

EVIDENCE-BASED PRACTICE AMONG DUTCH OCCUPATIONAL
THERAPISTS:
BARRIERS, PERCEPTIONS, AND USE OF RESOURCES

BY

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THERAPISTS:
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Abstract

This study explored how evidence-based practice (EBP) is perceived by Dutch occupational therapists (OTs), what sources of evidence they use to make clinical decisions, and what barriers to implementation of EBP they experience.

Study participants were 100 OTs, members of the Dutch Association of Occupational Therapy (Ergotherapie Nederland; EN) practicing in the Netherlands. Analyses of variance (ANOVA) or non-parametric alternatives were used to evaluate group differences. Pearson's product moment correlation coefficient was used to examine relations among EBP variables and demographic variables.

Dutch OTs value EBP, with 99% reporting they believed research is essential to the OT profession. Participants reported evaluating the quality of research evidence to be the greatest barrier to EBP overall. A barrier unique to this study was difficulty in using evidence written in languages other than Dutch. OTs experiencing this barrier were less likely to use articles in English ($r = .569, df = 88, p < .0000001$) or abstracts from electronic databases ($r = .511, df = 82, p < .000001$). Colleagues were the most frequent sources of evidence, while more robust sources were used least frequently. Support of management and colleagues correlated with use of in-service education, electronic databases, articles in English, and the perceived ability of OTs to revise treatments using research evidence. These findings suggest that EBP is not implemented optimally in the Dutch OT community, and opportunities for OTs, employers, educators, researchers, and the professional associations in addressing existing barriers are identified.

Introduction

Evidence-based practice (EBP) was introduced to the occupational therapy profession almost a decade ago and refers to making clinical decisions based on a combination of the clinical expertise of occupational therapists (OTs), the best available evidence, and the values and preferences of the client (Kuiper, Verhoef, de Louw, & Cox, 2004; Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000). EBP establishes a therapeutic alliance that optimizes clinical outcomes and the quality of life for clients (Sackett, et al., 2000). Sources of evidence vary in the degree of robustness, with randomized controlled trials providing a very robust source of evidence and opinions of experts or peers being the least robust source of evidence (Law & Philp, 2002). Communicating the evidence to clients also is an essential part of the EBP process (Tickle-Degnen, 1998, 2000). This enables clients to make an informed decision about their treatment, and to evaluate if the proposed assessments or interventions match their own values and preferences (Bennett & Bennett, 2000; Tickle-Degnen, 1998). Effective integration of EBP principles with clinical practice therefore enhances the quality of occupational therapy services.

Studies evaluating the use of EBP among OTs have documented a variety of factors that may prevent therapists from using EBP principles (Curtin & Jaramazovic, 2001; Dysart & Tomlin, 2002; Humphris, Littlejohns, Victor, O'Halloran, & Peacock, 2000; Jette, et al., 2003; McCluskey, 2003; Philibert, Snyder, Judd, & Windsor, 2003; Pollock, Legg, Langhorne, & Sellars, 2000; Sweetland & Craik, 2001). These and similar studies of other healthcare professions (Egerod & Hansen, 2005; Oranta,

Routasalo, & Hupli, 2002; Salbach, Jaglal, Korner-Bitensky, Rappolt, & Davis, 2007; Thompson, et al., 2001; Upton & Upton, 2006) identified barriers related to characteristics of the workplace, of the OT, of the research evidence, and/or of the accessibility and presentation of evidence.

Therapists must be able to assess the quality of the sources they make use of to utilize EBP effectively. Articles from peer-reviewed scientific journals represent robust sources of evidence (Lou, 2002), but the number of participants reading journal articles differed greatly among prior studies. One study of OTs in England found that 93.8% of their respondents reported they read journal articles (Curtin & Jaramazovic, 2001). However, a different study found that 50% of OTs from the United Kingdom (UK) used research papers only occasionally (Sweetland & Craik, 2001). Two studies of American OTs reported that 100% (Dysart & Tomlin, 2002) and 98% (Philibert, et al., 2003) of the surveyed therapists used research articles to support clinical practices, although no details were provided on the frequency of use.

Differences may exist in the use of EBP among OTs from different countries based on differences in healthcare systems, or differences in the mission or involvement of professional organizations. Another factor is that previous studies related to EBP among OTs have all been conducted in English-speaking countries (e.g., the United States, United Kingdom, Australia, and anglophone Canada). No study has addressed EBP among OTs in the Netherlands, a country where Dutch is the predominant and official language. Previous studies among nurses in countries where English is not the predominant language reported that publication of research

in a foreign language was an important barrier to implementing EBP (Kajermo, Nordström, Krusebrant, & Björvell, 1998; Oranta, et al., 2002) and that evidence-based journals written in English were used the least frequently (Egerod & Hansen, 2005).

Both the Dutch Association of Occupational Therapy (Ergotherapie Nederland; EN) (Van Bodegom, Van Der Biezen, Hoekert, & Bulthuis, 2007) and the Dutch government (Health Council of the Netherlands, 2000) recognize the significance of EBP for the profession. The available literature, however, suggests EBP is not implemented optimally among Dutch OTs (Curtin & Jaramazovic, 2001; Dysart & Tomlin, 2002; Egerod & Hansen, 2005; Humphris, et al., 2000; Lysaght, Altschuld, Grant, & Henderson, 2001; McCluskey, 2003; Oranta, et al., 2002; Parahoo, 2000; Philibert, et al., 2003; Pollock, et al., 2000; Sweetland & Craik, 2001; Upton & Upton, 2006). Information on barriers to EBP specific to Dutch OTs is necessary to be able to decrease or dissolve such barriers in the Netherlands, and to increase integration of EBP principles into clinical practice. Because multiple factors can prevent OTs from using EBP principles, obtaining information on what the most significant barriers are for Dutch OTs is essential. The present research study addressed how Dutch OTs perceive EBP, which sources of evidence Dutch OTs use in making clinical decisions, and which barriers Dutch OTs experience when implementing EBP.

Methods

Participants

We surveyed Dutch OTs employed by a Dutch organization in a clinical capacity at the time of the study. Occupational therapy students, OTs not working as OTs (e.g., full-time faculty members, retired OTs, or OTs pursuing careers outside occupational therapy settings), OTs residing in or practicing in a country other than the Netherlands, and non-members of the Dutch Association of Occupational Therapy (Ergotherapie Nederland; EN) all were excluded from participation.

The membership list of the EN was obtained on December 17th 2007 and used to select participants, with permission from this association. The inclusion criteria resulted in 2019 eligible OTs. Of these, 10% had no email address associated with the membership information. Because a prior report identified a lack of internet access as a possible barrier to the implementation of EBP (Curtin & Jaramazovic, 2001), eligible participants with no email address purposely were included to prevent biased results related to availability of internet access (Nardi, 2006). Stratified random sampling was used to select 200 participants, of which 90% (n = 180) had an email address and 10% (n = 20) had no email address.

