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RESEARCH IN AGENCY OPERATIONS

1. What research programs in regard to agency operations of interest to actuaries have been completed recently or are now being conducted by
   a) Insurance associations?
   b) Individual companies?
   c) Other groups within or outside the insurance industry?
2. How useful are the existing agency research findings? Are they adequate? What additional research studies should be initiated? By whom?
3. What statistical and analytical studies are being furnished agency departments? To what extent are actuaries involved in planning and conducting these studies?

MR. MORTON D. MILLER: This is a very timely subject. I know that our own agency offices throughout the country are very much concerned with the problems of marketing our products, establishing a recruiting function, and maintaining agency forces on a basis whereby they can be compensated reasonably and also find the insurance industry an attractive place to work.

At this time I am sure we are all concerned with the rise in our marketing costs to a point at which they may have some effect on the pricing of our product in relation to other competing media. Here the actuary has a great deal to offer the general-agency officers and his company from his understanding of the process and his ability to collect and interpret information in such a way as to provide guidance for the manager and, in particular, the agency officers.

CHAIRMAN H. CAREY HANLIN, JR.: For the past five years I have deserted the Society and have been attending meetings of the Life Insurance Agency Management Association.

Many very profound actuarial papers have been written on various aspects of agency problems, but I think the actuary's responsibility really transcends this. In many ways he can be more valuable to the agency man as, perhaps, a statistician than as a pure research actuary.

The actuary has the responsibility of providing the general staff with meaningful tools that can be used in the everyday operations of the business. The subjects we have for discussion devote themselves to the research aspects and the statistical and analytical aspects, as well as to what we should be doing and who should be doing it.

MR. NEIL M. ANDERSON: Current research of the Life Insurance Agency Management Association (LIAMA) can best be illustrated by a brief review of some of the recent activities of its five basic research committees.

Research Market Committee

1. Additional follow-up analyses related to the buyer study are planned by this committee.
2. A revised Persistency Rater with greater validity has been recently developed.
3. This committee publishes the Annualized Premium Survey, which reports the trend in new annualized premium in comparison to the trend in new paid-for volume.

Research Training and Morale Committee

1. Extension of the programmed learning concept through the teaching of prospecting skills and attitudes is in progress.
2. Studies of leadership and management styles and of relationships between managerial behavior and agent effectiveness are under way.
3. A study of the intensity of prospecting for sales interviews by age group has been initiated.

Research Technical Committee

1. This committee sponsors an annual research planning conference. The agenda for the 1968 conference includes operations research, model-building, research applications, computer utilization, and minority group research.

Research Distribution Cost Committee

1. Computer models are being developed for analysis and comparison of financing and compensation plans. A financing analysis service is offered to aid individual companies to construct realistic and workable plans.
2. The agency activity analysis which is under development has been used by individual companies in making functional time, cost, and profitability studies of agencies.
3. This committee is working with LOMA in its cost studies. The compatability of the agency activity analysis and LOMA's in depth selling study will be reviewed.

Research Selection Committee

1. Continuing study in the development and evaluation of agent-selection procedures and tools.
2. Further studies of combination agent turnover rates and levels of production by period of service and of the relationships between debit variables (e.g., size, location) and performance in terms of production and survival are being undertaken.
3. Managerial-selection tools are being tested.
4. The agent job review developed by this committee has been used by several companies to characterize the various kinds of agent jobs. This should have

major implications for research in the selection, training, supervision, and job-attitude areas.

The LIAMA is exploring with the National Industrial Conference Board the feasibility of developing turnover data for comparable positions outside the insurance industry. LIAMA also has a study under way to determine where agents go when they terminate—the extent to which they leave the industry as opposed to changing companies within the industry.

While all of LIAMA's research activities may not seem to fall directly into the actuary's domain, I believe that actuaries should be interested in most of them, since these matters relate ultimately to growth, costs, premiums, and profits. Of course, research findings based on intercompany data may not be directly applicable to a particular company, but they often serve as useful yardsticks to which one's own results can be compared.

Next I would like to mention some of the recent research activities of the National Life and Accident (a combination company with 260 district offices and about 6,200 debits). In 1966 we made a study of performance (production, earnings, survival) of new agents and the relationships of performance to the agents' scores on our pre-employment rating system and to the recent performance records of the respective district offices in which they were hired. Based on the findings, we adopted a system of variable starting pay for new agents (varying by rating score and district record) with which we have been pleased.

