

Cognitive aspects of ageing as portrayed in introductory psychology texts

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Introductory psychology texts may have an important influence on students' views of human behaviour. Previous investigations of these texts are briefly reviewed, and a small-scale study is described. The study examined 10 contemporary texts' coverage of cognitive aspects of ageing, focusing on the sources cited and the specific topics covered. Wide variation was found across texts in both the specific sources and the total number of sources cited. Topic coverage was also variable: although several mainstream topics were included in most or all texts, a similar number appeared in only a few texts. Comparison with results from a broadly similar study published eight years ago suggests that introductory texts' coverage of cognitive aspects of ageing has become more comprehensive and balanced in the last few years. Some topic limitations are still evident, however, and some possible subtle negative biases remain.

Because so many students take introductory psychology courses, and because the typical introductory course is structured around a text, introductory psychology texts may have an important influence on students' knowledge and attitudes about human behaviour.

There have been a number of investigations of modern introductory psychology texts. A few have focused on quantitative and structural features (Gorenflo & McConnell, 1991; Griggs, Jackson, & Napolitano, 1994; Weiten, 1988) or aspects of overall quality (Blumenthal, 1991). Several have examined the texts' treatment of specific topics, such as: Rogerian constructs (Ford & Maas, 1989), correlation and causation (Pennington, 1997), the boundary between counselling and clinical psychology (Leong & Poynter, 1991), and diversity issues (Hogben & Waterman, 1997). Commentators have tended to reach fairly negative conclusions, particularly regarding the texts' inaccuracies and oversimplifications.

The research most relevant to the present investigation is Whitbourne and Hulicka's (1990) study of ageism in undergraduate psychology texts published over the previous

40 years. The authors defined ageism on the part of textbook writers as a negative attitude involving

(a) disproportionately limited coverage of the latter part of the lifespan,

(b) ignorance of the range of relevant research and depiction of ageing as a universal process of decay, and

(c) portrayal of elderly people as physically and mentally disabled. They concluded that more recent texts had more comprehensive coverage of ageing issues, and tried to present them in a positive light, but still provided superficial coverage, relied on a limited number of authorities, and gave contradictory messages about the nature of the ageing process.

The scope of the present study is narrower than that of Whitbourne and Hulicka's (1990) study. The general aim was to find out what today's introductory psychology students are likely to be told about specifically cognitive aspects of ageing in their texts. In particular, I wanted to see how comprehensive and balanced the texts' coverage is, and how much variation there is across texts in topics covered and sources cited. The effect of ageing on cognitive functioning is one of the most extensively researched areas in the psychology of ageing, so investigation of introductory texts' coverage of this topic seems worthwhile in itself and a good place to begin looking at the texts' coverage of ageing in general.

Method

The basic strategy was to examine the coverage of cognitive aspects of ageing in ten American introductory psychology texts published in 1997 or 1998. The texts are listed in the Appendix. The choice of texts was pragmatic: copies had been supplied by the publishers. Since American texts heavily dominate the introductory psychology textbook market, limiting the sample to American texts seemed justified.

The examination had two main parts: listing of sources cited and identification of topics covered. I looked at all text sections explicitly concerned with adult development and/or ageing, or with intelligence; I also followed up the texts' index headings for material elsewhere on developmental research designs, post-formal operations,

or age-related brain changes.

Rather than attempting to compile an exhaustive list of relevant topics covered in the texts, I developed a checklist of important standard cognitive topics found in adult development and ageing texts, and searched for these topics. In a few cases, it was unclear whether a particular topic was being addressed; these instances were excluded from the quantitative results. Age-related changes in sensory systems or reaction time were included if a link was made to cognitive or neurological aspects of ageing. Material on brain disorders was excluded.

Results

Sources Cited

The number of sources cited per text ranged from 6 to 41. Five texts cited fewer than 14 sources and three cited more than 34. The median number of sources cited was 18.

A total of 172 different sources was cited. Of these, 154 (89.5%) were cited by only one text each. No source was cited by as many as five texts. Two sources were cited by four texts. Over half (52.3 %) of the sources were published in 1990 or later.

Topics Covered

The topics can be broadly categorised by frequency, according to whether they appeared in all, most (7 to 9), about half (4 to 6) or a small minority (1 to 3) of the texts. Table 1 shows the topics in each category.

