

Article

Are Spiritual Experiences through Music Seen as Intrinsic or Extrinsic?

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Abstract: Music has a great capacity to afford spiritual experiences, but are those experiences intrinsic or extrinsic to the music? This paper reports the results of research aimed at answering that research question. One hundred and seventeen self-reported Christian religious people completed a survey, answering eight rating-item questions about strong musical experiences, both in a religious and a non-religious context. Factor analysis revealed that ratings related to spirituality grouped together, but were separate from intrinsic and extrinsic semantic groupings, suggesting that there is something special about the phenomenon of spiritual experiences with music that is beyond a simple identifiable source. We concluded that spirituality, therefore, appears to be something profound and transcendent that *comes to life* with the musical forms, rather than being perceived as either explicitly intrinsic or extrinsic to the music. In the religious context, experiences were stronger, more spiritual, and more emotional, but in the non-religious context experiences elicited similar features, just to a lesser degree. This suggests the phenomenon is not merely a product of religion. This research, although limited due to its quantitative nature, demonstrated an important place for spirituality within the experience of music, and therefore places a call on the research community to invest more in understanding this phenomenon.

Keywords: spirituality; music; emotion; religion

1. Introduction

Music has a great capacity for eliciting spiritual experiences. We see this in the ubiquitous use of music in religion, in the transcendentalism of the Romantic period with great works of Art such as Liszt's Transcendental Studies [1], and in Robert Schumann's description of music as a universal language that animates the spirit [2]. There is something about music that makes it an effective vehicle for the expression of an ultimate reality that we can call spirituality [3–8]. Research on emotion in music over the last 20 years has led to an increasingly sophisticated understanding, culminating with perhaps one of the most important presentations of its mechanisms, through the work of Juslin and Västfjäll [9]. The mechanisms they propose can be grouped in a way that was proposed by Meyer [10] a half a century earlier, with a distinction between *referentialism* (extrinsic, e.g., Juslin and Västfjäll's "episodic memory") and *absolutism* (intrinsic, e.g., "emotional contagion"). That is, for at least the last 50 years, music in emotion researchers have been able to conceptualise emotion as having its source *extrinsic* to the music (memories, imaginings, etc.) or *intrinsic* to the music (coming from within the structure of the music). However, little work has been conducted to see if spiritual experiences can similarly be classed as intrinsic or extrinsic to the music. Are they of the same kind as the music, so that the music embodies the spiritual? Or are they of a different kind, so that the music simply designates the spiritual? That is the research question this study seeks to explore. We begin by demonstrating that several researchers are aware of this possible dichotomy, but we identify little research that directly addresses the question from an empirical perspective, and so a survey-based study is reported to address the question.

There is debate amongst the research community as to what exactly spirituality means [11–13]. Rather than try and solve that debate in this paper we note that it is recognized as being closely related to transcendence [14–16]. For example, Kennedy and Kanthamani suggested that both transcendence and spirituality encompass an "overwhelming feeling of peace and unity with the entire creation, or profound inner sense of Divine presence" ([17], p. 334). Therefore, we can compare spiritual and transcendent experiences to see whether music conveys them intrinsically or extrinsically.

They will be intrinsic to the music if they are *embodied* by the music; if, for example, the sense of transcending beyond this physical world and losing track of time and space is inherent in the perception and reception of the melody, harmony and rhythm of the music itself. Meyer [10] called this *absolute* meaning. Absolute meaning is contained within the music itself, arising from some natural signification that the music possesses. Davies [18] called this the *dynamic characteristic in appearance*, where music models the spiritual experience through its pitch, rhythm and dynamics. Just as a Bassett Hound *looks* sad, so music has the dynamic characteristics that match the spiritual experience.

Accordingly, spiritual experiences will be embodied by the musical forms and not simply mediated through them, so that those forms can be done away with. Harvey called this *integration*, claiming that spirituality is in the very nature of music's working: "The music is neither an abstraction nor an outer object but an inner coming-to-life of something" ([19], p. 32). Therefore, "music is by its very nature spiritual" (p. 82). To the extent that this is the case, spiritual experiences will be intrinsic to the music.

