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### **Citation**

Stulp, H. P. (2021, February 25). *Construction and validation of the apperception test God representations : An implicit measure to assess God representations*. Retrieved from <https://hdl.handle.net/1887/3142396>

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**Note:** To cite this publication please use the final published version (if applicable).

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**Title:** Construction and validation of the apperception test God representations: An implicit measure to assess God representations

**Issue Date:** 2021-02-25

## Chapter 6.

# **Validation of the Apperception Test God Representations, an implicit measure to assess God representations. Part 3: Associations between implicit and explicit measures of God representations and self-reported level of personality functioning**

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## Abstract

Research with self-report measures of God representations suggests an association with personality pathology. However, according to object relations theory, God representations are predominantly implicit. This observational study aimed at validating the implicit Apperception Test God Representations (ATGR). In a group of 74 patients with personality pathology and a group of 71 non-patients, correlations of measures of self-reported personality functioning with the implicit ATGR were compared with correlations with the explicit Questionnaire God Representations (QGR). Only in the clinical group, results corroborated the validity of three ATGR main scales by showing significant correlations with mostly nearly medium effect sizes.

## Introduction

Meta-analytic results of research into the association between religiosity and well-being/mental health (Stulp, Koelen, Schep-Akkerman, Glas, & Eurelings-Bontekoe, 2019) indicate that for adherents of monotheistic religions, personal God representations are an important factor. Two important theoretical framework for research into God representations, object relations theory and attachment theory, assume that personal God representations, as mental relational representations, act on a mostly implicit level (Brokaw & Edwards, 1994; Granqvist, 1998; Granqvist, Ivarsson, Broberg, & Hagekull, 2007; Jones, 2008; Kirkpatrick & Shaver, 1990; Kirkpatrick & Shaver, 1992; Rizzuto, 1979). Therefore self-reports, although widely used, are considered less appropriate to assess God representations. Moreover, God representations are viewed as dynamic internal working models, with different moods and situations triggering different God representations (Davis, Moriarty, & Mauch, 2013; Gibson, 2008), probably simultaneously. Self-report measurement usually does not take this into account well. Moreover, self-report is susceptible to social desirability and doctrine effects (Eurelings-Bontekoe, Hekman-Van Steeg, & Verschuur, 2005; Eurelings-Bontekoe & Luyten, 2009; Jonker, 2007; Zahl & Gibson, 2012). To address these measurement issues, research into God representations with indirect or implicit measures is indicated (Jong, Zahl, & Sharp, 2017). In fact, some scholars are convinced that advances in this field can only be made by developing more sophisticated measurement methods (Hall & Fujikawa, 2013).

Therefore we developed the Apperception Test God Representations (Stulp, Koelen, Glas, & Eurelings-Bontekoe, 2019), a performance based measure to assess implicit aspects of God representations. An important advantage of performance based tests, according to Sharp et al. (2019) in their review of existing God representation measures, is that compared to self-report measures they often provide a richer

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and more personalized and contextualized picture of how people view and relate with God. As disadvantages they mention the lengthy administration and scoring process. They distinguish two types of performance based God representation measures: stimulus-attribution, which requires respondents to attribute meaning to ambiguous stimuli, and constructive measures that ask respondents to respond within defined parameters. Another approach with similar advantages and disadvantages are structured interview measures as for example the Religious Attachment Inventory (Granqvist & Main, 2017). This measure, based on the well-validated Adult Attachment Inventory (Hesse, 2016), is still in development.

As is the case for the ATGR, most performance based measures of God representations are based on object-relations theory. Besides the ATGR, Sharp (2019) reviews two other stimulation attribution measures. One of them (Bassett, Miller, Anstey, & Crafts, 1990) analyses developments from a cognitive (Piagetian) framework. The other measure, the Spiritual Themes and Religious Responses Test (STARR, Saur & Saur, 1993), uses TAT-like cards, like the ATGR, but—as far as we know—its scoring system does not yield qualitative results, which makes it difficult to validate the measure. Of the four constructive measures, the God representation figure drawings measure of Olson et al. (2016) deserves attention because its focus is on similar concepts as the ATGR. The measure demonstrates high(er) interrater reliability, and the time for administration and scoring is much shorter, which would make it much more suitable for research as well as for clinical use. An important difference with the ATGR is that it asks respondents to give rather generalized representations of God (“Draw a picture of you and God”; “Draw a picture of how you FEEL you and God look when you do something wrong”, and “Draw a picture of how you would like you and God look when you do something wrong” (Olson et al., 2016, p. 84). The ATGR offers 15 specific situations that may trigger one or more of a person’s multiple God representations. An important difference between the ATGR and structured interviews as for example The Religious Attachment Inventory (Granqvist & Main, 2017) is that the ATGR does not require the respondent to report about concrete spiritual experiences, which might be difficult for some respondents.

Sharp et al (2019) conclude that in general these measures have not demonstrated good reliability and validity, but that the measure of the current study, the ATGR, is currently the most thoroughly validated performance-based measure, with “only” adequate evidence. This preliminary evidence is reported in Stulp, Koelen, Glas, et al. (2019).

