Aims and Context

Changes into old age are physiological (for example hearing and sight impairment, wrinkles, immobility etc.) and psychological (for example a feeling of a loss of role in the world due to not having a job or anyone to look after). Langer and Rodin noted that maintaining a sense of control could be beneficial to health as Lefcourt said in 1973 that if given the illusion of exercising personal choice, elderly people may be healthier and live longer.

In previous laboratory experiments, it was found that choice enhanced wellbeing. Stotland and Blumenthal (1964) told participants that they were going to take part in a number of tests. Half of them were told they could choose the order of the tests, and the other half was given a set order. It was found the participants who exercised choice were less anxious than the group not given a choice, possibly due to there being less pressure to do the tasks as they could do the tasks in any order they wished.

Ferrare showed that older patients entering nursing homes were likely to live longer due to the perception of choice they had in the home they wanted to go to and the care they received from staff. The choice had a positive effect on their health. He observed elderly patients and found 17 who said they had no choice of the home they moved to. Eight of the 17 died within four weeks of moving, another eight died within 10 weeks, and all deaths were unexpected (they rapidly deteriorated with no real warning).

Langer and Rodin designed a field experiment to investigate the theory that giving choices to a group of elderly patients in a ‘real world’ institutional setting (i.e. a nursing home) meant they would have better wellbeing and outlook on life than a group of patients without those choices.

Their aim was to see whether “more successful ageing” occurs when an individual feels useful and has a purpose, comparing two groups of nursing home residents from two different floors. One group would be given responsibilities (the experimental group) and the other would not be given any responsibilities (the control group). It was predicted that the patients in the experimental group (responsibility) would be happier than the control group (no responsibility).
Procedures

The research method used by Langer and Rodin was a field experiment conducted in a nursing home in Connecticut, USA. It offered medical and recreational facilities to its residents and was modern and comfortable.

One floor out of a possible of four was assigned randomly to be the experimental condition with the group of patients who were given responsibilities, and another floor was assigned to be the control condition with the group of residents who were given no responsibilities. In the experimental group there were 8 males and 38 females, and in the control group there were 9 males and 35 females. It is probable there were many more women in each group than men as women generally live longer on average. Some residents didn’t take part as they were a different age or not communicative, making data harder to collect.

Two types of questionnaire were designed to assess the effect responsibility had on the patients. The first questionnaire was administered by a research assistant who was unaware of the experiment’s aims (double-blind procedure), which assessed how much control they felt they had over general events in their lives and how happy and active they felt. It used an 8-point Likert scale from 0 (no control) to 8 (total control). Afterwards, the assistant also noted alertness using the 8-point scale.

One week after the first questionnaire was administered the nursing home administrator (a 33 year old outgoing male) called a meeting in the lounge of the two floors and made announcements to both sets of residents. The responsibility-induced group’s announcement placed emphasis on patients being responsible for themselves and can give their own opinions on complaint handing, could choose ‘Movie Night’ and choose a plant to look after. The control group with no responsibilities’ announcement placed emphasis on staff looking after patients, and any complaints are handled by staff so no input is put in by patients. They are given a plant that the staff take care of, and they are told when to go to ‘Movie Night’ - a very different announcement to the experimental group which had all the choices.

Three days later, all participants were revisited by the administrator who relayed the announcement to them. The responsibility-induced group was told: “We want you to be happy. Treat this like your home and make all the decisions you used to make. How is your plant coming along?” The group with no responsibility was told: “We want you to be happy. How is your plant coming along?” placing emphasis on not being able to make any decisions.

Three weeks later, a second questionnaire was completed by nurses who worked on both floors used in the experiment. All nurses were unaware of the experiment’s hypothesis, and they rated resident’s happiness, alertness, dependency, sociability and activity levels. Eating and sleeping habits were recorded as well as time spent doing various activities (watching TV, reading, talking to others etc.) Behaviour was measured, for example ‘Movie Night’ attendance.
Findings and Conclusions

In their field experiment investigating the effects of choice for the aged, Langer and Rodin found the people in the experimental group showed higher scores on the various measures than the control group. The results were that in general the people in the responsibility (experimental) group showed higher scores in happiness (48% of residents in the responsibility group felt happier afterwards compared to just 25% in the control group with no responsibility).