Instrumentation

A 73-item questionnaire was developed that measured three constructs related to EBP. The **first construct** explored sources of evidence used as a basis for clinical decisions, and the frequency with which the OTs used these sources. Participants

rated how often they used 19 different sources with a rating-scale of “daily”, “weekly”, “monthly”, “biannually”, “annually”, “never”, and “I have no access to this source”. The **second construct** used 21 statements to explore barriers experienced by OTs when implementing EBP. The **third construct** evaluated attitudes of the OTs regarding EBP using 11 statements. Participants rated their degree of agreement with these statements on a 5-point scale (“agree”, “somewhat agree”, “neither agree nor disagree”, “somewhat disagree”, “disagree”). Positive and negative statements related to attitudes toward EBP and to barriers experienced were mixed to eliminate biased responses (Nardi, 2006). The questionnaire also contained 15 demographic questions related to gender, work setting, hours working per week, number of colleagues, mentoring interns, degrees, and age. A set of 7 final statements addressed implementation of evidence in practice. The format and content of the questionnaire were modeled after previous studies addressing EBP among health care professionals (Dysart & Tomlin, 2002; Humphris, et al., 2000; Parahoo, 2000).

After institutional approval of the protocol, a draft of the questionnaire was prepared in English and evaluated by four American practicing OTs. The therapists completed the questionnaire on-line and provided feedback related to the format, length, and content during a focus group discussion to facilitate a clear understanding of that feedback.

The investigator and a senior Dutch OT (Dr. Steultjens), both native Dutch speakers, separately translated the English version of the questionnaire into Dutch. These translations were compared, integrated, and then back-translated into English

to insure a correct and accurate translation. The back-translation was carried out by a native Dutch speaker fluent in English and naïve to the study, who completed high school in the Netherlands and obtained a Bachelors degree in the United States.

Two Dutch OTs working in clinical practice in the Netherlands participated in a second pilot test evaluating the Dutch version of the questionnaire. These therapists completed an online version of the questionnaire and provided feedback related to the length of that questionnaire, question formulation, and any other observations on the content and format of the questionnaire. This feedback was used to create a final version of the questionnaire (provided in Appendix A in both Dutch and English).

The online version of the questionnaire and associated database were created using Vovici's web survey software (Vovici Corp., 2008) by staff of the Internet Development department of The University of Kansas Medical Center. An identical paper version of the questionnaire was mailed to 10% (n=20) of the selected participants by international postal service to prevent biased results based on availability of internet access (Nardi, 2006). The paper version of the questionnaire was adjusted to match the format and content of the online version.

Procedures

Online questionnaire. The EN staff sent a pre-notice (Appendix B) electronically to the 180 therapists selected to receive the on-line questionnaire, in order to encourage participation (Dillman, 2007). Two days later, an invitation to participate was distributed by the investigator (Appendix C). The invitation included information on the purpose of the study, how participants were selected, measures

taken to protect the confidentiality of personal information and responses, and the anticipated time required to complete the questionnaire (approximately 20 minutes). Participating OTs also were offered the opportunity to receive a summary of the findings upon completion of the study. An informed consent document was not required, as respondents who completed and submitted a questionnaire provide their approval through their participation (*per* the University of Kansas Medical Center's HSC). A time frame of six weeks was allowed for participants to respond. Two reminder messages were automatically sent to participants who had not submitted a completed questionnaire after 2 and 4 weeks (Nardi, 2006; Portney & Watkins, 2000).

A low overall response rate compromises integrity of a random sample (Nardi, 2006) and, after six weeks, only 40% of the potential participants had submitted a completed questionnaire. All 89 non-respondents received an additional request to participate by submitting a completed questionnaire within two weeks, addressed to each participant personally. The email addresses of 13 of these respondents proved to be invalid, and were replaced by 13 new names selected from the original list of eligible Dutch OTs. These individuals were sent a personal invitation by email, asking to respond within two weeks, and received a personal reminder one week after the initial request was made if they had not submitted a completed questionnaire.

Paper questionnaire. The 20 OTs with only a mailing address received a letter of invitation (Appendix D), a paper version of the questionnaire, and a stamped, self-addressed return envelope by mail. The letters were identical to those sent by email to

the other 180 potential participants. These participants were asked to return the completed questionnaire within six weeks. No additional reminders were sent to this group of participants.

Data Analysis

Data was coded according to the codebook in appendix J prior to analysis (see appendix K for raw data and appendix L for coded data). Descriptive statistics included frequencies, percentages, means, and standard deviation and were calculated for all variables. Analyses of variance (ANOVA) evaluated relations among EBP variables and nominal or categorical demographic data. The Kruskal-Wallis (*H*) or Mann-Whitney U test (*U*) was used as a non-parametric equivalent if assumptions of the ANOVA were not met. Fisher's Least Significant Difference (LSD) served as a post-hoc test when a significant difference between groups was found and ANOVA assumptions were not violated (Ott & Longnecker, 2001). The Games-Howell post-hoc procedure was used if the assumption of equal variances was violated (Games & Howell, 1976). Relations between EBP variables and continuous demographic data were evaluated using Pearson's product moment correlation coefficient. An alpha level of .05 was used for all tests.

Results

The data collection procedure summarized in Figure 1 yielded 100 valid responses, including 94 collected electronically and 6 submitted by regular mail, from 183 OTs meeting all inclusion criteria. This resulted in a response rate of 54.6%.

Respondents

The demographic data collected (Table 1) revealed that the majority of the respondents were woman (92.9%), the mean age category was 35 - 39 years old, and that the average years these OTs had practiced was 13.17 ($SD = 9.47$). The sample was homogeneous with regards to educational level, with 97% of the respondents possessing a Bachelor's level occupational therapy degree. The participating Dutch OTs reported they worked between 30 and 34 hours a week on average.

The sample represented the total population of interest (working OTs who are members of EN) with regard to age ($\chi^2(6, 100) = 11.720, p > .05$) and gender ($\chi^2(1, 99) = 0.100, p > .05$). However, a significant difference in the number of hours worked per week ($\chi^2(6, 100) = 18.476, p < .01$) was observed, with therapists that participated in the present study working more hours per week than expected based on the wider population of Dutch OTs who are members of the EN. Data from all the EN members meeting the inclusion criteria of this study was obtained from the membership database, with permission of EN.

We evaluated whether the sample also represented all working OTs in the Netherlands, including those who are not members of EN. Characteristics of the entire population of OTs working in the Netherlands were obtained from a NIVEL

report (Muysken, Kenens, & Hingstman, 2007). This comparison demonstrates the study sample is similar to the total population of OTs based on gender (93.5% women), but that differences exist based on age, work setting, and the number of hours worked per week. The mean age of the total population of all OTs working in the Netherlands was slightly lower (35 years) than that of our sample (35-39 years). The distribution of work settings among OTs was similar, but the average number of hours worked per week by our sample of Dutch OTs was higher (30 to 34 hours a week) than in the larger population of all OTs in the Netherlands (26.6 hours a week).