The most important findings of this study were: In a clinical group, the implicit ATGR scales were associated more strongly than the explicit God representation scales of the Questionnaire God Representations (QGR, Schaap-Jonker & Eurelings-Bontekoe, 2009) with various self-report scales of distress (OQ-45-2, De Jong, 2007), and with the Global Assessment of Functioning scale of the DSM-IV (Stulp, Koelen,

Glas, et al., 2019). More and stronger evidence for the validity of the ATGR is presented in a second validation study (Stulp, Glas, & Eurelings-Bontekoe, 2020), that showed that in both a clinical and a nonclinical sample the implicit ATGR scales were more strongly associated than the explicit God representation scales with implicit object relations measures, and in the clinical group they were also associated more strongly than the explicit God representation scales with explicit object-relations measures. In addition, results indicated that only among patients the implicitly assessed God representations correlated stronger than explicitly assessed God representations with explicit self-reported psychological distress and self-reported quality of object-relational functioning.

These results provide further evidence of the validity of the ATGR scales, and are in line with the view of many scholars of religion that God representations are a particular form of object relations (Brokaw & Edwards, 1994; Jones, 2008; Rizzuto, 1979; Winnicott, 1971): interpersonal object relations—as mental representations of self, of important others, and of the relationship between self and others—are related to representations of God and representations of the self in relationship with God. Results also suggest that for patients the implicit aspects of psychological functioning invade the explicit measures of psychological functioning, but that these implicit processes to a lesser extent influence the explicit measures of God representations, rendering them less valid than the ATGR in measuring (implicit) aspects of God representations.

This study is a sequel to the two former validation studies, focusing on the association between implicit and explicit God representations and self-reported features of personality functioning. If in patient groups explicit measures of psychological functioning indeed also tap aspects of implicit processes, associations of ATGR scales with explicit personality functioning measures will contribute to the establishment of the construct validity of the ATGR scales.

## **God Representations and Personality Pathology**

Because problems in object-relational functioning are a core feature of personality pathology (Caligor, Kernberg, & Clarkin, 2007; Clarkin, Lenzenweger, Yeomans, Levy, & Kernberg, 2007; Huprich & Greenberg, 2003; Vermote et al., 2015), an object-relational approach of God representations would imply that personality pathology is associated with less differentiated and integrated God representations. Davis, Granqvist, and Sharp (2018) who developed an integrative model for theistic relational spirituality that is based on attachment theory, social cognition theory and interpersonal neurobiology, also assume that a key aspect of unhealthy relational spirituality is a lower degree of integration. However, in their conceptualization of unhealthy integration they especially seem to emphasize the failure to integrate doctrinal and experiential God representations, or the unhealthiness of culturally maladaptive

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(e.g. malevolent) God representations. Although they also mention fragmentation, incoherence and disintegration, it is not clear whether they associate this with the existence of multiple God representations that are triggered across various situations and various moments, or with —as emphasized by object-relations theory and in this study— fragmented God representations that may be triggered together, or alternating, in the one and the same situation.

Hardly any quantitative research has been done yet into God representations and personality pathology. We found only two studies. In the first study, Schaap-Jonker, Eurelings-Bontekoe, Verhagen, and Zock (2002) examined associations between God representations, assessed with the Questionnaire God Representations (QGR), and personality psychopathology, assessed with a self-report measure for personality disorders. They found that patients with ‘cluster C’ obsessive-compulsive and avoidant personality disorder traits saw God as ruling/judging, whereas patients with ‘cluster A’ (paranoid, schizoid, schizotypal) personality pathology viewed God as passive and not supportive. They did not find associations between specific aspects of God representations and scores on ‘cluster B’ personality pathology. Authors suggest as a possible explanation that this might be caused by the heterogeneity of symptoms that may accompany this particular class of personality disorders.

In a more recent study, Schaap-Jonker, van der Velde, Eurelings-Bontekoe, and Corveleyn (2017) examined God representations in a nonclinical group of 161 participants and a clinical group of 136 participants. Sixty-three patients of the clinical group (46%) were diagnosed with a personality disorder. Cluster-analysis revealed that one profile was typical of the clinical group. This particular profile, which was characterized by a combination of high levels of Anxiety and Anger toward God with high levels of Ruling/Punishing perceptions and low levels of Positive Feelings and Supportive Actions, was not found in the nonclinical group. However, the study did not report whether this profile was specifically associated with personality pathology.

### **The Aim of the Present Study**

The aim of the present study is to examine the validity of the object relations theory based scales of the ATGR by comparing the associations between its scales and explicit measures of core aspects of personality functioning with the associations of scales of an explicit God representation measure with these personality scales. Initially we hypothesized that same- method correlations would be stronger than mixed-method correlations. However, on the basis of former results with the ATGR, showing that in the clinical group the implicit ATGR scales were more strongly associated than the explicit God representation scales with explicit object-relations measures (Stulp et al., 2020), it is now hypothesized (a) that associations between implicit God representations and explicitly measured personality functioning will be stronger in the clinical group than in the nonclinical group, (b) that in the nonclinical group associations between explicit

God representations and explicitly measured personality functioning will be stronger than the associations between implicit God representations and explicitly measured personality functioning, and (c) that in the clinical group associations between implicit God representations and explicitly measured personality functioning will be stronger than the associations between explicit God representations and explicitly measured personality functioning. Confirmation of these hypotheses would underline the incremental validity of the ATGR in measuring pathology-related aspects of God representations among patients with personality disorders. To the best of our knowledge, this is the first study that compares implicit and explicit measures of God representations regarding their associations with level of personality functioning.

