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Validation of the Polish Version of the Brief Measure of Perceived Divine Engagement and Disengagement in Response to Prayer (PDED)

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Abstract: Divine engagement applies to a positive relationship with God in which people feel that God is close to them and answers their prayers. Divine disengagement pertains to an unsteady connection and a sense of God's absence. Although several questionnaires consider the concerns of the human experience of prayer, only one deals precisely with the subject of the human perception of divine engagement and disengagement in response to one's prayer. The main goals of the present research were to: (1) determine the latent structure of the Brief Measure of Perceived Divine Engagement and Disengagement in Response to Prayer (PDED) in a sample set; (2) test whether the factor structure indicated by EFA matches the data and provides an equivalent goodness-of-fit index to Exline's model; and (3) confirm that perceived divine engagement and disengagement are correlated with religious meaning, gratitude to God, and dimensions of religious centrality. The results show that the proposed two-factor structure of the eight-item version of the PDED is a suitable and reliable solution of the original PDED (Study 1). Confirmatory Factor Analysis (CFA) revealed a good fit of the data to the model in both the second and third studies. Both dimensions of the PDED correlated significantly with all of the subscales of the RMS, GGQ-6, and CRS-15. The Polish version of the PDED demonstrated very good psychometric properties.

Keywords: divine engagement; divine disengagement; prayer; religious struggle; centrality of religiosity; adolescents; adults

1. Introduction

In May 2019, Pew Research Center reported the rates of daily prayer across the globe, based on surveys conducted between 2008 and 2017. According to its findings, more than 80% of people from West Africa and some parts of the Middle East declared praying every day. In contrast, daily prayer was less common in Western European nations (less than 20% of people praying), with the U.S. considered an outlier among wealthy nations (around 55%). The statistics regarding Poland showed that almost 30% of Poles declare praying daily. These numbers, though varied, confirm that prayer is still an important value across faiths and cultures (Masters and Spielmanns 2007), despite the fact that we are witnessing a progressive process of secularization and individualization (Bänziger et al. 2008).

According to several researchers, prayer plays a key role in human life, both at an individual and a social level (Spilka and Ladd 2013; Friese et al. 2014). James (2015, p. 358) called it "the very soul and essence of religion". Although it is challenging to provide a unique conceptualization of prayer (Chirico et al. 2020), it is usually defined as a

kind of spiritual communication (Baesler 2012), religious practice and basic form of ritual (Spilka 2005; Emmons and Schnitker 2015; Montero-Marín et al. 2019), coping resource (Wachholtz and Sambamthoori 2013), and personal expression of religion (Poloma and Pendleton 1991).

In the main world religions, communication between human and divine interlocutors is one of the most common ways to understand prayer (Ladd et al. 2016; Zarzycka and Puchalska-Wasył 2019). For example, Exline and Rose (2015) consider prayer as a two-way conversation where people not only speak to God, but listen to Him, as well. Baesler (2012, p. 41) describes prayer as a spiritual “relationship between the believer and the Other”. The dialogical nature of prayer implies not only that people turn to God, but also that God becomes an active communication partner. Voiculescu (2012) claims that God is an object and a subject of inter- and intrapersonal dialogues, speaking through believers and their interactions. According to Dein and Cook (2015), believers understand that God also communicates through scriptures, history, natural order, and silence.

In the context of prayer, a person can perceive divine responsiveness or, on the contrary, indifference. Rowatt and Kirkpatrick (2002) connect a warm, available, supportive, and omnipresent God with the concept of God’s responsiveness. Conversely, God perceived as nonresponsive, impersonal, uninterested, and cold in people’s imagination corresponds to God’s indifference. Moreover, the authors recognize one more type of perception of God, which they call ambivalent. To some people, God seems to be inconsistent, sometimes being close and other times being far away. VandeCreek et al. (2002) suggest that people who perceive the deity as a neutral or impersonal force are less self-revealing during prayer because they are not completely confident of God’s reply. Bradshaw et al. (2008) distinguish images of God as loving or remote. The first dimension underlines the benevolent facets of God who, as an object of prayer, is perceived by believers to be caring, intimate, and protective. The second dimension includes God as an unconcerned and distant figure. Soenens et al. (2012), examining images of God from self-determination theory, speak about representations of God as autonomy-supportive or rather more controlling. In the first case, God is perceived as being open, merciful, emphatic, choice-providing, and taking the believer’s perspective. In the second, instead, God is seen as imposing, pressuring, restricting, and evaluative.

Exline et al. (2021) introduce the concept of God’s perceived engagement/disengagement in response to prayer. Divine engagement reflects a positive and close relationship with God in which people feel that God is listening to them and answering their prayers. On the other hand, divine disengagement represents an unsteady connection and a sense of absence or lack of concern from God. In this case, people express their doubts as to whether God really cares about them. Moreover, the authors address God’s responsiveness or lack of responsiveness not only conceptually but also empirically. They provide the “Brief Measure of Perceived Divine Engagement and Disengagement in Response to Prayer” (hereinafter: PDED). The scale contains eight items (Table 1). Four of them reflect a sense of God’s engagement: item 2, item 3, item 5, and item 6. The other four items concern a sense of God’s disengagement: item 1, item 4, item 7, and item 8.

