recommendations for the Cross-Cultural Adaptation of the DASH & QuickDASH Outcome Measures. [S.l.]: Institute for Work & Health.
- Bradburn, N.M. (1969). *The structure of psychological well-being*. Chicago, IL: Aldine.
doi.org/10.1037/t10756-000
- Brewster, C. E., Francis, L. J., & Robbins, M. (2011). Maintaining a public ministry in rural England: Work-related psychological health and psychological type among Anglican clergy serving in multi-church benefices. In H.-G. Ziebertz, & L. J. Francis (Eds.). *The Public Significance of Religion*. (pp. 241-265). Brill.
doi.org/10.1163/ej.9789004207066.i-495.90
- Costa, P. T., & McCrae, R. R. (1985). *The NEO Personality Inventory*. Odessa, FL: Psychological Assessment Resources. doi.org/10.1037/t07564-000
- Crea, G., Francis, L. J., & McKenna, U. (2024). Assessing the power of the HEXACO to predict professional burnout among Catholic priests in Italy. *Journal of Religion and Health*. Online first. doi.org/10.1007/s10943-024-02202-5
- Datafolha (2019). Perfil e opinião dos Evangélicos no Brasil [Profile and opinion of Evangelicals in Brazil]. <https://oglobo.globo.com/brasil/datafolha-50-dos-brasileiros-sao-catolicos-31-evangelicos-10-nao-tem-religiao-24186896>
- Durkee-Lloyd, J. (2016). The relationship between work-related psychological health and psychological type among Canadian Baptist clergy: A research report. *Journal of Empirical Theology*, 29(2), 201-211. doi.org/10.1163/15709256-12341343
- Eysenck, H. J., & Eysenck, S. B. G. (1975). *Manual of the Eysenck Personality Questionnaire (adult and junior)*. London: Hodder and Stoughton.
doi.org/10.1037/t05462-000

Eysenck, H. J., & Eysenck, S. B. G. (1976). *Psychoticism as a dimension of personality*.

London: Hodder and Stoughton.

Eysenck, H. J., & Eysenck, S. B. G. (1991). *Manual of the Eysenck Personality Scales*.

London: Hodder and Stoughton.

Fabri, J. M. G., Francis, L. J., McKenna, U., Roldão, L. I. F., Pereira, E. R., Village, A., &

Caldeira, S. (2025a). Work-related psychological wellbeing of Catholic Priests in

Portugal: Cross-cultural adaptation and validation of the Francis Burnout Inventory.

Journal of Religion and Health. Online first. doi.org/10.1007/s10943-025-02275-w

Fabri, J. M. G., Francis, L. J., Silva, R. M. C. R. A., Dolores, I. M., Caldeira, S., McKenna,

U., & Pereira, E. R. (2025b). Cross-cultural adaptation and validation of the Francis

Burnout Inventory for application among Christian clergy in Brazil. *Mental Health,*

Religion & Culture. Online first

Francis, L. J. (2005). *Faith and psychology: Personality, religion and the individual*. London:

Darton, Longman and Todd.

Francis, L. J. (2018). Healthy leadership: The science of clergy work-related psychological

health. Edited collection. In R. Brouwer (Ed.), *The future of lived religious leadership*

(pp. 116-134). Amsterdam: VU University Press.

Francis, L. J., & Crea, G. (2015). Work-related psychological health and psychological type:

A study among Catholic priests in Italy. *Mental Health, Religion & Culture*, 18(7),

593-604. doi.org/10.1080/13674676.2014.963996

Francis, L. J., Crea, G., & Laycock, P. (2017). Work-related psychological health among

Catholic religious in Italy: Testing the balanced affect model. *Journal of Empirical*

Theology, 30(2), 236-252. doi.org/10.1163/15709256-12341357

Francis, L. J., Crea, G., & Laycock, P. (2021). Factor structure, reliability and validity of the

