Characteristics of Discrepancies between Self-reported Visual Function and Measured Reading Speed

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Purpose. Visual impairment is a risk factor for morbidity in the elderly and is often screened for by self-report. This study evaluates whether there are subsets for whom there is a discrepancy between self-reported and measured function.

Methods. The prevalence of a discrepancy between self-reported difficulty reading a newspaper and measured reading speed was determined in 2520 community-based men and women, aged 65 to 84 years, and the discrepant group characterized by polychotomous regression.

Results. Of subjects who reported minimal difficulty reading a newspaper, 10.8% (227/2107) read newsprint-sized text (0.21") more slowly than 80 words/min, a level previously shown to be necessary for sustained reading. Poor visual acuity, presence of psychiatric symptoms, and less satisfaction with vision were associated with being in the group that read slowly and reported difficulty with reading. Better cognition, better visual acuity, more years of education, white race, and fewer psychiatric symptoms were associated with being in the group that read more quickly and reported minimal difficulty. When reading the text size at which subjects read their fastest, only 2.6% of those with minimal difficulty remained discrepant. These individuals were more likely to have less education, be male, be African American, and have poorer cognitive status than those who did not remain discrepant.

Conclusions. A subset of the elderly population have a substantial discrepancy between self-reported reading difficulty and measured reading speed. In some, this discrepancy may be based on underlying expectations and experiences, and in others it may represent a transition from no visual impairment to visual impairment. (Invest Ophthalmol Vis Sci. 1999;40:858–864)

Poor visual function has been shown in several studies to be a risk factor for disability, for health care utilization, and for mortality. 1–5 Declines in visual function are associated with specific diseases, both systemic (e.g., diabetes) and ocular. Currently, the National Eye Institute is developing a tool for assessing quality of life—the NEI Visual Function Questionnaire, which is based on self-report of visual function. In a primary care setting, declines in visual function are often screened for by asking a patient whether he or she is having more difficulty with a particular task. Difficulties with reading are one such major functional outcome.

The predictive validity of patient self-report is not known. From a research perspective, studies that have looked at visual function as a predictor of disability have used both measured 4 and self-reported 2–5 function to predict other outcomes. However, in other realms of function, it has been shown that there are discrepancies between self-reported and measured function. 6–8 This may occur because they measure related but not identical processes. Additionally, there may be subsets of individuals for whom the correspondence between reported and measured function is weaker than in the majority of the population.

To what extent are discrepancies found between self-reported and measured visual function? Is there a well-defined group with a discrepancy, and, if so, what are their characteristics? For example, a discrepant subgroup who report little difficulty but who read more slowly than their nondiscrepant counterparts may be in a state of transition, in which visual function is declining, but has not yet been perceived as causing difficulty. Alternatively, there may be predisposing risk factors, such as poor education, that lead an individual to have decreased expectations with respect to reading speed, and to be discrepant on this basis.

Defining these characteristics is essential in determining the appropriate use of self-report as a screening tool, in both clinical and research settings. Additionally, this approach to defining a group with discrepancies between self-reported and performance-based visual function may be useful in investigating discrepancies in other realms of function.

This study examines the relationship between self-reported and observed reading ability in a population-based study of older individuals, to determine whether there are subgroups for whom there is a substantial discrepancy between these two measures. We then report on the characteristics of the groups in which a discrepancy exists.
METHODS

Study Design

The Salisbury Eye Evaluation project is a population-based study of vision and visual function, and its association with physical function, in community dwelling men and women aged 65 to 84 years. Subjects were recruited in Salisbury, MD, via random sample from Medicare eligibility lists of the Healthcare Financing Administration. The sample was stratified by age, with oversampling of individuals aged 75 to 84 years and African Americans to ensure adequate power of the study to draw conclusions about these populations. Further details of the study design have been described previously.9

Participants

This analysis is based on the 2520 participants recruited into the study and examined from September 1993 to September 1995 during the baseline evaluation. Informed consent was obtained prior to enrollment in accordance with the Declaration of Helsinki.

Evaluation

All subjects were interviewed in their homes and then examined in a standardized fashion in a central examination site by trained technicians. The 65 subjects who were illiterate were identified by the home interviewers, at the time of performing the Mini-Mental State Examination (MMSE). If a subject was unable to read “Close your eyes,” they were classified as illiterate. In the clinic, these subjects were not given a reading test and were excluded from this analysis.

