

Observed Aversion to Raising Hell in Pastoral Care: the conflict between doctrine and practice

Dr Eric Stoddart (University of Aberdeen) & Dr Gwilym Pryce (University of Glasgow)

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Introduction

Facing a person who is dying when you believe that those who are not Christians go to torment in hell is a challenge to how one offers pastoral care. You may be clear in your own mind that biblical teaching is unequivocal – the lost are lost to an eternity without Christ which includes mental and physical torment. Your responsibility as a witness to Christ is one of proclaiming His salvation from a terrible fate; you are to summon all people to repentance and faith in the Redeemer. Yet, something holds you back. You are averse to raising such a painful topic at a time when someone is uniquely vulnerable – do you add to their stress or, on other occasions, do you disturb their settled acceptance of their pending death?

Or perhaps you are preparing to conduct the funeral of someone who made no profession of Christian faith. On numerous occasions you have preached evangelistic sermons from your pulpit in which you have exhorted such people to turn to the Saviour for escape from the fearful prospect of hell. The chance of redemption has passed for this person but what about the relatives and friends that are present. Do you reassure the mourners that the deceased has passed from death to life eternal? Or do you remain true to your beliefs and imply (implicitly or explicitly) a lost eternity of torment for the deceased and potentially for the hearers, even if it means adding grief upon grief?

These dilemmas are not reserved for moments of bereavement; they lie latent in a wide range of pastoral situations. On hearing the story of a person's struggle to arrive at an ethically sound decision, for example, do you warn them that the easy alternative will only take them further down the 'wide road that leads to destruction'? As a pastor you feel the responsibility to warn of dangers of hell for those who refuse such a great salvation. You know the deterrent value of hell from your own experience. Yet, at the same time you are hesitant to try and secure someone's compliance with a Christian moral stance as a response to the threat of hell. Can you offer them only the "good" side of the Good News or should you present the "bad" side too?

For Christian pastoral carers who do not hold to a view of hell as the outcome for the lost, these will not be dilemmas that feature on the horizon. Perhaps they are indicators of a religious pathology around which intervention might be offered so that pastoral carer and client might find a more healthy spirituality? However, for a substantial minority, it is in the context of terminal illness, funerals of 'non-Christians' and ethical counselling that the doctrine of hell, and particularly hell-torment, takes on exceptional significance.

This study aims to explore the complex relationship between beliefs in hell and the practice of Christian pastoral care by clergy. It will identify the nature of this relationship, discuss the aversion to raising hell within the context of pastoral care that emerges, and seek to test the hypotheses that emerge from this discussion using data from a survey of 346 Christian leaders from a range of denominations in Scotland. In particular, we attempt to test 3 propositions regarding beliefs and pastoral practice with regard to the subject of hell. First, we hypothesise that, on average, observed aversion to raising the topic of hell will be greater the more inclusive the minister's doctrine. This is the same as saying that there will be an overall positive (upward

sloping) relationship between aversion and inclusivity (though the relationship may not be linear due to our second hypothesis). As one might expect, our results strongly confirm this hypothesis.

Second, we hypothesise that the sensitivities surrounding the discussion of hell provides a strong motivation for the individual pastoral carer to seek (consciously or subconsciously) a doctrinal “loophole” in his/her beliefs on hell that will allow them to avoid raising the subject in pastoral contexts, the potential for which becomes disproportionately more difficult the more tenebrous are their beliefs in hell. This hypothesis suggests that, on average, there will be concavity in the relationship between observed aversion to raising hell (OARH) in pastoral situations and the extent to which one’s beliefs on the matter are eschatologically inclusive. Using both bivariate analysis and a variety of multiple regression techniques, we find strong evidence to support our hypothesis of concavity in the relationship between beliefs in hell and pastoral practice.

Third, inability to reconcile one’s beliefs in hell with aversion to raising the subject in pastoral situations, does not mean that one will necessarily follow through on the implications of one’s doctrine. Here unmeasured factors, such as personality and particular social pressures of certain pastoral locations, come into play. And indeed, the more tenebrous one’s beliefs in hell, the greater the scope for such factors to forge a moral or emotional dilemma. Since these factors are intrinsically idiosyncratic they will (by definition) vary from person to person, and so it is proposed that personal differences will have a greater role to play the more tenebrous one’s beliefs. Differences in personality and congregation amongst eschatological *inclusivists* are unlikely to result in much differences in the propensity to raise the subject of hell since the logic of one’s beliefs does not require the discussion of the subject anyway. As such, whilst on average one might expect aversion scores to rise with inclusivity (hypothesis I) and to do so at a decreasing rate (hypothesis II), one would also expect the *variance* in pastoral practice, amongst pastors of similar beliefs, to decline the more eschatologically inclusive are those beliefs with respect to the subject of hell. We test this in both a bivariate context (using both Levene’s (1960) and Brown and Forsyth’s (1974) tests for equality of variance) and in a multiple regression setting (using a range of tests for heteroskedasticity). In both contexts, the variable nature of the standard deviation of OARH is unequivocal (the null of constant variance is rejected in each case with probabilities of false rejection never rising above one in ten thousand).

Interestingly, even when we control for other possible determinants of pastoral practice (such as age, denomination, geographical location within Scotland, gender, size of congregation or urban/rural location of congregation), these results hold true. The strength of our findings is reinforced by the fact that most of these factors do not have a statistically significant effect on OARH, even when interaction effects are examined.