## Method

### Participants

The first sample of this study consists of a convenience sample of 71 nonclinical participants, recruited at a Dutch Christian University of Applied Science, Viaa Zwolle and at a Dutch Christian intermediate vocational education school (the Menso Alting College, Zwolle). These institutions train people for work in the domains social work, pastoral work, nursing, and education.

The second sample consists of 74 patients who followed one out of four inpatient treatment programs for personality disorders at a Dutch Christian mental health care institution. On the basis of a clinical interview -focusing on Axis II of the DSM IV-TR (First, Gibbon, Spitzer, Williams, & Benjamin, 1997)- patients received the following classifications: Personality disorder NOS: 25 (33.8%); C-Cluster personality disorders or features: 28 (37.8%); B-Cluster Personality Disorder or features: 13 (17.6%); features of A-Cluster and B-Cluster personality disorders: 2 (2.7%); A-Cluster personality disorders: 1 (1.4%); Deferred diagnosis: 5 (6.8%). For more detailed information about these samples, procedures, and construction of the ATGR, the reader is referred to Stulp, Koelen, Glas, et al. (2019).

### Measures

#### **Implicit aspects of God representations**

**Materials and assessment procedure.** Implicit aspects of God representations were measured by the newly developed ATGR (Stulp, Koelen, Glas, et al., 2019), an apperceptive test of 15 cards with pictures especially developed for measuring implicit God representations. Following protocolled questions, respondents were asked to fantasize a narrative about each picture that addresses what happened in the picture, what led up to it and how it ends, what the people in the picture think and feel, what God thinks and feels, and what God does and why.



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**Scales.** Resulting narratives were analyzed with scales of the Social Cognition and Object Relations Scale (SCORS) scoring system (Westen, 1985), especially adapted for measuring God representations in narratives. In the following paragraphs we describe its six scales. The various levels of the representations are coded on a scale from 1 – 5, with lower scores representing lower levels of representations.

**Complexity of representation of God (Complexity).** This scale especially addresses the level of differentiation-integration of God representations. Low scores indicate representations of God that are not differentiated from feelings and motives from the respondent (or the character in the narrative). God may also be viewed as unidimensional, without many nuances, or as someone who is all good or all bad; maybe fluctuating in time, but never simultaneously. More mature God representations are nuanced and detailed and integrate negative aspects of God, (e.g. anger and punishment) with positive aspects (e.g. love, forgiveness). See also Table 1.

**Affect Tone of relationship with God for character and respondent (Affect Tone character and Affect Tone person).** This ATGR scale is scored in two ways; the first regards the way the (main) character in the narrative experiences his or her relationship with God (Affect Tone character), the second regards the way the respondent may consciously elaborate on this experience (Affect Tone person). Lower scores represent more negative feelings (see also Table 1). Although in the scoring of the original Thematic Apperception Test (Murray, 1943) this distinction is not made, the distinction seems relevant when assessing God representations (instead of human objects) because we assume that respondents' explicit ideas about their relationship with God (Affect tone person) might be more susceptible to doctrine and social desirability than respondents' descriptions of the relationship with God of the character in the narrative (Affect tone character). In other words, we assume that attributions of characters' thoughts and feelings about God assess respondents' implicit God representations, and their own comments on these attributions (Affect Tone person) express their more explicit God representations.

**Emotional investment in the relationship with God (Investment).** This ATGR scale is about the character's motivation for having a relationship with God; motives may vary from egocentric to more based on love and reciprocity. Lower scores represent a more egocentric motivation (see also Table 1).

**Agency of God (Agency).** The Agency of God scores are determined by combining scores on three subscales: Gods influence on the situation (Agency-s: yes or no), Gods influence on character's reactions; his thoughts, feelings, intentions, actions (Agency-r: not, shared influence, or decisive influence) and attributed reasons for God's actions (Agency-e: no explanation, general explanation, specific explanation). These scores are then converted to a total score on a scale from 1 – 5. A low score indicates that God has no influence on events. Higher scores indicate that God has influence, and this influence can be understood and trusted. The highest score (5)

acknowledges not only general (good) intentions, but assumes that God has specific intentions for specific persons. See also Table 1 for a more detailed description of the scales.

**Coding procedure.** Scoring took place by 19 fourth year University students Social Work or Health Care, in 11 couples in which each student first independently scored protocols, then compared the scores with the other student of the couple, and discussed all different scores to achieve consensus. Coders followed an intensive training program, given by the first author, who is an experienced psychologist with much experience with apperceptive and projective tests. For each scale, at least 15 hours of training were spent: three joint sessions of three hours and six hours of individual scoring at home.

**Interrater reliability.** The weighted average interrater reliability (ICC), based on absolute agreement, of the ATGR scales were good for the scales Affect Tone character (.80), Affect Tone person (.83) and Agency (.85), fair for the Complexity scale (.77), and poor for the Investment scale (.68).

#### **Explicit aspects of God representations**

The Dutch Questionnaire God Representations (QGR), in earlier publications also referred to as Questionnaire God Image (QGI), is a 33-item self-report questionnaire, a translation and adaptation of Murken's (1998) scales of God relationships. It consists of two dimensions; the dimension "feelings toward God", with three scales: Positive feelings toward God (Positive/POS), Anxiety toward God (Anxiety/ANX), and Anger toward God (Anger/ANG); and the dimension "God's actions", with three scales: Supportive actions (Support/SUP), Ruling and/or Punishing Actions (Ruling-Punishing/RULP), and Passivity of God (Passivity/PAS). All items are scored on a five-point scale, with (1) for not at all applicable, and (5) for completely applicable. The scale has good psychometric properties. The internal consistency of the scales is sufficient, with Cronbach's alpha's ranging from 0.71 for Passivity of God, to 0.94 for Positive feelings toward God (Schaap-Jonker & Eurelings-Bontekoe, 2009). Validity was confirmed by more unfavorable scores for mental health patients and by associations with religious salience, church attendance and religious denomination (Schaap-Jonker & Eurelings-Bontekoe, 2009).