Discussion

Sources Cited

The most striking feature of the sources cited is their variability across texts. A feasible explanation is that few

classic readings have emerged yet in this relatively new and rapidly expanding area. This explanation is in line with conclusions drawn by Gorenflo and McConnell (1991): "It seems...that it typically takes 20 years or so before an article is perceived as being 'classic' by most authors of introductory texts." (p.10). A related interpretation, based on Adler (1990), is that the small number of common references reflects the lack of a generally accepted paradigm in the area. Mechanistic, organismic, and contextual paradigms each underlie particular approaches to research into cognitive aspects of ageing (Dixon & Hertzog, 1996).

The two sources cited by four texts are Schaie (1993) and Shimamura, Berry, Mangels, Rusting, & Jurica (1995). The title of the second article is "Memory and cognitive abilities in college professors: Evidence for successful aging". Since the text authors and participants are all college professors, the relatively frequent mention of this particular article may reflect the observation (Gorenflo & McConnell, 1991) that sources cited in introductory texts are chosen partly on the basis of personal biases.

Preliminary analysis suggests that the considerable variability across texts in number of sources cited partly reflects variability in the total number of sources listed in the References sections. For instance, in the text which cites the most sources concerned with cognitive aspects of ageing, the References section as a whole lists about twice as many sources as does the text which cites the fewest.

Topics Covered

The results suggest that coverage of cognitive ageing in introductory psychology texts has become somewhat more comprehensive in the past ten or so years. For instance, intelligence, memory, and research design, in the context of ageing, covered by 63, 38, and 25 percent respectively of 1980s introductory texts (Whitbourne & Hulicka, 1997) are included in all the new texts surveyed here. In contrast,

Table 1. Topics categorised by frequency

<p>1. Included in all texts cross-sectional versus longitudinal designs intelligence and ageing memory and ageing</p>	<p>3. Included in about half (4-6) of the texts learning and ageing short-term (or working) memory and ageing slowing of information processing wisdom (or similar) lifestyle factors other than mental activity importance of health later-life growth in dendrites (or synaptic connections) examples of unusually productive older individuals (named)</p>
<p>2. Included in most (7-9) of the texts cross-sectional versus longitudinal designs linked to cognitive change with age fluid versus crystallized intelligence fluid versus crystallized intelligence linked to cognitive change with age importance of mental activity individual differences in cognitive aspects of ageing</p>	<p>4. Included in a few (1-3) of the texts sequential designs long-term memory and ageing recall versus recognition memory and ageing creative achievement and ageing training studies (or interventions) cognitive implications of sensory declines laboratory versus real-life cognitive performance</p>

several topic limitations are still notable. The discussion of memory, in particular, is often cursory: for instance, only about half the texts specifically mention short-term or working memory in the context of ageing, and few mention recall versus recognition memory.

The new texts seem to provide a reasonably balanced picture of cognitive aspects of ageing. Most discuss the wide individual differences in cognitive change with age, the role of mental activity in preserving ability, the fact that cognitive decline typically only affects certain functions, and the fact that findings of decline from cross-sectional studies can be misleading. On the other hand, a slight negative bias is still shown in the erratic coverage of other appropriate qualifications to the idea of universal cognitive decline. One relevant issue, mentioned by only a few texts, is the difference between laboratory and real-life cognitive functioning. Another issue, of considerable interest to gerontologists, concerns various ways of preventing or reversing cognitive decline. The texts' limited coverage of this issue is illustrated by the fact that only two texts mention Schaie's findings on factors associated with maintenance of cognitive performance in later life (Schaie, 1994), and by the fact that only a few texts mention the implications of findings from cognitive training studies.

Mixed conclusions can be drawn from this investigation of introductory psychology texts' handling of cognitive aspects of ageing. The limitations of the text sample mean that any conclusions must be tentative, but the findings do suggest that the coverage has become more adequate in recent years; on the other hand, perhaps inevitably, limitations are still evident, and there is considerable variability across texts. Clearly, there is still no guarantee that the introductory psychology student will be able to gain a reasonably full picture of cognitive aspects of ageing from his or her text. Perhaps this article will help introductory psychology teachers to decide which aspects of their texts' coverage of the area need to be supplemented through other course components.

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Appendix

List of Texts Examined

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