Background Literature

No previous studies, to our knowledge, have explored eschatological beliefs and their relationship to the pastoral practice of Christian clergy. The nearest similar study only dealt with doctrinal beliefs and focussed on the conservative evangelical constituency in the United Kingdom (Evangelical Alliance, 2000). Opinion polls give a very broad brush picture suggesting that 28 per cent of people in Britain hold a belief in hell – but with no indication as to what the nature of hell might be (*The Sunday Telegraph*, 28 May 2000). In a study of trends in religious belief it was found that whilst belief in God has declined amongst the British population by 6 percentage points since the 1970s, belief in hell has risen by 4 percentage points (Gill, Hadaway and Marler, 1998).

Theoretical Framework/Discussion

General Discussion

It is important to recognise that the sample have given their response to statements that imply an understanding of doctrine as propositional assertions of ontological truth. This in contrast to the experiential-expressivist which interprets doctrines as “noninformative and nondiscursive symbols of inner feelings, attitudes or existential orientations” (Lindbeck, 1984, p.16). It is also quite different to the cultural-linguistic approach to doctrine which understands it as the rules or grammar that govern and inform the way sacred narrative is told and used (Lindbeck, 1984, chapter 4). In this context a cultural-linguistic view of doctrine might interpret the narratives of hell as ways of holding community boundaries as a distinctively acting people and as enabling the Christian community to speak of God’s ‘No’ to evil (Stoddart, 2001). The experiential-expressivist (commonly the ‘liberal’ outlook) might draw on the language of hell to articulate the common human experience of exclusion in social relationships, perhaps extending this to the existential alienation that some feel from the Divine. The propositional doctrine refers to the reality of hell – although the details may be interpreted metaphorically (e.g. the fire and brimstone).

How holders of propositional doctrine relate this to their practice is of crucial importance. When significant place is given to the bible as the source of propositions then an *applied-theology* model is used. Findings from the disciplines of biblical exegesis are given coherence via systematic theology and then applied to practice. This is largely a one-way bridge in which the experience of practitioners is not a source of theological data. By contrast, models of praxis-reflection offer a hermeneutical spiral which begins with experience and develops understanding in an iterative process of critical reflection on action in the light of scripture and knowledge from other fields (Woodward & Pattison, 1999). Whereas the doctrine of hell and its possible biblical derivatives can be placed under question and challenged as to their effects within the model of praxis-reflection, the applied-theological model *in principle* insulates the exegete from critical concern with the pain and other consequences that result from his/her findings. It is this latter model that predominates amongst those who stress the inerrancy or infallibility of Scripture. One’s feelings (perhaps of horror at the dark and tenebrous nature of hell) must be brought into line with the teaching of the Bible. This also implies, however, that for a given distribution of personality types, the more propositional and tenebrous one’s beliefs, the greater the potential for conflict between one’s doctrinal and emotional inclinations.

Premises and Specific Hypotheses

The empirical investigation rests on two premises. First, that no minister relishes the prospect of raising the subject of hell in pastoral situations. Whilst there may be anecdotal stories to the contrary, particularly with regard to more general ecclesiastical settings (such as the following alleged quote from the sermon of a Presbyterian minister on the Isle of Lewis),

“And when you’re down in the fiery pit, weeping and gnashing your teeth it will be no good looking up to Heaven and pleading ‘Lord, we didna ken, we didna ken.’ God will look down from his heavenly throne and reply: ‘Well, ye ken noo.’ “

(Jeffrey, 1995, p.87)

it seems unlikely that this will persist in the particular pastoral settings considered in the data. The second premise, is that there will be a distribution of emotional aversion corresponding to the (unobserved) distribution of personality types. We assume that this distribution is similar for different personality types (that there may, in reality, be a degree of correlation between personality type and belief does not substantially alter the interpretation of the findings given the strength of the results). Whilst the emotional and personality make-up of the respondents is not

observed, what *is* observed is the extent to which aversion is reflected in pastoral practice. This observed aversion (OARH), however, is the product of both sensibility and belief.

On the basis of these presuppositions, our research will investigate complexities of an applied-theological model when it is the doctrine of hell (and particularly human torment) that is applied to situations of pastoral practice. First, we would expect average aversion to raising the subject of hell to rise with inclusivity (hypothesis I). Second, those who reject a propositional understanding of doctrine or who hold to alternative propositions concerning existence beyond death will find discussion of hell to be inconsequential – in the sense that future suffering is not at stake. Urgency and/or a weight of responsibility to warn of the real dangers of hell is greater when the future state is darker in the beliefs of the pastoral carer. There is disproportionately less doctrinal ‘wriggle room’ at this tenebrous end of the continuum of eschatological beliefs, and so not only will aversion will fall (rise) with exclusivity (inclusivity) it will do so at an increasing (decreasing) rate. This is hypothesis II.

Put formally, whilst we would expect to see a positive first derivative in OARH with respect to inclusive beliefs (the more inclusive one’s eschatological beliefs, the greater the observed aversion to raising the subject of hell = hypothesis I), we would anticipate a negative second derivative (the effect of beliefs on pastoral practice diminishes as beliefs become more eschatologically inclusive = hypothesis II). In other words, the relationship between aversion and belief, for the “typical” (i.e. average) minister, will be concave to the origin and monotonically increasing with inclusivity.

Whilst there may be less cognitive “wriggle room” at the tenebrous end of the doctrinal spectrum, there may also be greater potential for conflict between beliefs and the minister’s own emotional inclination/personality type. We would therefore expect the standard deviation of the observed aversion amongst ministers to be greater the more tenebrous the doctrinal position. This gives rise to our third hypothesis. Where the applied-theology model is drawing on inclusivist propositions we would expect little variance in the pastoral practice of minister who share this outlook. This would be equally true of those who are not dealing in propositional truth. This decline in variance (hypothesis III) is not to be misunderstood to suggest lack of *variety* in pastoral practice. Rather, it is a reduction in variance between beliefs and practice.

