Interest group survival: Explaining sources of mortality anxiety

Darren R. Halpin[a,*] and Herschel F. Thomas III[b]
[a]Research School of Social Sciences, Australian National University, Canberra 0200, Australia.
[b]Department of Government, The University of Texas at Austin, 1 University Station A1800 Austin, Texas 78712-0119, USA.
*Corresponding author.

Executive Summary In order to engage in public policy, interest groups need to survive and thrive as organizations. What factors shape perceptions of group entrepreneurs as to the future prospects for their groups' survival? The careful and ambitious work of Gray and Lowery (and others working in the population ecology paradigm) has drawn attention to that fact that not all groups that are born survive. This observation raises the question: what leads groups to 'feel' anxiety about their organizational mortality? In their 1997 article, utilizing survey data on the organizational characteristics and situational dynamics of a sample of groups lobbying in several US states, Gray and Lowery asked just that question: what are the levels of 'mortality anxiety' among groups still alive? In this article, we revisit this question using similar data, but with some additional variables, and for a non-US case (namely, post-devolution Scottish public policy). In sorting out what factors are associated with anxiety, our analysis seeks to weigh up the existing ecological emphasis on broad shifts in population-level forces (that is, competition) with group-level variables reflecting adaptive changes (that is, identity, uniqueness, changes).
Interest Groups & Advocacy (2012) **1,** 215–238. doi:10.1057/iga.2012.11

Keywords: group survival; population size; organizational mortality; group adaptability; mortality anxiety

Arguably, the early group literature was overly preoccupied with group formation issues (for example, Truman, 1951). The conventional assumption was that groups once born would simply go on surviving. At a population level this implied the accumulation of groups, year upon year. But it is unlikely that early group scholars, if confronted, would have maintained this unrealistic position. After all, in one of the seminal works in the field, Robert Salisbury

makes the point that many early US farm organizations failed to survive (1969). Nevertheless, the struggle for survival – and the specific conditions under which groups would feel their survival under threat – was not itself the subject of explicit theorizing or empirical investigation. In contrast, more recent careful and ambitious work by Gray and Lowery (and others working in the population ecology paradigm) has drawn attention to that fact that there is considerable 'churning' in group populations. In fact, the *volatility* of group population is a continual finding among more recent studies mapping the activity of organized interests (see for example Schlozman, 2010; Halpin, 2012; Hanegraaff *et al*, 2012). The population ecology literature points to key environmental factors that may dampen birthrates and hasten organizational disbanding. A sign of the salience of the population ecology approach is that it has provoked a multitude of subsequent exploratory, theory-testing and elaborative studies (see for instance Nownes, 2004; Halpin and Jordan, 2009; for a review see Halpin and Jordan, 2011).

The ecological approach suggests that most groups will struggle for survival.[1] However, the ultimate success of the struggle will likely hinge on environmental forces constraining the resources available along with the partitioning strategies of groups themselves. This broad brush does of course leave significant room for more micro-level analysis, especially that which might confirm that actual players in the context appreciate and recognize these forces (see Halpin and Jordan, 2009; Halpin and Nownes, 2011). To this end, a small (but hopefully growing) thread in the group literature has started to address how *specific* groups recognize mortality challenges and how they respond (both individually, and then in aggregate). This present article aims to contribute in a modest way to this broader task by (re)examining the question of mortality anxiety. Specifically, we revisit an early study by Gray and Lowery (1997) in the US states in which they addressed the *intermediate* issue that groups – still 'alive' – may feel 'anxiety' in relation to their future survival. This is an important question, but one that has been largely neglected in the broader organizational studies population literature. We test these earlier US findings in a new context (UK public policy). In so doing, we also include additional variables – informed by recent work in ecological and institutional strands of organizational studies – that probe group-level sources of anxiety.

Why investigate mortality anxiety? The immediate answer, as rehearsed above, is that it assists in exploring how ecological theories of population dynamics actually work. While ecological-based theories of population dynamics point to competition for scarce resources – and active partitioning of the environment to manage competition – as the mechanism that regulates headline counts of groups, such work often lacks the fine-grained analysis to confirm that such mechanisms are actually at work. One such approach would be to examine the conditions that are associated with feelings of mortality anxiety

among groups, and to see if these turn out to be similar to the competition-based forces envisioned in the theories. Here we focus on mortality anxiety, to see what conditions seem to lead certain groups to 'feel' survival pressures. We are most interested about where this 'pressure' comes from. Is it population dynamics or is it internal conditions?[2]

However, the mortality anxiety question also has broader implications and ought to hold interest for group scholars more generally. One of the longstanding concerns of the group literature has been the capacity for the group system to serve as a conduit for societal interests to political elites and policy makers. The well-rehearsed debate around bias in the 'heavenly chorus' (starting with Schattschneider, 1960) serves as a reminder that the group system does not straightforwardly reflect interest structures. Against this backdrop, the vulnerability of groups to disbandment is of course one additional source of bias – alongside birthrates. As such, one would be wise to consider how groups experience anxiety and struggle to survive. This point is not simply an abstract potentiality. While there is talk of a group explosion (particularly in the United States), scholars have consistently noted that there is also much churn in group populations (see Gray and Lowery, 1996; Schlozman, 2010). In keeping with the US findings, recent UK work suggests a flat lining population of groups over time belies a high degree of churn (that is, groups exit and enter) (Jordan and Greenan, 2012). As Jordan *et al* counsel, 'a stable number is not the same as a stable population: the total can be the same while the cases have heavy turnover' (Jordan *et al,* 2011). This, by itself, suggests that the question of mortality and survival *are* perennial topics for groups themselves – and thus ought to be similarly important to scholars. Our aim here – akin to that broached by Halpin and Jordan (2009) – is to probe the intermediate 'struggle' for survival. If one accepts that groups engage in adaptive strategies to survive and that these may be relevant to explaining the populations we see – and this article does – then anxiety is a valuable analytical focal point.

The article proceeds as follows. The next section sets out key hypotheses with respect to mortality anxiety among groups. The subsequent section introduces the research design, data set, and sets out the specific measures, including some basic frequencies for dependent and independent variables. The section following it reports results of our analysis, followed by a discussion and conclusion.

Sources of Mortality Anxiety?

In their 1997 article, utilizing survey data on the organizational characteristics and situational dynamics of a sample of groups lobbying in several US states, Gray and Lowery probed the levels of 'mortality anxiety' among groups still alive. They asked whether groups feel anxiety, which they define as

'an assessment of the likelihood that an organization will soon face a crisis threatening its existence' (1997, p. 26). On the basis of their work in American states, Gray and Lowery conclude that 'Mortality anxiety declines with increased dependence on internal sources of revenue, when membership is large, and where policy arenas minimize conflict. And fear of the future increases with community density and levels of direct resource competition. Along the way, we have also found evidence of a liability of newness among organized interests registered to lobby in the states' (1997, p. 42). These general findings dovetail nicely with the broad population-level mechanisms of legitimacy and competition that ecological theories of organization suggest are crucial to explaining actual group mortality. Yet, they also point to the role of group-level organizational variables in accounting for variations in anxiety.