Our actuarial, agency, and systems departments have been working jointly on the development of a comprehensive agency research record. Although we are far from the implementation stage, our ultimate goal is simultaneous access, by means of our computer system, to the following data for each agent:

a) Personal-history data, ratings, and other characteristics of the agent when employed.

b) Data descriptive of the situation into which the new agent went (e.g., recent staff and district performance records, performance of the previous agent on that debit, the number of other first-year agents on the staff, etc.).

c) Characteristics of his debit—location, size, make-up by type of in-force business, general socioeconomic level, etc.

d) Performance (production, earnings, persistency, etc.) of the agent in each of his first eight personal quarters as well as in the current company quarter and year.

e) Data on the agent's training, performance on development tests, business education, company and industry honors and recognition.

We will retain much of this data for terminations, so that they can also be studied. This system will greatly increase our research capacity. Although most of the data have been available previously, it has not been in a form feasible for analysis and study. In addition to making analyses of compensation costs and results, we will be better able to study the reasons for agent success and failure, the characteristics of new business in relationship to agent and debit characteristics, and the profitability of various types and sizes of debits and districts. An important by-product of the system will be the more prompt and efficient production of the many periodic management and statistical reports which are now done by other means.

MR. CHARLES S. SCHNELLE: One of the most rewarding areas of research in agency operations has the goal of developing new agents at reasonable cost. New York Life has conducted several investigations of this sort in recent years, some of which I will mention briefly.

1. *Ratio of training allowances to first-year premiums for agents under the company's training program.*—This is not really a research job, since it is something required for compliance with New York's Section 213. However, it involves investigation of an item which could well justify research activity in any case.

2. *Cost of developing a successful agent.*—The study analyzed the selling and agency supervision expense according to our functional cost analysis. Costs for developing a successful agent were defined to include costs incurred on account of agents who failed as well as those who were successful. The information developed was used to estimate the average cost, per $1,000 of business produced or to be produced in the future, for each agent placed under contract. We also developed an estimate of the average recruiting and training cost per new agent placed under contract, including terminating agents.

3. *Developing status of new agents.*—This study shows in tabular form by geographical region the trainee agents under contract at the beginning and end of each year and how one developed from the other as a result of new appointments, terminations, and successful graduates from the training program during the year.

4. *Starting salary of new agents.*—The study shows average starting salaries by geographical region and cyclical trend.

5. *Persistency studies.*—The persistency of new agents was studied under various categories: (*a*) age at appointment, (*b*) former occupation, (*c*) educational background, and (*d*) basic starting salary.

Among other things, our study indicated that agents receiving the highest starting salaries had the better persistency. This is logical, because one would expect to have to pay higher salaries in order to get men of higher quality with better persistency. However, an attempt was made by certain individuals to interpret this result to mean that a general improvement in persistency could be achieved by means of a general increase in starting salaries paid to trainee agents and, therefore, that a general increase in the salary schedule for new agents would pay for itself. I should add that the actuaries did not agree with this interpretation.

6. *Operations research.*—An operations research technique was used to test the adequacy or inadequacy of the company's validation standards for men in its training program.

7. *Lapse study.*—A study of the first- and second-year lapse rates on business produced by new agents was based on issues during a three-month period produced by men in their first, second, and third contract years. Corresponding studies were also made of the distribution of such business by mode of premium payment and according to the contract month when the business was procured among the various success levels in the agent's training program.

Some of the results of this study were particularly significant and valuable:

a) As might be expected, business paid for by agents who completed their third contract year had the most favorable lapse rates of all categories.

b) Business from agents who terminated within six months after appointment had especially poor first-year lapse rates, such rates on business procured during the agent's first three contract years being more than double the first-year lapse rates on corresponding business produced by men successfully completing the two-year training period.

c) Lapse rates on business produced by successful agents during their third contract year were significantly more favorable than those on business paid for during these agents' first two contract years. This seemed to be largely the result of a shift in distribution of business by mode of premium payment after the training period, during which a more liberal compensation rule was applicable to business on modes of premium payment which are subject to the higher lapse rates.

d) The incidence of lapses, month by month, during the first policy year on modes of premium payment other than annual and the variations in lapse rates by mode of premium payment indicated the existence of a close relationship between the rules for annualizing commissions for determining credits and the kind and quality of business an agent is likely to produce in his attempt to maximize income under such rules.

e) Lapse rates were especially heavy for business on the life of an agent or a member of his family. This result indicates that special restrictions are called for in giving credit for this type of business.