Table 1. Polish version of the PDED.

ITEMS	Jak często podczas modlitwy towarzyszą Ci poniższe wrażenia lub odczucia? (When You Pray, How Often Do You Perceive or Experience the Following?)				
	Nigdy	Rzadko	Czasami	Często	Zawsze
	(Never)	(Rarely)	(Sometimes)	(Often)	(Always)
	1	2	3	4	5
pded1:	poczucie, że Bóg “milczy” lub nie odpowiada (a sense that God is being “silent” or unresponsive)				1 2 3 4 5
pded2:	poczucie uzyskania odpowiedzi na modlitwę (a sense of having an answer to the prayer)				1 2 3 4 5
pded3:	wiara, że otrzymałeś wskazówkę/i od Boga (belief that you have received guidance from God)				1 2 3 4 5
pded4:	wątpliwość czy Bóg naprawdę słyszy Twoje modlitwy (questioning whether God really hears your prayers)				1 2 3 4 5
pded5:	przekonanie, że Bóg słucha Twojej modlitwy (belief that God is listening to the prayer)				1 2 3 4 5
pded6:	poczucie, że Bóg do Ciebie mówi lub komunikuje się w jakiś sposób (a sense that God is speaking to you or communicating in some way)				1 2 3 4 5
pded7:	przekonanie, że Bóg nie próbuje się z Tobą komunikować (belief that God is not trying to communicate with you)				1 2 3 4 5
pded8:	wątpliwość czy Bóg jest zainteresowany Twoimi troskami (questioning whether God is interested in your concerns)				1 2 3 4 5

God’s engagement factor contains some components of a positive and familiar bond with God, such as guidance (Poloma and Pendleton 1991; Bradshaw et al. 2008; Cadge and Daglian 2008), speaking (Sobosan 1977), and listening (Baesler 2012). A God involved in dialogue with people is a God who is not only always available, empowering, provident (Lawrence 1997), and receptive (Johnson 1984), but also speaks through creation and historical events (Bradshaw et al. 2008). Instead, God’s disengagement factor is related to the notion of God as a punisher (Nelsen and Kroliczak 1984; DeScioli et al. 2012; Laurin et al. 2012), and judge (Robinson et al. 2007), who is vengeful (Cavanagh 1992), unhelpful (Cavanagh 1992), ignoring people (Büssing et al. 2020), and abandoning them during life’s adversities (Ano and Pargament 2013). Such a perception of God as relatively absent or hidden (Lawrence 1997) appears often in times of spiritual dryness (Büssing et al. 2020), supernatural struggles (Ano and Pargament 2013; Zarzycka and Puchalska-Wasył 2019), and psychological distress (Ellison and Lee 2009).

Although several questionnaires cover the topics of the human experience of prayer and different dimensions of religiosity (The Centrality of Religiosity Scale, CRS–15) (Huber and Huber 2012), religious commitment (The Religious Commitment Inventory–10, RCI–10) (Worthington et al. 2003), spiritual dryness (The Spiritual Dryness Scale) (Büssing et al. 2013), religious beliefs (Santa Clara Strength of Religious Faith Questionnaire, SC-SORF) (Plante and Boccaccini 1997), struggles (The Religious Comfort and Strain Scale, RCSS; The Religious and Spiritual Struggles Scale, RSSS) (Exline et al. 2000; Zarzycka 2014; Exline and Rose 2015), coping (The Brief RCOPE) (Pargament et al. 2011), and meaning (The Religious Meaning System Questionnaire, RMSQ) (Krok 2014), none of them specifically addresses the content of the human perception of divine engagement and disengagement in response to one’s prayer (Exline et al. 2021). Therefore, our aim was to present an initial validation of the Polish version of the PDED.

Exline et al. (2021) developed their measure, focusing on the question of whether believers are convinced of God’s attentiveness to their prayers or requests. Since the PDED is the first self-report scale measuring different thoughts about God’s level of engagement in response to prayer which demonstrates adequate reliability and validity, our main goal was to detect its latent structure and to verify through Exploratory Factor Analysis (EFA) whether the new underlying factors are consistent with the original PDED (Study 1).

Study 2 and Study 3 had a twofold purpose. At first, a Confirmatory Factor Analysis (CFA) was conducted to test to what extent the factor structure corresponded to theoretical expectations of the PDED and matched the actual data. Therefore, building on the EFA from Study 1 and on the original scale (Exline et al. 2021), we expected that PDED would contain two factors (divine engagement and divine disengagement) with four indicators assigned to each of them. We also expected that both factors would negatively correlate with each other and at a level equivalent to the r value obtained by Exline et al. (2021). Moreover, we considered that the standardized factor loadings would exceed the threshold limit of 0.60 as suggested in the literature (Field 2000). Next, the convergent validity of the PDED was evaluated to confirm that perceived divine engagement and disengagement in response to prayer are correlated with the dimensions of religious meaning, gratitude to God, and religious centrality. We expected that all of the constructs would be associated with each other, considering that perceptions of divine responsiveness or a lack of it were positively connected with positive-valence God variables in Exline and others' studies (e.g., religious belief salience, belief in God's existence, loving God concept, awareness of God's presence, positive attitudes toward God, etc.).