The alternative is that spiritual experiences are extrinsic to the music, if they are simply designated to the music through association. This is what John Booth Davies [20] meant by the expression

“Darling, they’re playing our song”. It is an intentionality that is merely *lent* to the music, which the music does not, of itself, possess [21]. A particular song may, for example, come to represent one’s connection with God even if it does not inherently possess that intentionality. This is what Meyer [10] classified as *referential* meaning because the music merely refers to something outside the music. While Meyer focused on thoughts and, in particular, emotions, we are proposing that this provides a way of understanding spiritual experiences in music.

This extrinsic association can happen either with the music itself or with the text, which is part of the music in a wider sense. This research includes the possibility of the latter because of the close association between music and text. Various studies have shown this connection [22–24], which became known as the “integration effect” [25]. More recent studies have found that language in music (text) appears to be qualitatively different from language on its own [26]. Therefore, we will include the possibility of spiritual experiences arising from music and text together.

Music has a great capacity for sustaining such extrinsic references. It can trigger images or thoughts of people, places and experiences that are spiritual in nature, especially in the religious context. It can also carry connotations or shared associations that are spiritual in nature, such as in an African freedom song. Further, music can convey moods that are spiritual. This was evident in Gabrielsson and Lindström Wik’s [27] existential and transcendence categories, such as “*heavenly/extraterrestrial feeling*”, “*oceanic feelings*”, “*spiritual peace/harmony*”, and “*devout, sacred atmosphere*”.

Research on emotion as an experience of music has demonstrated that emotion can be both extrinsic, through its propensity to attract and maintain extra-musical references, and intrinsic, derived from the structure of the music itself, emanating from its forms. This was the focus of Meyer’s seminal work *Emotion and meaning in music* [10], which is still bearing influence today [9,28–30]. Yet Davies [18] is one who claims that while music can have external references as it operates as a code, the power of music does not seem to depend on those codes, so emotion is better accounted for as an intrinsic phenomenon.

In our previous paper [31] we found that spiritual experiences operate in a similar way to emotion. However, that paper was limited to qualitative responses to open-ended questions about spiritual experiences identified in response to personally significant musical experiences. This paper examines, via quantitative techniques, whether spiritual experiences are reported as being intrinsic to the music and therefore embodied by it, or extrinsic to the music and therefore referred to by it, with the music acting as a conduit or link to this spiritual experience.

The study deliberately limits the participants to religious people because we wanted to be sure that a range of spiritual experiences could be reported, including those of a connection with the supernatural. Participants were drawn from the Christian religion (see Participants section, below). However, to safeguard against the possibility that participants will provide spiritual responses *because* they believe the researchers are seeking information about religious context experience (which we were not, we were seeking information on spiritual experiences) comparisons of experiences from the religious and the non-religious contexts were employed.

Music does not operate in what Sloboda [32] called a pharmaceutical way, by constraining a certain experience regardless of context and listener factors (personality, mood, *etc.*). It is, at least partially, a cultural phenomenon, whose meaning is developed within a cultural frame [33]. The community will respond to the music with a pre-given comportment to listening that includes attitudes, beliefs,

expectations, and behaviors [34]. This influence of culture was examined here by comparing experiences in religious and non-religious contexts. If the spiritual experience is simply a demand characteristic of the religious context, it should not be present in the non-religious context. Furthermore, a demand characteristic should lead to lower ratings in the non-religious context, but in that case the differential responses to the different items related to spirituality will still be able to inform relative differences between contexts. In light of the contemporary understanding of spirituality as distinct from and wider than religion [12,13,35], we expect that experiences in the religious contexts will be more extrinsic in nature, involving references to the supernatural, but we expect that the overall spiritual experience will not simply be an effect of context.

This study has two aims:

- (1). To see whether spiritual experiences are intrinsic or extrinsic for religious people.
- (2). To see whether religious context has any effect on this.

2. Method

2.1. Participants and Recruitment

Participants in this study were recruited from Christian religious groups. This broad set of aesthetic and spiritual traditions was chosen on the basis that these participants would not reject the term spirituality either as being vacuous or as identifying them with beliefs to which they could not subscribe. These participants were drawn from specific churches (selected on the basis of their strong commitment to music), an arts college, para-church organizations, and various societies, choirs, and guilds. In addition, some were recruited from the Internet through groups concerned with religion.