MR. EDWARD G. NEWCOMB: At Northwestern Mutual we have devoted extensive research to the financial analysis of our general-agency operations. This study was prompted to a large degree by an Alfred Sloane article attributing much of General Motors' success to building a strong, financially profitable dealership organization. Our management drew analogies to our general-agency operation and requested an all-out program to implement some parallel actions. As a source of basic data, we have been accumulating information on activity within our field offices, adapting some ideas from the LIAMA's agency activity analysis. For over three years, our general agents have furnished us daily activity records on themselves and their staff covering a period of two weeks out of every calendar quarter. This record provides a complete accounting of time broken down among all major field functions and is identified with the specific agent when appropriate.

From these data we have developed a complete financial analysis of each of our general agent's operations and have implemented a reporting system which is invaluable to us and to our general agents for learning more of what is happening and of how it might be improved. Although it is not compulsory, nearly 100 per cent of our general agents continue to furnish activity records because they are so impressed with what we can provide them if they do.

Quarterly we prepare a report of current operating data showing general agent's net income and profit reflecting increase in vested terminals, sources and uses of cash, and an agency balance sheet. A supplemental evaluation of the questionable asset—loans to agents—is included quarterly.

Annually we provide a comprehensive financial analysis for each general agent showing where he made his money. The profit from each agent is shown, together with an evaluation of how much profit he should have made. This involves an expense allocation to individual agents together with a comparison of actual to expected with similar types of general agencies. A comparison of how managers of similar operations distribute their time and earn their money brings problem areas into sharp relief. We have never been as well and as currently informed on the aspects of each general-agency operation. This gives us a useful supervisory tool in effecting improvements and provides an invaluable service to our general agents.

This operational research furnished valuable information in a recent study of our general agent's compensation. An analysis of how they spend their time and how they make their money led to some changes in our compensation approach. We knew that the profit from servicing business in force varied immensely among our agencies but were not aware of how little of the general agent's time was involved with this function.

As a result of getting a better fix on how much management time is spent with younger agents, we adopted a rather unique element of compensation called a "growth bonus," based on the improvement in the future production value of the agency. We developed a scale of point values related to expected future production of an agent, grading by age, level of production, and years of service. Each agency is inventoried each year, and a certain amount of compensation per point of increase is paid. This is compensation for true company growth.

MR. CHARLES F. B. RICHARDSON: Mr. Schnelle mentioned that agents hired at the higher salary levels seemed to show better persistency than those at the lower salary levels, a similar finding to a LIAMA study a few years ago. This surprised me, and I wondered whether this might not be an example of spurious results, since under most financing plans the manager or general agent shares in the loss. Logically, the selection standards are likely to be more severe at the higher salary levels, but there are also other factors involved. Would Mr. Schnelle like to comment on this?

MR. SCHNELLE: I would not presume to judge what effect the various factors have in relation to the persistency of men in the higher salary ranges. All we know is that our studies show that these men have the better persistency. I do not believe that the sharing of a loss on termination inhibits the general manager from putting under contract one whom he thinks will be successful. General managers are pretty good judges of what it takes to make a successful agent and will bid for the man they think will be successful. Generally speaking, this man has a better chance of achieving success than the man they pay a smaller salary. I think it is as simple as that.

CHAIRMAN HANLIN: Ed Newcomb talked about providing the value of vested renewals of the agent. We have a program which does this but have furnished the information only upon request or upon death of an agent. Is there a possible disadvantage in giving this information, such as encouraging agents to request loans against the value of their vested renewals?

MR. NEWCOMB: In our experience I think it is helpful to the general agent to know where he stands with the agent. In the past he probably would have loaned the money even without this knowledge. We are in a real deferred compensation business, and I feel it is important for the agent to realize the value of writing good business, preserving it, and getting the commissions on it when the premiums are paid.

MR. NORMAN F. BUCK: One might ask why, after a hundred years, we have not completed all of our basic agency research and have nothing left to do but updating. In reply, it has been said that up to the present life companies have not needed to do much research in order to survive and some have even prospered without it. However, competition is increasing so much that it has become imperative now for successful life companies not only to do their research but to use it.

In preparing for this session, I put the panel questions to several key people in our agency department. One of the most thought-provoking responses was that "while research must be honest, it must also be palatable." By palatable I think he meant something that he could understand. We must always tailor the presentation of our findings to the traits of our customers. The best research is not worth a hoot if it does not get used.