Francis Burnout Inventory Revised among Catholic priests and religious sisters in

Italy. *Mental Health, Religion & Culture*, 24(3), 271-282.

doi.org/10.1080/13674676.2020.1786507

Francis, L. J., Gubb, S., & Robbins, M. (2012). Work-related psychological health and psychological type among Lead Elders within the New Frontiers network of churches in the United Kingdom. *Journal of Prevention and Intervention in the Community*, 40(3), 233-245. doi.org/10.1080/10852352.2012.680422

Francis, L. J., Haley, J. M., & McKenna, U. (2023). Psychological type profile of Methodist ministers in Britain: Contributing to the Atlas of Clergy Type Tables. *Research in the Social Scientific Study of Religion*, 33, 102-125. doi.org/10.1163/9789004544574_007

Francis, L. J., Kaldor, P., Robbins, M., & Castle, K. (2005). Happy but exhausted? Work-related psychological health among clergy. *Pastoral Sciences*, 24(2), 101-120.

Francis, L. J., Laycock, P., & Brewster, C. (2017a). Work-related psychological wellbeing: Testing the balanced affect model among Anglican clergy. *Religions*, 8 (118), 1-11. doi.org/10.3390/rel8070118

Francis, L. J., Laycock, P., & Brewster, C. (2017b). Exploring the factor structure of the Francis Psychological Type Scales (FPTS) among a sample of Anglican clergy in England. *Mental Health, Religion & Culture*, 20(9), 930-941. doi.org/10.1080/13674676.2017.1375469

Francis, L. J., Laycock, P., & Crea, G. (2017). Assessing clergy work-related psychological health: Reliability and validity of the Francis Burnout Inventory. *Mental Health, Religion & Culture*, 20(9), 911-921. doi.org/10.1080/13674676.2017.1373333

Francis, L. J., Laycock, P., & Ratter, H. (2019). Testing the Francis Burnout Inventory among Anglican clergy in England. *Mental Health, Religion & Culture*, 22(10), 1057-1067. doi.org/10.1080/13674676.2019.1644304

- Francis, L. J., Loudon, S. H., & Rutledge, C. J. F. (2004). Burnout among Roman Catholic parochial clergy in England and Wales: Myth or reality? *Review of Religious Research*, 46(1), 5-19. doi.org/10.2307/3512249
- Francis, L. J., Payne, V. J., & Robbins, M. (2013). Psychological type and susceptibility to burnout: A study among Anglican clergymen in Wales. In B. R. Doolittle (Ed.) *Psychology of burnout: New research* (pp. 179-192). New York: Nova Science. doi.org/10.1037/e591202013-001
- Francis, L. J., Robbins, M., Kaldor, K., & Castle, K. (2009). Psychological type and work-related psychological health among clergy in Australia, England and New Zealand. *Journal of Psychology and Christianity*, 28(3), 200-212.
- Francis, L. J., & Rutledge, C. J. F. (2000). Are rural clergy in the Church of England under greater stress? A study in empirical theology. *Research in the Social Scientific Study of Religion*, 11, 173-191. doi.org/10.1163/9789004493278_012
- Francis, L. J. & Turton, D. W. (2004a). Reflective ministry and empirical theology: Antidote to clergy stress? In C. A. M. Hermans, & M. E. Moore (Eds.) *Hermeneutics and empirical research in practical theology: The contribution of empirical theology by Johannes A van der Ven* (pp. 245-265). Leiden: Brill. doi.org/10.1163/9789047414650_012
- Francis, L. J. & Turton, D. W. (2004b). Recognising and understanding burnout among the clergy: a perspective from empirical theology. In D. Herl and M.L. Berman (Eds.) *Building Bridges over Troubled Waters: Enhancing pastoral care and guidance* (pp. 307-331). Lima, OH: Wyndham Hall Press.
- Francis, L. J., & Village, A. (2015). Go and observe the sower: Seeing empirical theology at work. *Journal of Empirical Theology*, 28(2), 155-183. doi.org/10.1163/15709256-12341325