Data

Survey by postal questionnaire of 750 randomly selection clergy ministering in Scotland was undertaken in the autumn on 1998. Only Trinitarian denominations consisting of more than twenty congregations were included in the sample. Useable returns numbered 346. Because denominational outlooks are fluid the sample was not selected in proportion to denominational membership – this was a study of clergy not denominational practice. The survey was composed of 23 statements of beliefs (relating to human nature, Christ’s resurrection and return, judgement and heaven and hell). A further 18 statements related to practice in pastoral contexts such as terminal illness, a funeral, counselling and exclusion from the Lord’s Supper. Demographic questions on denomination, locality, age, gender, ordination, and congregational size were included.

A composite measure of belief in hell (hellbel) was constructed from the responses to the following four statements (the lower the value the more tenebrous is a respondent’s understanding of what lies ahead for the ‘lost’):

- “There will be further opportunities beyond death for any ‘lost’ to alter their destiny (scores reversed to conform to direction of composite measure).”
- “Some humans will be eternally separated from God.”

- “The fate of the lost is to suffer eternal mental anguish in hell.”
- “The fate of the lost is to experience eternal physical torment in hell.”

Response was indicated on a five-point Likert scale (‘1’ strongly agree, ‘5’ strongly disagree) and the composite score was constructed as a simple linear sum of these four variables. In addition, a composite measure of aversion to raising hell was constructed from responses to four statements of pastoral practice:

- When conducting the funeral of a person who did not identify with the Christian faith...
 - “I make a statement about the possibility of their lostness.”
 - “I mention hell as a prospect for the impenitent.”
 - “I mention the Last Judgement as a warning.”
- When counselling someone on a problem which includes an ethical dimension...
 - “I use the threat of hell as a challenge to obedience to Christ.”

Response was again indicated on a four-point Likert scale (‘1’ always, ‘2’ often, ‘3’ sometimes, ‘4’ never) and the observed aversion composite score (OARH) was constructed as the linear sum of the responses to the four statements on pastoral practice.

It is worth noting here why we have used the simple linear sum to compute composite variables rather than more elaborate methods. Whilst is common to use factor analysis, principle components or some other clustering algorithm to create artificial scales from related categorical variables, we caution against this on the basis that,

“First, the results are quite sensitive to the scale of measurement in the variables. The obvious remedy is to standardize the variables, but, unfortunately, this has substantial effects on the computed results. Second, the principle components are not chosen on the basis of any relationship of the regressors to y , the variable we are attempting to explain. Lastly, the calculation makes ambiguous the interpretation of results. The principle components estimator is a mixture of all of the original coefficients. It is unlikely that we shall be able to interpret these combinations in any meaningful way.” (Greene p. 273)

As a result, we argue that simple linear sums of the variables is on balance a preferred way to create composite variables, its major advantage being the transparency in the way it is computed.

Categories of age, denomination, geographical region, gender, type of locality (e.g. rural) and size of congregation were used to provide demographic variables. Simple summary statistics are given below in Table 1 for each of these variables. We report the coefficient of variation (“CoV” = standard deviation as a proportion of the mean) rather than the standard deviation or variance because it allows the variability of variables measured in different units to be compared. We include size in both the continuous and categorical lists because, for sake of parsimony, we include the category number for size (1 to 4) in the regressions rather than individual category dummies (which were also attempted in analysis but not reported as they provided no improvement in the regression fit and were not statistically significant).

Table 1 Summary Statistics TO GO HERE

Results

Bivariate Analysis

Consider first a simple bivariate plot of average aversion against doctrinal inclusivity (Figure 1). For the purpose of constructing this figure (and also Figure 2) we group the composite beliefs categories in such a way as to ensure at least 20 observations in each bin to ensure that the means are reasonably robust. Support for hypotheses 1 and 2 is immediately evident since

average aversion appears to rise with inclusivity (hypothesis I) but at a diminishing rate (hypothesis II - as shown by the concave nature of the curve, highlighted by the logarithmic trend line). So whilst observed aversion to raising the subject of hell tends to follow the corollary of belief, it does so in a non-linear way. This non-linearity, we argue, arises because doctrinal “wriggle-room” also rises with inclusivity. So *convergence* towards the pastoral practice of the inclusivist will gather pace as one moves progressively along the inclusivity continuum, because for each step towards inclusivity one has the luxury of greater *intellectual* freedom to avoid raising the subject of hell. A simple one tail t-test of equality of means assuming heterogeneous variances (see below) confirms this (sig. = 0.0000; based on halving the sample according to beliefs).

Figure 1 TO GO HERE

Hypothesis III suggests that, as one moves along the inclusivity spectrum, there will not only be a decline in doctrinal/cognitive conflict with avoiding the subject of hell, but also less emotional conflict. If there is a roughly similar distribution of personality types across different belief scores, then there will be much greater scope for emotional conflict the more tenebrous one’s doctrine of hell. Thus, we would expect the standard deviation of OARH to be lower for higher inclusivity scores and this is confirmed both graphically (Figure 2) and from applications of Levene’s (1960) and Brown and Forsyth’s (1974) tests for equality of variance (based on splitting the sample in half according to belief scores, the chances of incorrectly rejecting the null of homogenous variance of aversion are less than one in one billion).