Although we have much good research, it seems on balance to be too introspective, with too little attention paid to market and sociological research. While it may be useful to know the termination rates of agents, should we not be spending more of our time finding out what the fellow in the corner house needs and wants and can pay for? The Institute of Life Insurance deserves praise for taking the lead in this direction with its Future Outlook and Yankelovich reports. We need to know where we stand with our publics.

To be more specific about additional research studies that are needed, the intercompany first-year lapse rates published by LIAMA are useful, but with a bit more effort they could be made much more valuable. The heterogeneity of data which handicaps all intercompany studies is especially troublesome in connection with the first-year lapse reports. No two companies sell exactly the same kinds of business to the same kinds of people through the same kinds of agents. The important factor is how well we keep on the books whatever business we sell. To find out how we are faring in comparison with other companies, our data could be sent to LIAMA in stipulated cells by such factors as age, policy size, and mode of premium payment, instead of in one lump sum. LIAMA could then compare our actual lapses with expected lapses based on the type of business we sell. At the same time, we could still get our comparisons of crude lapse rates.

Broadening the field a bit, there is a whole host of subjects on which life insurance companies need more information. Let me briefly mention three in the hope that others will discuss them more fully.

1. *The high termination rate among new agents.*—Why aren't there more topnotch people pounding on our doors demanding the privilege of selling life insurance since it is a great business, a useful service, and a good livelihood?

2. *The job of the general agent and manager.*—A comprehensive job description of this one key person in the life insurance business sounds like a job no mere human could qualify for. How can we simplify this vital job so that ordinary mortals can do it effectively?

3. *The need to keep our proved products in tune with the times.*—Fixed-dollar life insurance has been a valuable service through the years. Unfortunately, inflation has eaten into the value of the dollar, and many companies are adopting equity products as a defense. Is ordinary insurance by its essential nature so inflexible that we cannot adapt it to the times? What are all the barriers that prevent flexible-amount, equity-oriented, ordinary insurance?

MR. SCHNELLE: In the area of additional research, I want to mention some things that I would like to see done.

1. *Persistency.*—Persistency of new agents is a key factor in determining whether the field force is being built at a reasonable price or not. Of particular value in my opinion are studies indicating differences in persistency by office. These should highlight the agency managers who are turning in the best and the worst records. The effectiveness of the manager who recruits and trains the new agent is one of the most important factors in the acquisition and development of successful agents.

2. *Quality.*—Studies should be made to determine important information relative to the quality of the business written. The data should include (*a*) volume of business produced by new agents, (*b*) lapse rate on such business, (*c*) mode of premium payment, (*d*) size of case, and (*e*) average premium, both per case and per $1,000 of face amount.

Such studies, if made by office and differentiating between business produced by successful and by terminating new agents, should aid in measuring the effectiveness of agency managers.

3. *Expense analysis.*—More accurate and detailed functional expense analyses are needed to obtain a better estimate of the cost of developing new agents.

4. *Operations research.*—Operations research techniques might help in

determining such things as what trainee valuation standards would achieve the best results, taking into account such factors as the various items relating to the persistency of the agent, the quality and quantity of business produced, and the expenses incurred in recruiting and training him. The items entering the study should be investigated on the basis of frequency distributions.

5. *Combined master record.*—Electronic data-processing developments should enable us to obtain and utilize improved information about our agents. A single combined, detailed, record file on each agent would be very desirable. Such a record would be of assistance in the following jobs: (*a*) commission calculations and accounting, (*b*) accounting in connection with agent-training plans and their validation, (*c*) valuation of benefit plans, (*d*) information needed by the agent in preparing his tax returns, (*e*) production records and other studies of business produced by agent characteristics, (*f*) determination of preselection standards, and (*g*) development of postselection standards.

All the research that I have referred to should be done on an individual-company basis. Organizations like LIAMA have done research which provided the industry with a great deal of valuable information, and I am sure they will continue to make a substantial contribution to our knowledge in the future. Such information can be used as an effective standard for comparison. However, for a company interested in measuring the development of its own sales force, I do not believe anything can take the place of a study of that company's own experience.

MR. NEWCOMB: I would like to add one comment on problems with industry research in agency operations. It is difficult to develop good, reliable data on field operations even within one company. One of the problems involves lack of control. We have a lot of descriptive data on each agent under contract. However, there is a wide diversity of characteristics—some are full-time producers, some are part-time producers, some rural, some city. It is difficult to obtain data within a company which we feel are reliable. When it comes to intercompany data, the problems are magnified. Nothing but broad, general conclusions can reliably come from most industry studies in agency operations. If a company is large enough, it can receive by far the greatest benefit in an intensive analysis of its own operation.