- Francis, L. J., & Village, A. (2022a). The Francis Psychological Type Scales (FPTS): Factor structure, internal consistency reliability, and concurrent validity with the MBTI. *Mental Health, Religion & Culture*, 25(9), 931-951.
doi.org/10.1080/13674676.2022.2041584
- Francis, L. J., & Village, A. (2022b). Psychological type profile and temperament of Catholic priests serving in England, Wales, and Ireland. *Mental Health, Religion & Culture*, 25(9), 884-896. doi.org/10.1080/13674676.2021.2017420
- Francis, L. J., Village, A., & Haley, J. J. (2023). The Francis Burnout Inventory: Testing the balanced affect model among Methodist circuit ministers in Great Britain. *Research in the Social Scientific Study of Religion*, 33, 90-101.
doi.org/10.1163/9789004544574_006
- Francis, L. J., Village, A., Robbins, M., & Wulff, K. (2011). Work-related psychological health among clergy serving in The Presbyterian Church (USA): Testing the idea of balanced affect. *Review of Religious Research*, 53(1), 9-22. doi.org/10.1007/s13644-011-0003-8
- Francis, L. J., Wulff, K., & Robbins, M (2008). The relationship between work-related psychological health and psychological type among clergy serving in The Presbyterian Church (USA). *Journal of Empirical Theology*, 21(2), 166-182.
doi.org/10.1163/157092508X349854
- Joseph, E. N., Luyten, P., Corveleyn, J., & de Witte, H. (2011). The relationship between personality, burnout, and engagement among the Indian clergy. *International Journal for the Psychology of Religion*, 21(4), 276-288.
doi.org/10.1080/10508619.2011.607412
- Jung, C. G. (1971). *Psychological types: The collected works* (vol 6). London: Routledge and Kegan Paul.

Kay, W. K. (2000). *Pentecostals in Britain*. Carlisle: Paternoster.

Keirsey, D., & Bates, M. (1978). *Please understand me*. Del Mar, CA: Prometheus Nemesis.

Lemkau J. P., Purdy R. R., Rafferty J. P., Rudisill J. R. (1988). Correlates of burnout among family practice residents. *Journal of Medical Education*, 63(9), 682-91.

doi.org/10.1097/00001888-198809000-00003

Lloyd, J. B. (2008). Myers-Briggs theory: How true, how necessary. *Journal of Psychological Type*, 68, 43-50.

Lloyd, J. B. (2015). Unsubstantiated beliefs and values flaw the Five-Factor model of personality. *Journal of Beliefs and Values*, 36(2), 156-164.

doi.org/10.1080/13617672.2015.1033209

Lloyd, J. B. (2024). Psychological type and the life of faith. *Theology*, 127(2), 119-125.

doi.org/10.1177/0040571X241236906

Maples, J. L., Carter, N. T., Few, L. R., Crego, C., Gore, W. L., Samuel, D. B., Williamson, R. L., Lynam, D. R., Widiger, T. A., Markon, K. E., Krueger, R. F., & Miller, J. D. (2015). Testing whether the DSM-5 personality disorder trait model can be measured with a reduced set of items: An item response theory investigation of the Personality Inventory DSM-5. *Psychological Assessment*, 27(4), 1195-1210.

doi.org/10.1037/pas0000120

Maslach, C. (2003). *Burnout: The cost of caring*. Cambridge, MA: Malor Books.

Maslach, C., & Jackson, S. E. (1986). *Maslach Burnout Inventory manual* (2nd Ed.). Palo Alto, CA: Consulting Psychologists Press.