In this study three scales scored excellent on internal consistency, as indicated by Cronbach's alpha: Positive ( $\alpha = .94$ ), Anxiety ( $\alpha = .91$ ), and Support ( $\alpha = .94$ ). Two scales scored good: Anger ( $\alpha = .83$ ) and Passivity ( $\alpha = .82$ ), and one scale, Ruling-Punishing, scored fair ( $\alpha = .70$ ).

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Table 1. *Object-Relation and Social Cognition Theory Informed ATGR Scales*

	Level 1: very immature	Level 2	Level 3:	Level 4:	Level 5: very mature
<b>Complexity of representation of God</b>	Poor differentiation between thoughts / feeling of the character and of God	Poor understanding of God: vague, confused, incoherent, fluctuating or unintegrated representations	Superficial understanding: unidimensional, unelaborated descriptions of God's characteristics, thoughts or feelings	Acknowledgement of God's complexity; detailed descriptions, differentiated, ambiguous. Stability of God's characteristics over time/situations	Understanding of complexity/ ambiguity, relating it to general characteristics of God
<b>Affect tone of relationship with God</b>	Representations of God are malevolent, causing great distress or helplessness	Representations of God as hostile or disengaged, or defensively positive	Affective relationship with God with predominantly negative feelings	Relationship with God is affectively neutral or characterized by mixed feelings	Relationship with God is experienced with predominantly positive feelings
<b>Emotional investment into relationship with God</b>	No relationship with God or selfish relationship, only for own gratification	Superficial relationship, probably enduring, but need gratification prevails	Conventional relationship with God with some emotional investment, driven by wish for acceptance, pleasing God	Dedicated relationship with God, emotional investment based on principles, inner convictions	Deep, dedicated relationship with God for the sake of the relationship itself. Awareness of reciprocity.
<b>Dealing with religious rules and principles</b>	No sense of approval or disapproval from God, or only fear for discovery of bad acts because of negative consequences.	Some sense of approval or disapproval from God, absence of guilt or disproportionately feeling guilty. Problems with acknowledging Gods authority.	Complying because it's Gods will, without inner conviction, emphasizing rules instead of principles or relationship. Emphasis on avoiding punishment or obtaining approval.	Complying/ obeying out of inner conviction, respecting God's authority	Complying/ obeying out of affectively experienced relationship with God; sense of reciprocity, feelings of regret are related to relationship.
<b>Agency of God</b>	God has no influence on situations or on character's reactions	God has influence on situations or joint divine and personal influence on the character's reactions. No explanation for Gods action is given.	God has influence on situations or shared influence on the character's reactions, with general explanations given for it. Or God has absolute influence on reactions, but no explanation is given for it.	God has influence on situations or shared influence on character's reactions, with general explanations given for it. Or God has absolute influence on reactions, but only a general explanation is given for it.	God has total influence on character's reactions, and a specific explanation is given for it.

**Personality functioning.** Personality functioning was assessed by the Dutch version of the Severity Indices of Personality Problems-118 (SIPP-118; Verheul et al., 2008), a dimensional self-report measure of the core components of (mal)adaptive personality functioning. This measure, developed by The Dutch Viersprong Institute for Studies of Personality Disorders (VISPD), clearly addresses the core elements proposed by Livesley (2013). According to Livesley, there is consensus about self-problems and chronic interpersonal dysfunction as the core features of personality disorders, as reflected in the fifth edition of the Diagnostic and Statistical manual of Mental Disorders (American Psychiatric Association, 2013). The SIPP, also in line with Livesley “adaptive failure” model, also incorporates the relevance of (universal) life tasks.

The SIPP measure is based on consensus of 10 clinical experts about initially 25 facets of adaptive personality functioning. Validation research resulted in 16 facets that comprised five core adaptive personality factors: Self-control, Social Concordance, Identity Integration, Relational Capacities, and Responsibility (Andrea et al., 2007). Higher scores reflect more adaptive functioning. This measure will be used to examine the validity of the ATGR scales.

The 16 facets are measured over a timeframe of three months before administration, by 118 Likert scale items with Cronbach’s alpha’s ranging from .69 (Respect) to .84 (Aggression regulation), with a median of .77. The domain scores showed good test-retest reliability, explored over a timeframe of 14-21 days in a student sample with correlations ranging from .87 to .95. Discriminant validity appeared to be good as well: 12 of the 16 facets scales showed highest scores among a nonpatient sample, intermediate scores among a psychiatric outpatient sample, and lowest scores among a personality disordered sample. Convergent validity also appeared to be good, with the instrument yielding higher scores on the domains for patients with no diagnosis versus one diagnosis, and for patients with one diagnosis versus with at least two diagnoses (Verheul et al., 2008).