2. Study 1

2.1. Participants and Procedure

The study was carried out among 259 adolescents and adults (54.5% women) in the age range of 15–64 years ($M = 28.96$ with $SD = 10.49$). When asked about religion, a significant percentage (91.5%) of the respondents identified themselves with the Catholic Church. The remaining 8.5% of participants declared belonging to the Orthodox Church, or the Evangelical Church of the Augsburg Confession. To the question about how much they believe that God exists (where 1 = "I do not believe at all" and 10 = "I believe deeply"), more than half of them (58%) replied with 10, around 20% with 9, and 12% with 6–8. Only 10% declared from 1 to 5. Regarding the frequency of prayer, the participants replied that they prayed every day (63%), often (13%), sometimes (17%), and never (7%). With respect to doubts or questions about God's existence, almost 40% replied with 1 = "I do not have doubts at all", followed by 38% of those who declared from 2 to 5. The remaining 22% declared having some doubts from 6 to 10 = "I have great doubts that God exists".

In the current study, the participants were acquired through social networks that gather people involved in religious organizations, communities, and parishes. We used non-probability purposive sampling that consisted of participants who could report some degree of commitment to prayer. The rationale behind this approach resulted from the strategy used by the creators of the PDED, who exclusively considered in their samples only respondents who declared a certain involvement in prayer practices (Exline et al. 2021). The adolescents participated in the research after obtaining their parents' approval. They were included to take part in the study since this developmental stage of life seems to be sensitive for religious and spiritual growth (Good and Willoughby 2008). Moreover, in the period of adolescence, the formation of independent religiousness occurs (Tatala 2009). All participants were informed about the objective of the study and of the confidentiality of data. They conveyed willingness to be included in the project. Informed and written consent was obtained from each respondent.

2.2. Method

For the analysis, we employed the PDED created by Exline et al. (2021). The measure includes a set of eight assertions that are part of two distinct factors: perceived divine engagement and perceived divine disengagement. The respondents were provided with all of the pertinent information about the study and were asked to mark the answer that was most consistent with their opinion on a 5-point Likert scale (1 = never; 2 = rarely; 3 = sometimes; 4 = often; 5 = always).

Following the common rules required in the process of validation, we used a standard translation and blind back-translation procedure. In the first stage, a group of three separate

interpreters translated the PDED from the source language to Polish. In the next step, two qualified psychologists investigated specific aspects of the translated text and came to an agreement concerning the meaning and adequacy of the eight items. Consequently, a board of twenty students was requested to complete the accepted earlier form of the PDED to evaluate comprehensibility of the statements. Lastly, three bilingual translators without previous familiarity with the measure completed back-translations, proving that the obtained translations into English did not differ from the meaning and formulation of the original statements. The ultimate Polish adaptation and its English equivalents are available in Table 1. The items pded1, pded4, pded7, and pded8 are part of the subscale associated with perceived divine disengagement, and the items pded2, pded3, pded5, and pded6 belong to the subscale of divine engagement.

2.3. Statistical Analysis

To execute the analyses requested, we applied the IBM SPSS Statistics 23.0 software (Studies 1, 2, and 3) and IBM SPSS AMOS (Study 2 and Study 3). Before the standard statistical calculations, we estimated a priori the suitable sample size through G*Power 3.1.9.4. As the basis for determining the group size, we assumed the empirical evidence concerning the correlations between PDED and positive- and negative-valence God variables obtained in Exline and colleagues' (Exline et al. 2021) analyses. We ensured the power level of 0.95, critical significance of $\alpha = 0.05$, and a small effect of 0.20. The logical justification for choosing the minimum effect size was because, according to Perugini et al. (2018), underestimations are more common in psychology. Moreover, the only study about divine engagement/disengagement and other religious variables (Exline et al. 2021) provided mostly lower and medium correlational values between God's engagement/disengagement and other religious variables. On these grounds, G*Power indicated that we would require 262 respondents in our study.

With respect to EFA, we followed the recommended KMO cut-off value of 0.70 (Watkins 2021), although Hair et al. (2019) accept 0.60, and Bartlett's test of sphericity of $p < 0.05$ (Hair et al. 2019). We assumed as appropriate the total variance of 0.60 and loading items greater than 0.50 (Hair et al. 2019). Based on Exline et al.'s (2021) study, we also expected to obtain two factors of the tool and their negative correlation. Therefore, we used the maximum likelihood estimation with an oblique factor solution. The analysis of discriminant power of eight items was assessed by calculating the item-scale correlation.