Miner, M. H. (2007a). Changes in burnout over the first 12 months in ministry: Links with stress and orientation to ministry. *Mental Health, Religion and Culture*, 10(1), 9-16.

doi.org/10.1080/13674670600841819

- Miner, M. H. (2007b). Burnout in the first year of ministry: Personality and belief style as important predictors. *Mental Health, Religion and Culture*, 10(1), 17-29.
doi.org/10.1080/13694670500378017
- Myers, I. B., & McCaulley, M. H. (1985). *Manual: A guide to the development and use of the Myers-Briggs Type Indicator*. Consulting Psychologists Press.
- Myers, I. B., McCaulley, M. H., Quenk, N. L., & Hammer, A. L. (1998). *MBTI manual: A guide to the development and use of the Myers-Briggs Type Indicator*. Palo Alto, CA: Consulting Psychologists Press.
- Pacciolla, A., & Sanagiotto, V. (2022). Exaustos, porém, realizados! Análise descritiva da síndrome de burnout entre os padres e religiosos brasileiros [Exhausted, however, accomplished! Descriptive analysis of burnout syndrome among Brazilian priests and religious]. *Revista Ecclesiastica Brasileira*, 82(321), 193-207.
doi.org/10.29386/reb.v82i321.3942
- Payne, V. J., Lewis, C. A., & Francis, L. J. (2021). Confirming the factor structure of the Francis Psychological Type Scales (FPTS) among a sample of Anglican clergy in Wales. *Mental Health, Religion & Culture*, 24(6), 628-637.
doi.org/10.1080/13674676.2020.1858275
- Reid, J. (1999). The relationships among personality type, coping strategies, and burnout in elementary teachers. *Journal of Psychological Type*, 51, 22-33.
- Robbins, M., & Francis, L. J. (2010). Work-related psychological health among Church of England clergywomen: Individual differences and psychological type. *Review of Religious Research*, 52(1), 57-71.
- Robbins, M., Francis, L. J., & Powell, R. (2012). Work-related psychological health among clergywomen in Australia. *Mental Health, Religion & Culture*, 15(9), 933-944.
doi.org/10.1080/13674676.2012.698044

- Rutledge, C. J. F., & Francis, L. J. (2004). Burnout among male Anglican parochial clergy in England: Testing a modified form of the Maslach Burnout Inventory. *Research in the Social Scientific Study of Religion*, 15, 71-93. doi.org/10.1163/9789047406563_009
- Sanagiotto, V. (2024). Psychological predictors of burnout syndrome among Brazilian priests and religious. *Revista Ecclesiastica Brasileira*, 84(328), 397-419.
doi.org/10.29386/reb.v84i328.5526
- Stephens, N. M. (2020). A correlational model of burnout and personality among clergy in the United States. Andrews University graduate research, dissertation 1721.
- Village, A. (2021). Testing the factor structure of the Francis Psychological Type Scales (FPTS): A replication among Church of England clergy and laity. *Mental Health, Religion & Culture*, 24(4), 336-346. doi.org/10.1080/13674676.2020.1780575
- Village, A., & Francis, L. J. (2023). Introducing the Francis Psychological Type and Emotional Temperament Scales (FPTETS): A study among church leaders and church members. *Religion, Brain and Behaviour*, 13(4), 399-419.
doi.org/10.1080/2153599X.2022.2160800
- Village, A., Payne, V. J., & Francis, L. J. (2018). Testing the balanced affect model of clergy work-related psychological health: Replication among Anglican clergy in Wales. *Rural Theology*, 16(2), 93-100. doi.org/10.1080/14704994.2018.1519918