Self-report

As part of the Activities of Daily Vision questionnaire,10 subjects were asked about their degree of difficulty reading a newspaper, with answer options of none, a little, moderate, or extreme, or stopped reading because of problems with vision. They were also asked whether they had changed their method of reading a newspaper because of their vision. This question was asked because of prior evidence that people with a decline in function may change their method of task performance to maintain function before perceiving difficulty.11,12 If this were true with respect to reading a newspaper, it would be expected that individuals who had a measured decline in reading speed but who perceived no difficulty would be more likely to have changed their method than those who read more quickly. Subjects were asked to rate their current vision with their glasses on if they wore glasses, on a scale from 0 to 10, with 0 signifying blindness and 10 signifying excellent vision.

Examination

Binocular visual acuity was tested with ETDRS charts under standardized conditions, using usual correction.13 Reading speed was tested by having subjects read standardized texts aloud at four different letter sizes (0.13°, 0.21°, 0.33°, 0.52°). Reading was performed at a distance of 1 meter using the participant’s customary distance glasses. The letter sizes correspond to medication labels, newspaper, small newspaper headlines, and large newspaper headlines, respectively.14 Reading these texts required a 6th grade reading level. Cognitive status was tested using the MMSE.15 Individuals with a score less than 18 were ineligible for the project at the outset.

Presence of psychiatric disturbance was determined using the 28-question version of the General Health Questionnaire (GHQ).16 This questionnaire is a screening instrument that was designed to detect current diagnosable psychiatric disorders, focusing on the inability to carry out one’s normal healthy functions, and the appearance of new phenomena of a distressing nature. Seven questions are asked in each of four realms: depression, anxiety, social impairment, and hypochondriasis. Each question has four possible responses: better than usual, same as usual, worse than usual, or much worse than usual. The first two responses were categorized as a negative response, given a score of zero, and the latter two as a positive response, given a score of one. The results were summed, with higher scores signifying a higher degree of psychiatric disturbance.

Data Analysis

Self-report of reading difficulty was divided into three groups: those who reported little or no difficulty, those who reported moderate difficulty, and those who either had extreme difficulty or had stopped reading a newspaper secondary to vision. Reading speed was also divided into three categories: those who read fewer than 80 words/min, those who read between 80 words/min and 160 words/min, and those who read more than 160 words/min. The rationale for these cutpoints was based on information about reading performance, indicating that at 80 words/min individuals are able to read for a sustained period, and at 160 words/min they are able to read functionally.17 Two potential discrepant groups were defined a priori as groups in which a discrepancy between self-report and performance would be substantial and meaningful. Subjects who stated that they had little or no difficulty reading a newspaper and yet read newsprint-sized text more slowly than 80 words/min were defined as the first discrepant group. They were compared with two other groups whose self-report and performance were more consistent: those who read slowly and reported difficulty, specifically, those who read fewer than 80 words/min and reported moderate or extreme difficulty reading or did not read secondary to vision (the slow concordant group), and those who read more quickly (at least 80 words/min) and reported minimal or no reading difficulty (the fast concordant group). Subjects who reported extreme difficulty or being unable to read a newspaper because of vision and yet were able to read faster than 160 words/min were defined as a second discrepant group. However, because of the small absolute numbers of this group (n = 10), these subjects were not analyzed further.

The characteristics of people in the two concordant and the first discrepant groups were compared as to age, gender, race, education, MMSE score, presence of psychiatric symptoms, visual acuity, self-rating of visual function, and having changed their method of reading a newspaper. All variables other than gender, race, and having changed the method of reading were analyzed as continuous variables. Independent associations were then evaluated via polychotomous regression,18 with the exception of the variable of changing the method of reading a newspaper. This variable was not included in the polychotomous regression, because anyone who had not read a newspaper, either because of vision or not, was not asked about whether they had changed their method. Because many who have not read a newspaper because of vision are in the slow concordant group, this would have systematically
TABLE 1. Characteristics of Salisbury Eye Evaluation Participants