Participants had the option of completing a paper-based or electronic survey, the latter facilitating participation from people overseas. Valid responses were received from 117 people aged between 18 and 77 years (Mean = 37.3, SD = 16.6) of whom 52% were male. Most major Christian denominations were represented, including Catholic, Anglican, Baptist, Presbyterian, Congregational, Assemblies of God, Vineyard, Christian City Church, and Uniting Church.

Across the participant pool, 6% reported having no musical experience, 14% rated themselves as novices, 32% reported having some training, 35% experienced, and 13% professional musicians. Ninety percent of participants were from Australia, the rest being from the United States, Germany, Malaysia, Singapore, and South Africa.

2.2. Procedure and Material

A survey-based approach, consisting of three parts, was developed to address the research question as part of a larger study on spiritual experiences in music. The first part consisted of revealing ethics commitments, and gathering background and demographic information. The second part asked participants to recall a significant musical experience they had had in a religious setting. Participants were free to choose whatever significant experience they wished, and so they would be making reference to the music that was part of that experience, whether vocal or instrumental music. We then limited the main elements under investigation to quantifiable rating scales. Participants were then asked to rate, on an 11 point Likert scale (0 to 10), the extent to which the significance of the

experience was due to extrinsic significations, such as memories, ideas, concepts, emotions and so on, represented by the music.¹ This formed the quantitative part of the “extrinsic” element. Participants were also asked to rate the extent to which the significance of the experience was due to intrinsic embodiment of the music itself, such as melody, harmony, rhythm, instruments and so on.² This formed the quantitative part of the “intrinsic” elements.

Participants were asked to rate the extent to which they experienced six other elements in addition to “intrinsic” and “extrinsic”. They were asked about the “strength” of the experience and whether there were “particularly intense emotions”. They were asked about three elements that relate to transcendence: “a sense of being part of or overtaken by something more powerful than yourself”, a sense of “losing track of time or space or even yourself as an individual”, a sense of being “transformed or strengthened”. They were then asked about the extent to which they would “describe this experience as spiritual”.³ (What participants meant by “spiritual” was an open question so they were simply encouraged to use their own understanding of the term.) There were other qualitative questions in this study, but this paper presents these questions as the quantitative aspects, which comprised two general elements: “strength” and “emotion”, and four elements related to spirituality: “overtaken”, “lose track”, “transformed” and “spiritual”, in addition to the two elements “intrinsic” and “extrinsic”, mentioned above. The third part of the questionnaire asked the same questions about an experience in the non-religious setting, such as at home or at a concert. The order of parts 2 and 3 of the survey were swapped randomly across participants as a means of counterbalancing religious and non-religious context.

3. Results

A factor analysis was used to explore the inter-relationships between the eight quantitative elements in this study. Varimax rotation was used to obtain maximum separation of the emergent factors. The data from the religious and non-religious contexts for each individual were pooled in order to provide a larger data set and to maximize variation. This provided a maximum total data set of 234 entries (not all included participants completed all questions). All rating scales used ranged from 0–10.

Table 1 shows three distinct factors. The third factor was included despite having an Eigenvalue of less than 1 (0.9) because this allowed the presentation of both intrinsic and extrinsic meaning as well as spirituality. The first factor accounted for almost half the variance and included very strong loadings for all the spiritual-related elements, as well as “strength” and “emotion”. We suggest this factor is therefore identifying a sense of spirituality, which was also related to strength and emotion, and therefore labeled that factor accordingly. This identifies the importance of the spiritual experience in these experiences of music, as well as the connection between spirituality and emotion.

¹ This extrinsic question read: “To what extent was the significance of this experience due to the memories, ideas, concepts, emotions, *etc.*, represented by the music?”

² This intrinsic question read: “To what extent was the significance of this experience due to the music itself? (For example was it due to the melody, harmony, rhythm, instruments, *etc.*?)”

³ All quotes come from the questionnaire, and no further guidance was given in these questions.

Table 1. Factor analysis of the pooled questionnaire data.