Other findings included the responsibility-induced group feeling more active, more alert and spent more time visiting other patients. An increase of scores was 6.78 between the first questionnaire and the second questionnaire for the experimental group, but a reduction of 3.3 for the control group’s scores between questionnaires was also found. This showed that wellbeing in the experimental group was much better than the control group, who had no responsibility; evidence to show the hypothesis to be correct.

Other behaviours such as attendance at movie night and time talking to staff were noted, and it was found the group with responsibility responded positively by doing these things more than the control group.

In addition, whereas the responsibility group’s average scores on the various measures always got higher after talks with the nursing home administrator, the control group’s average scores got lower following these talks.

A positive average total change score of 3.97 was found for the responsibility-induced group as compared with a reduction of 2.37 for the control group. The difference between these mean scores was highly significant (p<0.005, which means the probability of any extraneous variables affecting the dependant variable, in this case questionnaire scores, is extremely low).

From these findings it was concluded that introducing a greater sense of responsibility in patients who may not normally get to make decisions improves wellbeing, and also negative consequences of ageing, for example loneliness, immobility etc. can be prevented/slowed/reversed by allowing the aged the right to make decisions like they used to, giving them a feeling of purpose and stopping negative consequences from returning.
Evaluation of the Methodology

In their research to investigate the effects of choice and enhanced personal responsibility for the aged, Langer and Rodin used a field experiment. There are many advantages and disadvantages to using this research method. Strengths of using field experiments are that because they take place in the participant’s natural environment (in this case a nursing home) it has high ecological validity. This means it is true to life, and this is a strength because valid results can be gathered as in this study questionnaire results are taken from patients in a real nursing home in the USA.

Another strength of the research method is that Langer and Rodin implemented rigorous experimental controls. For example, only the IV differed between the two groups. The IV was whether or not the groups had responsibilities or not, for example the plant they had (did they choose it or not, and did they get to look after it), movie night etc. Also both groups were given a similar talk by the same person. Residents had been in the home for the same length of time, were from similar backgrounds and had similar health. Furthermore, the residents were unaware of the differences in procedure as they were on separate floors and nurses were also unaware of the study’s purpose, making it a double-blind procedure. This is a strength because there are no demand characteristics (unnatural behavior to change results to please the experimenter), making the results more valid.

However there are also disadvantages to field experiments. Firstly, because they are in a natural environment (a nursing home) it is impossible to control all extraneous variables. This is a weakness because it is harder to tell if anything that cannot be controlled (environmental variables such as light, heat, background noise etc.) affected results (happiness or alertness scores for instance). It is possible that if one floor was too hot, residents in that particular group would report being less happy.

Another disadvantage to Langer and Rodin’s research method was that the residents were divided up on pre-existing floors, so they may not have been very well-matched (different ages, health etc.) In fact, the responsibility group had been assessed as happier and more active than the control group. This is a weakness because already results are different and it may well be that patients on one floor are happier due to extraneous variables, reducing the validity of the results.

Langer and Rodin’s methodology can also be evaluated in terms of ethics. The weaknesses are that they denied one group responsibility and personal control. This is a weakness because there is little protection of participants, and not allowing participants to make decisions can make them depressed and unwell. Also, as it was a double-blind procedure, they did not get informed consent and residents were deceived. This is another weakness because it breaks ethical guidelines and patients may feel angry and distressed because studies had been conducted about them without their permission.

However, the strengths are that they did not split friends up, a strength because it wouldn’t have been the fact participants had been split from friends that influenced their happiness/sociability etc. scores.

The strength of the reliability of Langer and Rodin’s research is that even though it was a field experiment it was very well controlled so it is easily replicated by other researchers, a strength as consistency of results can be checked to make sure they are strong results that can be applied elsewhere to other nursing homes.
The strengths of the validity of Langer and Rodin’s research are that it took place in a natural environment (nursing home) so it has higher ecological validity, making it truer to life and can be generalised to other nursing homes as they are collected from a natural setting.