Regarding the CFA, before proceeding with this analysis we checked for the normality of the indicators using AMOS. Next, we took into account the most universal fit indices to estimate the model: (1) Chi-square test not significant; (2) CMIN/DF < 3 ; (3) Goodness-of-Fit Index (GFI) > 0.9 , Adjusted Goodness-of-Fit Index (AGFI) > 0.9 , and Comparative Fit Index (CFI) > 0.9 ; (4) Root Mean Square Errors of Approximation (RMSEA) ≤ 0.06 ; with the confidence interval of LO and HI between 0.05 and 0.08; (5) Standardized Root Mean Squared less than 0.05; (6) $0.05 \leq \text{PCLOSE} \leq 1$; (7) CN HOELTER index 0.05 and $0.01 \geq 200$ (Bollen and Liang 1988; Mueller and Hancock 2008; Świątek et al. 2021). Since our samples were relatively large and were at risk of a not significant Chi-square, we opted for the CN to determine the adequacy of the samples (Froiland et al. 2019). With the aim to measure convergent validity, Pearson's bivariate correlation was carried out.

2.4. Results

According to the Kaiser criterion, we extracted two factors with eigenvalues above 1.0. The amount of the total variance explained was 59.78%. The first factor accounted for 41.63% of the variance and the second factor for an additional 16.40%. The Kaiser-Meyer-Olkin value of 0.821 and statistically significant Bartlett's Test of Sphericity ($\chi^2(13) = 38.24$; $p < 0.001$) demonstrated the suitability of the data for factor analysis. Moreover, the scree plot (Figure 1) indicates two components to retain.

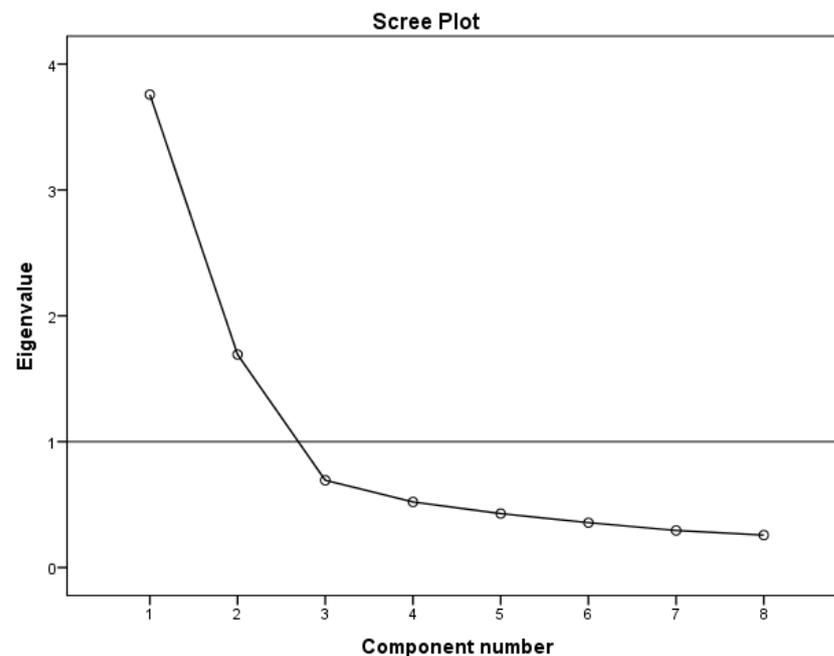


Figure 1. Line plot of eigenvalues of the PDED after maximum likelihood extraction.

Likewise, in the original study (Exline et al. 2021), the two-factor Polish structure of the measure coincided with the intended theoretical and empirical model of the PDED. The values of the factor loadings were at an acceptable level (Table 2), with the lowest values of 0.585 for the item pded1 (hereinafter: pded—perception of divine engagement and disengagement; in the subscale of divine disengagement) and of 0.636 for the item pded5 (in the subscale of divine engagement), and the highest of 0.886 for the item pded3 (in the subscale of divine disengagement) and of 0.851 for the item pded4 (in the subscale of divine engagement). It is important to notice that pded1 has a similar value to its equivalent (0.564) in the study by Exline et al. (2021). The outcomes of Cronbach's alpha prove that the two factors have adequate reliability (Table 2), exceeding the traditional cut-off of 0.70.

Table 2. Factor loadings after an oblique rotation for the items of the PDED.

ITEMS	Factors Loadings	
	Engagement	Disengagement
Cronbach's α	0.866	0.806
pded3	0.886	
pded2	0.828	
pded6	0.806	
pded5	0.636	
pded4		0.851
pded8		0.719
pded7		0.677
pded1		0.584

According to the evaluation of the discriminant power (Table 3), the eight items that constitute the entire measure displayed positive correlations with its overall value. Such a finding denotes that the increase of an individual item corresponds to a simultaneous increase in the rest of the scale statements.

Table 3. Values of the discriminatory power in the PDED.

ITEMS	ITEM–Scale Correlation
pded1	0.545
pded2	0.873
pded3	0.908
pded4	0.869
pded5	0.612
pded6	0.870
pded7	0.844
pded8	0.904

All of the items demonstrate moderate or high discrimination, ranging from 0.545 to 0.908. The lowest values of item–scale correlations are those with the lowest factor loadings.