<i>Rotated Component Matrix</i>	Factor		
	1 Spirituality	2 Intrinsic meaning	3 Extrinsic meaning
Strength	0.74	0.13	0.33
Emotions	0.76	0.10	0.34
Overtaken	0.90	0.08	0.10
Lose track	0.82	0.12	0.03
Transformed	0.89	−0.10	0.03
Spiritual	0.86	−0.16	−0.06
Intrinsic	0.04	0.85	0.02
Extrinsic	0.13	0.05	0.95
% of Variance	48%	18%	10%
Eigenvalue	4.24	1.72	0.94

$n = 234$; Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization; Shaded rows are elements related to spirituality.

The second and third factors were strongly loaded with just one element each; “intrinsic” and “extrinsic” meaning respectively. We interpret this finding as indicating that spiritual experiences are not clearly either intrinsic or extrinsic parts of the music. These findings were further examined by comparing experiences in the religious and non-religious contexts. Tables 2 and 3 present the results.

Table 2. Factor analysis of the religious context.

<i>Rotated Component Matrix</i>	Factor		
	1 Spirituality	2 Intrinsic meaning	3 Extrinsic meaning
Strength	0.69	−0.03	0.50
Emotions	0.67	0.23	0.35
Overtaken	0.86	0.07	0.12
Lose track	0.80	0.18	−0.06
Transformed	0.85	0.04	0.04
Spiritual	0.88	0.02	−0.02
Intrinsic	0.05	0.82	0.14
Extrinsic	0.02	0.22	0.91
% of Variance	46%	17%	10%
Eigenvalue	4.14	1.51	0.88

$n = 117$.

These analyses are very similar to the overall analysis (Table 1), suggesting context had very little effect. The spirituality factor was again the strongest, and again it bore no relationship with intrinsic or extrinsic meaning, which both loaded independently. “Strength” did load more strongly onto the “intrinsic” factor in the non-religious context, suggesting that the music itself involved a sense of strength in the non-religious context that was not so relevant in the religious context. In the same context both “strength” and “emotion” loaded strongly onto the extrinsic factor.

Table 3. Factor analysis of the non-religious context.

<i>Rotated Component Matrix</i>	Factor		
	1 Spirituality	2 Intrinsic meaning	3 Extrinsic meaning
Strength	0.55	0.42	0.42
Emotions	0.66	0.20	0.46
Overtaken	0.82	0.29	0.22
Lose track	0.77	0.21	0.16
Transformed	0.87	−0.00	0.11
Spiritual	0.86	−0.07	−0.06
Intrinsic	0.05	0.85	−0.03
Extrinsic	0.11	−0.05	0.92
% of Variance	47%	16%	11%
Eigenvalue	4.23	1.44	0.96

$n = 117.$

Some of the dependent measures did not exhibit the assumptions required for parametric statistical testing. However, the decision was made to use parametric tests since the violations fell within the gamut of those described by Finch [36]. The eight elements were entered as the dependent variables into a MANOVA with context (religious and non-religious) as the independent variable, and this showed some differences between the religious and non-religious contexts. There was an overall main effect ($F(9,168) = 19.08, p < 0.01, \eta_p^2 = 0.506$), and a series of follow-up t-tests confirmed there were significant differences for all elements except for “extrinsic” (see Table 4). Figure 1 plots the mean and standard error (SE) of each variable by context.