The weakness is that the wording for the question about control on the questionnaire was confusing, and this is a weakness as patients may not have understood the question and put down any answer, making results not a true measure. Another problem with the validity was that the home used in Connecticut was described as ‘cheerful and modern with medical and recreational facilities’. It is a weakness as it may not be a true reflection of what other nursing homes are like, as some may not be as luxurious and residents in a luxurious nursing home are likely to already be happy.

Langer and Rodin’s sample was residents of a nursing home in Connecticut, USA (91 residents of similar socioeconomic backgrounds, age and health). It was a large and diverse sample, making it more representative, which is good because it makes results easier to generalize to a wider population as a large sample of elderly people was used, so can be applied to other nursing homes.

The two groups were also similar, which was also good because other factors such as age and health aren’t influencing happiness or mobility etc. only the independent variable is (control or no control over decisions).
Alternative Evidence

Langer and Rodin used a field experiment to investigate the effects of choice for the aged. They found that residents in the responsibility-induced group were 48% happier than the control group and more alert at the end of the experiment. It was concluded that the effects of ageing (physical loss such as mobility, or psychological loss such as feeling like you no longer have a role) can be reversed, slowed or prevented by returning the right to make decisions, improving wellbeing.

Other studies have been conducted in this area of research. One such study is Ryan and Deci, who studied theories of motivation and happiness. They developed Self Determination Theory, which suggests various factors that increase participant’s enjoyment and participation in activities. A key factor was giving people a sense of autonomy (independence). This study supports Langer and Rodin because they found similar results, which were participation increases due to various factors, e.g. increased responsibility. Langer and Rodin found increased responsibility also increased happiness and alertness. However, unlike Langer and Rodin, Ryan and Deci’s study was merely a theory and not an experimental study. This is a weakness because they did not test their theory, so Langer and Rodin’s study is better as they conducted a very well controlled experiment in a nursing home and gathered results which supported their hypothesis.

Another study is Ferrare, who looked at data concerning the effects of the ability of elderly patients to control where they live. This study found elderly patients who entered nursing homes were more likely to live longer if they perceived they had a choice in the home they went to/type of care they received from staff. The choice had a positive effect on their wellbeing. This study supports Langer and Rodin because the findings were eight out of 17 died within the first four weeks, and another eight died within 10 weeks of moving. This shows that by not having a choice could cause problems and worse outcomes. Responsibility improves outcomes (e.g. happiness and alertness, therefore increasing wellbeing). This study is unlike Langer and Rodin’s however as this study was an observation of elderly patients and there was no control whatsoever over extraneous variables such as what they ate, activities they had etc. There was no manipulation of the environment. Experiments that are controlled, i.e. Langer and Rodin’s field experiment can establish cause and effect between the IV (responsibility/no responsibility) and the DV (happiness, alertness etc.) but they lack ecological validity. Observations cannot establish cause and effect, but are high in ecological validity (they are true to life).

One final study is Stotland and Blumenthal who told participants they were going to take part in a number of tests. Half were told they could choose the order they took them, and the other half were told a specific order of questions (fixed order). The participants who had a choice showed less anxiety than the participants with no choice. This study supports Langer and Rodin because it found that with choice there is less stress, and Langer and Rodin also found that participants with responsibility were happier and more sociable (they spent more time talking to patients and staff). However, this study is very different from Langer and Rodin’s because it was a laboratory experiment using students, not elderly people, therefore there is less ecological validity as students do not live in nursing homes so results from students can’t be applied to the elderly in care homes; they live in a completely different environment, have different outlooks, physical characteristics etc. so it isn’t true to life. This could make Langer and Rodin’s study stronger, but in Langer and Rodin’s study all extraneous variables e.g. light and heat were impossible to control, unlike with Stotland and Blumenthal where cause and effect can be established between the
questions (were they in a particular order or not) and anxiety levels as the study took place in an artificial environment (a laboratory).