<u>CONTEXT & EDITORIAL POLICY</u>

The first two Quarterly Research Papers in the series comprising Volume 8 of the **HR Research Journal** were sent to you as an IPMZ membership service in September and December last year.

Here is the third paper.

The fourth paper, completing Volume 8, will be sent to you mid-year.

The four papers constituting Volume 8 resurrect the **HR Research Journal** after a 10-year gap in production.

The Editorial Policy of the **<u>Journal</u>** is to report on Research Dissertations prepared by those studying for higher qualifications, such as the IPMZ Higher Diploma.

These quarterly reports will –
- Describe the research methodology used –
  - ✓ Research Question
  - ✓ Hypotheses
  - ✓ Abstract terms
  - ✓ Population and Sample
  - ✓ Instrument used to collect information
  - ✓ Pre-test/Pilot Study
  - ✓ Response Rate
  - ✓ Limitations of the research
  - ✓ Reliability and Validity of information

- Offer observations/suggestions on methodology for the guidance of future HR researchers.

- Summarize any Research Findings of possible use to HR practitioners.

The third <u>Quarterly Research Paper</u> appears below.

You may find it useful to print out each quarterly paper and file it, for ease of future reference.

<u>FLORENCE NYADOMBO's</u>
2011 investigation into
HOW BEST CAN PACE COLLEGE
<u>IMPROVE ITS MARKET SHARE</u>?

<u>Introductory comments</u>
This was a survey of the opinions of lecturers, administrators and students at a tertiary education college in Harare. Nyadombo sought the opinions of a sample of them about techniques that could be used to improve motivation of lecturers and administrative staff, plus about various measures to retain and attract students.

Her 'population of interest' consisted of 35 administrative staff, 55 lecturers and 1 910 students at the college. A stratified random sample of 25% of each category was selected, amounting to 9 administrators, 14 lecturers and 477 students.

She administered a questionnaire, complemented by an interview schedule of 11 questions to her sample.

After summarizing the 500 responses, she used the results to make recommendations about how the college could improve its share of the market.

<u>THE RESEARCH QUESTION</u>
Nyadombo stated her Research Question as: "<u>How best can Pace College improve its market share **and** have a leading **and** competitive position in the market?</u>"

Editorial Note

There are actually three separate research questions in this statement.

In principle, any business could improve its share of the market (e.g. from 1% to 2%, or 10% to 12% of the market) **but** still rank below its competitors (e.g. 9th out of 10 competitors) – **and** a business may be competitive (i.e. win customers) without being a leader.

This illustrates the importance of formulating and refining the research question, in order to focus the research precisely.

To widen and deepen her knowledge, Nyadombo reviewed published literature both on research methodology and on the subject of business and motivation through remuneration.

Her reports on her readings are well done, with the essay on business models being particularly well written.

Nyadombo's HYPOTHESES

The researcher in this case made 10 proposals related to her Research Question. For example, "Designing retention schemes for the qualified lecturers with a view to retain quality lecturing skills to the college".

Although the relationship of the proposals to her Research Question is implied, she did not phrase her proposals in the more usual form of explicit hypothetical 'answers' to the Research Question (an approach intended to help focus the questions that would later be asked to obtain data).

Had she adopted such an approach, she might then have phrased the above example as, "Introducing retention schemes will retain and motivate qualified lecturers".

Drawing out the implications of her 10 proposals, they can be re-phrased as explicit hypothetical answers to the Research Question, as follows –

➢ Introducing retention schemes will retain and motivate qualified lecturers.
➢ Providing adequate lecturing facilities will retain and motivate lecturers.
➢ Introducing incentive schemes will retain and motivate lecturers and administrators.
➢ Professional recruiting of qualified administrative staff will result in improved administration.
➢ Improving administrative systems will attract more students.
➢ Charging reasonable fees will attract more students.
➢ Offering a wider range of professional studies will attract more students.
➢ Improving marketing strategies will attract more students.
➢ Making the physical appearance of the college more attractive will attract more students.
➢ Opening new branches in locations convenient for students will attract more students.

These are the hypotheses she would then investigate.

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DEFINITION OF ABSTRACT TERMS in the Research Question and Hypotheses

Some of the abstract terms that appeared in Nyadombo's Research Question and Hypotheses were: 'how best – improve – market share – leading – competitive position – retention schemes – incentive schemes – lecturing facilities – professional recruiting – reasonable fees – marketing strategies – professional studies – attractive environment'.

Her definitions tended to be general rather than concrete (and in some cases were incorrect – e.g. she defined 'market share' as 'owning the majority of the clients in the society'. In fact, any portion of clients, from 1% upward, constitutes a share of the market).

However, some definitions were more specific – e.g. incentive scheme was defined as 'rewarding programs that are designed to stimulate the willingness of an employee to perform'.