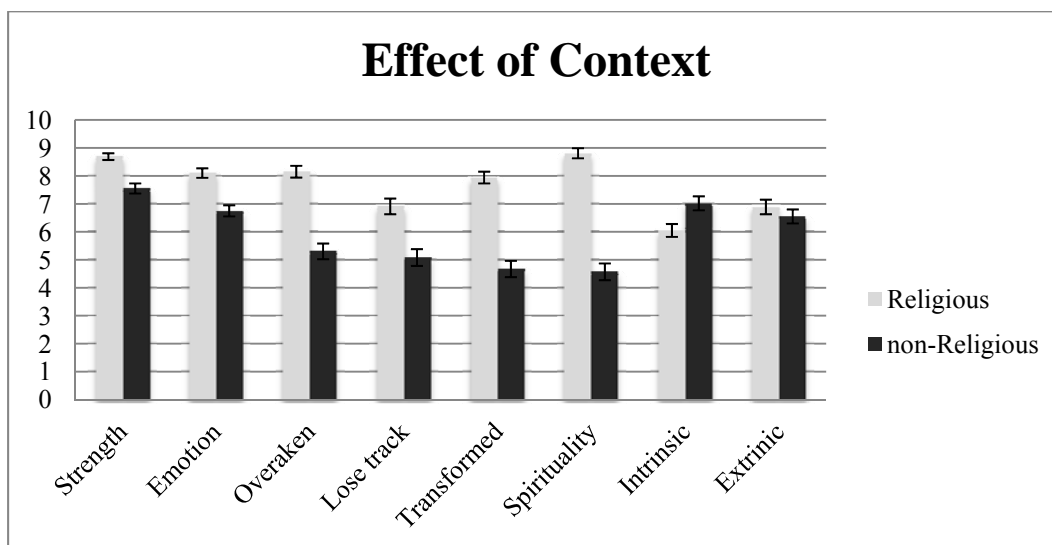
Table 4. T-test results and effect size (Cohen’s d) for comparison between Religious and non-Religious contexts.

Element	t	p	Cohen’s d
Strength	5.29	<0.01	0.693
Emotion	5.106	<0.01	0.668
Overtaken	8.103	<0.01	1.064
Lose track	4.544	<0.01	0.592
Transformed	9.167	<0.01	1.197
Spiritual	11.941	<0.01	1.562
Intrinsic	2.839	0.04	0.374
Extrinsic	0.935	0.99	0.124

Note: $df = 232$, p values adjusted for multiple comparisons using Bonferonni correction.

For most of the elements it was the religious context that produced the higher ratings. The “spiritual” and transcendence-related elements in particular, but also “strength” and “emotion” were stronger in the religious context. This may be expected due to the religious nature of the participants. Yet these elements were still rated at around 5 out of 10 or higher in the non-religious context, suggesting there is still some sense of the spiritual and transcendence and more so of strength and emotion even in the non-religious context.

Figure 1. Mean element ratings comparing religious and non-religious contexts.



Notes: $n = 117$; Error bars show ± 1 SE; Dependent variables rated on a scale of 0 to 10.

The “extrinsic” element was rated similarly for both contexts, indicating it was a moderately important element regardless of context. Ratings for “intrinsic” were, by contrast, higher for the non-religious context. This may be due to a greater focus on the music itself in the non-religious context, whereas in the religious context people experienced something more, often involving the words.

Results also demonstrated strong support for the similarity between spirituality and transcendence. Table 5 shows that correlations between the three transcendence elements and spirituality were all strong and significant. The correlation between “spiritual” and “lose track” (0.59) was the lowest, which may identify where spirituality and transcendence differ for these participants. It seems spirituality had less to do with the idea of withdrawal from time and space and more to do with the connection or fusion with another entity, such as God.

Table 5. Pearson correlations of the three transcendence elements with the “spiritual” element.

Element	Correlation
Overtaken	0.74*
Lose track	0.59*
Transformed	0.79*

Note: $n = 230$; * $p < 0.01$.

4. Discussion

This paper has presented the quantitative findings pertinent to the research question of whether spiritual experiences are intrinsic or extrinsic to music, by analyzing quantitative ratings on a self-report questionnaire. Participants with a keen interest in music were selected from the Christian religious tradition, which represents one aesthetic tradition in which spirituality should be a concept that is readily accessible. A comparison was made between experiences in a religious context (e.g., a church service) and a non-religious context (e.g., a concert) for each participant. We acknowledge the limitation of findings that do not take into account qualitative aspects of spirituality and we refer the

reader to our previous paper where such information was reported [31]. Nevertheless, we submit that these quantitative data yield valuable results contributing to a broad understanding of spirituality and music.

4.1. Spirituality as Intrinsic or Extrinsic?

There was no obvious link between spirituality and either the intrinsic or extrinsic meaning of the music. Rather, it occupied its own dimension in both religious and non-religious contexts. The spirituality factor, which included both spiritual and transcendence elements, was statistically independent of both the intrinsic and extrinsic factors. We acknowledge that there were more questionnaire elements relating to spirituality (four out of eight), which could account for the amount of variance that factor represented. However, that does not explain why the spiritual-related elements did not load onto the intrinsic or extrinsic factors.