Table 1

FPTETS: Scale properties

			<i>r</i>	%
<i>Extraversion</i> ($\alpha = .79$)				
Sociable	or	Private	.61	45
Like parties	or	Dislike parties	.47	55
Energised by others	or	Drained by too many people	.36	66
Happier working in groups	or	Happier working alone	.47	53
Socially involved	or	Socially detached	.75	56
An extravert	or	An introvert	.63	46
<i>Sensing</i> ($\alpha = .62$)				
Practical	or	Inspirational	.31	73
The concrete	or	The abstract	.29	88
Prefer to make	or	Prefer to design	.35	67
Sensible	or	Imaginative	.51	68
Present realities	or	Future possibilities	.30	65
Down to earth	or	Up in the air	.39	85
<i>Thinking</i> ($\alpha = .63$)				
Analytic	or	Sympathetic	.43	50
Thinking	or	Feeling	.34	53
Critical	or	Affirming	.39	41
Logical	or	Humane	.48	27
Sceptical	or	Trusting	.36	30
Fair-minded	or	Warm-hearted	.21	45
<i>Judging</i> ($\alpha = .65$)				
Structured	or	Open-ended	.43	47
Orderly	or	Easygoing	.45	37
Organised	or	Spontaneous	.38	49
Punctual	or	Leisurely	.26	75
Happier with certainty	or	Happier with uncertainty	.27	94
Systematic	or	Casual	.50	63
<i>Volatile</i> ($\alpha = .77$)				
Feel insecure	or	Feel secure	.47	34
Have mood swings	or	Stay stable	.54	40
Get angry quickly	or	Remain placid	.57	38
Feel guilty about things	or	Feel guilt-free	.42	57
Panic easily	or	Stay calm	.61	19
Frequently get irritated	or	Rarely get irritated	.53	42

Note: N = 147

r = correlation between the individual items and the sum of the remaining items

% = percent endorsement of items in the first column

Table 2

Mean scale properties

	Alpha	Mean	SD
Extraversion	.79	3.21	2.08
Sensing	.62	4.46	1.15
Thinking	.63	2.46	1.73
Judging	.65	3.65	1.63
Instability	.77	2.30	1.95
Emotional exhaustion	.80	25.49	9.43
Satisfaction in ministry	.91	37.50	12.13

Note: N = 147

Table 3

Francis Burnout Inventory: Scale properties

	<i>r</i>	%
<u>Scale of Emotional Exhaustion in Ministry</u> ($\alpha = .80$)		
I feel drained by fulfilling my ministry roles	.50	42
Fatigue and irritation are part of my daily experience	.45	47
I am invaded by sadness I can't explain	.52	20
I am feeling negative or cynical about the people with whom I work	.62	39
My humour has a cynical and biting tone	.32	29
I find myself spending less and less time with those among whom I minister	.32	33
I have been discouraged by the lack of personal support for me here	.54	37
I find myself frustrated in my attempts to accomplish tasks important to me	.46	40
I am less patient with those among whom I minister than I used to be	.55	38
I am becoming less flexible in my dealings with those among whom I minister	.44	29
<u>Satisfaction in Ministry Scale</u> ($\alpha = .91$)		
I have accomplished many worthwhile things in my current ministry	.73	67
I gain a lot of personal satisfaction from working with people in my current ministry	.63	71
I deal very effectively with the problems of the people in my current ministry	.27	78
I feel very positive about my current ministry	.61	67
I feel that my pastoral ministry has a positive influence on people's lives	.81	70
I feel that my teaching ministry has a positive influence on people's faith	.74	69
I feel that my ministry is really appreciated by people	.61	71
I am really glad that I entered the ministry	.75	68
The ministry here gives real purpose and meaning to my life	.76	70
I gain a lot of personal satisfaction from fulfilling my ministry roles	.76	69

Note: r = correlation between individual items and the sum of the remaining items

N = 147

Table 4

Correlations with SEEM and SIMS

	SEEM <i>r</i>	SIMS <i>r</i>
<i>Psychological factors</i>		
Extraversion	-.25**	.18*
Sensing	-.20*	-.00
Thinking	.21*	-.20*
Judging	.00	-.06
Volatility	.34***	-.20*
<i>Personal factors</i>		
Age	-.04	.06
Educational level	-.02	.09

Note: N = 147

* $p < .05$; *** $p < .001$