In this article, we pursue the same general research question, utilizing similar types of survey data. However, we do so for a different political system, the case of Scotland, and include some additional conceptual dimensions that were omitted in earlier work, but which we think might prove to be important: in particular, we probe the importance of identity and organizational antecedents.[3] Replication in a UK context serves valuable scholarly purposes. The concern with survival is no less salient in the UK context, thus it warrants investigation. Moreover, the extent to which results confirm those of Gray and Lowery will reinforce the broad generality of their conclusions. This is not the same as saying that the UK context – or any other country context – is immaterial for how Gray and Lowery's argument plays out, or the mechanisms governing how broad variables shape anxiety. Consistent with scholarly practice, theory-testing is critical to progress in the field, and this guides the article's broad contribution.

In this section, we set out the various theoretical claims made about the sources of anxiety about group mortality and related expectations. Gray and Lowery (1997, p. 26) point to three broad dimensions of group life that may account for 'interest organizations' assessments of the likelihood that they will soon face an existence-threatening crisis', and these provide a good set of variables that are likely to shape anxiety levels (which we elaborate below). To these we add several additional hypotheses that are derived from the broader organizational ecology literature (see Aldrich *et al*, 1990; Carroll and Hannan, 2000). Details are as follows.

Population-level competition

Consistent with the ecological literature, our main variables of interest concern inter-group competition.[4] Based on the population ecology approach, groups surviving within dense populations need to partition scarce resources (whether

they are members, policy attention or finances) by creating 'niches'. But, at some point, even niches will become over-populated causing a slow in birth-rates and an increase in death rates. Without rehearsing the entire theoretical schema, the broad argument is that competition for finite (yet potentially shared) resources in the environment provides a feedback mechanism to curtail birth and prompt exit from the population (or organizational disbandment). This scenario will likely drive anxiety among group entrepreneurs. Of course, a conscious 'recognition' of survival threats by entrepreneurs – such as competition over finite yet important resources – is different from whether such threats can be said to objectively exist (and thus be detected by scholars probing specific contexts). And, as Gray and Lowery point out, there is a distinction between 'direct' competition – that actors are cognizant of – and 'diffuse' competition – which may exist regardless of its detection by agents within the context. If the question we are concerned about is one of *realized* anxiety by group entrepreneurs, then the only measure that will count is direct assessments of acknowledged competition. This leads to the expectation that:

Hypothesis 1a: The more *direct* competition from *similar* groups *experienced* by a group the more *anxiety*.

Group resources

Apart from background levels of competition over resources within a group's environment at a given point in time, there is the issue of what resources a group actually *possesses* at a given moment. In this regard, Gray and Lowery pinpoint four general types of resources that groups might possess: access to policy making, finances (both income and staff), size of supporter/member base (but growth may increase interest heterogeneity and be a risk), and the possession of a 'unique' set of benefits to attract/retain members. We take these one by one and formulate relevant expectations.

Following Browne (1990), the literature broadly accepts that groups seek to maintain themselves (that is, to secure survival) by constructing a clear *issue* niche. For Browne, *issue specialization* is the primary asset groups can develop in order to survive (see also Wilson, 1973). This derives from the assumption that 'issue expertise' is the key asset groups have to exchange with policy makers. This basic insight generates several related expectations. The first is that anxiety levels will vary with access levels to policy makers – that is, groups not able to gain access will feel heightened anxiety. The successful formation of a policy niche can be assessed by the extent to which policy competition from groups with different views is experienced by a group. This might be restated to reflect the level of status attributed to groups. We might expect that groups

with high access (where this is easy to achieve), but low status (bestowed by policy makers), will experience high levels of anxiety. Of course, we also recognize that *some* groups might view poor access as an expectation of tactic choice or broader group identity (what Maloney *et al* (1994) referred to as 'outsiders by choice'). Yet, for the majority of groups, access is perhaps best conceptualized as a resource (see Bouwen, 2002, 2004). The second expectation is that groups experiencing policy competition will feel more anxious: the presumption that policy attention is finite leads one to conclude that competition reduces the space for a given group in the 'crowd'. Lastly, following Browne, we might expect that groups that spread policy attention (and more importantly mobilize broadly) more generally will risk heightened competition for access. The notion that a safe policy niche is the best strategy for survival leads one to expect that broad policy attention will come with survival risks. Thus, the third expectation is that policy generalists (those that mobilize broadly across policy domains) will feel more anxious.

Hypothesis 2a: Groups with *low levels of access* to and/or *status* from policy makers will exhibit more anxiety.

Hypothesis 2b: Groups *experiencing competition* for access to policy makers will exhibit more anxiety.

Hypothesis 2c: Groups that are *policy generalists* will exhibit more anxiety.

Another important set of resource-related concerns revolve around group financing. Groups need financial resources to pay staff and to engage in policy activities. Many case studies of group histories underline the importance of financial problems in either sparking group change or cementing its fate (see Salisbury (1969) on US farm groups). These crises act as key 'focusing events' that provide openings for change – but also create anxiety among incumbent entrepreneurs as to future viability. Thus, we might reasonably expect that funding will underpin a sense of security and enhance the sense among group entrepreneurs that the group will survive. In the past, studies have focused on the prominence of one or other specific funding sources (Walker, 1991; Gray and Lowery, 1997). Here we focus attention on the *mix* of funding sources. A range of studies on voluntary sector organizations, mostly in the United States, has highlighted that the diversity of funding sources – that is, mixing governmental, member and donor sources of income – is associated with longevity (reduced mortality hazard). Thus, we might expect that *diverse* funding sources represent less risk, and less anxiety, than groups gaining resources from only one source (see Carroll and Stater (2009) on voluntary sector organizations).

Hypothesis 2d: The narrower the range of financial resources a group relies upon the more anxiety it will exhibit.

Groups are – by definition – membership organizations, thus it seems plausible that the size of a group's membership list would also be a key resource (see Minkoff *et al* (2008) for a similar argument). In groups of a particular type – we think here of mass member supportership groups associated (at least in the United Kingdom) with high-profile environment groups – it is of course likely to be highly correlated with funding levels. But membership lists may also provide political legitimacy, which might underpin survival prospects. Thus it seems reasonable to surmise that groups with a declining membership roll will experience heightened anxiety (and it was a finding in Gray and Lowery, 1997).