Apart from a slight loading (0.22) of “Overtaken” with extrinsic meaning in the non-religious context, there was very little evidence of spiritual experiences being extrinsic to the music. The qualitative responses that support this quantitative data, which were discussed in our previous paper [31], suggested there was some degree of extrinsic dimension to the spiritual experience, in that there were some comments intimating that the music brought external references to spiritual aspects, such as references to God (p. 316). However, this only accounts for part of the experience of spirituality. When the spiritual experience is considered holistically, as was done here, it is not an extrinsic phenomenon.

These quantitative results also indicated that the spiritual experience was not really intrinsic to the music either, in that the factors were clearly separate. “Overtaken” and “Lose track” did load weakly (0.29 and 0.21) for the non-religious context, but that was all. We suggest that this is because intrinsic meaning was taken in a constricted, formal sense of “melody, harmony and rhythm”. Meyer [10] characterized the formalist position as “the meaning of the music [that] lies in the perception and understanding of the musical relationships set forth in the work of art and that meaning in music is primarily intellectual” (p. 3). The finding that “strength” generally did not load onto the intrinsic factor, whereas it loaded onto the spiritual factor, implies that the strength of the experience was distinct from whether or not it was a result of the music itself. This suggests that the “intrinsic” element was seen by participants to relate not to the nature of the experience, which one would expect to be strong (because participants were asked to consider the strongest experiences they had had), but to the formal components of the music itself. Therefore these quantitative data indicate that spiritual experiences are not a formalist phenomenon; not a product of the musical forms.

In the qualitative responses participants went beyond this formalism to state why the experience of those tonal forms might have been significant. For example, “There is a rare beauty that we understand and that resonates with us and calls us beyond ourselves” ([31], p. 319). We conclude, therefore, that while the components of the music (melody, rhythm, harmony, *etc.*) were not sufficient to account for the experience of spirituality, they gave rise to the *expression* of spirituality in the same way that Meyer claimed that emotions are an *Absolute Expression* of music. He described it in these terms: “these same [musical] relationships are in some sense capable of exciting feelings and emotions in the listener” ([10], p. 3). Correspondingly, the musical forms express the feeling or sense of the spiritual. They can do that because, as Sloboda [37] has written, music *affords* worship or the experience of the spiritual.

The other reason to conclude this is that “emotion” did not load with “intrinsic” on the factor analyses either. It is well documented that emotion can be intrinsic to the music, [10,18,19]. Furthermore, musical features have been causally linked to emotions, such as loud music producing high energy emotions and major mode generating positive emotions [38]. Emotion consistently loaded on the same factors as “spiritual”, and correlations between emotion and each of the spiritual-related elements were all strong and significant. This not only indicates that spirituality and emotion are closely related phenomena, relating to music in a similar way (even though that cannot be explained more fully here), but that if participants had approached the “intrinsic” element in more expressionist terms, rather than formalist, it would have demonstrated a closer relationship with the spiritual experience. The question of the relationship between spirituality and emotion was discussed in our previous paper [31].

Taken together, these findings show that spiritual experiences were not simply a product of the musical forms, because if they were, “spiritual” would have loaded strongly with “intrinsic” meaning. Nor were they merely an association of the music because if they were, “spiritual” would have loaded more strongly with “extrinsic” meaning. (This probably would have been all the more the case if we had restricted experiences of music to just instrumental music. The text, although associated with the music, arguably allows more extrinsic associations. Therefore the fact that such associations were absent from these data suggests that spirituality is not merely an extrinsic association.) Instead, spirituality, like emotion, is a form of expression that arises from the music; an awareness that is apprehended in the encounter with music.

Two other points are worth making. The presence of the spiritual factor as the first factor in every factor analysis underscores the importance of the spiritual experience with music. While the elements of spirituality might have been distributed across various dimensions in the factor analysis, on each analysis they in reality remained connected, suggesting a strong semantic cohesiveness in the concept of spirituality in terms of our proposed elements (in particular, the three elements of overtaken, lose track and transformed). We interpret this as a call on the scientific community to bring spirituality from the fringes and examine it as a vital part of the experience of music, as the same community has been doing with emotion for over 20 years.