Reliability and Validity of the Questionnaire

The internal consistency was evaluated for all three constructs (barriers to EBP, sources used, and attitude toward EBP) after data collection using Cronbach's alpha procedure. Six variables with an item-to-total correlation lower than 0.10 were excluded from analysis, because of a limited contribution to measuring the overall concept (B.J. Gajewski, personal communications, September 11, 2008). Two of these variables were related to the use of sources and four were related to barriers to EBP. Although the latter four variables provided valuable information (see Table 2 and Table 3) they did not contribute to measuring the construct. The total procedure indicated a good internal consistency for all measured constructs (use of sources: $\alpha = .789$; barriers: $\alpha = .795$; attitude toward EBP: $\alpha = .783$).

Although not tested formally, face validity for the questionnaire was supported by expert opinion, sought from both academic experts and practicing OTs (Nardi, 2006).

Attitude toward Evidence-Based Practice

Responses of the participating Dutch OTs (Table 4 and Table 5) revealed they viewed EBP as a positive concept overall. The majority of respondents agreed or somewhat agreed that research is essential to the occupational therapy profession (99%) and that research helps to build a scientific knowledge base for clinical practice (92%). Even so, 49% of the participants agreed or somewhat agreed that it is too difficult to incorporate EBP into daily practice, and more than half (53%) of the participants perceived using evidence in clinical practice as requiring too much effort.

Work setting. Significant differences in attitude toward EBP were found among OTs from different work settings (Figure 2). Overall, OTs working in academic hospitals had the most positive perception of EBP ($F(8, 91) = 3.004, p < .01$), significantly more positive than the attitudes of OTs working at any other work settings except for those working in psychiatric organizations.

Number of colleagues. Those OTs with more OT colleagues in the work setting were likely to disagree more with the statement that EBP is a temporary trend ($r = .306, df = 89, p < .005$) suggesting an increase in the number of colleagues correlated with a more positive attitude toward EBP.

Use of Sources

Table 6 displays the frequencies with which Dutch OTs used different sources of evidence to guide clinical decisions. Participating OTs used their experience, information from the client, and information of the client's family and friends very frequently.

Human sources. Although relatively less robust, human sources were used most frequently, with 79% of the respondents using their OT colleagues weekly or more often and 82.8% of the respondents using information from non-occupational therapy colleagues weekly or more often. OTs with less experience were more likely to use their OT colleagues more frequently as a source for clinical decision-making ($r = .336, df = 99, p < .005$).

Robust sources of evidence. Participants used sources of more robust quality such as journal articles and abstracts from electronic databases least frequently to guide clinical practice. Table 6 illustrates that many respondents never used these more robust sources, and the majority of respondents who did use robust sources did so rarely. The frequency of use differed significantly according to work setting for use of articles from professional journals in Dutch ($F(8, 83) = 3.89, p < .001$) and articles from professional journals in English ($H(8) = 24.320, p < .005$). Articles from journals written in Dutch were used most frequently for clinical decision-making by OTs working in private practices (Figure 3). OTs working at academic hospitals used articles in English significantly more than OTs working at nursing homes, rehabilitation centers, non-academic hospitals, and organizations for people with mental disabilities (Figure 4).

Other sources. Beside human sources, most OTs used information gained from continuing education such as workshops, conferences, and in-service education, to make clinical decisions (Table 6). The majority of respondents used information from these sources biannually or annually. OT-specific as well as other guidelines

were used more often, with the majority using guidelines either biannually or monthly. Finally, information obtained at post-graduate education was used as a source of evidence significantly more by therapists who mentored at least one occupational therapy intern during the two years prior to the study ($F(1, 92) = 4.061$, $p < .05$).

Barriers to Evidence-Based Practice

Barriers to EBP (Table 7 and Table 8) can be categorized as barriers related to skills of the OTs, to the workplace, to the evidence, or to accessibility of the evidence.

Skills of the occupational therapist. Difficulty in evaluating the quality of evidence was the single greatest barrier experienced by Dutch OTs (67.4%). Those therapists reporting this difficulty also were more likely to perceive difficulties in understanding the statistical analysis in research articles ($r = .456$, $df = 95$, $p < .0001$) and to feel that research was not written in an understandable manner ($r = .305$, $df = 94$, $p < .01$). Younger OTs (<25 years old) felt the quality of evidence was more easily determined than did therapists from all other, older age groups ($F(8, 86) = 2.463$, $p < .05$; Figure 5).

Furthermore, a substantial proportion of Dutch respondents (42.9%) reported difficulties in using evidence written in a foreign language. Therapists experiencing this barrier also were significantly less likely to use articles from journals written in English ($r = .569$, $df = 88$, $p < .0000001$) and abstracts from electronic databases (r

=.511, $df = 82$, $p < .000001$) relative to OTs who did not report difficulties with evidence written in a foreign language.

Work setting. More than half of all respondents (>65%) felt that management and colleagues at their workplace supported the use of research evidence in practice (see Table 7). Support from management ($r = .449$, $df = 96$, $p < .00001$), support of OT colleagues ($r = .363$, $df = 96$, $p < .001$), and support of colleagues from other disciplines ($r = .359$, $df = 95$, $p < .001$) all were associated with an increased perception of the OT being capable of making changes in treatments using research evidence. OTs working at academic hospitals felt the most capable of incorporating changes in therapeutic procedures based on research evidence ($F(8, 89) = 2.258$, $p < .05$; Figure 6). A positive relation also emerged between a Dutch therapist feeling more capable of changing therapeutic procedures based on research evidence and the presence of more occupational therapy colleagues in the work setting ($r = .372$, $df = 88$, $p < .001$). Last, perceived support of management also had a positive relation with increased use of in-service education ($r = .360$, $df = 86$, $p < .001$), abstracts from electronic databases ($r = .409$, $df = 83$, $p < .001$), and articles in English ($r = .402$, $df = 88$, $p = .0001$).

Mentoring students. OTs who mentored more interns during the two years prior to completing the questionnaire reported a greater availability of time provided by the employer to access research evidence during working hours ($F(4, 59) = 3.179$, $p < .05$) and to read professional literature ($F(4, 58) = 3.615$, $p < .05$) (Figure 7 and Figure 8).

Presentation of research articles. More than half of the participants (56.2%) did not think research is written in an understandable manner. Another 57.5% also found it hard to translate research findings to the treatment of individual clients. OTs who felt that research is not written understandably also were likely to feel incapable of critically appraising research evidence ($r = .354, df = 96, p < .001$), and to understand statistical analyses in research articles ($r = .671, df = 94, p < .0000001$).