Figure 2 TO GO HERE

Multiple Regression Analysis

The question we seek to answer here is whether the patterns (particularly the apparent concavity and heteroskedasticity in the relationship between aversion to raising the subject of hell and eschatological inclusivity) observed in the bivariate setting, will hold true in a multiple regression context. Regression (1) in Table 2 is a simple ordinary least squares regression of observed aversion to raising hell on our inclusivity measure, and the square of the inclusivity measure. If our hypothesis holds true, the coefficient on the squared term will be negative. This is indeed the case, and is statistically significant – there is less than half a per cent chance of false rejection of the null hypothesis of a zero coefficient (the significance levels reported for the OLS regressions are based on Davidson and MacKinnon 1993 ‘HC3’ robust standard errors – see the section on heteroskedasticity below). The linear term for beliefs is also statistically significant and has a positive sign as expected. Simulation reveals that the curve is monotonic over the relevant range of values of inclusivity and depicts an overall positive relationship between aversion and inclusivity (Figure 3).

Table 2 TO GO HERE

Figure 3 TO GO HERE

The question remains, however, as to whether these findings hold true when considered in a multiple-determinant context. In particular, will the coefficient on the squared term still be negative and statistically significant when we consider also denomination and age? Regression (2) includes dummy variables (a binary variable equal to one if the observation has the characteristic of interest, and equal to zero otherwise) for whether the minister was less than 36 years old, whether he/she described themselves as “other Presbyterian”, and whether he/she

was Pentecostal/Charismatic. Of these, the age dummy proved to be the least statistically significant (including age as a continuous variable resulted in an even lower significance level, as did inclusion of dummy variables for other age brackets). Note, though, that the inclusion of these variables reduces the significance of the squared term on beliefs. We conclude, however, that this effect emerges as a result of multicollinearity (a regression of beliefs on the dummy explanatory variables finds statistically significant correlations, confirmed by an examination of variance inflation factors, eigenvalues, and condition indices). Since the various elaborate solutions to multicollinearity create more problems than they solve (Greene 1993) we shall be content with omitting the dummy variables and returning to our original regression (i.e. regression (1)) as the most appropriate model of the relationship between belief and practice.

Various other attempts were made to include additional explanatory variables into the model, but these tended to contain high levels of multicollinearity and low significance levels on the new variables. Regression (3) is typical of those estimated and reveals that factors that may have been considered as important *a priori* determinants of pastoral practice (the “Highlands & Islands effect”, gender, whether the church is urban or rural and size of congregation) prove to have no statistically significant effect in the model. Various interaction effects were also explored (such as the interactions of beliefs in hell and beliefs in resurrection; interactions with age) but all these proved to be insignificant. Note also that the addition of extra variables tended not to have a huge effect on the adjusted R^2 (a basic measure of the model’s goodness of fit). The figures reported suggest that we can explain around 40% of the variation of the explanatory variable, not untypical for cross sectional models of this kind.

Ordered Logit

There is, however, a potentially fundamental problem with both the bivariate analysis and multiple regression modelling described above. It arises from the fact that our original data was ordinal and not cardinal. We have assumed (as many empirical researchers tend to do) that the underlying boundaries that define the categories of response are equally spaced; that the difference between the “sometimes” and “often” category is the same as the distance between the “often” and “always” categories, for example (see Long 1997 p.114ff). This assumption may not hold true in reality. The observed concavity in the relationship between beliefs and practice may be a statistical artefact – a bi-product of the Likert scales used in the questionnaire.

A technique particularly useful for the analysis of ordinal dependent variables is ordered logit regression (see Long 1997). Unlike ordinary least squares regression, the coefficients of the ordered logit model do not equate to the first partial derivatives and so derivation of the second derivatives would not be trivial (see Greene, 1993). Put another way, observing the sign and significance of the coefficient on the squared term of the beliefs variable in a logit model would not be the most straightforward and transparent way of testing for concavity. Instead we enter beliefs in hell as a series of dummies (see regression (4) in Table 2); the baseline category is “teneborous beliefs in hell”, and the labels given to the remaining categories are described as “very low inclusivity”, “quite low inclusivity”, “medium inclusivity”, “quite high inclusivity”, and “very high inclusivity”. The ordered logit estimates the true scale of the underlying latent continuous dependent variable (in this case the degree of aversion) and then maps the observed categories for the dependent variable onto the latent variable by deriving estimates for the cutpoints for each the categories. The model can then be used to estimate the probability that a pastor with a particular set of beliefs will fall into a particular category of aversion.

Knowing the values of the cutpoints, allows us to take the mid-point score of each of these categories and multiply them by the predicted probabilities to derive a predicted aversion score for each category of belief. These values are plotted in Figure 4 along with an estimated trend line. It is clear from this figure that the evidence still favours concavity in the relationship between beliefs and practice.

Figure 4 TO GO HERE

There is still an important ambiguity in the analysis, however, arising from the fact that the beliefs variable is also derived from a series of Likert scales, and so the scaling of the explanatory variable may yet distort our findings. For example, if the central categories of belief are actually wider (in terms of the underlying latent variable – see Long, 1997, p. 114ff) than the outer categories (unlikely), then the observed concavity would be an inevitable outcome (assuming categories of the dependent variable are fairly equally spaced). One solution is to use ordered logit to predict belief scores (based on a derived latent beliefs variable) and then enter these in either an OLS regression of aversion or an ordered logit regression of aversion. Since this is akin to deriving an instrumental variable (analogous to two stage least squares – see Greene 1997), using the predicted values of beliefs rather than actual values, will have the added benefit of removing simultaneity bias from the regression (resulting from the possible existence of reverse causation – practice influencing belief).