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Mean ± SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age*</td>
<td>73.5 ± 0.10</td>
</tr>
<tr>
<td>Gender (female)†</td>
<td>1458 (57.9)</td>
</tr>
<tr>
<td>Race (African American)†</td>
<td>666 (26.4)</td>
</tr>
<tr>
<td>Education*</td>
<td>11.2 ± 0.07</td>
</tr>
<tr>
<td>MMSE*</td>
<td>27.1 ± 0.05</td>
</tr>
<tr>
<td>GHQ score*</td>
<td>2.30 ± 0.08</td>
</tr>
<tr>
<td>LogMar visual acuity*</td>
<td>0.035 ± 0.004†</td>
</tr>
<tr>
<td>Visual satisfaction score*</td>
<td>2.30 ± 0.08</td>
</tr>
<tr>
<td>Change in method of reading due to vision†</td>
<td>187 (7.4)</td>
</tr>
</tbody>
</table>

* Values are means ± SE.
† Values are number in sample, with percentage in parentheses.
‡ LogMar of 0.035 is the Snellen equivalent of 20/22.

RESULTS

The demographic characteristics of the study population are shown in Table 1. This group was 58% female, reflecting the older population of Salisbury. Twenty-six percent were African American, and there was a broad range of educational levels, with 5% having less than a 9th grade education and 28% having received at least some college education.

We first evaluated the correspondence between self-reported difficulty reading a newspaper and measured reading speed. Ninety percent (2107/2340) of subjects who were asked about reading a newspaper and had their reading speed tested reported little or no difficulty reading a newspaper (Table 2). Of this group, 10.8% (227/2107) read newsprint-sized text (0.21°) more slowly than 80 words/min, although they reported little or no difficulty reading a newspaper. As previously defined, this group appeared to have a substantial disparity between self-report and tested ability and was termed the discrepant group.

A similar proportion was noted to have a discrepancy in the other direction. Of the 90 individuals who reported extreme difficulty or inability to read a newspaper secondary to vision, 10 (11%) read at a fluent level (160 words/min). However, the small number of subjects in this group precluded further evaluation or comparison with other groups.

The characteristics of the first slow discrepant group were then compared in a bivariate analysis to the two groups whose self-report of reading ability and reading speed were consistent (Table 3). Of the 317 individuals who read <80 words/min, those who reported minimal or no difficulty (the discrepant group) had better visual acuity, rated their vision better, had fewer psychiatric symptoms, and were less likely to have changed their method of reading a newspaper than those in the slow concordant group. Within the 2107 subjects who reported little or no difficulty reading a newspaper, the discrepant group (i.e., those who read <80 words/min) were older, were more likely to be African American, had lower MMSE scores, had less education, had poorer visual acuity, and were less satisfied with their vision than those in the fast concordant group (those who read >80 words/min). They were also more likely to have changed their method, and had more psychiatric symptoms, than the fast concordant group.

The characteristics independently associated with a discrepancy between reading performance and self-reported visual were determined via polychotomous regression (Table 4). This analysis allowed direct comparison of the three groups: the discrepant group, the slow concordant group, and the fast concordant group. Individuals in the discrepant group were less likely to have poor visual acuity than the slow concordant group but more likely to have poor visual acuity than the fast concordant group (Fig. 1). As seen in Table 4, being in the fast concordant group was associated with a higher MMSE score, more years of education, and lower GHQ scores than the discrepant group. They were also less likely to be African American. Individuals in the slow concordant group were less likely to be satisfied with their vision than the discrepant group, who also read slowly but who reported minimal or no difficulty reading and were more likely to have psychiatric symptoms (P < 0.05 for all data described). We reran these regressions using cutoffs of 50 words/min and 100 words/min and obtained similar results, except that GHQ was only a borderline positive predictor of being in the slow concordant category using a cutoff of 100 words/min, and a borderline negative predictor of being in the fast concordant category using a cutoff of 50 words/min (0.05 < P < 0.10 for both). Although the variable of changing the method of reading a newspaper was significant in the bivariate analysis, it was not possible to include it in the polychotomous regression because of systemic biases in the determination of this question.

We next evaluated whether the relationship between self-report and performance changed when using the print size at which each subject read at their fastest as the performance measure (Table 5). Maximal reading speed was divided into the categories used previously (<80 words/min, 80-159 words/min, and ≥160 words/min) to allow direct comparison with the data in Table 2. When contrasting maximal speed with self-reported speed, the proportion in the discrepant group decreased to 2.6% (55/2107) of those who reported little or no difficulty reading a newspaper.