Time. Dutch OTs reported insufficient time provided by the employer to access and read research evidence as a major barrier. The majority reported they felt employers did not provide enough time to access (59.2%) and to read (60.2%) professional literature. OTs working in nursing homes, rehabilitation centers, and private practices were more likely to agree that their employers provided enough time to read literature than their colleagues working in special education ($H(8) = 17.078, p < .05$; Figure 9).

Discussion

The Dutch occupational therapy community has made several efforts to promote principles of EBP among OTs practicing in the Netherlands. During the past 12 years, five occupational therapy guidelines have been developed (Cup & Steultjens, 2005; Ergotherapie Nederland, 2008; Graff, et al., 2006; Stehmann-Saris, van Heugten, Kinébanian, & Dekker, 2003; Theune & Steultjens, 2005). EN also has published a series of articles about EBP (Kampstra & Langelaan, 2002a, 2002b, 2002c; Kampstra & Verhoef, 2003), and EBP has been addressed at several conferences to create awareness among therapist about EBP principles and application in practice (Kuiper, 2008). EBP and research methodologies were integrated in Dutch occupational therapy curricula more extensively between 2003 and 2005 (E. Tigchelaar, personal communications, January 14th 2009; J.A.C. Verhoef, personal communications, January 15th 2009; L.P. Wouda, personal communications, January 19th 2009). Dutch experts also have written books on EBP and its use in practice to give practitioners in the Netherlands guidance in using evidence and implementing evidence in practice (Kuiper, et al., 2004; Logister-Proost, 2007). Despite these efforts, the results of the present study indicate that EBP is not integrated optimally among Dutch OTs. As hypothesized, barriers to implementation are related to the work setting, to the evidence itself, to the OTs, and to the accessibility of evidence. The persistence of these barriers prevents optimal implementation of the EBP principles and the routine use of robust sources of evidence to support clinical practice.

Attitude toward Evidence-Based Practice

This study indicates that the great majority of the Dutch OTs surveyed thought that research is essential to the profession (99%) and that research helps to build a scientific knowledge base for clinical practice (92%). Similar attitudes were reported in previous studies conducted among OTs from the UK (Curtin & Jaramazovic, 2001; Humphris, et al., 2000) and the US (Philibert, et al., 2003). In spite of having positive attitudes, about half of the participants in the present study felt use of evidence was too difficult and took too much effort to employ in clinical practice. Humphris et al. (2000) reported that 38% of OTs in their study stated that implementing research evidence in practice took too much effort. The present results suggest that Dutch OTs working in academic hospitals are more likely to feel capable of changing therapeutic procedures in the workplace using evidence. This may underlie the higher rate of respondents in the present study perceiving that implementation of evidence takes too much effort, because fewer (13%) OTs in our study worked in hospital settings, while all respondents in the study by Humphris et al. (2000) worked in acute care settings.

Present findings indicate that Dutch OTs working in academic hospitals (4%) perceived EBP in the most positive light, compared to participants working in other settings. Academic hospitals not only provide care but also focus on conducting research and educating healthcare professionals. This environment may result in a supportive environment that educates all employees about the importance of EBP, resulting in employees being well-informed about EBP and having a more positive attitude regarding this approach to practice.

The use of sources

Human sources. The Dutch OTs surveyed reported using human sources most frequently. Similar results have been reported by other studies (Bennett, et al., 2003; Lysaght, et al., 2001; Sweetland & Craik, 2001). Colleagues are relatively easy to access, and if working in a multidisciplinary team, consulting, discussing, and collaboration with colleagues from other professions is both inevitable and necessary to establish good team work that benefits the client. However, EBP requires that information from colleagues is evaluated critically before being used in practice, and that it is complemented with information from more robust sources of evidence, such as peer-reviewed research articles. The present study demonstrated that the least experienced Dutch therapists used information from their OT colleagues to make clinical decisions significantly more frequently. One study among Australian OTs has reported a similar finding (Bennett, et al., 2003). Because occupational therapy programs worldwide are integrating more EBP theory in their curricula, new graduates may be more likely to use EBP methods and robust sources of evidence more routinely. However, a new graduate may be discouraged from pursuing EBP principles if confronted with a setting where these principles are absent or are only partly utilized. A new therapist might feel that they do not have the skills or authority to change the way of practice, or may not possess the self-confidence to do so. This illustrates the importance of the work environment in supporting the use of EBP, to encourage therapists to use these principles in practice. An alternative interpretation of these findings is they may represent an appreciation of EBP by new therapists who

don't yet have the practical skills or insight necessary to implement EBP principles in clinical settings. This situation conceivably could arise if EBP principles are added to academic curricula at the expense of practical knowledge, rather than being added in an integrated fashion. A natural outcome may be junior therapists who are well-grounded in theory, and who also recognize the value of practical insights gained through experience and readily available from more senior colleagues. One potential approach is to challenge therapists to explore every avenue of evidence, and to support insight and other forms of less robust evidence with research findings and other, more robust forms of evidence.

Robust sources of evidence. Dutch participants in this study used information from more robust sources of evidence least frequently to support clinical decisions. Similar studies among OTs practicing in other countries found differing results (Dysart & Tomlin, 2002; Philibert, et al., 2003; Sweetland & Craik, 2001). These differences may be attributable to educational level. The studies among US OTs (Dysart & Tomlin, 2002; Philibert, et al., 2003) had higher percentages of therapists (29% and 36.3%) possessing a Master's degree and having a post-graduate degree has been associated with an increased use of current research literature (Bennett, et al., 2003). Together these findings suggest that post-graduate education may be another important factor in increasing the use of research literature in practice.

Other sources of evidence. The present results indicated that therapists who mentored at least one intern in the past two years used information from post-graduate education more frequently than OTs who did not mentor any interns in this

timeframe. Therapists that choose to become a mentor may have greater personal motivation to seek knowledge themselves and to transfer knowledge to others.

Another explanation might be that interns stimulate their mentors to obtain knowledge. The present study did not, however, evaluate if mentors also pursued more post-graduate education.

To estimate how often sources of evidence were used by therapists, participants were asked how often they used a particular source of evidence to make clinical decisions. This question was intended to evaluate the frequency with which information obtained was used in order to make clinical decisions. This question may have been interpreted by therapists as referring to how often a source was actually consulted at future times. This possibility leads to a degree of uncertainty in interpreting this particular response.