## Data Analyses

**Testing proportions of stronger correlations between scales.** We compared the (absolute) strength of correlations of implicit versus explicit God representation scales with the explicit personality pathology scales by computing six proportions per group: each proportion represents the number of comparisons with stronger associations of the five personality scales with a specific QGR scale than with a specific ATGR scale, divided by the total number of compared associations per QGR scale (25). The sixth proportion (per group) was the sum of the proportions per QGR scale, divided by the total number of all comparisons (150). The significances of proportions of stronger associations were tested by a binomial test, performed in EXCEL with the formula BINOM.DIST (number\_s, trials, probability\_s, cumulative). For the first

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argument (number of successes) we filled in the number of comparisons with stronger associations for the same-method than for the mixed-method combination, for the second (trials) we filled in the total number of comparisons, for the third argument (the probability of success) we filled in .5, and for the fourth we filled in ‘True’, which yields the cumulative probability. If the proportion found was higher than 0.5, we used the formula 1-BINOM.DIST; if it was lower than 0.5, we used the formula BINOM.DIST. Because this test assumes that the comparisons are independent, the correlations with the AGC subscales were left out of these analyses.

**Testing differences in correlations.** Differences between correlations were tested with the null-hypothesis that these correlations were equal. If a correlation between a scale and a same-method scale ( $r_{12}$ ) was stronger than the correlation between this scale and an other-method scale ( $r_{13}$ ), this difference was tested one-sided using Steiger’s (1980) formulas (14) and (15) for  $Z_1^*$  and  $Z_2^*$ , based on improved versions of Fisher’s  $r$  to  $z$  formula. These formulas account for the shared variance between two scales of which the associations with another scale are compared ( $r_{23}$ ).

**Examination of individual significant correlations between scales.** To detect possible associations between specific scales, we inspected strength and significance of the various Pearson correlations between scales in both groups.

**Partial correlations.** When implicit and explicit attachment to God scales correlated significantly with the same personality scale, partial correlations were computed to test if there was a unique contribution of the implicit God representation scales in explaining the variance in that particular personality scale.

## Results

### Associations of God Representations with Explicit Measures of Personality Functioning

Table 2. *Comparisons of Same Method with Mixed Method Correlations*

	stronger correlations for same-method than for mixed-method			significant differences		significant correlations			
	k	%	p	k	%	same-method correlations		mixed-method correlations	
						k	%	K	%
Nonclinical	140/150	93%	<.001	58/150	39%	22/30	73%	0/40	0%
Clinical	42/150	28%	<.001	1/150	1%	4/30	13%	9/40	23%

Table 3. *Correlations of Implicit and Explicit God Representation Scales with Explicit Personality Pathology Scales*

God representation scales	SIPP domain scales									
	Nonclinical					Clinical				
	Self-control	Social Concordance	Identity Integration	Relational Capacities	Responsibility	Self-control	Social Concordance	Identity Integration	Relational Capacities	Responsibility
Implicit ATGR scales										
Complexity	.05	-.05	.16	.10	-.03	.06	.04	.17	.13	-.03
Affect Tone character	-.13	.06	-.09	-.02	-.05	<b>.26*</b>	.12	<b>.37***</b>	.08	<b>.25*</b>
Affect Tone person	.01	.17	-.03	.09	.06	.21	<b>.27*</b>	.11	.02	.20
Investment	.03	.12	.06	-.04	.01	.22	.17	.20	<b>.28*</b>	<b>.24*</b>
Agency	.07	-.09	.14	.09	-.05	<b>.25*</b>	.19	.21	.18	.15
Agency-s	.08	-.19	.11	.09	-.06	.20	<b>.24*</b>	.18	.19	.18
Agency-r	-.03	-.09	.01	-.03	-.04	<b>.26*</b>	.08	.18	.08	.07
Agency-e	.09	-.07	.14	.12	-.06	.22	.15	.19	.13	.14
Explicit QGR scales										
Positive	<b>.33**</b>	<b>.32**</b>	<b>.36**</b>	<b>.32**</b>	<b>.35**</b>	-.02	.15	<b>.23*</b>	.00	.02
Anxiety	<b>-.24*</b>	<b>-.28*</b>	-.15	-.22	-.14	-.10	-.12	<b>-.34**</b>	<b>-.27*</b>	-.13
Anger	<b>-.55***</b>	<b>-.51***</b>	<b>-.52***</b>	<b>-.46***</b>	<b>-.35**</b>	-.01	-.13	-.09	.14	-.01
Supportive	<b>.25*</b>	<b>.33**</b>	<b>.30**</b>	<b>.32**</b>	<b>.31**</b>	.11	.11	.23	.03	.08
Ruling/punishing	.02	.03	.16	.13	.15	-.01	.01	.00	.09	-.10
Passivity	<b>-.29*</b>	<b>-.40***</b>	<b>-.35**</b>	<b>-.28*</b>	<b>-.30*</b>	-.06	<b>-.23*</b>	-.19	-.07	-.12

NOTE: Bold correlations are significant at the  $p = .05$  level. N.B.: High scores on the SIPP domain scales reflect more adaptive functioning

\* =  $p \leq .05$

\*\* =  $p \leq .01$

\*\*\* =  $p \leq .001$

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The difference between the same-method versus mixed-method correlations was significant for almost 40% of the comparisons. However, in the clinical group only 28% of the comparisons was in favor of the same-method correlations. This percentage was significantly lower than expected when the distribution in the population of stronger and weaker correlations would be fifty-fifty. Only one of those comparisons between same versus mixed-method correlations (1%) was significantly different.