As a result, we used an ordered logit regression of beliefs on a series of denominational dummies (other Presbyterian, Pentecostal/Charismatic, Roman Catholic, Baptist, Congregational, Methodist, and Salvation Army), area dummies (Highlands and Islands, Lothian, North East, Borders), size of congregation, age dummies, and years since ordination. Since this regression was for prediction purposes only, the particular coefficients are not of particular interest and the affect of multicollinearity was not relevant (since omitted variables cause bias, whereas inclusion of collinear variables does not, the loss of efficiency in parameter estimates is not relevant when prediction is in view and the general consensus is that it is better to include as many explanatory variables as possible in regressions used for predictive purposes – Greene 1993). We initially used the predicted beliefs variable and its squared values as the regressors in an OLS model of our previously obtained predicted aversion score. However, since the aversion score was derived from an ordered logit with beliefs as the explanatory variables (incidentally, this also confirmed the concavity hypothesis), the model suffered from circularity, so we reverted to using the original categorical aversion measure in our model (regression (5)). The results, reported in the final column of Table 2, show that the linear measure of beliefs is no longer statistically significant, but the squared term remains both negative and statistically valid at the 6% level of significance (and so concavity is again confirmed).

To confirm this result, we compute the average predicted aversion score for newly created categories of belief where the categories are equally spaced according the estimated latent beliefs variable. The results are plotted in Figure 5 and clearly define a concave relationship. However, the graph should be treated with a degree of caution, given that it suggests non-monotonicity (i.e. aversion actually starts to decline for higher values of the predicted inclusivity score). This finding is both counter intuitive and not supported anywhere else in our analysis.

Figure 5 TO GO HERE

Heteroskedasticity

Hypothesis III stated that there would be more variability in the relationship between beliefs and practice the more teneborous the belief in hell. Testing this proposition in the context of multiple regression amounted to testing the null hypothesis of “homoskedasticity” (constant variance of the error term) against the alternative hypothesis of “heteroskedasticity” (non-constant variance of the error term, also referred to as a “non-scalar error covariance matrix”). Examination of the scatter plots of residuals made it patently clear that heteroskedasticity was a defining feature of our models and, in particular, that the variance of the error term that it declined with inclusivity (see Figure 6, for example). Unsurprisingly a battery of heteroskedasticity tests unanimously

and unambiguously rejected the null of homoskedasticity (for example, when applied to regression (1), the Breusch-Pagan (1979) test for heteroskedasticity resulted in a $\text{Chi}^2(1)$ value of 80.65 [sig. = 0.0000] and the Szroeter's (1978) test for heteroskedasticity resulted in a $\text{Chi}^2(1)$ value of 80.55 [sig. = 0.0000].

Figure 6 TO GO HERE

Corrected Standard Errors

Whilst the existence of heteroskedasticity supports our hypothesis about the nature of conflict between belief and practice, it also raises the problem of inconsistent standard errors. The use of weighted least squares to correct for heteroskedasticity is not necessary in many circumstances because heteroskedasticity does not actually bias coefficient estimates (it only affects the estimation of the standard errors) and because “using the wrong set of weights has two ... consequences which may be less benign. First, the improperly weighted least squares estimator is inefficient. This might be a moot point if the correct weights are unknown, but the GLS standard errors will also be incorrect. The asymptotic covariance matrix of the estimator ... may not resemble the usual estimator.” (Green, 1993, p. 407).

Using FGLS heteroskedastic estimation as an alternative to weighted least squares is also problematic: “if the form of the heteroscedasticity is known but involves unknown parameters, it remains uncertain whether FGLS corrections are better than OLS. Asymptotically, the comparison is clear, but in small or moderate-sized samples, the additional variation incorporated by the estimated variance parameters may offset the gains to GLS.” (Green, 1993, p. 407). The most appropriate course of action, therefore, is to correct the standard errors. White's (1980) method has been widely applied and has now become the most popular method for dealing with heteroskedastic errors.

However, it has been found that when the sample size is small (say, less than 500), White's standard errors, whilst a considerable improvement on OLS standard errors, are not always reliable. MacKinnon and White (1985) have since proposed three versions to be used when the sample size is small, and the third of these tests, what they call 'HC3', is the most reliable, particularly when heteroskedasticity is known to be present (which is the case here). As a result, all the significance levels calculated for the coefficients estimated in the OLS regressions reported in Table 2 are calculated using HC3 (comparable robust standard errors were used for the ordered logit regression).

Discussion

We have found that there exists a dissonance between beliefs and pastoral practice in the area of Christian eschatology. There are clergy who believe in a tenebrous outcome for 'the lost' and who articulate this in their pastoral practice with overt reference to hell's dangers. For these, there exists resonance between their belief and their practice. Naturally, those for whom hell (in its dark and forbidding form of separation or torment) does not form part of their theological framework, do not draw on it within their pastoral practice. In other words, it does not appear on their horizon. Of interest to us has been those who although believing in a hell (of some shade of darkness) indicate that they do not speak of its dangers when pastoral contexts suggest it might be relevant. It is this aversion that has been the focus of our study.

We have found that effect of beliefs on pastoral practice diminishes as beliefs become more eschatologically inclusive. Again, where there is no danger of eternal (or even temporary) suffering in hell for any 'lost' the very category 'the lost' loses its potency. It is amongst those who hold to a belief in hell suffering but who hold back from discussing it who are of particular

interest. They are people amongst whom there is more variance in their pastoral practice than those who either have no aversion to raising the subject of hell or who do not consider it a relevant issue.

These findings raise some vexing issues:

(a) there are some who will utilise eschatological threat within the context of pastoral care. Such an approach would be consistent with an approach to pastoral care such as that of nouthetic counselling in which the biblical text is a resource for confronting a person's behaviour (cf. its principal exponent Adams, 1970). Whilst we can respect the integrity of a pastoral carer who genuinely believes that some (even many) people are in serious eschatological danger and duly warns them, the potential for manipulation and abusive use of the pastoral relationship abounds. That Jesus might score low on aversion and high on eschatological exclusiveness should give us significant pause for thought. His warnings to Bethsaida and Nazareth are cases in point (biblical reference). Nevertheless, exegetical considerations might offer a significantly different picture of Jesus' beliefs and pastoral practice that would not support the eschatological framework of hell suffering (cf. Powys, 1997). Further research into the effects of raising hell with people *in extremis* will need to be undertaken if the perspective of those on the receiving end of such pastoral care can be heard.