Hypothesis 2e: Groups with shrinking member lists will experience more mortality anxiety.

Group size – by which is typically meant organizational scale, tapped by measures like staff complement or turnover – is a standard variable used in organizational studies to explain many aspects of organizational behavior and performance. Here we hypothesize that smaller groups will likely experience more anxiety than their larger counterparts because they are more vulnerable to shifts in resource availability, and it is harder to cut back to survive.

Hypothesis 2f: Smaller groups experience higher levels of anxiety.

Finally, the vast bulk of the group literature, since Olson's theory of collective action (problems), has underlined a belief that groups do not attract members unless they provide selective incentives (something other than sheer policy goods) (see Olson, 1965; Wilson, 1973). This might lead one to expect that anxiety about survival will be high among groups that fail to provide strong sets of selective incentives: they theoretically run the risk of free riding. We share Gray and Lowery's agnosticism as to whether this type of consideration is crucial to survival prospects, but we also think it is worth at least trying to test its impact.

Hypothesis 2g: Groups with low levels of selective incentives will experience high mortality anxiety.

Organizational traits

It seems intuitively attractive to probe the group-level properties that might shape anxiety levels. And, indeed, the literature focuses on several characteristics of groups as organizations that seem critical to survival prospects, and hence anxiety levels. The organizational studies literature has long focused on properties such as age and size as critical to survival prospects or mortality

hazards (see Hannan and Freeman, 1984). In almost all theories of organizational survival, but particularly those based on ecological accounts, organizations cement their place in populations by attracting 'legitimacy' from key audiences.[5] Thus, in their early years, organizations endure a 'liability of newness' as they seek to legitimate their position with key audiences (against organizations that already exist in the group universe), a time during which they are particularly vulnerable. This suggests that young groups will feel particularly anxious.

Hypothesis 3a: The younger the group the more anxiety it experiences.

Although not theoretically salient (based on the literature), it is nevertheless standard practice to control for variations in group-type in analyses (see Gray and Lowery, 1997, p. 30). If pushed, one might suggest that business groups, professional associations or citizen groups could experience different anxiety levels based on some fundamental attributes of groups. Yet, there are contextual differences *within* types that would seem to logically nullify any 'type-effect' in the data. As such, we proceed without any firm expectations.

Hypothesis 3b: Group-type: No firm theoretical expectations.

As outlined below, some additional dimensions are added to those originally outlined in Gray and Lowery (1997): organizational change and organizational identity.

Organizational change

At one level, we might expect that groups facing challenges would be expected to adapt to try and respond. One might anticipate that they would try and stay ahead of the population curve, and thus keep disbandment at bay (see Halpin and Jordan, 2009). Indeed, this is a safe assumption, and is underpinned by many case studies plotting responses to environmental uncertainties (and opportunities) (see Imig, 1992; Warhurst, 1994). But, at the same time, the organizational studies literature offers the somewhat counterintuitive observation that change brings its own risks or hazard. A series of studies across a whole range of organizations – including social movement organizations (Minkoff, 1999) – finds that the 'mortality hazard' increases with changes in organizational structures. Of course, the precise nature of the 'feature' being changed is also important – 'core' features are more hazardous to change than 'peripheral' ones (Hannan and Freeman, 1984). Yet, the broad expectation is that more change means more hazard in relation to mortality.

Hypothesis 4a: Groups that make organizational changes will experience more anxiety.

Organizational identity

As discussed above, a key component of niche theory is the notion that groups would try to create a (relatively) uncluttered policy space in which to specialize. But, what if a niche can be created on different dimensions? Gray and Lowery (2000, p. 197) are frank in suggesting that more work could be done to better map the resource dimensions that underpin survival of groups in their 'multidimensional niche space'. One approach that tries to be more 'holistic' in its assessment of such matters is the work of Michael T. Heaney (2004). Heaney offers are more global take on the niche that groups construct to ensure survival. He has argued that survival questions surrounding specific individual groups could be usefully pursued, in a way not inconsistent with population ecology, by looking at how groups construct identities. Heaney's contribution has been to attempt to disentangle elements within identity and overcome the assumption that groups pursue identities (only) linked to policy niches (which reflects accumulated policy expertise). He expands the repertoire of bases upon which a viable identity can be struck. In short, he suggests that group identities may be 'multi-vocal', that they may mix and match different aspects of identity to create identity niches.

Although the resource dependency and partitioning theories that support a niche perspective suggest that organizations are well advised to find a unique space in which to operate – avoiding resource competition – there is also a need to *maintain* legitimacy (and flow of resources) with key audiences. Specifically, the allied literature on 'categorical' theories suggests that organizations that try to create too complex an identity (span too many identity 'categories') risk making it hard for key audiences to recognize them as legitimate and thus contribute resources (see Zuckerman, 1999; Negro *et al*, 2010). Groups are thus wise to ensure that they settle on an identity that can be easily appraised by external audiences.

Hypothesis 5a: Groups with a diverse identity 'mix' will experience higher levels of mortality anxiety.

Research Design

The data

The data used here is the result of a postal survey of 'interest groups' active in Scottish public policy. The survey population was compiled from a data set on Scottish Government policy consultations between 1999 and 2007 (the post-devolution period).[6] Public policy consultations in Scotland are routinely

conducted on a broad range of issues, which may include calls for comments on draft bills, initial agendas for discussion, proposals for amendments to regulations, the details of implementation of EU directives or similar.[7] Consultations are launched by a team within a relevant Government department, with invitations being sent to stakeholder lists and invitations made on the government website (in practice, for consultations the access barriers are low).[8] No *definitive* list of consultations conducted by the Scottish Government exists,[9] but it is possible to *definitively* say that each and every consultation where data is available in the public domain has been counted. The consultation process provides an important window into policy mobilization by groups.

From all the actors engaged in these policy consultations, we extracted all *interest groups* (the raw data had also included government departments, local government, citizens and companies). The definition of an interest group accords with the field standard, namely a formal organization that is *both* policy-orientated and collective in nature (see Jordan *et al*, 2004). The survey sample of 1500 was drawn from a list of those groups who had responded to consultations in the period 1999–2007. A weighted sampling method was used, whereby the more active groups in the sampling frame were more likely to be included in the sample. Because our sample comes from a broader analysis of *actual* group activity over an 8-year period, we can utilize *both* group organizational variables (measured in the survey) with policy activity variables (measured in the broader consultations data set). We achieved a 32 per cent response rate, which is remarkably good for a postal survey. In this article, we utilize 387 group cases, but given that responses to some selected questions in our analysis are missing, the number of observations in our model estimation to follow is expectedly lower (though we do not believe such non-response is systematically correlated to group characteristics). Overall, the response rate and total size in the final model is remarkably similar to that reported in Gray and Lowery (1997, p. 31, fn. 2).