In the nonclinical group, 73% of the same-method correlations was significant, whereas in the clinical group only 13% of the same-method correlations was significant (see also Table 3). In the nonclinical group, none of the mixed-method correlations was significant, whereas in the clinical group, 23% of those correlations was significant. In the nonclinical group, the explicit God representation scale Ruling/punishing correlated more strongly than implicit God representation scales in 64% (16/25) of the comparisons with the (explicit) personality scales (see also Table 4). The other five explicit God representation scales correlated more strongly with all personality scales than the implicit God representation scales, with only one exception: the implicit Complexity scale correlated more strongly than the explicit QGR Anxiety with SIPP scale Identity Integration. Of the personality scales, Responsibility had the most significant differences in favor of the explicit God representation scales: half of the comparisons (15/30) was significantly stronger for the explicit than for the implicit God representation scales.

Table 4. *Number of Stronger Correlations of Explicit God Representation Scales than Implicit God Representation Scales with Personality Pathology Scales for the Nonclinical Group*

QGR scales	SIPP domain scales					Total
	Self-control	Social Concordance	Identity Integration	Relational Capacities	Responsibility	
Positive	5	5	5	5	5	25/25
Anxiety	5	5	4 <sup>2,3,4,5</sup>	5	5	24/25
Anger	5	5	5	5	5	25/25
Supportive	5	5	5	5	5	25/25
Ruling/punishing	1 <sup>3</sup>	0	5	5	5	16/25
Passivity	5	5	5	5	5	25/25
Total	26/30	25/30	29/30	30/30	30/30	140/150

NOTE <sup>1</sup>Complexity; <sup>2</sup>Affect Tone character; <sup>3</sup>Affect Tone person; <sup>4</sup>Investment; <sup>5</sup>Agency (ATGR scales that correlated more strongly with the personality scale than the explicit QGR scale)

In the clinical group, as expected, for each QGR scale in only a minority of the comparisons the QGR scale showed stronger correlations with personality scales than the implicit God representation scales (see also Table 5). The QGR Anxiety scale had

the highest proportion of comparisons with stronger associations with personality scales than the ATGR scales, namely 44% (11/25). For the QGR scales Anger and Ruling/punishing, respectively only 20% and 10% of the comparisons had stronger correlations than implicit ATGR scales with the personality scales. In line with our expectations, for three of the implicit ATGR scales, namely Affect Tone character, Investment, and Agency, 75% of the comparisons had stronger correlations than QGR scales with personality scales. For Affect Tone character, 52%, and for Complexity, only 35% of the comparisons had stronger correlations with the personality scales than the explicit God representation scales.

Table 5. *Number of Stronger Correlations of Explicit than Implicit God Representation Scales with Personality Pathology scales for the Clinical Group*

QGR scales	SIPP domain scales					Total
	Self-control	Social Concordance	Identity Integration	Relational Capacities	Responsibility	
Positive	0	2 <sup>1,2</sup>	4 <sup>1,3,4,5</sup>	0	0	6/25
Anxiety	1	1 <sup>1</sup>	4 <sup>1,3,4,5</sup>	4 <sup>1,2,3,5</sup>	1 <sup>1</sup>	11/25
Anger	0	2 <sup>1,2</sup>	0	3 <sup>1,2,3</sup>	0	5/25
Supportive	1 <sup>1</sup>	1 <sup>1</sup>	4 <sup>1,3,4,5</sup>	1 <sup>3</sup>	1 <sup>1</sup>	8/25
Ruling/punishing	0	0	0	2 <sup>2,3</sup>	1 <sup>1</sup>	3/25
Passivity	1 <sup>1</sup>	4 <sup>1,2,4,5</sup>	2 <sup>1,3</sup>	1 <sup>3</sup>	1 <sup>1</sup>	9/25
Total	3/30	10/30	14/30	11/30	4/30	42/150

*NOTE* <sup>1</sup>Complexity; <sup>2</sup>Affect Tone character; <sup>3</sup>Affect Tone person; <sup>4</sup>Investment; <sup>5</sup>Agency (ATGR scales that correlated more strongly with the personality scale than the explicit QGR scale)

**Specific correlations of implicit God representation scales with personality functioning scales.** To further examine the validity of the ATGR scales, we describe the significant correlations of each scale with specific personality scales. This is done for the clinical group only, because in the nonclinical none of the ATGR scales correlated significantly with the personality scales.

The implicit God representation scale Complexity did not correlate significantly with any of the SIPP-domains. Affect Tone character correlated significantly with Self-control, Identity and with Responsibility. Affect Tone person correlated significantly with Social Concordance. Investment correlated significantly with Relational Capacities and with Responsibility. Agency correlated significantly with Self-control. All significant correlations were positive, indicating that patients with healthier God representations often also had more adaptive personality functioning (higher scores on the SIPP-scales reflect more adaptive functioning).

**Partial correlations between ATGR and SIPP scales, controlling for the correlations between QGR and SIPP scales.** Many correlations between



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ATGR and SIPP scales remained significant after controlling for the associations of QGR scales with the SIPP scales, indicating that the ATGR scales explained 5-14% of unique variance in personality scores that could not be explained by the QGR scales.