When we turn to her questionnaire, three of her 10 closed questions did offer respondents more concrete choices, enabling them to see more precisely what she meant by the abstract terms used – e.g. question 3 on incentive schemes offered a choice of performance bonus, worker of the month award and notch-up scheme (presumably a notch up on a salary scale). Incorporating such concrete items in her definitions would have usefully improved this section of her report.

POPULATION of interest – and the SAMPLE selected from that population for research

In research terms, a 'population' consists of all those from whom the researcher wishes to obtain information.

In this case, Nyadombo was interested in the opinions of 55 college lecturers and 35 administrators, as well as the opinions of 1 910 students, a total population amounting to a conveniently round figure of 2 000.

As is usual in survey research where analyzing large numbers of responses can be unwieldy, she decided to choose a sample (in this case, 25%) of each of these three categories (or 'strata') of the population – 14 lecturers, 9 administrators and 477 students. She does not report how she drew her three samples (which she described as a simple random sample; in fact, the correct term where a researcher samples randomly from different strata is a 'stratified' random sample).

Editorial Note on random sampling

Where a researcher decides to obtain information from a sample of the population rather than from the whole population of interest, he or she usually tries to ensure that the sample is representative of the population – i.e. that it mirrors the characteristics of the wider population of interest, so that she can confidently generalize the results from the smaller sample to the wider population.

This representativeness is achieved by selecting the sample on a random basis. In research, 'random' is not the same as haphazard. The term is given a specific meaning in research.

To meet the requirements for selection to be random, each person in a population – or each person in each stratum of the population, in this case – must have an equal and independent chance of being chosen for the sample.

In this case, where the population had three strata, to meet the requirements of random selection the researcher would have needed to obtain or compile a list of all the lecturers, number them from 1 to 55, write out 55 slips of paper with a number on each, put them in a container (such as a bowl or bucket) and then, without looking, draw out a quarter of those numbered slips. Matching the numbered slips against the numbered list of lecturers' names would enable the researcher to identify which lecturers should receive the questionnaire soliciting their opinions.

The process would then need to be repeated for the 35 administrators.

Finally, the process would have to be repeated for the 1 910 students, in order that each had an equal and independent chance of being selected for the 25% sample. Obviously, after having obtained a list of nearly two thousand students and numbering each one, it would be a considerable task to prepare 1 910 pieces of paper each with a different number – and the researcher would have needed a large bucket. There are other ways of dealing with the logistics of this (random number tables, for example) but in the absence of any information on how Nyadombo actually selected her samples, we can only speculate as to how she proceeded.

INSTRUMENTS used to collect data

There are a number of 'instruments' a researcher can use in a survey. One of these is the self-administered questionnaire where the people in the sample write down their answers to questions and then return the questionnaire to the researcher. Another is the interview schedule where the people in the sample answer questions put to them verbally by the researcher, who notes their answers on a printed schedule for each person interviewed. Nyadombo reports that she used both instruments in her survey.

THE PILOT STUDY

Wherever possible, it is a good idea to pre-test the questionnaire in a pilot study, to check how understandable the questions are, before going to the expense of producing the required number of final copies (500 in this case). A pre-test is done by administering the draft questionnaire to a small number of persons from the population (randomly selected, if possible), often in a face-to-face situation where the researcher observes each respondent completing the questionnaire, noting any apparent difficulties in comprehension for subsequent discussion. The idea is to simulate as far as possible the circumstances in which those in the sample will subsequently be expected to complete the questionnaire, i.e. where there will be no researcher to answer questions about what a question 'means'.

Nyadombo's own words are illuminating. "A pilot study was carefully done at the college to a few IPMZ lecturers… the information was a bit biased due to the presence of an anonymous person… the interviewees were suspicious… the respondents felt unsafe to disclose some of the information for fear of victimization… The pilot study was successfully done with a response rate of 100%. Out of this result it came out that it was of paramount importance to explain in detail why this study was being carried out… The other fact that came from the pilot study was the issue of ambiguity in question wording where the facts could have several meanings which made it virtually impossible to answer the question as required. As a result the researcher had to simplify and be more specific in the question wording…"

It would have been useful to have some information about how questions were made simpler/more specific, following the pre-test.

RESPONSES to the questionnaires/interviews

After the pilot study and after amending her instruments, she then proceeded with the main study.

Although not completely clear from her report, it appears she distributed 500 questionnaires to her sample and, when the rate of return was low, she followed up by interviewing each of those who had not responded, using the questionnaire as an interview schedule, in effect.

Although the questionnaire reproduced in her report did not ask for the names of respondents, from the fact that she could ascertain who had not returned the questionnaire, we can infer that each returned questionnaire could be linked to an individual lecturer, administrator or student such that she could identify those individuals who had not returned questionnaires.