We theorized that those who were in the discrepant group when reading newsprint-sized text but who were no longer in the discrepant group when larger print size was used might be using compensatory strategies in their daily lives. This might in turn lead them to perceive little difficulty in reading a newspaper. In contrast, those who remained in the discrepant
DISCUSSION

This study shows that in the majority of older adults there is a significant subgroup of individuals have a discrepancy between reported and measured reading function. That is, they report minimal or no difficulty with reading a newspaper and, yet, under standardized testing conditions do not read at a rate that is consistent with sustained reading. This subgroup represented 10.0% (227/2280) of the entire population studied. A discrepancy in the other direction was rare in terms of absolute numbers; only 10 (0.4%) subjects reported extreme difficulty reading and yet were able to read at a functional level. However, the proportion of subjects who reported extreme difficulty who were discrepant (11%) was similar to the findings of a discrepant in the opposite direction.

Studies that have evaluated other realms of function have also found a discrepancy between self-reported and measured function.** P < 0.001, versus the discrepant group.**

Finally, individuals who reported significant difficulty reading a newspaper but who read quickly might be reporting difficulty based on other symptoms. Unfortunately, because of the small size of this group** we were not able to fully characterize this group. However, 5 of the 10 subjects reported dry eye symptoms. They reported one or more of the following: "eyes feel dry all the time or often," "feel gritty or sandy sensation," "have a burning sensation," "notice much crustiness" on lashes, or "ever get stuck shut in the morning." In contrast, only 23.3% of the slow concordant, 13.1% of the fast concordant, and 14.3% of the slow discordant reported dry eye symptoms.

**TABLE 3. Characteristics of Discrepant Group Compared with Those with Concordance between Self-report and Reading Speed**

<table>
<thead>
<tr>
<th></th>
<th>Discrepant (n = 227)</th>
<th>Slow Concordant (n = 90)</th>
<th>Fast Concordant (n = 1880)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>75.0 ± 0.34</td>
<td>76.3 ± 0.60</td>
<td>73.1 ± 0.11***</td>
</tr>
<tr>
<td>Female (%)</td>
<td>55.6</td>
<td>56.0</td>
<td>58.5</td>
</tr>
<tr>
<td>African American (%)</td>
<td>52.9</td>
<td>45.1</td>
<td>18.4*</td>
</tr>
<tr>
<td>Education</td>
<td>9.4 ± 0.22</td>
<td>9.8 ± 0.40</td>
<td>11.8 ± 0.07****</td>
</tr>
<tr>
<td>MMSE score</td>
<td>25.4 ± 0.21</td>
<td>25.4 ± 0.34</td>
<td>27.7 ± 0.05****</td>
</tr>
<tr>
<td>GHQ score</td>
<td>2.8 ± 0.28</td>
<td>4.7 ± 0.56***</td>
<td>2.0 ± 0.08****</td>
</tr>
<tr>
<td>VA (logMar)</td>
<td>0.17 ± 0.01</td>
<td>0.47 ± 0.05****</td>
<td>-0.02 ± 0.003****</td>
</tr>
<tr>
<td>Visual satisfaction</td>
<td>7.4 ± 0.15</td>
<td>4.5 ± 0.26****</td>
<td>8.0 ± 0.04****</td>
</tr>
<tr>
<td>Changed method (%)</td>
<td>14.2</td>
<td>30.8*</td>
<td>4.9*</td>
</tr>
</tbody>
</table>

Values are means ± SE, except where % is given in first column.

Discrepant: reading speed <80 words/min, little or no reading difficulty reported; slow concordant, reading speed <80 words/min, moderate or extreme difficulty or stopped reading secondary to vision; fast concordant: reading speed ≥80, little or no reading difficulty reported; logMar units of 0.17, 0.47, and -0.02 are the Snellen equivalents of 20/30, 20/59, and 20/19, respectively; VA, visual acuity.