(b) Mitigating factors generate aversion to maintaining a theological model which is otherwise presented as applying biblical truth to human experience. It would be unusual for someone to hold to a belief in hell torment on grounds other than their reading of the biblical witness. Although this survey has not invited clergy to classify themselves under theological labels it is safe to assume that it is the applied-theology model that dominates where the biblical text is read in terms of hell-torment. Our investigation demonstrates that it is not sustained in the eschatological dimension of pastoral practice. That aversion can destabilise this theological model when eternal suffering is at stake invites the question as to the other areas around which it may already be fragile (e.g. sexuality). Only further research into the views held by high aversion-scoring clergy within applied-theology communities will ascertain whether it is a consistent affect on other matters.

(c) The nature of these mitigating factors remains unknown but may be the cause of considerable anxiety to those who find themselves with high levels of aversion but a tenebrous outlook for 'the lost'. We can only guess at what contributes in each person holding tenebrous beliefs about the fate of the 'lost' to their aversion to raising the topic in pastoral contexts. Personality traits disposing one to avoid conflict, anger or rejection may be significant for some ministers. If one's congregation shares one's eschatological beliefs it might be easier to use it as a resource in pastoral care but where it is only the minister and few others who are hell-believers acceptance in the community and perhaps even job security may feature strongly in a decision to initiate a discussion. It may be that the character of 'the lost' is significant in the amount of aversion on the part of a pastoral carer. Our survey did not specify the particular conduct, lifestyle or other aspects that characterise 'the lost' when viewed as individual people. Further research would be necessary to establish if certain groups of 'the lost' are treated to more or less aversion than others. Are, for example, 'the lost' who are elderly spinsters taking care of their neighbours, the subjects of greater aversion than 'the lost' who are inveterate drunks and social outcasts?

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Table 1 Summary Statistics

Variable	Category	Mean or %	Median	CoV	N
Pseudo Continuous Variables:					
Aversion to raising the subject of hell	-	14.08	15	0.03	328
Hell	-	11.10	11	0.19	327
Size of Congregation	-	2.10	2	0.27	334
Categorical Variables:					
Age					337
	<35	9.20%	-	-	31
	36-45	27.60%	-	-	93
	46-55	34.12%	-	-	115
	56-65	22.85%	-	-	77
	>65	6.23%	-	-	21
size					334
	<100	37.43%	-	-	125
	100-200	31.44%	-	-	105
	200-300	14.67%	-	-	49
	>300	16.47%	-	-	55
Other Presbyterian	Yes	5.20%	-	-	346
Pentecostal/Charismatic	Yes	3.76%	-	-	346
Highlands & Islands	Yes	15.32%	-	-	346
Male	Yes	89.60%	-	-	346
Rural	Yes	24.57%	-	-	346

CoV = Coefficient of Variation

Figure 1

Mean OARH Score by Grouped Category of Belief in Hell
with Logarithmic Trend Line

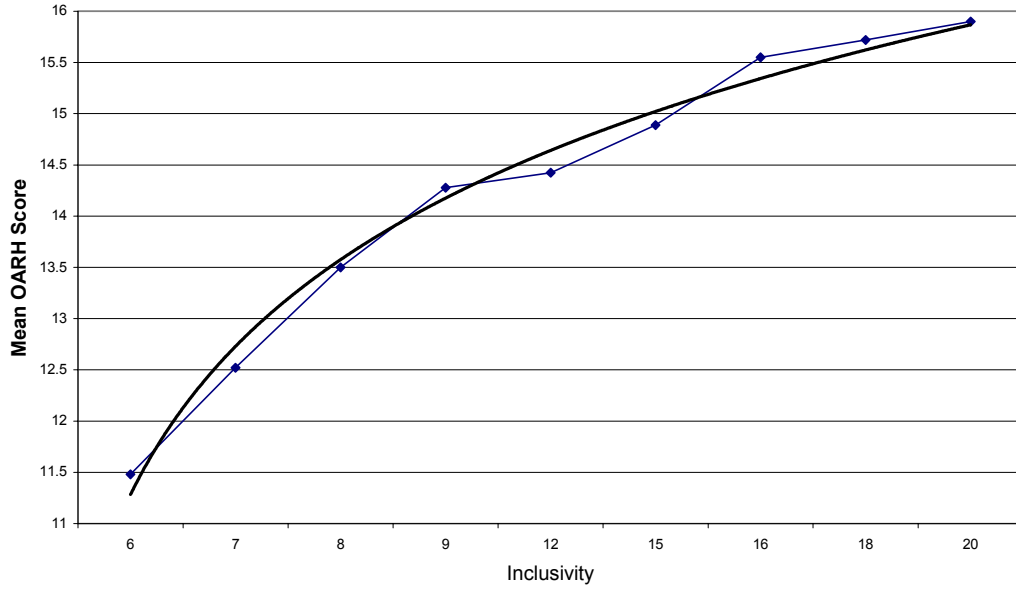


Figure 2

Standard Deviation of OARH Score by Grouped Category of Belief in Hell
with Logarithmic Trend Line