Barriers to Evidence-Based Practice

Determining the quality of evidence. We identified a variety of barriers preventing therapists from practicing according to EBP principles. Participating OTs identified difficulty in determining the quality of evidence to be the single greatest barrier to implementation. This was associated with a perceived inability to understand statistical analyses in research articles, and with the belief that research articles are not written in a way that is easy to understand. A study among American OTs showed that 33% felt confident to critically appraise the quality of research articles while 38% did not feel confident (Dysart & Tomlin, 2002). The present findings revealed that only 15.8% of the Dutch participants perceived no difficulty in

determining the quality of evidence. This difference might be explained by a lower percentage of OTs in the present study having an advanced degree (Master's degree: 3%) compared to other studies. Bennett et al. (2003) found that having higher academic qualifications or previous EBP training was associated with an increased confidence in EBP skills. Occupational therapy programs in the US have been required to teach students to provide evidence-based effective therapeutic intervention since 1999 (The Accreditation Council for Occupational Therapy Education, 1999). EBP only became a core component in Dutch occupational therapy curricula between 2003 and 2005. The present study also found that therapists 25 years of age or younger were less likely to perceive difficulties in determining the quality of evidence. Since the present study also found a strong relationship between age and year of graduation, the junior therapists received more education on how to determine the quality of evidence compared to their more senior colleagues. Determining the quality of research is essential for deciding which evidence is appropriate for treatment of individual clients, and these skills must be improved to achieve optimal outcomes. One caution is that the difficulty experienced in determining the quality of evidence may have been addressed in a leading fashion. A solution is to instead ask the question in a different manner, such as "I find determining the quality of evidence....." and provide the participants with answer options varying from "hard" to "easy".

Language barrier. More than 40% of the Dutch respondents reported articles written in a foreign language to be a barrier. Dutch speaking therapists who

experienced a language barrier were less likely to use articles written in English. Because English is the most common publication language, OTs must learn to collect information from research reported in English to obtain sufficient information to guide clinical decisions. Language as a barrier to implementation of EBP has been noted as a factor among other health professions. A survey of Finnish nurses identified the publication of research in a foreign language as the most substantial barrier to implementing EBP in their work settings (Oranta, et al., 2002). A study among Danish nurses indicated that bedside nurses used evidence-based journals written in English least frequently as a source of knowledge (Egerod & Hansen, 2005), and a study among Swedish nurses found that 54% of these participants reported articles written in English were viewed as great or moderate barriers to use of that evidence (Kajermo, et al., 1998).

Although short summaries of some foreign-language articles are available in Dutch, this level of detail is not sufficient as the sole basis for clinical decisions. One solution for eliminating this barrier and making research evidence for foreign languages more accessible is for national occupational therapy associations to subsidize translations and making these translations accessible to members.

Work setting support. The present findings suggest support by the work places' management is an important factor in encouraging employees to utilize EBP, and is in agreement with several previous studies (Curtin & Jaramazovic, 2001; Lysaght, et al., 2001). Not reported by previous studies is our observation that management and colleague support may play a part in increasing the frequency of in-

service education, abstracts from electronic databases, and using articles in English for clinical decision making. Rogers (2003) describes that change agents, which could be either managers or colleagues, can speed up the process of adopting innovations (such as EBP) by providing information. This type of support should lead to more rapid adoption of EBP resulting in the Dutch OT community.

Another novel finding was that, in relation to other settings, OTs working in academic hospitals reported feeling the most capable of making changes in therapeutic procedures by using research evidence. Articles in English were also used significantly more by Dutch participants who worked at academic hospitals. Academic hospitals focus on teaching and research, and the availability of resources serving these purposes may facilitate employer support for EBP. Academic hospitals often are larger organizations, and big organizations tend to be more innovative than smaller organization (Rogers, 2003), possibly due to the availability of more resources, such as libraries, telecommunication infrastructure, or other facilities. This particular work setting may attract OTs interested in expanding their professional knowledge, and in conducting research themselves. Several common work settings for Dutch OTs were represented by only a limited number of respondents in the present study, suggesting that further study of the work setting as an influencing factor is warranted.

Understandability of research articles. More than half of the Dutch respondents did not believe research is written in a way easy to understand. Although limited knowledge related to research methodology or statistical analysis may

underlie this finding, researchers also must be critical regarding the way research reports are written and consider the diverse skills of the target audience in order to facilitate translation of research findings to clinical practice. Research articles must be scientifically accurate, but also understandable, and findings should be described in a practical context to encourage implementation.

Accessibility of resources. No major barriers were found regarding the access to resources. All Dutch OTs had access to the Internet although 10% reported they had no access to abstracts from electronic databases. This may indicate a lack of knowledge about where evidence may be found and how it can be retrieved rather than a limited access, because several electronic databases (e.g., OTseeker, Pubmed, and TRIPdatabase) provide free access to abstracts from full-text articles. Although electronic databases are good tools when searching for applicable articles, only free access to abstracts of the original articles is provided. These abstracts lack sufficient information to provide a basis for clinical decisions. It is important that OTs have easy access to full text articles as well. Dysart and Tomlin (2002) made a similar observation in their study of US OTs.

Mentoring. There was a correlation between the frequency of OTs agreeing they receive enough time to access and read evidence from their employer and mentoring higher numbers of occupational therapy students. Employers who support educating occupational therapy students might also be more likely to support the professional development of their own employees, and may therefore permit more time to access and read literature. Also, OTs who mentored students may be

encouraged by this experience to continue their own learning, and keep their knowledge current. Although provision of extra time would be desirable, factors such as workload pressure might prevent this. However, employers should offer therapists the opportunity to gain more knowledge and skills to access, critically appraise, and implement research and to do this efficiently.

Lack of time. A lack of time to access or read professional literature was identified by the OTs as the most important barrier related to work settings. Although the majority of the respondents reported their workplace is supportive of EBP, this support did not seem to influence the time provided by employers to access and read research evidence. Studies among OTs in the US (Dysart & Tomlin, 2002), the UK (Curtin & Jaramazovic, 2001; Humphris, et al., 2000; Sweetland & Craik, 2001), and Australia (Bennett, et al., 2003; McCluskey, 2003) reported similar time constraints. A caution to consider, however, is that the lack of time reported might be higher in the total population of Dutch OTs, as these therapists reported working more hours per week on average than has been reported by the OTs in our sample and the total population of interest (only EN members).

The barriers reported in this study might be experienced differently by other members of the Dutch Occupational Therapy Association who were not surveyed, or by the larger population of all practicing OTs in the Netherlands, because participants in the present study worked more hours a week on average than OTs in these wider populations. OTs in the wider populations may, for example, experience greater time

constraints related to accessing, reading, and evaluating evidence simply because they are working fewer hours each week.

Take-Home Message

In order to increase the quality of occupational therapy care in the Netherlands, EBP should be integrated optimally within the occupational therapy community. Achieving this goal only seems possible if different groups within the occupational therapy community work together. Dutch OTs are responsible for delivering high quality care based on their experience, the clients' preferences, and the best available evidence. This goal is of critical importance for maintaining the high quality of OT services in the Netherlands. Achieving this goal also requires that others such as employers, educators, researchers, and professional organizations create or increase accessibility to educational opportunities to acquire EBP skills, while the same group also must strive to decrease other barriers that prevent therapists from applying the principles of EBP in their clinics. Often overlooked is the consumer's role, as education and empowerment of the consumer will lead to an increased acceptance and expectation that evidence-based practices support clinical activities. A more extensive discussion of the implications is presented in Appendix I.