**P < 0.05, **P < 0.01, ***P < 0.005, ****P < 0.001, versus the discrepant group.

<table>
<thead>
<tr>
<th></th>
<th>Slow Concordant (n = 90)</th>
<th>Fast Concordant (n = 1880)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (per year)</td>
<td>0.98</td>
<td>1.00</td>
</tr>
<tr>
<td>MMSE score (per point)</td>
<td>1.00</td>
<td>1.22****</td>
</tr>
<tr>
<td>GHQ score (per point)</td>
<td>1.07*</td>
<td>0.96*</td>
</tr>
<tr>
<td>African American</td>
<td>1.19</td>
<td>0.22****</td>
</tr>
<tr>
<td>Education (per year)</td>
<td>1.04</td>
<td>1.16****</td>
</tr>
<tr>
<td>VA (per 0.1 logMar = 1 line lost)</td>
<td>1.31****</td>
<td>0.38****</td>
</tr>
<tr>
<td>Vision satisfaction (per point)</td>
<td>0.66****</td>
<td>1.03****</td>
</tr>
</tbody>
</table>

Values are odds ratios versus discrepant group. Polychotomous regression (all variables entered into regression are listed in table). VA, visual acuity.
group that "underreports" their function is more common than those who "overreport" their function. In one study, in 9 of 13 activities, there was less than a 50% predictive value of subjects saying that they could not perform a task. In other studies, however, the discrepant groups were not well characterized.

In our study, there are characteristics that distinguished the discrepant from the more congruent groups. The strongest association was with visual acuity; individuals in the discrepant group had visual acuity that was intermediate and significantly different from those in the fast concordant (better visual acuity) and slow concordant (poorer visual acuity) groups.

Because this is a cross-sectional study, it is not possible to determine which of these associated characteristics are fixed (i.e., representing true predisposing risk factors) and which are dynamic (i.e., representing a transitional state from no difficulty to disability). It could be hypothesized that as visual function declines, individuals progress from the fast concordant to the discrepant to the slow concordant group. If this is the case, it would be important to recognize the individuals who are progressing along this course and to determine the characteristics associated with this discrepant transitional state. It appears from these data that it may be possible to further delineate within the discrepant group those who are in a transitional state of early visual decline, versus those individuals who have a long-term difference in their perception of function and are therefore in the discrepant group long-term.

Because the discrepant group has a visual acuity that is intermediate between the fast concordant and the slow concordant group, the characteristics that distinguish the discrepant from the more congruent groups may be useful in identifying those individuals who are progressing along this course. It appears from these data that it may be possible to further delineate within the discrepant group those who are in a transitional state of early visual decline, versus those individuals who have a long-term difference in their perception of function and are therefore in the discrepant group long-term.

**Table 5. Association of Self-reported Difficulty with Maximal Reading Speed**

<table>
<thead>
<tr>
<th>Self-report: Difficulty Reading</th>
<th>Performance: Reading Speed (words/min)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;80</td>
<td>80-159</td>
</tr>
<tr>
<td>Little/no</td>
<td>55</td>
<td>375</td>
</tr>
<tr>
<td>Moderate</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Extreme</td>
<td>43</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>422</td>
</tr>
</tbody>
</table>

Maximal reading speed was using print size at which each individual read at their fastest. Sixty did not read a newspaper, not sec-

**Table 6. Characteristics of Persistently Discrepant Individuals versus Individuals No Longer Discrepant at Maximal Reading Speed**

<table>
<thead>
<tr>
<th></th>
<th>Persistent Discrepancy (n = 55)</th>
<th>No Persistent Discrepancy (n = 172)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>75.0 ± 0.68</td>
<td>75.1 ± 0.40</td>
</tr>
<tr>
<td>MMSE score****</td>
<td>24.0 (0.45)</td>
<td>25.9 (0.23)</td>
</tr>
<tr>
<td>Female (%)**</td>
<td>39.6</td>
<td>60.5</td>
</tr>
<tr>
<td>African American (%)**</td>
<td>77.4</td>
<td>45.4</td>
</tr>
<tr>
<td>Education****</td>
<td>7.6 ± 0.34</td>
<td>9.9 (0.25)</td>
</tr>
<tr>
<td>VA (logMar units)†</td>
<td>0.15 ± 0.03</td>
<td>0.18 ± 0.01</td>
</tr>
<tr>
<td>Vision satisfaction score</td>
<td>7.4 ± 0.33</td>
<td>7.4 ± 0.16</td>
</tr>
<tr>
<td>Compensation (%)</td>
<td>7.7</td>
<td>16.3</td>
</tr>
<tr>
<td>GHQ score</td>
<td>3.4 ± 0.56</td>
<td>2.6 ± 0.32</td>
</tr>
</tbody>
</table>

Values are means ± SE, except where % is given in the first column. VA, visual acuity.