This may have had implications for the validity of information provided, of which more later.

Specific details of how the researcher physically distributed the 500 questionnaires, and details of the initial percentage response and then the number of interviews she conducted would have been helpful to other researchers in future.

What she does report is that information was obtained from all 500 of the individuals in her sample, i.e. an eventual 100% response rate – no mean feat.

Nyadombo does not mention whether any of those in her sample of 500 were unavailable – perhaps sick, or on leave – and if so what steps she took to select substitutes from her population. Again, including such details in the final report would be helpful to other researchers.

Her final questionnaire consisted of two parts.
- ➢ Section A (5 questions) sought demographic data – sex, age, education, 'level of position' and 'length of service'. These were summarized in tables but were not in any way related to the Research Question or the Hypotheses. Thus they provided a profile of the population but no more.
- ➢ Section B sought information relevant to her hypotheses, as follows –

- 4 questions required a Yes/No answer (e.g. *'Does the college have retention schemes to retain qualified lecturers?'*)
- 3 questions asked respondents to rate administrative systems (excellent, good, poor); student fees (very expensive, fair); and the attractiveness of the college premises (very attractive, not attractive).
- 3 questions asked respondents to choose between alternatives, as follows – *'What is the marketing strategy - advertising, personal selling, none?'*; *'How are administrators recruited - family, press, employment agency?'*; and *'What incentive schemes are in place to stimulate willingness of lecturers and administrators - performance bonus, worker of the month awards, notch up scheme?'*

It appears from the tables summarizing responses to the questions in Section B that responses to all questions were sought and obtained from all three strata in her sample – including from students. One might legitimately wonder whether students would normally have details of retention/incentive schemes for staff; or the details of how college administrators were recruited in the past.

Be that as it may, the tabulation of responses indicates that 300 of the 500 respondents believed that administrators at the college got their jobs on the basis of 'family appointment', 120 believed it was on the basis of press advertisement and 80 believed they were recruited through employment agencies.

LIMITATIONS of the research
Researchers are encouraged to recognize the limitations of their research and to draw these to readers' attention, so that professional HR practitioners do not read more into the findings than is warranted by the methodology followed.

Nyadombo identified as limitations several factors that might impact on valid responses to her questionnaire. We examine this in more detail in the next section.

RELIABILITY and VALIDITY of the data
Reliability and validity are related but separate issues in social research.

Reliability means consistency, i.e. if a respondent were to be asked a particular question a second time (either later in the questionnaire, perhaps in a slightly different form; or after the passage of time), would he or she give the same answer? If he does, we can conclude that his response is reliable. The dilemma is that he may be untruthful both times, i.e. he may consistently misrepresent his views, or even lie.

This brings us to the issue of validity.

Validity means truthfulness, i.e. is each respondent giving accurate information – or, where he is stating an opinion, is he saying what he truly believes?

Concerns about reliability and validity arise in all social research. Researchers cannot guarantee that the information they gather is reliable and valid. What they must do is explicitly acknowledge the problems and seek to minimize them.

In regard to reliability/consistency of responses, Nyadombo submitted that the use of two instruments enabled comparison of data 'so as to maintain consistency in the findings'. This is a good idea in principle. It would have been useful if she had given specific details of her comparisons.

In regard to the crucial issue of validity/truthfulness of responses, Nyadombo alluded to this aspect of the research at a number of places in her report. It was obviously a problem that she well recognized. For example, she thought that other members of staff might be suspicious of the researcher and that some participants might not take the researcher seriously (due to gender discrimination); non-responders said 'they did not have enough time to attend to the questions and they preferred an interview which was fast and convenient'; some non-responders 'were just ignorant to complete the forms because of their inability to know their importance'; 'most of the interviewees have very close personal relationship with the researcher, some thought it was going to give them a good chance of highlighting their problem areas and some feared for their own victimization', and so on. Such perspectives, taken together with the researcher's determination to obtain information from every one of the 500 persons in her sample, had the potential to influence the accuracy and truthfulness of the data provided. It is a truism in research that you cannot compel informants to be careful and truthful in their responses (and generally you cannot know whether they are); you can only encourage and appeal – and try to show that no advantage will accrue to a respondent by tailoring his answers in any other way.

A final remark needs to be made on validity. Where data appears of doubtful usefulness for any reason, a researcher should draw attention to this – and if he or she decides to exclude such data, this should be stated. The researcher in this case took a different approach – "It was noted that some completed questionnaires had some errors in responses and some information was inconsistent. However special attention was made on the interpretation of what the respondents meant to say on the forms *hence some few edits were made*".

Her frankness in this, as in other remarks on validity, is commendable – but a researcher should not 'edit' in this way as to do so may distort the primary data.