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Tables & Figures

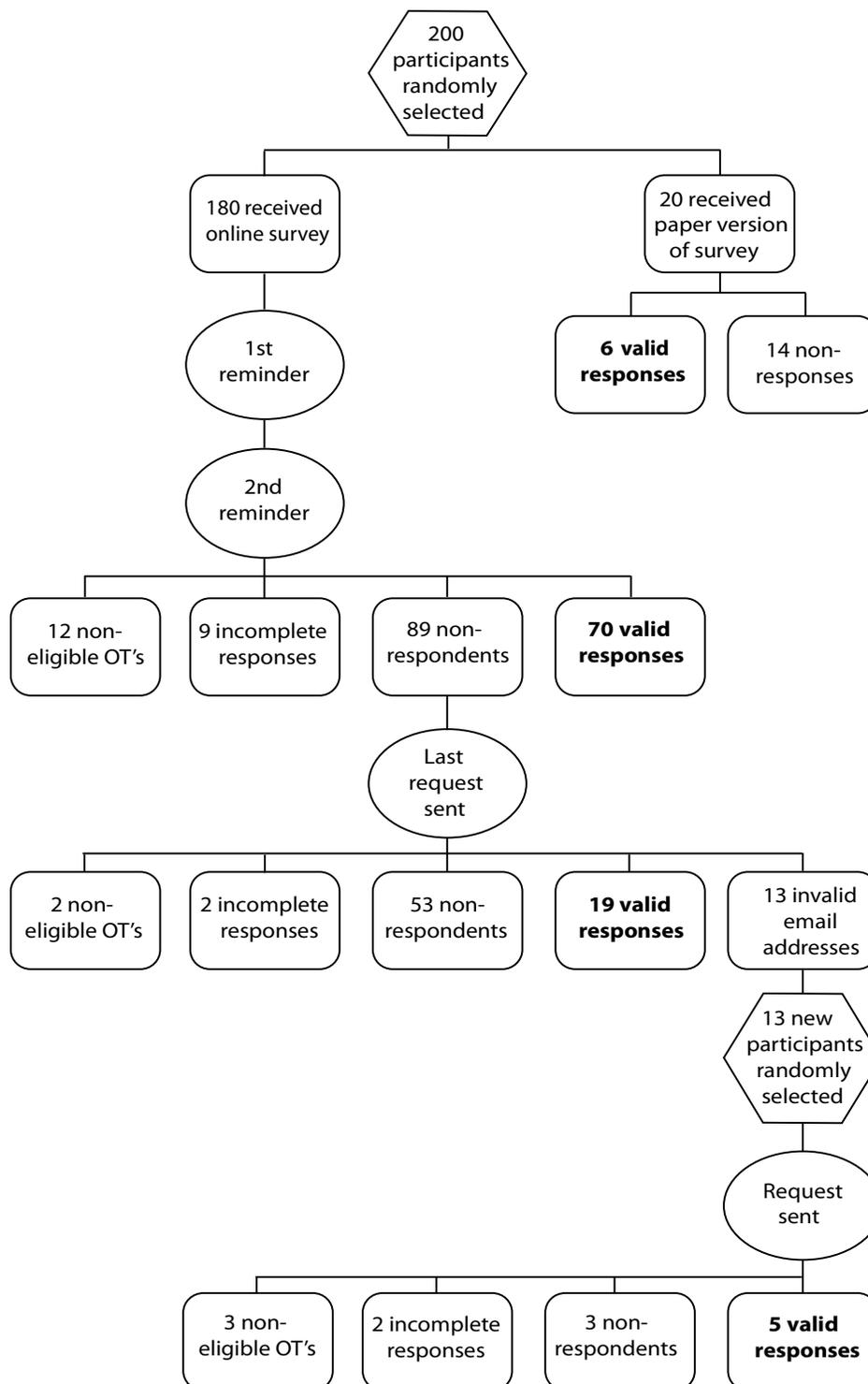


Figure 1. 200 Dutch OTs were invited to participate of whom 183 OTs proved to meet all eligibility criteria. A completed questionnaire was returned by 100 of the eligible OTs. The demographics on access to email in the total population of interest were reflected accurately by the 94 OTs who completed surveys on-line and 6 OTs who returned a paper survey through regular mail.

Table 1. Demographic Information on Participating OTs

	n (%)
Age	
<25	5 (5%)
25-29	27 (27%)
30-34	21 (21%)
35-39	13 (13%)
40-44	6 (6%)
45-49	7 (7%)
50-54	9 (9%)
55-59	10 (10%)
>60	2 (2%)
Gender*	
Female	92 (92.9%)
Male	7 (7.1%)
OT Degree	
Bachelor	97 (97%)
Master	3 (3%)
Work Setting	
Nursing home	30 (30%)
Rehabilitation center	33 (33%)
Academic hospital	4 (4%)
Non-Academic hospital	9 (9%)
Psychiatric organization	2 (2%)
Organization for people with a mental disability	4 (4%)
Private practice	11 (11%)
Special education	2 (2%)
Other	5 (5%)
Hours working per week	
5-9	1 (1%)
10-14	1 (1%)
15-19	6 (6%)
20-24	33 (33%)
25-29	10 (10%)
30-34	27 (27%)
35-36	14 (14%)
>36	8 (8%)

Note. The sample size is 100 unless stated otherwise.

*n=99 due to 1 missing answer

Table 2. Statements Excluded from Data Analysis – Positively Phrased Statements

Statement (n)	M ± SD	A n (%)	SA n (%)	N n (%)	SD n (%)	D n (%)
My employer provides enough time to attend continuing education courses (workshops etc.). (99) *	3.68 ± 1.227	26 (26.3)	44 (44.4)	8 (8.1)	13 (13.1)	8 (8.1)
Research outcomes are relevant to my practice. (99) *	3.77 ± 1.058	28 (28.3)	35 (35.4)	24 (24.2)	9 (9.1)	3 (3)

A =agree, SA= somewhat agree, N= neither agree nor disagree, SD= somewhat disagree, D= disagree

Scoring system: 5 = agree / 4 = somewhat agree / 3 = neither agree nor disagree / 2 = somewhat disagree / 1 = disagree

n = number of respondents; *n= <100 due to missing data and/or "not-applicable" answers

Table 3. Statements Excluded from Data Analysis – Negatively Phrased Statements

Statement (n)	M ± SD	A n (%)	SA n (%)	N n (%)	SD n (%)	D n (%)
Enrollment costs prevent me from attending important continuing education courses (workshops etc.) (99) *	3.15 ± 1.424	9 (9.1)	36 (36.4)	15 (15.2)	9 (9.1)	30 (30.3)
There is little research that applies to my practice. (99) *	2.91 ± 1.238	15 (15.2)	21 (21.2)	35 (35.4)	14 (14.1)	14 (14.1)