3. Study 2

3.1. Participants and Procedure

In Study 2, the participants were 203 adolescents and adults (78% women) ranging in age from 15 to 65 years ($M = 27.60$, $SD = 9.25$). The procedure of gathering quantitative data, applying statistical software/module, and sociodemographic characteristics was comparable to the process described in Study 1. When asked about religion, a significant percentage (60%) of the respondents identified themselves with the Catholic Church. The remaining 16% of the participants declared belonging to the Orthodox Church, Protestantism, or Judaism. Almost 20% of respondents acknowledged not believing in God. The remaining participants (4%) did not specify their faith. To the question about how much they believe that God exists (on a scale from 1 = “I do not believe at all” to 10 = “I believe deeply”), 41% replied with 10, around 11% with 9, and 16% with 6–8. Almost 32% declared from 1 to 5. Regarding the frequency of prayer, the participants replied that they prayed every day (30%), often (10%), sometimes (32%), and never (28%). With respect to doubts or questions about God’s existence, almost 38% replied with 1 = “I do not have doubts at all”, followed by 30% of those who declared from 2 to 5. The remaining 32% declared having some doubts from 6 to 10 = “I have great doubts that God exists”.

3.2. Method

The Religious Meaning System Questionnaire (Krok 2014; Krok and Zarzycka 2021) was used to measure religiosity perceived as a cognitive and motivational system that orients and gives meaning. In its first subscale, called “sense of orientation”, religiosity is understood as a reality which allows people to apprehend their lives and the world around them (e.g., “I like watching or listening to programs concerning religion”). In the second subscale, called “sense of meaningfulness”, religiosity empowers individuals to find purpose of life (e.g., “I think that religion helps me in finding purpose in life”). Each subscale includes 10 statements which are rated on a 7-point Likert scale (from 1 = “very strongly disagree” to 7 = “very strongly agree”). The total score is the sum of all items of both scales. In other studies, the questionnaire had good psychometric qualities (Krok and Zarzycka 2021). In the present study, the values of Cronbach’s alpha were 0.96 (sense of orientation), 0.93 (sense of meaningfulness), and 0.97 (overall score).

Gratitude to God was assessed using the six-item Gratitude Questionnaire (GQ–6) originally developed by McCullough et al. (2002) and validated into Polish by Kossakowska and Kwiatek (2014). This self-report instrument was originally considered to measure peoples’ disposition toward interpersonal gratitude. To achieve the purpose of our research, we amended the content of the items so that they could be used to estimate people’s propensity to express gratitude to God (Szcześniak et al. 2020) and initially named this scale the “Gratitude to God Questionnaire” (GGQ–6). The items in their modified form are as follows: (1) I am thankful to God for many things in my life; (2) If I had to list everything that I felt grateful to God for, it would be a very long list; (3) When I look at

the world, I don't see much to be grateful to God for (item scored inversely); (4) I am grateful to God; (5) As I get older, I find myself more able to appreciate God for the people, events, and situations that have been part of my life history; (6) A long time may pass before I feel grateful to God (item scored inversely) (Szcześniak et al. 2020, p. 651). The respondents assessed each statement using a 7-point Likert-type scale where 1 means "strongly disagree" and 7 means "strongly agree". The reliability of the original GQ-6 was $\alpha = 0.82$ (McCullough et al. 2002). The GGQ-6 variant used in our study had internal consistency equal to $\alpha = 0.93$. An EFA confirmed the unidimensional character of the GGQ-6, which explained 75.40% of the variance.

3.3. Results

Firstly, the assessment of the normality of the indicators through AMOS showed that values were for skewness between -0.157 and 0.858 , and for kurtosis between -0.572 and -1.512 , thus being less than ± 2 . Such outcomes are viewed as approved for approaching normal distribution (Garson 2020). Similar to the original study (Exline et al. 2021), divine engagement was slightly higher ($M = 2.65$; $SD = 1.27$) than divine disengagement ($M = 2.35$; $SD = 1.17$).

Secondly, since a two-factor structure of the PDED emerged from EFA, a corresponding two-factor model was specified, employing the CFA. The analysis of global fit indices revealed that the model provided a good fit (CMIN/DF = 1.35; GFI = 0.970; AGFI = 0.943; CFI = 0.994; RMSEA = 0.042; LO 90 = 0.000; HI 90 = 0.079; SRMR = 0.025; PCLOSE = 0.598; HOELTER 0.05 = 238; HOELTER 0.01 = 285). The value of the Chi-square was also very good (25.662, degrees of freedom = 19), presenting a statistically insignificant $p = 0.140$. Assessment of local fit indices revealed sufficient standardized factor loadings that surpassed the value of 0.60, and ranged from 0.68 to 0.94 (Figure 2). The reliability for God's engagement ($\alpha_{\text{eng}} = 0.872$) and God's disengagement ($\alpha_{\text{diseng}} = 0.934$) were considered very good, with both exceeding the values of the original scale.