* P < 0.05, **P < 0.01, ***P < 0.005, ****P < 0.001.
cordant groups, it could be postulated that there is a period of decline in visual acuity and resultant reading speed before vision is perceived by an individual to be causing difficulty with reading. This phenomenon, which has been termed preclinical disability, has been described in other realms of function.\textsuperscript{4,11,12} Individuals have a decline in function, which they compensate for and, perhaps as a result of the compensation or the intermediate level of decline, do not perceive difficulty. At some point, when the function (e.g., reading speed) crosses a threshold, it is perceived as difficult. Individuals with more severe impairment may be less able to successfully compensate, although maintaining prior compensatory methods. The subjects in the discrepant group of this study report having changed their method of reading a newspaper (i.e., compensation) at a rate that is intermediate between the fast and slow concordant groups, theoretically consistent with an early decline in visual function. The observation that 78\% of those who were in the discrepant group initially, and who also had poor visual acuity, were no longer discrepant when reading text of a size at which they read with their maximum speed, suggests that these individuals might use compensatory strategies in their daily lives and that it is their function in a compensated state that they are reporting.

Cognitive status, as measured by the MMSE, may be either stable or dynamically changing, and may alter both an individual’s function and their perception of function. Subjects with higher MMSE scores were more likely to be in the fast concordant group than the discrepant group. In other words, of subjects who reported minimal or no difficulty reading a newspaper, those with some cognitive impairment were more likely to read slowly. Subjects who remained in the discrepant group when tested with different-sized texts had lower mean MMSE scores, suggesting that cognition was affecting reading speed and the perception of difficulty, and that, possibly, individuals with cognitive impairment are less able to use compensatory strategies in their usual lives.

Educational level, gender, and race, on the other hand, are stable unchanged measures. The education level of the discrepant group is lower than that of the fast concordant group. In addition, individuals who remained in the discrepant group even when reading at maximal speed had lower education levels, suggesting that this group was not relying on compensatory measures. Perception of reading difficulty in this group with lower education may have more to do with expectations based on previous reading speed. In addition, reading difficulty may be defined differently by different subjects. In this study, reading difficulty was compared with reading speed when reading aloud. Other elements such as speech pattern may contribute to reading speed, and an individual’s perception of reading difficulty may be affected by comprehension and other characteristics. Finally, individuals with higher education are likely to spend more time reading, and may therefore be more likely to perceive difficulty in the presence of smaller changes in reading function.

The explanation for differences between concordance categories by gender and race are not as clear; they may be due in part to expectations. Although there was no significant difference in gender with regard to being in the discrepant group, women were more likely to improve their reading speed at maximum speed, suggesting the use of compensatory strategies. Of those who reported minimal or no difficulty, African Americans were more likely to be in the discrepant group than in the fast concordant group. Additionally, they were more likely to remain in the discrepant category when reading at maximal speed, a pattern similar to that of individuals with poor education level. In this study, there was a high correlation between education and race, with 42\% of individuals with less than an 8th grade education being African American, and 12\% of individuals who attended college being African American.

Finally, in 7.5\% (172/2280) of the population studied, performance on standardized testing of speed in reading newspaper-sized text was not consistent with an individual’s assessment of reading difficulty, and yet these perceptions were consistent with performance (i.e., no longer discrepant) when tested at their maximal reading speeds. This finding suggests that in assessing visual function, it is not enough to test individuals with newspaper-sized text, because they may be compensating in subtle ways that enable them to function satisfactorily in nonstandardized testing conditions. Furthermore, understanding this discrepant group may be important in targeting a high-risk group for whom compensation and other interventions could be effective.

In summary, this cross-sectional study shows that approximately 10\% of individuals have a substantial discrepancy between self-reported difficulty reading a newspaper and measured reading speed, when tested under standardized conditions. For some subjects, this discrepant category may represent a transitional state, in progressing from a fast concordant to a slow concordant category as function declines. In others, this may represent a long-term state, based in part on perceptions and expectations. This issue will need to be addressed prospectively and to be examined in other realms of function to see whether this discrepant category is seen with other types of functioning.

References