Taken together, four of the eight implicit ATGR scales demonstrated incremental validity by significantly explaining variance in SIPP domain scales that could not be explained by the explicit God representation scales: The implicit God representation scale Affect Tone character explained 6.7% unique variance in the personality functioning scale Self-control and 12.9% of unique variance in Identity Integration; Affect Tone person explained 6.7% of unique variance in Social Concordance, Investment explained 7.3% of unique variance in Relational Capacities, and Agency-s explained 7.3% of unique variance in Social Concordance. The partial correlations of the main Agency scale with Self Control, Social Concordance, Identity and Relationship approached significance with  $r$ 's of .22 with each of these domain scales, explaining 5% of their variance. The proportions of variance are called unique in the sense that they are not shared with the explicit God representation scales, but this does not account for potentially shared variance between the implicit God representation scales.

## Discussion

The aim of the present study was the further validation of the ATGR by examining its associations with the explicit SIPP personality scales, and by comparing these associations with the associations of scales of an explicit God representation measure in two groups.

Our first—adapted—expectation (associations between implicit God representations and explicitly measured personality functioning will be stronger in the clinical group than in the nonclinical group), was clearly confirmed: Only in the clinical group, most ATGR scales had meaningful significant associations with the personality scales, confirming the validity of the ATGR for religious patients with personality pathology. In contrast, in the nonclinical group there were no significant correlations between the implicit God representation scales and the explicit personality scales.

Our second expectation (in the nonclinical group, explicitly measured personality functioning will be more strongly associated with explicit than with implicit God representations) was also clearly confirmed: in the nonclinical group, 73% of the same-method correlations was significant, whereas none of the mixed-method correlations was significant.

Our third—adapted—expectation (in the clinical group, explicitly measured personality functioning will be more strongly associated with implicit than with explicit God representations) was also clearly confirmed: more than two-third of the comparisons between implicit and explicit God representations regarding strength of

correlation with explicitly measured personality functioning was in favor of the implicit God representations.

These results corroborate some of our earlier findings showing that only among patients implicit measures of God representations are more strongly than explicit measures of God representations associated with explicit measures of distress and quality of object-relational functioning. This phenomenon might be explained by assuming that among patients with personality pathology implicit negative emotions and evaluations invade the conscious experience of emotions and evaluations more than among nonpatients (Stulp, Glas, & Eurelings-Bontekoe, 2020; Stulp, Koelen, Glas, & Eurelings-Bontekoe, 2019). These findings are in tune with research on implicit cognition, suggesting that under stress or with limited resources, implicit processes gain dominance over explicit processes (Hofmann, Rauch, & Gawronski, 2007). As a result, explicit measures of psychopathology may be useful in clinical practice because they tap into aspects of implicit mental functioning. This is a relevant finding regarding the debate about whether implicit processes can be assessed with explicit measures. Many scholars assume that this is not possible, because implicit and explicit measures of the same concepts often are hardly associated. In the attachment domain this is demonstrated by the meta-analytic results of Roisman et al. (2007) about the trivial to small associations between outcomes of the implicit Adult Attachment Interview and outcomes of self-report measures of attachment. However, Hall, Fujikawa, Halcrow, Hill, and Delaney (2009) used self-report measures for assessing internal working models (IWM's) of attachment representations of God, and argued, in line with Shaver and Mikulincer (2002), that they can be viewed as valid indicators of implicit processes because their relationship to implicit measures is empirically supported.

Nevertheless, although for patients with personality disorders in this study the explicit measures of God representations also seem to tap implicit aspects of God representations, the implicit measures of God representations have incremental value because of the relatively stronger associations of the implicit scales with various aspects of personality functioning.

Our conclusion of stronger associations of implicit than explicit God representation measures with the explicit SIPP measures is predominantly based on the *number* of stronger correlations rather than on their *magnitude*. Apparently, in the clinical group the QGR does not measure the broad range of pathology-related aspects of God representations which the ATGR does, as the various correlations of all ATGR scales with one or more SIPP domain scales indicate.

These correlations confirm the validity of the ATGR scales among patients with personality pathology. In the following paragraphs we will discuss this validity per scale.

### The Validity of the Separate ATGR Scales

**Complexity of representations of God.** Although Davis, Granqvist, and Sharp (2018) assume that integration is a key aspect of healthy relational spirituality, to our surprise none of the correlations between the implicit God representation scale Complexity and the personality pathology domain scales was significant, suggesting that the level of integration and differentiation of God representations is not associated with personality pathology. Perhaps the explicit pathology measures are not able to assess this more structural, underlying dimension of representations that is also a key aspect in the object-relational approach of representations of self and others.

Explorative post-hoc analysis revealed that this ATGR scale was specifically and significantly associated with SIPP facet scale Purposefulness,  $r = .30$ ,  $p = .008$ . Apparently, for religious patients, a less integrated and differentiated representation of God is connected to difficulties in making sense of one's life.

**Affect Tone character.** The pattern of associations of the implicit God representation scale Affect Tone with the personality scales corroborated its validity: This ATGR scale, focusing on the affect tone of the relationship with God, was most strongly and significantly associated with the SIPP domain scale Identity Integration and the domain scale Self-control, suggesting that patients who have trust in the relationship with God also have a better-integrated identity and a higher level of emotion regulation and frustration tolerance. This is in line with object relations theory that assumes a close relationship between quality of object relations and identity integration and affect regulation (Pedersen, Poulsen, & Lunn, 2014).

**Affect Tone person.** Results of the present study suggest that the implicit God representation scale Affect Tone person seems to predominantly assess an explicit, and doctrinally drive picture of the relationship to God, rather than the implicitly experienced affective relationship to God: this ATGR scale correlated significantly with personality pathology scale Social Concordance only. This underlines our idea that especially this scale might be susceptible to social desirability. Respondents often seemed to feel the urge to comment on what they let the character attribute to God, often adding that they personally thought that God is more benevolent than the character in the story experienced. The face-to-face assessment of this instrument therefore may have contributed to the social-desirability or doctrine-effects on this scale.