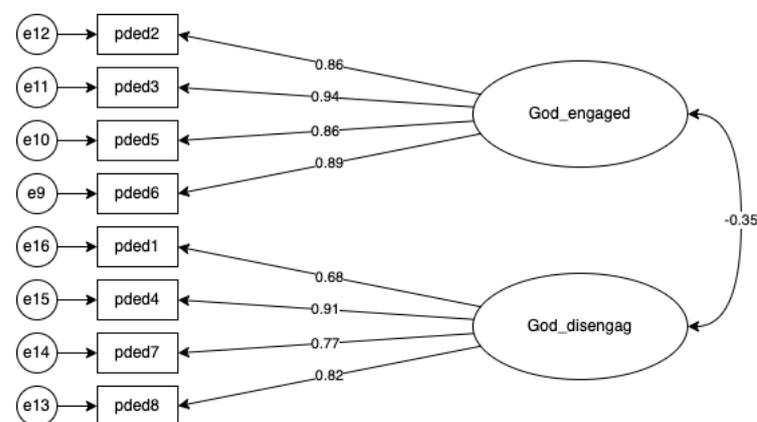


Figure 2. CFA for the PDED (Sample 2).

Convergent validity was applied by computing the Pearson correlation between the two subscales of the PDED, RMS and GGQ-6. As shown in Table 4, there were significant and strong positive correlations between God's engagement and religious sense of orientation/meaningfulness/overall, and gratitude toward God. There were also significant and low negative correlations between God's disengagement and religious sense of orientation/meaningfulness/overall, and gratitude toward God. The correlation between the two subscales of the PDED was $r = -0.303$. Moreover, religious sense overall correlated strongly with gratitude toward God ($r = 0.770$).

Table 4. Correlations between dimensions of PDED, RMS, and GGQ–6.

ITEMS	Factors	
	Engagement	Disengagement
Religious sense of orientation	0.808 ***	−0.319 ***
Religious sense of meaningfulness	0.833 ***	−0.350 ***
Religious sense overall	0.836 ***	−0.340 ***
Gratitude toward God	0.831 ***	−0.346 ***

Note. *** $p < 0.001$.

4. Study 3

4.1. Participants and Procedure

Study 3 was performed with the involvement of 464 adults (55% women) with a mean age of the participants equal to $M = 31.10$ ($SD = 3.79$; range = 18–75 years). Similarly to Studies 1 and 2, we used the same data collection procedure, statistical programs, and sociodemographic variables. When asked about religion, a significant percentage (50%) of the respondents identified themselves as non-denominational. Almost 31% of the respondents acknowledged being adherents of the Catholic Church. The remaining 19% of participants declared “other”. To the question about how much they believe that God exists (on a scale from 1 = “I do not believe at all” to 10 = “I believe deeply”), 24% replied with 10, around 6% with 9, and 10% with 6–8. Almost 60% declared from 1 to 5. Regarding the frequency of prayer, the participants replied that they prayed every day (20%), often (6%), sometimes (17%), and never (57%). With respect to doubts or question about God’s existence, almost 38% replied with 1 = “I do not have doubts at all”, followed by 28% of those who declared from 2 to 5. The remaining 34% declared having some doubts from 6 to 10 = “I have great doubts that God exists”.

4.2. Method

The Centrality of Religiosity Scale (CRS–15), developed by [Huber and Huber \(2012\)](#), is a multidimensional questionnaire of the centrality, influence, and importance of religiosity in personality. The rationale for choosing the 15-item CRS–15 version was because this variant is considered to provide the highest dimensional discriminance and reliability ([Huber and Huber 2012](#); [Zarzycka 2011](#); [del Castillo et al. 2020](#)). Moreover, it is generally implemented when the researchers are interested in the differential effects of the respective dimensions on other phenomena.

The CRS–15 assesses the central dimensions of religiosity: intellect, ideology, private practice, experience, and public practice. The subscale of intellect has been defined as cognitive and intellectual confrontations with religious content, without considering the aspect of personal acceptance (e.g., “How often do you think about religions issues?”). This dimension provides information on thinking about religious topics, intellectually dealing with religious content, and searching for religious knowledge. The dimension of ideology concerns the subjective assessment of the probability of the existence of a transcendent reality and the intensity of the attitude of openness to various forms of transcendence. The results obtained in this subscale indicate to what extent a religious object is real for a human being (e.g., “In your opinion, how probable is it that a higher power really exists?”). In the dimension of private practice, there are questions about the frequency of contacting the transcendent reality and its subjective meaning to the person. This includes individual, personal dialogue with God and ritualistic prayer practices (e.g., “How often do you usually pray?”). The dimension of experience is about how often transcendence, as a dynamically understood reality, becomes an element of human experience. The more experiences there are, the more stable the experiences become. The questions concern situations in which a person has a sense of God’s action (e.g., “How often do you experience situations in which you have the feeling that God or something divine wants to communicate or to reveal something to you?”). In the dimension of public practice, the questions concern the frequency and subjective importance of human participation in religious services.

It provides information on the social (community) rootedness of religiosity (e.g., “How important is it for you to be connected to a religious community?”). The overall score, which is the average of the points obtained in the individual subscales, is a measure of the centrality of religiosity. The subscales and the overall score presented excellent reliability: intellect ($\alpha = 0.896$), ideology ($\alpha = 0.925$), private practice ($\alpha = 0.890$), experience ($\alpha = 0.954$), public practice ($\alpha = 0.892$), and the overall score ($\alpha = 0.954$). The mean of the overall score of the CRS-15 was $M = 2.45$ and $SD = 1.30$, confirming that participants could be assigned to the transitional range between a minimal and significant level of religiosity (Huber and Huber 2012).