A =agree, SA= somewhat agree, N= neither agree nor disagree, SD= somewhat disagree, D= disagree

Scoring system: 1 = agree / 2 = somewhat agree / 3 = neither agree nor disagree / 4 = somewhat disagree / 5 = disagree

n = number of respondents; *n= <100 due to missing data and/or "not-applicable" answers

Table 4. Attitudes toward Evidence-Based Practice – Positively Phrased Statements

Attitude statement (n)	M ± SD	A	SA	N	SD	D
		n (%)	n (%)	n (%)	n (%)	n (%)
Research is essential to the occupational therapy profession. (100)	4.77 ± .446	78 (78)	21 (21)	1 (1)	0 (0)	0 (0)
Research helps to build a scientific knowledge base for clinical practice. (100)	4.50 ± .718	60 (60)	32 (32)	7 (7)	0 (0)	1 (1)
Research and clinical experience are equally important. (100)	4.29 ± .977	54 (54)	31 (31)	7 (7)	6 (6)	2 (2)
More occupational therapists should use evidence to guide their practice. (100)	4.01 ± .810	32 (32)	38 (38)	29 (29)	1 (1)	0 (0)
I would like to work according to the evidence-based practice principles. (100)	3.96 ± .840	29 (29)	41 (41)	28 (28)	1 (1)	1 (1)
Research evidence helps me to make clinical decisions. (99)*	3.95 ± .973	31 (31.3)	43 (43.4)	16 (16.2)	7 (7.1)	2 (2)

A = agree, SA = somewhat agree, N = neither agree nor disagree, SD = somewhat disagree, D = disagree

Scoring system: 5 = agree / 4 = somewhat agree / 3 = neither agree nor disagree / 2 = somewhat disagree / 1 = disagree

n = number of respondents; *n < 100 due to missing data

Table 5. Attitudes toward Evidence-Based Practice – Negatively Phrased Statements

Attitude statement (n)	M ± SD	A	SA	N	SD	D
		n (%)	n (%)	n (%)	n (%)	n (%)
Evidence-based practice has a negative effect on the profession. (99)*	4.22 ± .932	1 (1)	4 (4)	16 (16.2)	29 (29.3)	49 (49.5)
Evidence-based practice is a temporary trend. (99)*	3.99 ± 1.102	1 (1)	11 (11.1)	21 (21.2)	21 (21.2)	45 (45.5)
It is too difficult to use research evidence in clinical practice. (100)	2.75 ± 1.114	11 (11)	38 (38)	22 (22)	23 (23)	6 (6)
It takes too much effort to use evidence in clinical practice. (100)	2.55 ± 1.058	15 (15)	38 (38)	29 (29)	13 (13)	5 (5)

A = agree, SA = somewhat agree, N = neither agree nor disagree, SD = somewhat disagree, D = disagree

Scoring system: 1 = agree / 2 = somewhat agree / 3 = neither agree nor disagree / 4 = somewhat disagree / 5 = disagree

n = number of respondents; *n < 100 due to missing data

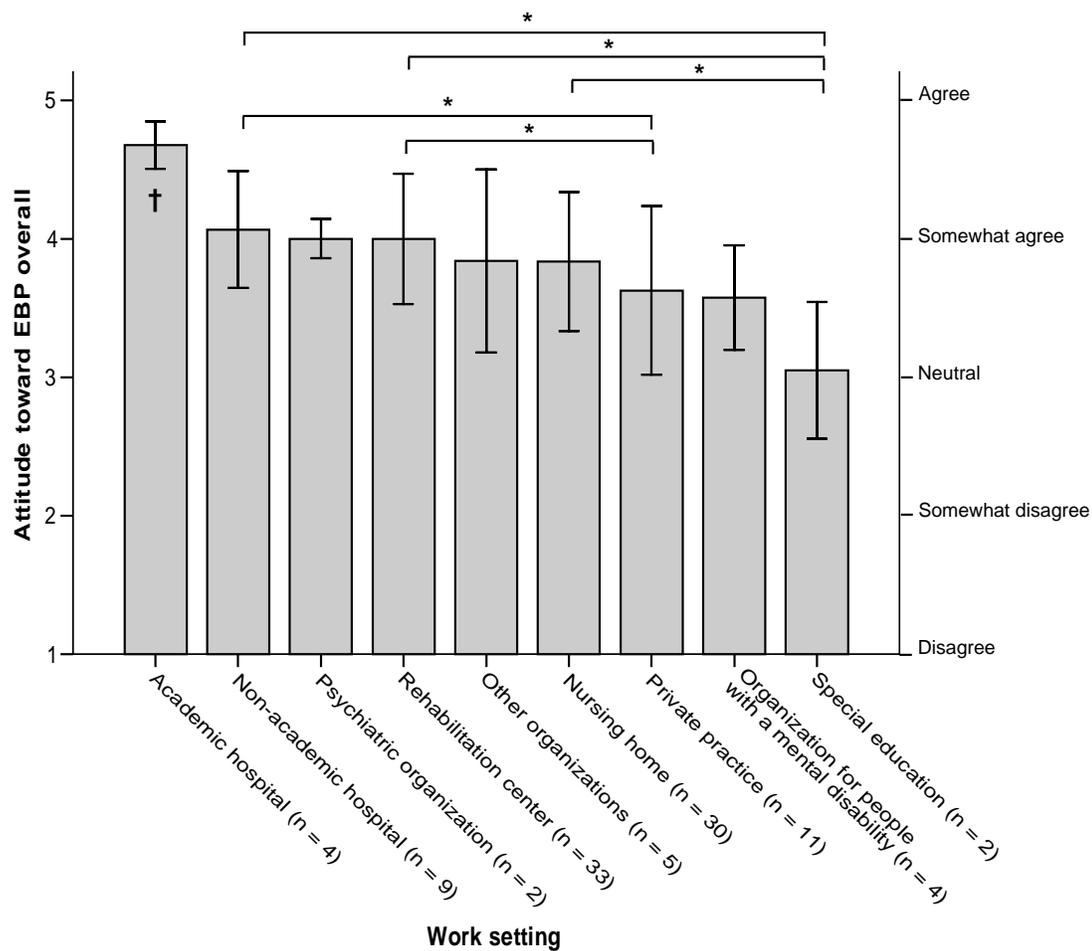


Figure 2. Perspective of Dutch OTs regarding EBP according to primary work environment (means score \pm SD). Significant differences were found among different work setting ($*p < .05$). OTs working in academic hospitals had the most positive attitude toward EBP ($\dagger p < .05$ vs. all other work settings except for psychiatric organizations).