MR. JOHN M. CLYNE: Have there been any studies made with regard to successful agents in relation to the people that hire them in the first place?

MR. SCHNELLE: Certainly the man who selects, recruits, and trains the agent is a big factor in determining whether or not the agent will be successful. While we have nothing very definitive on this, there are certainly indications from the raw statistics that certain offices, year in and year out, have had good results while other offices have had poor results. This would seem to substantiate the point you are making.

MR. RICHARDSON: About fifteen years ago, when I was with the Mutual of New York, we made a study on this very point. After having our agency executives rate the managers, we picked the top and bottom quarters of them and analyzed the survival rate and the performance of new agents under each according to aptitude index score and so forth. We found that the best managers did a better job with agents who had a low aptitude index than the poor managers did with agents who had the highest scores.

MR. WAYNE A. GILLIS: We have a high first-year lapse rate on new agents and suspect that part of the cause is that agents have a poor delivery technique. Has anyone made a study of this, specifically by making direct contact with lapsed policyholders?

MR. SCHNELLE: I do not know the answer to this question, but my impression is that the most important factor in determining the lapse rate of business is mode of premium payment. This is a very important factor. The rule used for annualizing commissions is also important.

MR. MILLER: Regarding the mode of premium payment, are you convinced of the value of what you are doing? I gather you have to encourage persistency of regular monthly business. Do you not have some scheme in which you defer commissions?

MR. SCHNELLE: In general, we do not pay any commissions at all on monthly premium business until one of two tests has been met. One test relates to the total amount of premiums paid; the other requires that three premiums be paid. When either of these tests is met, the accrued commission on all premium payments already made becomes payable. Thereafter, a commission becomes payable on each monthly premium applicable to the first policy year, as such premium payments are made. However, this rule does not apply to most of the agents operating under our training program.

The rule we have adopted in annualizing commission credits on monthly premium business produced by such trainee agents calls for crediting 75 per cent commission credits on anticipated premiums for the full first year when such business is placed and the first monthly premium on it is paid. The balance of the first-year commission credits are credited when the twelfth monthly premium is paid. We are not entirely happy with this rule.

CHAIRMAN HANLIN: We are convinced of the importance of persistency on the monthly business, so, in giving a percentage advance, we do not give it on monthly business. On other modes of premium payment we allow 80 per cent of annualized commissions, but for monthly business we credit only earned commissions. We have been unhappy with our experience and would like to do away with it.

MR. NEWCOMB: We do not have any monthly premiums but will take a monthly deposit and annualize the commission. If they do not pay for three months, we will charge back the whole commission. In other words, we only recognize quarterly business, even though we have a monthly device.

MR. ANDERSON: Regarding information furnished to the agency department, our actuarial department has designed and routinely furnishes two statistical reports. One is a sales and conservation analysis which is produced weekly for the company as a whole and monthly by district office and sales region. This report shows for the current period and year to date the following items: paid issue, first-year lapse, renewal lapse, and net increase for ordinary and weekly premiums, separately, with several finer breakdowns under each series. Each district manager is given a copy of the report pertaining to his office.

The second report is an ordinary issue analysis, produced monthly by the district office and showing the number of policies and the amount of insurance issued; it is tabulated by plan or plan group, age group, mode of premium payment, and rating class. Average policy size and average premium per $1,000 are shown for male and female sales. This is a new report and at this time is furnished only to home-office agency management.

MR. NEWCOMB: With all our production statistics now on magnetic tape, we are able to run rather comprehensive studies on a continuing basis. Each month we run a study of lapses, but we consolidate them only once a year. Our statistics go back to January 1, 1965. At the end of this May we will be checking the persistency of policies written in March of

1965; March, 1966; and March, 1967—the one-, two-, and three-year persistency of business. Summary records are developed on an agent-by-agent basis. Included in the record are the age and sex of the insured, the type of insurance plan, the mode of premium payment, the number of quarters paid on each policy lapse, the type of agent contract, and the agent's service. Paid-for insurance and lapses on the basis of premium, policies, and amount are shown.

Annually, a general-agency summary is prepared and studies are made on the basis of each of the variables indicated. We intend to build up five years of persistency experience for each agent and ten years for each general agency and to have these figures in detailed form for over ten years for the company as a whole. A continuing analysis of these statistics should help preserve good persistency on our business, which is one of our most coveted possessions.