4.3. Results

The assessment of the normality of the indicators through AMOS showed that values for skewness were between 0.210 and 0.937, and for kurtosis were between -0.854 and -1.673 . The results confirmed that the indicators show approximately normal distribution. Contrary to the original study (Exline et al. 2021), divine engagement was slightly lower ($M = 2.21$; $SD = 1.45$) than divine disengagement ($M = 2.64$; $SD = 1.52$).

The outcomes of CFA showed that the values of the global fit indices confirmed a reasonable level of fit of the model to the data (CMIN/DF = 3.57; GFI = 0.965; AGFI = 0.934; CFI = 0.985; RMSEA = 0.075; LO 90 = 0.056; HI 90 = 0.094; PCLOSE = 0.017; HOELTER 0.05 = 206; HOELTER 0.01 = 247). The value of the Chi-square presented a mediocre fit (67.945, degrees of freedom = 19), presenting a statistically significant $p = 0.000$.

Because of the reasonable level of fit, we decided to add a connection between error terms drawing on the modification indices and on the theoretical rationale. Adding a covariance path (Figure 3) significantly improved the global fit for the data (CMIN/DF = 2.18; GFI = 0.979; AGFI = 0.959; CFI = 0.993; RMSEA = 0.051; LO 90 = 0.029; HI 90 = 0.072; SRMR = 0.020; PCLOSE = 0.447; HOELTER 0.05 = 340; HOELTER 0.01 = 410). The value of the Chi-square still showed a poor fit (39.399, degrees of freedom = 19), presenting a statistically significant $p = 0.003$. However, the current sample was larger than that of Study 2, which often results in a significant p value (Szcześniak and Stochalska 2021). Inspection of local fit indices showed good standardized factor loadings that ranged from 0.78 to 0.96 (Figure 3). The values of Cronbach’s alpha acquired in Study 3 were considered very good, in this case also surpassing the values of the original scale: for God’s engagement $\alpha_{\text{eng}} = 0.950$ and for God’s disengagement $\alpha_{\text{diseng}} = 0.904$.

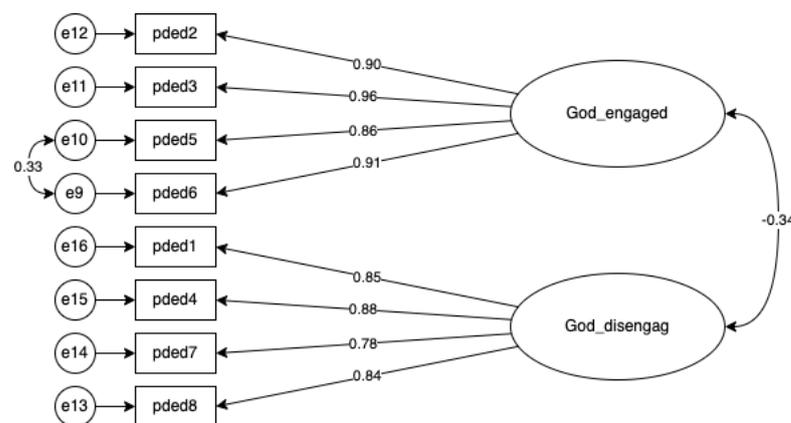


Figure 3. CFA for the PDED (Sample 3).

Convergent validity (Table 5) showed that there were significant and strong positive correlations between God’s engagement and religious beliefs/experience/practices, prayer, and the overall score. Interest in religious issues correlated in a moderate way with God’s engagement. There were also significant and low negative correlations between God’s disengagement and religious beliefs/experience/practices, prayer, and the overall score.

Interest in religious issues did not correlate significantly with God's disengagement (it was at the level of tendency). The correlation between divine engagement and divine disengagement showed a moderate association $r = -0.314$.

Table 5. Correlations between dimensions of PDED and CRS–15.

Dimensions of CRS–15	Factors	
	Engagement	Disengagement
Intellect	0.426 ***	−0.076 ^t
Ideology	0.853 ***	−0.236 ***
Private practice	0.898 ***	−0.323 ***
Experience	0.916 ***	−0.325 ***
Public practice	0.727 ***	−0.251 ***
Overall score	0.880 ***	−0.266 ***

Note. *** $p < 0.001$; ^t tendency ($0.05 < p < 0.1$).

In summary, we noticed a significant positive association between God's engagement factor and all of the subscales, and the overall score of the CRS–15. In contrast, God's disengagement factor negatively correlated with all of the subscales and the overall score of the CRS–15.

5. Discussion

As far as we know, the current analysis is the first attempt, outside of Exline and coauthors' project (Exline et al. 2021), to: (1) identify the number of factors reflecting the configuration of the original PDED; (2) investigate whether the discovered structure established by means of EFA corresponds to the set of items from Study 2 and Study 3, giving an analogous global and local fit indices as Exline and colleagues' model; and (3) confirm whether perceived divine engagement and disengagement are correlated with religious meaning, gratitude to God, and the five dimensions of centrality of religiosity with the overall score.