Indicators/Measures

This article sets out to explain the reasons why groups exhibit differing levels of mortality anxiety. We examine groups that are currently (i) politically active (not in 'policy hibernation') *and* (ii) organizationally alive (not yet dead/disbanded). In this respect, we have a research design that gives us a good generalizable sample of groups and enables us to actually test for levels of 'mortality anxiety' rather than conducting a *post mortem* on a group corpse.

Mortality Anxiety is the dependent variable in our research. It measures the extent to which groups *perceive* a future threat to their existence. Respondents were asked to indicate the likelihood that their 'organization will face a serious challenge to its existence' within the next 5 years on a four-point scale (very likely,

somewhat likely, not very likely and don't know).[10] This question is a direct replication of Gray and Lowery's deployment of the concept: and like them, we inversely scored the answers to mean that a high score reflects high anxiety.

As can be observed in Figure 1, 54.2 per cent of respondents felt that challenge was not very likely, compared with 29.2 per cent who thought challenge somewhat likely, and 16.6 per cent who thought serious challenge to survival very likely. So what might contribute to explaining this variation?

As discussed above, the first set of variables reflects the population ecology concept of competition among like-groups (*Competitors*). We measured this by asking respondents the question: 'Are there other organizations with broadly similar purposes or goals with whom your organization competes for new members, funds, government contracts or other key resources?' Group responses were restricted to a binary yes and no: 54.5 per cent do experience competition from like-groups, whereas 45.5 per cent do not.

The next set of variables relate to the concept of resources. The first variable reflects the status and access – perhaps best thought of as privileged position – of the group (*Privileges*). This is measured by a series of questions that asked groups how often they were invited to comment on bills and the like, be represented on public committees and seconded to assist government departments in their work. Respondents were given the mean score on these questions and the scale recoded to range from 0 to 100. Respondents answering at least two of the questions in the *Privileges* scale were included (see Halpin and Binderkrantz (2011) for more details). The second assesses if groups 'feel' policy competition. The *Direct Competition* variable is a categorical variable (−2, −1, 0, 1, 2) corresponding to answers (never, rarely, sometimes, often,

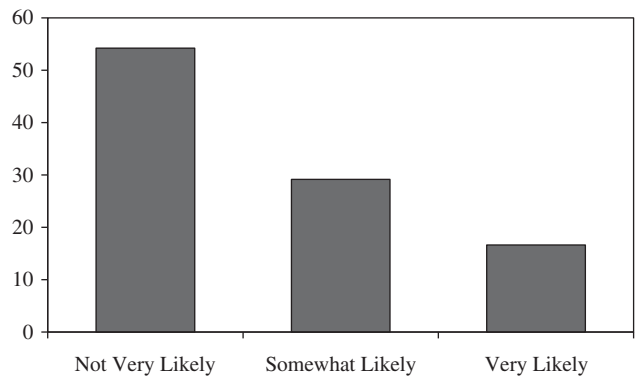

Figure 1: Percentages for each category of group mortality anxiety.
Note: $N = 367$.

always) to the question: 'How often do you find yourself in direct competition with other organizations to your position?'.

In order to test the proposition that groups spreading their policy attention more broadly (aka. policy generalists) would likely feel more anxiety, we calculate a Herfindahl–Hirschman Index (HHI) score to summarize the actual spread of each group's participation in policy consultations. In our data, group mobilization is mapped to *specific policy consultations*, and then subsequently additional codes applied to link these to general issue areas or domains by utilizing policy agenda codes.[11] The HHI has been used in political science and in the study of group mobilization in a public policy context (Gray and Lowery, 1996, 2000; Halpin and Binderkrantz, 2011).[12] Here we generate an *Issue Focus* variable for each actor, by looking at their activity across a series of policy domains. These scores theoretically range from 0.00 to 1.00 depending on the distribution of each actor's domain-level activity. Low scores convey an actor that spreads its activity most equally across domains within the system, whereas a high score suggests heavy concentration in one single domain. As an alternative measure, we include a simple count of the number of policy domains an organization is active within (*Number of Domains*).

We also surmised that diversity of financial sources will impact on anxiety. We asked respondents to nominate – from a list of seven possible sources – those that they use as sources of income. We constructed *Finance* as an additive scale (1–7), which corresponds to positive answers to these questions. The membership of a group can represent an important political resource, bolstering claims of legitimacy. We assess this dimension by asking groups if their current membership is the same, larger or smaller than it was 5 years ago (*Change in Size*). We coded the variable as 1 for those groups that reported membership levels 5 years ago were larger (that is, a decrease in membership), a 0 for those that were approximately the same in size, and −1 for those that experienced an increased membership. We use a measure of paid staff employed by the group as an additional measure of general resources. This measure has been logarithmically transformed to obtain linearity (*Paid Staff (ln)*).[13]

As discussed above, Olson's collective action problem has preoccupied much scholarly attention in the group sub-field. The claim that groups struggle to form (and more importantly to maintain themselves) without selective incentives suggests, at face value, that groups without such incentives ought to experience higher levels of anxiety. To test this proposition we measured the extent to which groups said they provided four types of selective incentives in an additive scale (0–4): gifts/newsletters, participation at events, discounts on services/goods, support to resolve individual members problems (*Selective Incentives*).

The next two variables pertain to organizational traits. We measure organizational age as the number of years a group has existed since formation, logarithmically transformed (*Age (ln)*). Group-type is operationalized with

reference to standard distinctions among trade associations, unions, citizen groups, professional groups and so on. We insert a dichotomous dummy variable for each of these types in our model.

In order to test the proposition that organizational changes trigger more anxiety, we asked groups this question: 'Has your organization undertaken any of the following changes in the past 5 years?' Ten options were supplied, including changes to policy breadth and constituency breadth (either increased, decreased). We compiled an additive index of positive responses to these 10 options (*Sum of Changes*).

Finally, we operationalize the *identity 'mix'* of a group (*Uniqueness*) by compiling an additive scale (0–6) based on the number of positive responses to a question probing what types of dimensions they think are unique from other similar groups (including, policy focus, involvement of members and so on). These dimensions of identity were operationalized based on the inductive work of Heaney, 2004 (Table 1).