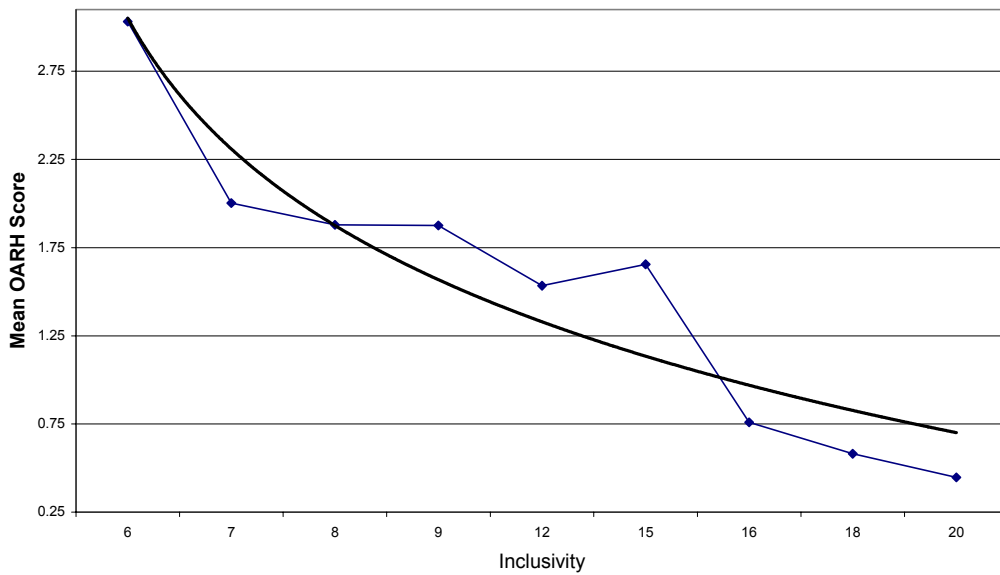


Figure 3

Estimated Relationship Between Aversion and Beliefs

Based on Estimated Coefficients from Regression (1)

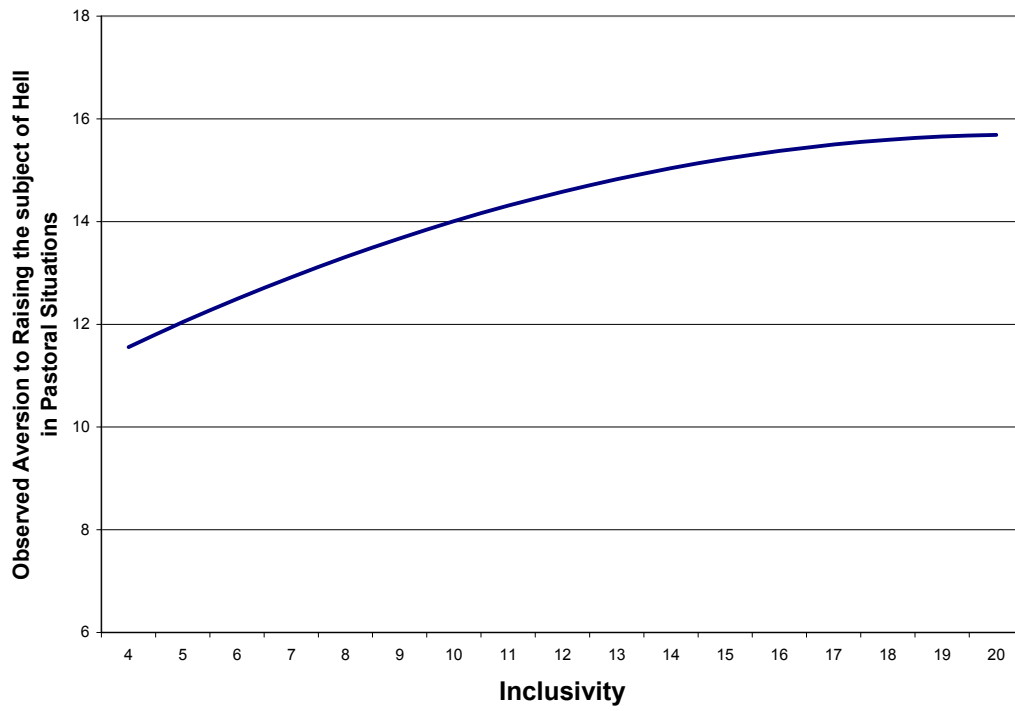


Table 2 Regression Results: Models of Observed Aversion to Raising the Subject of Hell

	(1) OLS	(2) OLS	(3) OLS	(4) Ordered Logit	(5) OLS with Predicted Beliefs in Hell
Constant	9.327	10.613	10.345	-	0.930
	(0.000)	(0.000)	(0.000)	-	(0.000)
inclusivity of beliefs in hell	0.618	0.464	0.459	-	0.054
	(0.000)	(0.001)	(0.002)	-	(0.643)
squared values of inclusivity of beliefs in hell	-0.015	-0.010	-0.010	-	-0.048
	(0.004)	(0.057)	(0.082)	-	(0.054)
Age < 36 years	-	-0.816	-0.810	-	-
	-	(0.068)	(0.074)	-	-
Other Presbyterian	-	-2.168	-2.112	-	-
	-	(0.000)	(0.000)	-	-
Pentecostal/Charismatic	-	-2.222	-2.221	-	-
	-	(0.009)	(0.010)	-	-
Highlands & Islands	-	-	-0.085	-	-
	-	-	(0.798)	-	-
Male	-	-	0.267	-	-
	-	-	(0.483)	-	-
Rural	-	-	-0.041	-	-
	-	-	(0.885)	-	-
Size of Congregation	-	-	0.019	-	-
	-	-	(0.865)	-	-
inclusivity of beliefs in hell:	-	-	-	-	-
very low	-	-	-	0.449	-
	-	-	-	(0.161)	-
quite low	-	-	-	1.619	-
	-	-	-	(0.000)	-
medium	-	-	-	1.839	-
	-	-	-	(0.000)	-
quite high	-	-	-	3.137	-
	-	-	-	(0.000)	-
very high	-	-	-	4.683	-
	-	-	-	(0.000)	-
n	313	313	303	313	329
Adj R2	0.3711	0.4434	0.448	-	0.2289
Wald Chi Square tes (H ₀ : all coeffs. = 0)	-	-	-	101.17	-
	-	-	-	(0.000)	-

Figures in brackets are estimated significance values; for regression slopes, these are based on robust standard errors.