**Emotional Investment in the relationship with God.** The implicit God representation scale Investment especially seemed to express, as intended, the quality of the experienced relationship with God, because it correlated significantly with those SIPP domain scales that focus on the relationship with others: Relational Capacities and Responsibility. Patients who tell stories about characters that are easily frustrated in the relationship with God, and whose reasons to relate to God are rather egocentric and extrinsically motivated, also report difficulties in interpersonal relationships. This is in line with Hall and Edwards (1996, 2002), who also found difficulties in the

relationship with God to be associated with an extrinsic religious orientation and with an egocentric interpersonal attitude. Theoretically, the healthiness of and capacity for investing in human relationships for reasons of the relationship itself instead of personal gain, and the correspondence with spiritual relationships, is also emphasized by Verhagen and Schreurs (2018) in their model for the interconnectedness of spiritual and interpersonal relationships,

**Agency.** The implicit God representation scale Agency aims at assessing whether God is perceived as influential in persons and their life situations, and if his actions are understood and valued. Agency correlated significantly and positively with the personality scale Self Control, implying that belief in God's influence is associated with a sense of self-control.

Whereas the Investment scale specifically was associated with someone's view of others, the Agency scale was more strongly associated with aspects of the self. Of course the development of the self cannot be disentangled from the development of representations of others. As Winnicott (1971) states: The eyes of the mother, and the entire face of the mother, are the child's first mirror. Our data are in line with the correspondence hypothesis (Granqvist, 1998; Kirkpatrick, 1998; Kirkpatrick & Shaver, 1990): (implicit) internal working models of the self and of others correspond with the attachment to God representations (Hall et al., 2009).

All in all, patterns of correlations of the ATGR scales with the explicit personality functioning scales suggest the validity of three of the five scales: Affect Tone character, Investment, and Agency. Validity of the Complexity and the Affect Tone person scale could not be confirmed in this study.

## **Clinical Implications**

The results of this study demonstrate that for Christian patients suffering from cluster B or cluster C personality disorders, the use of a performance-based measure as the ATGR to assess implicit God representations, has incremental value above measuring explicit God representations with self-report measures. The study also demonstrated that religious patients with a pathological sense of self and of others — implying interpersonal difficulties and lack of support from others— who therefore might need experienced support from the divine, may however at the same time be unable to create a representation of a God that is powerful and may reach out to them as a loveable object to help them. This might render them double lonesome, and asks for therapeutic (religious) interventions.

The rich narrative content that is yielded by a stimulus attribution measure as the ATGR provides opportunities for clinicians to further explore their patients' representations of God and their relationship with God. Identifying similarities between the told stories and patients' own stories, with regard to affect tone of the relationship with God, emotional investment in this relationship, and experiences of God's agency,

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might be the first step in a narrative approach that subsequently stimulates developing growth-promoting storylines, as is done in the God image narrative therapy (GINT) as mentioned in Olson et al. (2016). A follow-up assessment of the ATGR might be indicated to assess the effectiveness of such interventions.

### Limitations and Future Research

A first limitation of this study is that the validity of the conclusions may be restricted to a specific Dutch group of Protestant Christians, with members believing in a personal God.

A second limitation is that we used only an explicit personality functioning instrument for examining the construct validity. Therefore in this particular article, we could not conclude about the association between implicit measures of God representations and implicit measures of personality (mal)functioning. It would be appropriate to also examine associations between the ATGR scales and implicit or indirect measures of personality pathology, for example by using the STIP-5, a semi-structured interview for personality functioning (Berghuis, Hutsebaut, Kaasenbrood, De Saeger, & Ingenhoven, 2013) and the Structured Interview of Personality Organization (STIPO, Clarkin, Caligor, Stern, & Kernberg, 2004; Stern et al., 2010).

A third limitation is that the comparison between associations of implicit and explicit God representation scales with personality scales may be obscured because they do not measure exactly the same aspects of God representations. An explicit God representation measure that is conceptually equivalent to the ATGR does not exist. Although we have considered to use the Spiritual Assessment Inventory (Hall & Edwards, 1996, 2002) that perhaps is conceptually more related to the ATGR, we chose the QGR, an explicit God representation that is well-validated for Dutch believers. When a translated and well-validated Dutch version of the SAI becomes available, it would be useful to examine its associations with the ATGR and to also compare associations of both measures with explicit and implicit measures of personality (mal)functioning.

A fourth limitation is the cross-sectional design of this study. Although it is theoretically assumed that differences in implicit representations of self, God and others, and of the self in relationship with God and with important others, underlie and cause differences in interpersonal functioning, results cannot conclude about the direction of the found associations.

More research is needed into the influence of biographical factors on ATGR scale scores. Finally, validation of the scales could be more strongly undergirded by examining whether, among patients, changes in implicit God representations are related to changes in personality functioning and in, explicitly but preferably also implicitly measured distress/wellbeing.

However, all in all the results of this study provide additional evidence of the validity of the ATGR scales. Moreover, the results demonstrated that core aspects of

personality functioning are also related to implicit God representations. This implies that therapists with patients suffering from personality disorders for which believe in a personal God is important, should also pay attention to patients' implicit God representations in intake and treatment program.

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