Secondly, these data indicate that transcendence is closely related to spirituality. The consistently strong loading of “spiritual” with the three transcendence elements, along with the strong correlations depicted in Table 5 intimate that these phenomena are very similar. This supports the research indicating that transcendence is central to spirituality [14–16].

4.2. Spirituality is Not a Product of Context

One aim of this study was to determine whether the intrinsic or extrinsic nature of spiritual experiences was a product of religious context. Some differences between contexts were clearly evident. Experiences in the religious context were stronger and more emotional, spiritual and transcendent than those in the non-religious context. This is in line with Dibben and Hansen’s [39] finding that religious experiences were more intense and profound than non-religious ones, despite physiological responses being similar. Higher ratings for “strength” may indicate a demand characteristic, in that participants may have filtered out truly strong experiences in the non-religious contexts to satisfy the hypothesis the participants may have believed was under investigation

(spirituality in religious contexts). Alternatively, this may indicate that experiences in the religious context were simply stronger for religious people, which would make sense.

The “intrinsic” meaning element was rated higher in the non-religious context, suggesting that experiences in the religious context are perhaps focused on something more than the music. The qualitative data (reported in [31]) demonstrated that this was an added dimension of rational signification, such as references to the supernatural. This seems to be evidence of the combining of conceptual and experiential knowledge, as distinguished by Rahner [40]. It is as if an ineffable sense of spirituality was experienced in the non-religious context, but in the religious context there was an added dimension of conceptual signification that made the experience more pronounced. The inclusion of music with text in some experiences may partially account for this, yet music with text was also included in some non-religious experiences.

However, these differences do not mean that spirituality is therefore a product of context. The factor analyses were very similar, and the spiritual factor was equally distinct from intrinsic or extrinsic meaning in both contexts. Ratings for “extrinsic” meaning were equal for both contexts. However, most importantly, average ratings for all the spiritual elements still came in around the 50th percentile in the non-religious context. Therefore, although spirituality is more prevalent in the religious context, it is still apparent in the non-religious context. This indicates that the spiritual experience is not simply a product of context.

5. Conclusions

We conclude that, as far as our interpretation of the quantitative data reveals, spiritual experiences with music for religious people are best understood as an expression of the (intrinsic) musical forms such as melody, harmony and rhythm. They are not intrinsic in the sense of being contained within those forms in a formalistic sense, for the qualitative data in particular expressed an apprehension of something beyond these physical attributes that one understands intuitively in relation to them. Equally, spiritual experiences are not entirely extrinsic in the sense of some intentionality lent to or referred to by the music. There are aspects of the experiences that are extrinsic, and these are experienced more in the religious setting. This may be partly due to the presence of text with the music, and this will need to be examined in future research. Nevertheless, the extrinsic aspects only partially account for spiritual experiences. These experiences are best understood as an apprehension of something profound and transcendent that “comes to life” [19] with the music itself.

We also conclude that spirituality is not a product of context. There were some differences between experiences in religious and non-religious settings, where experiences in the religious context were stronger, more spiritual, and more emotional, as well as involving more rational content. However, experiences in the non-religious context also included these elements, albeit to a lesser extent. This would not be the case if spirituality were simply a product of religious context.

This study has demonstrated clear evidence for the importance of spirituality in the experience of music for religious people. It confirms that this phenomenon is not a peripheral one, but a legitimate research area in need of further investigation. Our approach in this study has been quantitative, which places limitations on the conclusions drawn, but it builds on our earlier qualitative research to embrace different methodologies for better understanding the nature of spirituality and music (See, for example, [41]). In particular there is a need to investigate whether these results are applicable to

non-religious people, or people of other religions. If they are it will only heighten the need to better understand spiritual experiences in relation to music.

Author Contributions

This paper is based on a part of the first author's PhD dissertation, and is primarily his work—both writing and research—with a contribution of about 80%. The second author was the PhD supervisor, and worked with the first author closely in the design, analysis and writing up of the study. Additional work was performed by the supervisor as part of his Australian Research Council (ARC) Future Fellowship, FT120100053.

Conflicts of Interest

The authors declare no conflict of interest.

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