Figure 4

Ordered Logit Predicted Aversion Score with Estimated Trend Line

(Predicted Aversion Score is calculated at Midpoint Scores of Aversion Categories, where the bounds of these categories are those estimated by the Ordered Logit)

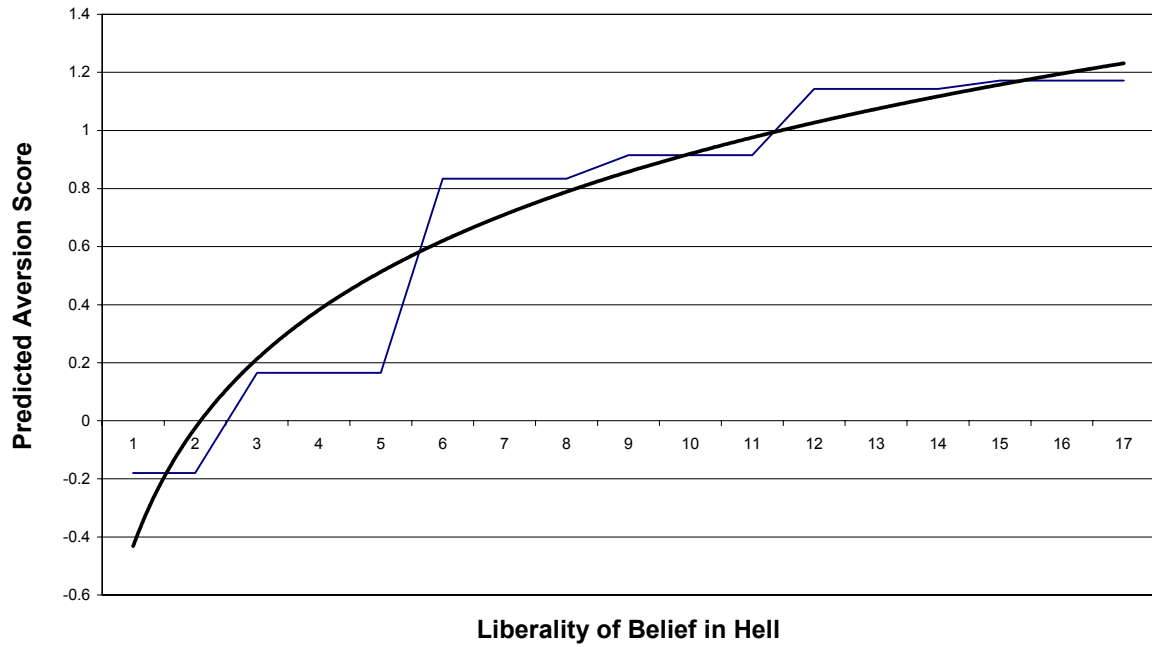


Figure 5
Mean Predicted Aversion Score by Equally Spaced Category of Belief
with Trend Line

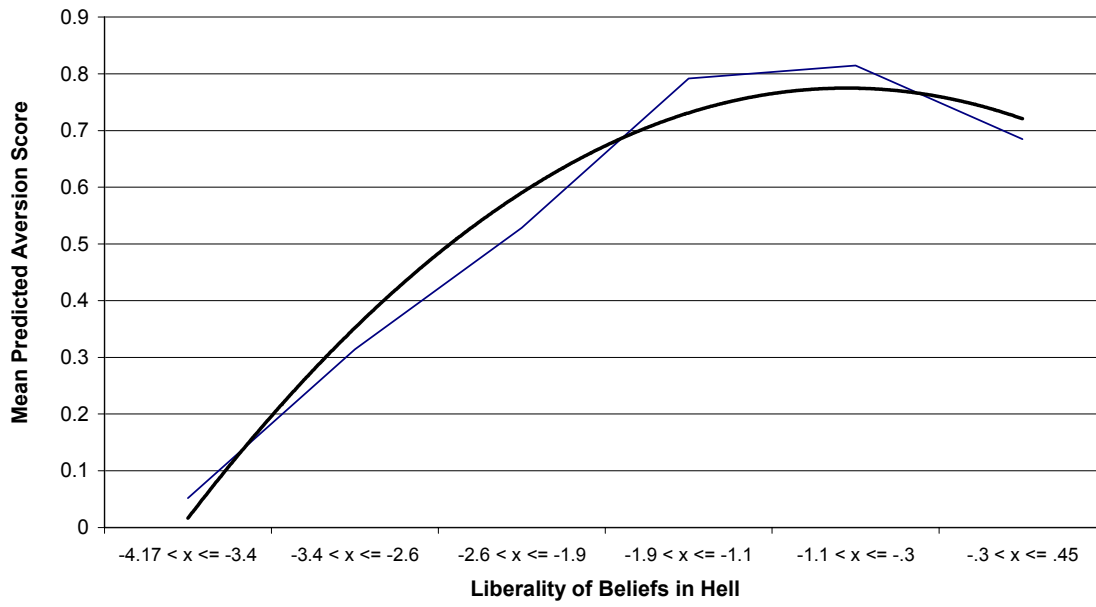


Figure 6

Scatter Plot of Residuals from Regression (1)
against the original inclusivity score (measured on the x axis)