Table 1: Summary of descriptive statistics

Variable	*Obs*	*Mean*	*SD*	*Minimum*	*Maximum*
Dependent variable					
Mortality Anxiety	367	−0.38	0.75	−1	1
Independent variables					
Competitors	378	0.54	0.50	0	1
Privileges	377	39.64	19.95	0	100
Direct Competition	370	−0.37	0.95	−2	2
Issue Focus	387	0.60	0.29	0.13	1
Number of Domains	387	3.46	2.89	1	14
Finance	387	4.95	1.66	0	8
Change in Size	377	−0.30	0.71	−1	1
Paid staff (ln)	384	2.04	1.58	0	6.83
Selective Incentives	378	2.51	1.25	0	4
Age (ln)	370	3.43	1.01	0	6.23
Trade Association (Ref.)	387	0.16	0.37	0	1
Trade Union	387	0.04	0.20	0	1
Business	387	0.04	0.20	0	1
Social Service Org.	387	0.09	0.28	0	1
Professional Association	387	0.16	0.36	0	1
Campaign Org.	387	0.14	0.35	0	1
Other Type	387	0.36	0.48	0	1
Sum of Changes	367	3.05	1.87	0	8
Uniqueness	321	4.16	1.69	0	6

Analysis and Findings

We utilized the above data and set of independent variables to explain variation in anxiety levels among interest groups. The dependent variable is categorical and ordinal in nature, so we subject it to an ordinal logistic regression, or ordered logit test (as do Gray and Lowery, 1997).

Table 2 presents the full model with all independent variables included.[14] Generally, when interpreting the results of this ordered logit estimation, a one unit change in each independent variable, all else equal, corresponds to *N* odds for cases to be at a higher level of mortality anxiety versus all other levels combined. A value above 1 corresponds to higher odds, whereas values below 1 correspond to lower odds. That is, above 1 means a higher odds of mortality anxiety, whereas below 1 means a lower odds of mortality anxiety. Let us review the results. We take each hypothesis in the order introduced in the earlier portion of the article. Appendix Table A1 reports the ordered logit results of models using separate groups of independent variables from the full model shown in Table 2, with nearly identical findings among statistically significant determinants of mortality anxiety across specifications.

Our first hypothesis was, following the lead of density dependency theories, that more *direct* competition from *similar* groups *experienced* by a group the more *anxiety*. We can confirm this hypothesis: the first variable, Competitors, is significant at the 0.05 level and operates in the expected direction (prop. odds ratio of 1.85). For a one unit increase in the variable Competitors, the odds of a high level of Mortality versus combined low and middle levels of Mortality anxiety are 1.85 times greater. Consistent with density dependence theories, an increased level of perceived direct competition leads to heightened levels of anxiety.

The next set of resource-based hypotheses turns out to be generally less helpful in explaining anxiety. The hypothesis that groups with *low levels of access* to and/or *status* from policy makers will exhibit more anxiety finds no support in our data (1.01, without statistical significance). We also find no impact of direct policy competition (*Direct Competition*) on anxiety. That is, policy-related competition seems to have no effect on mortality anxiety. This strengthens the initial finding underlining the importance of competition among like-groups on mortality anxiety: and reaffirms PE/niche theory hunch that this is crucial to survival prospects.

When it comes to the breadth of the issues that groups engage on and its impact on anxiety, the findings are mixed. Recall, our hypothesis was that groups that are *policy generalists* will exhibit more anxiety. Using our measure of issue focus – an HHI score capturing how evenly a group spreads attention across issue domains – we see a non-significant relationship. However, the direction is as hypothesized – more even spread leads to more anxiety. Somewhat

Table 2: The determinants of interest group mortality anxiety, ordered logit estimation results

Independent variables	*Odds ratio*
Competitors	1.850**
	(0.524)
Privileges	1.012
	(0.008)
Direct Competition	1.046
	(0.155)
Issue Focus	0.403
	(0.283)
Number of Domains	0.831**
	(0.066)
Finance	0.957
	(0.085)
Change in Size	1.627***
	(0.306)
Paid Staff (ln)	0.800**
	(0.079)
Selective Incentives	0.874
	(0.109)
Age (ln)	0.954
	(0.136)
Trade Association	Ref. Category
Trade Union	1.504
	(1.057)
Business	1.534
	(1.064)
Social Service Org.	3.498**
	(1.887)
Professional Association	0.808
	(0.388)
Campaign Org.	2.277*
	(1.059)
Other Type	1.453
	(0.583)
Sum of Changes	1.160*
	(0.094)
Uniqueness	0.965
	(0.085)

***$P<0.01$, **$P<0.05$, *$P<0.1$.
$N=255$. Standard errors in parentheses. McKelvey and Zavoina R^2: 0.193. LR χ^2: 43.397***.
Note: We follow Gray and Lowery (1997) and report the R^2 values resulting from regressing (OLS) each independent variable on the others: 0.145, 0.231, 0.118, 0.597, 0.619, 0.128, 0.081, 0.259, 0.188, 0.205, 0.203. See Hagle and Mitchell (1992) for discussion of McKelvey and Zovoina R^2.

surprisingly our much more simple measure of number of policy domains a group was active in proved to be significant, yet in the wrong direction. That is, the more domains a group is active in the less anxious it becomes (0.83).

The breadth of finance sources and the deployment of selective incentives seem to have no significant impact on alleviating anxiety levels, although the odds ratios suggest they have a very modest impact in reducing anxiety (which is as hypothesized, see Hypotheses 2d and 2f). What does have a significant impact on increasing mortality anxiety is a shrinking membership list (*Change in Size*). As with Gray and Lowery (1997), we hypothesized that groups with shrinking member lists would experience more mortality anxiety, and this is exactly what we found (odds ratio 1.627 significant at the 0.01 level).

A similarly significant result was found with respect to the size of the full-time staff of a group. We suggested that increased levels of professional paid staff would run inverse to anxiety levels. The variable *Paid Staff (ln)* has a proportional odds ratio of 0.80, which is statistically significant at the 0.05 level. For a one unit increase in Paid Staff, the odds of a high level of Mortality Anxiety versus combined low and middle levels of mortality anxiety are 0.80 times lower. Paid staff may simply be a good proxy for size of the organization. The organizational ecology literature has surmised that age is a good predictor of mortality hazard simply because it actually indexes size (that is, old organizations are often large organizations by and large) (see Hannan, 2005).

This links nicely with the set of variables related to organizational traits. As it happens, the age variable in our analysis shows no impact on mortality anxiety whatsoever. This suggests that a 'liability of newness' does not exist in our sample of groups (contra to Lowery and Gray's US findings). But as just discussed, the importance of staff size suggests that fixed staff complement (and scale/size), as opposed to outright age, is more salient to feelings of mortality anxiety. This suggests that Hannan and his colleagues might be right to suggest that effects of age are easily confused with the impacts from the size/scale dimension.