Our findings illustrate that the Polish version of the PDED presents an appropriate two-factor solution and builds on the theoretical and empirical considerations of the original PDED. As the EFA showed, both subscales accounted for 59.78% of the variance, displaying an accepted variance of slightly less than 60% but much more than the acceptable 50% (Hinkin 1998). Moreover, the first factor accounted for 41.63%, and the second one accounted for 16.40%, both being slightly lower than in the original study (42.5% and 20.7%, respectively).

The Cronbach's alpha reliability estimations also evidence that the two subscales demonstrate sufficient internal consistency above the 0.7 threshold. The factor loadings were between 0.58 and 0.88, being statistically consistent with the loadings of the respective items from the PDED developed by Exline et al. (2021), which ranged from 0.56 to 0.78. Based on the results obtained, we can assert that the validated version displays good psychometric properties.

Regarding the CFA (Study 2 and Study 3), in both samples, the global fit indices presented good levels, although in Study 3 we decided to add a covariance path between two errors (9 and 10). The reason for this option was that both items 5 and 6 (Table 1) reflect God's engagement in response to prayer.

With respect to the similarities and differences between the original and current study, we also noticed that while in our Study 2 divine engagement was slightly higher than divine disengagement (although still lower than the value in Exline and colleagues' research), in Study 3 these proportions were the inverse, contrary to the original outcomes. These small differences between our findings and those obtained by Exline et al. (2021) may result from the different composition of the research groups. The American samples were younger, culturally more diverse, and mostly Protestant. Moreover, one of the conditions of including students in the American research project was participants' engagement in prayer.

In contrast, the Polish samples were older, more culturally uniform, and mostly Catholic (Study 2) or non-denominational (Study 3). The Polish groups contained respondents who declared praying rarely or never. However, the sociodemographic dissimilarities between both the American and Polish respondents did not affect psychometric quality of the adapted PDED scale which still resulted in a good model fit.

Lastly, the perception of God's engagement correlated positively with all of the subscales of the RMS, GGQ-6, and CRS-15. Such outcomes may suggest that believing in a God that is engaged and attentive to prayers is associated with perceiving religious meaning in one's own life, being more grateful to God, searching for religious knowledge, considering religious objects as real, having a personal dialogue with God and a sense of God's action, and participating in religious services. At the same time, the RMS, GGQ-6, and CRS-15 were negatively associated with the perception of God's disengagement. These findings may indicate that perceiving God as not listening to people's prayers and not communicating with them is linked to the co-occurrence of lower: religious meaning, gratitude to God, interest in religious topics, ponderance of religious objects as existing, personal communication with God, and participation in religious services.

The obtained results resemble those published by [Exline et al. \(2021\)](#), showing similar levels of correlation with the other religious indicators. For example, divine engagement was positively linked with positive-valence God variables (e.g.,: belief in God's existence, loving God concept, secure attachment to God, belief in divine intervention, gratitude to God), and negatively with distance-related God variables (e.g.,: doubt about God's existence, cruel God concept, anger/disappointment, concern about God's disapproval, distant attachment). Divine disengagement correlated negatively with positive-valence God variables and positively with distance-related God variables.

The correlation of the PDED's two subscales is also noteworthy. As expected, this association is negative since divine engagement and divine disengagement represent two opposite types of perception reflecting people's understanding of their close connection or lack of a bond with God. Moderate correlation means that although the two subscales are conceptually close, both cover different aspects of God's involvement in believers' lives.

Finally, the lack of a significant correlation between divine disengagement and intellect may raise questions, given that both constructs were related with each other at the level of tendency. Such a result may be due to the fact that although the intellectual dimension of the centrality consists in thinking about religious matters, it does not reflect any particular religious affiliation ([Huber and Huber 2012](#)). Therefore, feeling a sense of God's absence is not necessarily associated with lower interest in religious issues.

6. Limitations

Some limitations should be specified. The study was performed mostly among participants representing the stage of young adulthood, although the range was between 15 and 75. In future investigations, it would be advisable to include a more diverse and evenly age-divided group of participants. It is well known that younger generations tend to report lower levels of religiosity ([Bergan and Tahmeseb McConatha 2001](#); [Krause et al. 2018](#)); therefore, research conducted among participants representing different age groups could provide more information about the PDED scale and its relationship with other variables.

7. Conclusions

The current study is the first and a comprehensive validation of the Polish version of the Brief Measure of Perceived Divine Engagement and Disengagement in Response to Prayer. The outcomes of EFA and CFA indicate that a two-factor model with four indicators per each subscale has very good psychometric properties and assesses people's perception of God's engagement and disengagement in response to their invocations. Moreover, Study 2 and Study 3 corroborate the original model, and provide empirical evidence of CFAs with similar results. In addition, the results of convergent validity show that the Polish version of the PDED correlates in the hypothesized directions with questionnaires measuring

positive- and negative-valence variables about religious beliefs, meaning, centrality of religiosity, and gratitude to God.

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