In order to produce a fully specified model, we included a group-types variable.[15] As it happens, two types of groups were found to manifest significantly higher levels of anxiety. We found that Social Service groups – those who are advocacy groups but who also deliver services to social clients – exhibit very high levels of mortality anxiety compared to other groupings (3.498 is the proportional odds ratio for a one unit increase in Type (Social) on Mortality Anxiety given all other variables are held constant). For campaign groups the odds ratio is 2.28 at just the 0.1 level of significance. On this evidence we might conclude that, at least for Scotland, social service advocacy groups and citizen/campaign groups are engaged in a precarious business.

We can only speculate as to why, but we believe a prime candidate would be heightened sensitivity to policy programs and shortened issue-horizons. Many

of these groups likely survive as a result of policy program specific funding or narrow (sometimes local) issue agendas: when these fade away so too do the groups. However, this finding presents a puzzle. Although we find a strong effect for citizen and social service groups, we do not find any effect for many of the organizational variables – like resource measures – that might support this interpretation. To unpack this group-type effect would require more data (which we do not possess) on the time-sensitivity of the issue or policy agenda of these groups. This is admittedly speculative, but we believe accurately reflects the difficulty of working with group-type in relation to mortality issues. This is underlined in a UK discussion over how growth in populations might be squared with evidence of varied birth and disbandment of groups generally in which Jordan *et al* note, 'This work … points to the more complicated nature of the situation; it is not only citizens' groups that have proliferated, and it is not only traditional economic groups that have stagnated' (Jordan *et al*, 2011). Although we find evidence of group-type changes, we do not have a clear story to account for it. In short, these 'types' seem to soak up variation in our model because they obscure other aspects of group organizational features. This suggests the way forward is a more sophisticated account of variations in the organizational forms or designs groups adopt.

What about our hypothesis that groups making more organizational changes will experience more anxiety? We find modest support for this hypothesis. A proportional odds ratio of 1.16 (statistically significant at the 0.1 level) suggests that a one unit increase in *Sum of Changes* leads to 1.16 times greater odds of a high level of *Mortality Anxiety* versus combined low and middle levels of *Mortality Anxiety*. This is supportive of the basic expectation that more change means more mortality hazard. Although we do not actually measure organizational mortality, we can see that changes are associated with anxiety about the future. This is no doubt a tightly bound relationship – causation is hard to pinpoint – but it is highly suggestive. Future work might probe how mixes of specific changes by entrepreneurs affect anxiety about mortality (and ultimately mortality itself).

Despite our expectations that the complexity of a group's identity across a set of established parameters might exacerbate mortality, we found no recognition of this in the levels of anxiety felt or expressed by group leaders (these findings are summarised in Table 3, below).[16]

Conclusions

This work set out to contribute to an important, but somewhat neglected, facet of the organizational/group ecology literature: namely, the issue of group mortality anxiety. The work of Gray and Lowery (1997) offered a template for

Table 3: Summary of hypotheses and findings

Concept	*Dimension*	*Hypothesis*	*Results*
Population-Level Competition	Competition	Hypothesis 1a. The more *direct* competition from *similar* groups *experienced* by a group the more *anxiety*	Direction as expected (significant level)
Group resources	Access/status	Hypothesis 2a: Groups with *low levels of access* to and/or *status* from policy makers will exhibit more anxiety	Rejected
	Policy niche/ competition	Hypothesis 2b: Groups *experiencing competition* for access to policy makers will exhibit more anxiety	Rejected
	Policy attention	Hypothesis 2c: Groups that are *policy generalists* will exhibit more anxiety	Reverse direction (on domain count) (significant level)
	Financial diversification	Hypothesis 2d: The narrower the range financial resources a group relies upon the more anxiety they will exhibit	Direction as expected
	Membership resources	Hypothesis 2e: Groups with shrinking member lists will experience more mortality anxiety	Direction as expected (significant level)
	Staff size	Hypothesis 2f: Smaller groups experience higher levels of anxiety	Direction as expected (significant level)
	Material incentives	Hypothesis 2g: Groups with low levels of selective incentives will experience high mortality anxiety	Direction as expected
Organizational traits	Liability of newness	Hypothesis 3a: The younger the group the more anxiety it experiences	Direction as expected
	Group type	Hypothesis 3b: Group-type: No firm theoretical expectations	Campaign/citizen and Social Service advocacy groups show significant positive levels of anxiety
Organizational Change	Organizational change	Hypothesis 4a: Groups that make organizational changes will experience more anxiety	Direction as expected (modest significant level)
Organizational Identity	Identity Complexity	Hypothesis 5a: Groups with more complex identity 'mix' experience higher levels of anxiety	Rejected

measuring and exploring this issue, which we have brought to a new empirical context (Scottish public policy) and to which we have added several new explanatory dimensions (namely, organizational change, identity and spread of policy attention). These new variables tap dimensions relevant to a more

nuanced understanding of group population dynamics, and specifically try to reflect group-level *strategies* to survive (as best as can be achieved with this style of data). There is much more to be done, but this research offers some new ways forward.

We found significantly heightened levels of mortality associated with groups that experience declines in their membership lists over a sustained period, and when they make many changes to their organization. The latter of these dimensions has not been examined by previous studies, but for our sample we find these both to be associated with increased anxiety. When comparing among types of groups, we find that citizen and social service groups experience heightened levels of anxiety. From the other perspective, we found that lowered levels of mortality anxiety were associated with high levels of paid professional staff. This makes sense if we conceptualize staff complement as a proxy for institutionalization and an index of size. Both size and level of institutionalization could plausibly provide some anchoring for groups and suggest that survival itself is more or less secure (at least in the time frame of 5 years that group leaders were questioned upon).

The article set out to address the population ecology literature, and thus it is perhaps proper to consider how our findings fit the existing *status quo*. A key finding here is in respect to density dependence and niche theories. The ecological group literature suggests that groups ought to partition on membership resources (compete with similar groups) and not partition on policy space (as Browne and Wilson presumed). Our headline finding is that mortality anxiety increases when groups face (or interpret that they face) high levels of competition from *similar* groups. And, we find that groups feel no (more or less) anxiety when they face policy competition and that policy specialization levels have no effect on anxiety. To back this up, we also find that groups experience less anxiety the more policy domains they are engaged in. In fact, the variables that did matter were related to membership resource issues – such as decline in member roles. All in all, this supports the standard ecological niche theory expectations. This is consistent with past work by Gray and Lowery (1997) and provides further support for the widely utilized density dependence argument in organizational ecology. There were some areas where our results departed from those of Gray and Lowery. For instance, we could find no evidence that age was associated with any significant increase in mortality anxiety (that might be expected according to the 'liability of newness' argument). Similarly, we could find no evidence that reliance on material incentives made any impact on mortality.

A second, and novel, contribution from our study is in the addition of a few organizational measures – taking inspiration from the organizational ecology literature (see Hannan, 2005) – that open up and expand the repertoire of sources of anxiety. The variable number of *organizational changes* proved to be

strongly associated with high levels of anxiety, which suggests more attention ought to be paid to the adaptive work that goes on among groups. Studies have long shown that changes are risky for organizational disbandment; our study supports and strengthens this finding by also showing that it heightens levels of anxiety among group leaders about mortality. We suggest more attention in the future be given to the impact of (differing) historical patterns of organizational change on the ways that the same set of groups approach similar contemporary problem contexts. The legacy of earlier change is likely, in our view, to mean that apparently similar groups approach new challenges and opportunities from different positions.

This article offers a broad message. Although there is an understandable tendency in the field to move focus from group-level discussion of collective action problems and formation issues to a focus on questions like influence or patterns of access, we suggest this should not mean the abandonment of organizational considerations altogether. After all, if 'bias' in the system of organized interests we can detect *before government* is a key concern for group scholarship, then surely understanding survival, maintenance and mortality anxiety, are crucial puzzles. In engaging in this research we have sought to ensure that Gray and Lowery's contribution on mortality anxiety does not drift into the background, but is taken up by a new generation of group scholars, and beyond the United States. For, among other things, it reminds us of the *link that real groups feel* between the organizational and the environmental.

Notes

1 One reviewer reminded us that, in fact, some groups may well not seek to survive: they emerge to fight specific battles or campaigns, accepting success would see the group fold.
2 We do not investigate the link between mortality anxiety and actual mortality (but see Gray and Lowery, 1997).
3 These are particularly salient given that Gray and Lowery's work draws explicitly on the ecological thread in organizational studies that has increasingly focused on identity and antecedents in explaining population-level dynamics.
4 Note that due to our single country research design we cannot measure a variable like population density – Gray and Lowery could do this because they sampled across US states.
5 Legitimacy is the key mechanism that is said to govern formation, while competition governs subsequent survival prospects as populations grow in number (see Delacroix and Rao (1994) for a sympathetic critique of these as mechanisms of regulation in organizational populations).
6 We collected data from the 1982–2007 period, but given we survey groups active since 1999, we calculate measures of policy activity from a sub-set of this data. Devolution refers to the period after 1999 in Scotland whereby it was granted its own Parliament with powers to legislate on a limited number of so-called 'devolved' issues. The process in the United Kingdom, including powers granted to legislatures in Wales and Northern Ireland is referred to as devolution. Before 1999, the UK Parliament passed legislation relating to Scotland, but there was a Scotland Office that functioned as a Scottish civil service.

7 Given that Scotland does not have responsibility for all policy matters (so-called reserved matters), our data *does not* cover policy issues in areas like defense, national security, international trade or foreign affairs.
8 This data set was compiled largely using paper-based records held in the Scottish Government Library and its document storage facility in Edinburgh, but with the addition of some more recent documentation only available electronically on the *Publications* pages of the Scottish Government website.
9 The Scottish Government's internal *Consultation Good Practice Guidance* (2008) recommends that departments, on completing a consultation exercise, should deposit copies of responses with the Scottish Government Library and also post them on the Scottish Government website. However, this guidance has not always been followed, and therefore not all consultation documentation has made its way into the public domain.
10 Note that 'don't know' responses are treated as missing in the analysis to follow. This explains the drop in the number of observations in the models presented in this article.
11 The original coding scheme was developed by Frank Baumgartner and Bryan Jones (see the Policy Agendas coding scheme codebook at www.policyagendas.org). However, we have used the modified UK Policy Agendas codebook at www.policyagendas.org.uk.
12 In their landmark study of lobbying populations, Gray and Lowery (2000, pp. 97–101) use HHI scores to examine the diversity of the lobbying populations of US states. Following Halpin and Thomas (2012), we also measured this variable according to entropy scores. However, we achieved the same finding, regardless of measure.
13 Note that we add one to all observations of Paid Staff before taking the natural log to avoid dropping observations with zero paid staff.
14 Note that a Brant Test indicates that the parallel regression assumption has not been violated, a Link Test indicates that specification error is not present, and that diagnostics of collinearity do not reveal any additional specification problems with the full model. (See full discussion of the diagnostic tests we utilized at www.ats.ucla.edu/stat/stata/dae/ologit.htm.)
15 Note that in the model estimation the Trade Association group-type is omitted, it is used as the baseline category.
16 This was regardless of how we calculated the identity index.

References

Aldrich, H., Staber, U., Zimmer, C. and Beggs, J.J. (1990) Minimalism and organizational mortality: Patterns of disbanding among U.S. trade associations, 1990–1983. In: J. Singh (ed.), *Organizational Evolution*. California: Sage.

Bouwen, P. (2002) Corporate lobbying in the European Union: The logic of access. *Journal of European Public Policy* 9(3): 365–390.

Bouwen, P. (2004) Exchanging access goods for access. A comparative study of business lobbying in the EU institutions. *European Journal of Political Research* 43(3): 337–369.

Browne, W.P. (1990) Organized interests and their issue niche: A search for pluralism in a policy domain. *Journal of Politics* 52(2): 477–509.

Carroll, D.A. and Stater, K.J. (2009) Revenue diversification in nonprofit organizations: Does it lead to financial stability? *Journal of Public Administration Research and Theory* 19(4): 947–966.

Carroll, G.R. and Hannan, M.T. (2000) *The Demography of Corporations and Industries*. Princeton, NJ: Princeton University Press.

Delacroix, J. and Rao, A. (1994) Externalities and ecological theory: Unbundling density dependence. In: J. Singh and J. Baum (eds.) *Evolutionary Dynamics of Organizations*. Oxford, NY: Oxford University Press, pp. 255–268.

Gray, V. and Lowery, D. (1996) A niche theory of interest representation. *Journal of Politics* 58(1): 91–111.

Gray, V. and Lowery, D. (1997) Life in a niche: Mortality anxiety among organized interests in the American states. *Political Research Quarterly* 50(1): 25–47.

Gray, V. and Lowery, D. (2000) *The Population Ecology of Interest Representation: Lobbying Communities in the American States*, Paperback edn. Ann Arbor, MI: University of Michigan Press.

Hagle, T.M. and Mitchell, G.E. (1992) Goodness-of-fit measures for probit and logit. *American Journal of Political Science* 36(3): 762–784.

Halpin, D. and Jordan, G. (2009) Interpreting environments: Interest group response to population ecology pressures. *British Journal of Political Science* 39(2): 243–265.

Halpin, D. and Binderkrantz, A. (2011) Explaining breadth of policy engagement: Patterns of interest group mobilization in public policy. *Journal of European Public Policy* 18(2): 201–219.

Halpin, D. and Jordan, G. (2011) *Quantifying Group Populations*. Basingstoke, UK: Palgrave.

Halpin, D. and Nownes, A. (2011) Reappraising the survival question: Why we should focus on interest group 'Organizational Form' and 'Careers'. In: A. Cigler and B. Loomis (eds.) *Interest Group Politics*, 8th edn. Washington DC: Congressional Quarterly Press.

Halpin, D., Baxter, G. and MacLeod, I. (2012) Multiple Arenas, Multiple Populations. In: D. Halpin and G. Jordan (eds.) *Quantifying Group Populations*, Chapter 6. Basingstoke: Palgrave.

Halpin, D. and Thomas III, H.F. (2012) Evaluating the breadth of policy engagement by organized interests. *Public Administration*, doi: 10.1111/j.1467-9299.2011.02005.x.

Hanegraaff, M., Braun-Poppelaars, C. and Beyers, J. (2012) The development of the WTO interest group population: Exploring density, stability and diversity over time. In: D. Halpin and G. Jordan (eds.) *Quantifying Group Populations*, Chapter 8. Basingstoke, UK: Palgrave.

Hannan, M. and Freeman, J. (1984) Structural inertia and organizational change. *American Sociological Review* 49(2): 149–164.

Hannan, M.T. (2005) Ecologies of organizations: Diversity and identity. *Journal of Economic Perspectives* 19(1): 51–70.

Heaney, M.T. (2004) Outside the issue niche: The multidimensionality of interest group identity. *American Politics Research* 32(6): 611–651.

Imig, D. (1992) Resource mobilization and survival tactics of poverty advocacy groups. *Western Political Quarterly* 45(2): 501–520.

Jordan, G., Halpin, D. and Maloney, W. (2004) Defining interests: Disambiguation and the need for new distinctions. *British Journal of Politics and International Relations* 6(2): 195–212.

Jordan, G., Baumgartner, F., McCarthy, J., Bevan, S. and Greenan, J. (2011) Tracking interest-group populations in the US and UK. In: D. Halpin and G. Jordan (eds.) *Quantifying Group Populations*. Basingstoke, UK: Palgrave.

Jordan, G. and Greenan, J. (2012) The changing contours of British representation: Pluralism in practice. In: D. Halpin and G. Jordan (eds.) *Quantifying Group Populations*, Chapter 4. Basingstoke, UK: Palgrave.

Maloney, W.A., Jordan, G. and McLaughlin, A.M. (1994) Interest groups and public policy: The insider/outsider model revisited. *Journal of Public Policy* 14(1): 17–38.

Minkoff, D.C. (1999) Bending with the wind: Strategic change and adaptation by women's and racial minority organizations. *American Journal of Sociology* 104(6): 1666–1703.

Minkoff, D., Aisenbrey, S. and Agnone, J. (2008) Organizational diversity in the U.S. advocacy sector. *Social Problems* 55(4): 525–548.

Negro, G., Hannan, M.T. and Rao, H. (2010) Categorical contrast and niche width: Critical success in winemaking. *Industrial and Corporate Change* 19(5): 1397–1425.

Nownes, A.J. (2004) The population ecology of interest group formation: Mobilizing gay and lesbian rights interest groups in the Unites States, 1950–1998. *British Journal of Political Science* 34(1): 49–67.

Olson, M. (1965) *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge, MA: Harvard University Press.

Salisbury, R.H. (1969) An exchange theory of interest groups. *Midwest Journal of Political Science* 13(1): 1–32.

Schattschneider, E.E. (1960) *The Semisovereign People: A Realist's View of Democracy in America*. New York: Holt, Rinehart and Winston.

Schlozman, K.L. (2010) Who sings in the heavenly chorus? The shape of the organized interest system. In: J. Berry (ed.), *The Oxford Handbook of American Political Parties and Interest Groups*. Oxford: Oxford University Press.

Truman, D.B. (1951/1971) *The Governmental Process*, 2nd edn. New York: Alfred Knopf.

Scottish Executive (2008) Consultation Good Practice Guidance. Edinburgh.

Walker, J.L. (1991) *Mobilizing Interest Groups in America*. Ann Arbor, MI: University of Michigan Press.

Warhurst, J. (1994) The Australian Conservation Foundation: The development of a modern environmental interest group. *Environmental Politics* 3(1): 68–90.

Wilson, J.Q. (1973/1995) *Political Organizations*. Princeton, NJ: Princeton University Press.

Zuckerman, E.W. (1999) The categorical imperative: Securities analysts and the illegitimacy discount. *American Journal of Sociology* 104(5): 1398–1438.

Appendix

Table A1: The determinants of interest group mortality anxiety, ordered logit estimation results

Independent variables	*Odds ratios*			
Competitors	1.683**	1.879***	1.911***	1.850**
	(0.365)	(0.460)	(0.480)	(0.524)
Privileges	0.997	1.008	1.012*	1.012
	(0.005)	(0.006)	(0.007)	(0.008)
Direct Competition	1.187	1.213	1.167	1.046
	(0.133)	(0.148)	(0.149)	(0.155)
Issue Focus	1.403	0.342*	0.411	0.403
	(0.516)	(0.207)	(0.255)	(0.283)
Number of Domains	—	0.836***	0.844**	0.831**
	—	(0.056)	(0.059)	(0.066)
Finance	—	0.975	0.999	0.957
	—	(0.072)	(0.079)	(0.085)
Change in Size	—	1.457**	1.492**	1.627***
	—	(0.236)	(0.247)	(0.306)
Paid Staff (ln)	—	0.886	0.855*	0.800**
	—	(0.071)	(0.074)	(0.079)
Selective Incentives	—	0.862	0.927	0.874
	—	(0.084)	(0.098)	(0.109)
Age (ln)	—	0.898	0.937	0.954
	—	(0.107)	(0.114)	(0.136)
Trade Association (Ref)				
Trade Union	—	—	1.231	1.504
	—	—	(0.774)	(1.057)
Business	—	—	1.361	1.534
	—	—	(0.899)	(1.064)
Social Service Org.	—	—	3.756***	3.498**
	—	—	(1.844)	(1.887)
Professional Association	—	—	0.884	0.808
	—	—	(0.381)	(0.388)
Campaign Org.	—	—	2.755**	2.277*
	—	—	(1.108)	(1.059)
Other Type	—	—	1.406	1.453
	—	—	(0.508)	(0.583)
Sum of Changes	—	—	—	1.160*
	—	—	—	(0.094)
Uniqueness	—	—	—	0.965
	—	—	—	(0.085)
Observations	340	313	313	255
LR χ^2	9.53***	32.543***	46.849***	43.397***
McKelvey and Zavoina R^2	0.031	0.119	0.169	0.193

***$P<0.01$, **$P<0.05$, *$P<0.1$.
Standard errors in parentheses.