Table 6. Frequency of Sources Used for Clinical Decision Making

Sources (n)	M ± SD	Daily n (%)	Weekly n (%)	Monthly n (%)	Biannually n (%)	Annually n (%)	Never n (%)	No access † n (%)
Experience (100)	6.94 ± .239	94 (94.0)	6 (6.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Client (100)	6.67 ± .711	77 (77.0)	16 (16.0)	5 (5.0)	1 (1.0)	1 (1.0)	0 (0.0)	0 (0.0)
Non-occupational therapy colleagues (99)*	6.02 ± .808	23 (23.2)	59 (59.6)	16 (16.2)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.0)
Occupational therapy colleagues (100)	5.97 ± .771	23 (23.0)	56 (56.0)	16 (16.0)	5 (5.0)	0 (0.0)	0 (0.0)	0 (0.0)
Family and friends of the client (100)	5.85 ± .809	19 (19.0)	53 (53.0)	23 (23.0)	4 (4.0)	1 (1.0)	0 (0.0)	0 (0.0)
Internet websites (100)	4.98 ± 1.155	4 (4.0)	31 (31.0)	40 (40.0)	15 (15.0)	4 (4.0)	6 (6.0)	0 (0.0)
Textbooks (100)	4.47 ± .969	1 (1.0)	9 (9.0)	42 (42.0)	37 (37.0)	7 (7.0)	3 (3.0)	1 (1.0)
Occupational therapy guidelines (100)	4.39 ± 1.270	4 (4.0)	16 (16.0)	25 (25.0)	34 (34.0)	13 (13.0)	7 (7.0)	1 (1.0)
Articles from the EN journal (100)	4.12 ± .868	0 (0.0)	2 (2.0)	34 (34.0)	42 (42.0)	18 (18.0)	4 (4.0)	0 (0.0)
Other guidelines (100)	3.99 ± 1.314	3 (3.0)	9 (9.0)	22 (22.0)	32 (32.0)	20 (20.0)	12 (12.0)	2 (2.0)
Workshops (98)*	3.49 ± .976	1 (1.0)	4 (4.1)	5 (5.1)	30 (30.6)	53 (54.1)	2 (2.0)	3 (3.1)
Conferences (100)	3.43 ± .832	0 (0.0)	3 (3.0)	5 (5.0)	31 (31.0)	55 (55.0)	5 (5.0)	1 (1.0)
In-service education (100)	3.23 ± 1.196	1 (1.0)	2 (2.0)	11 (11.0)	20 (20.0)	47 (47.0)	9 (9.0)	10 (10.0)
Post-graduate education (100)	3.23 ± 1.309	4 (4.0)	6 (6.0)	3 (3.0)	8 (8.0)	60 (60.0)	13 (13.0)	6 (6.0)
Articles from other professional journals in Dutch (100)	2.96 ± 1.082	0 (0.0)	0 (0.0)	7 (7.0)	27 (27.0)	29 (29.0)	29 (29.0)	8 (8.0)
Abstracts from electronic databases (96)*	2.90 ± 1.373	0 (0.0)	6 (6.3)	8 (8.3)	15 (15.6)	18 (18.8)	39 (40.6)	10 (10.4)
Articles from professional journals in English (100)	2.86 ± 1.255	0 (0.0)	3 (3.0)	8 (8.0)	22 (22.0)	14 (14.0)	45 (45.0)	8 (8.0)

Scoring system: Daily = 7 / Weekly = 6 / Monthly = 5 / Biannually = 4 / Annually = 3 / Never = 2 / No access = 1

n = number of respondents / *n = <100 due to missing data

† This answer option was treated as missing in all bivariate analyses.

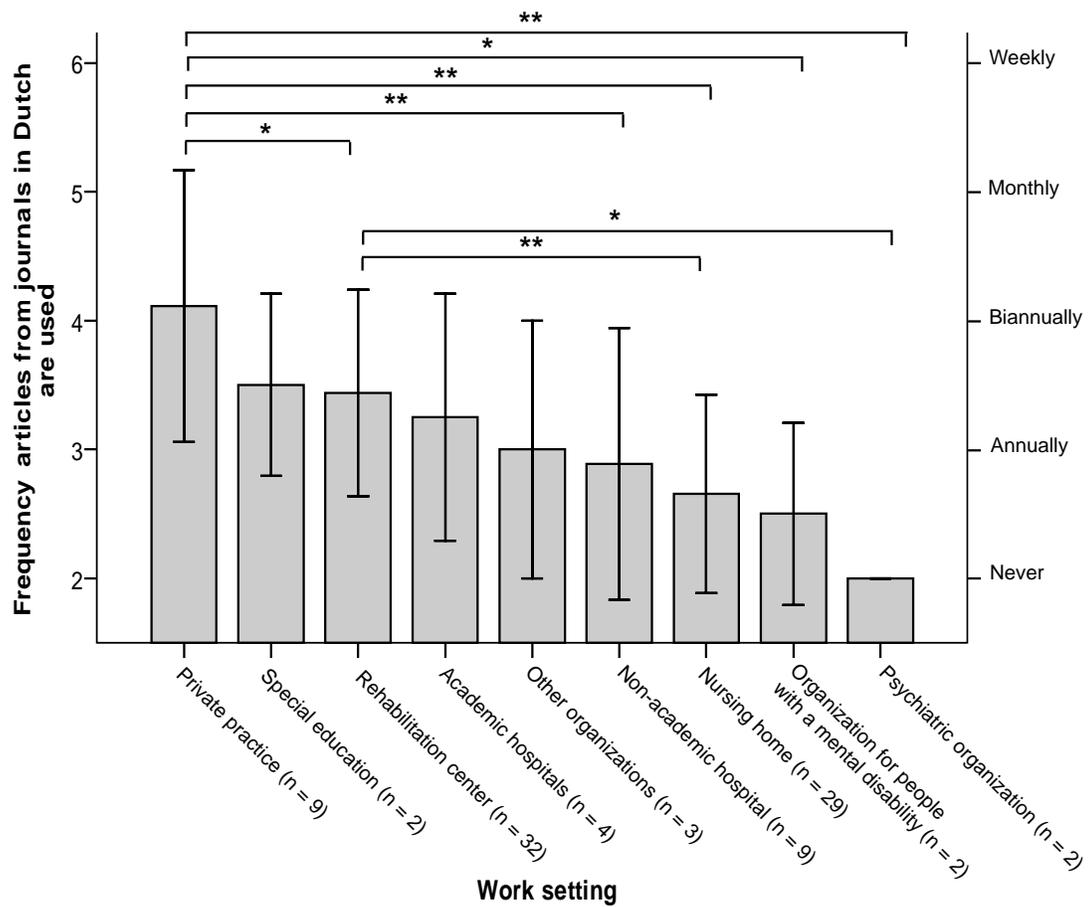


Figure 3. Reported frequency of use for articles from Dutch professional journals used by Dutch OTs according to work environment (mean score \pm SD; * $p < .05$ and ** $p < .01$ for indicated work settings).

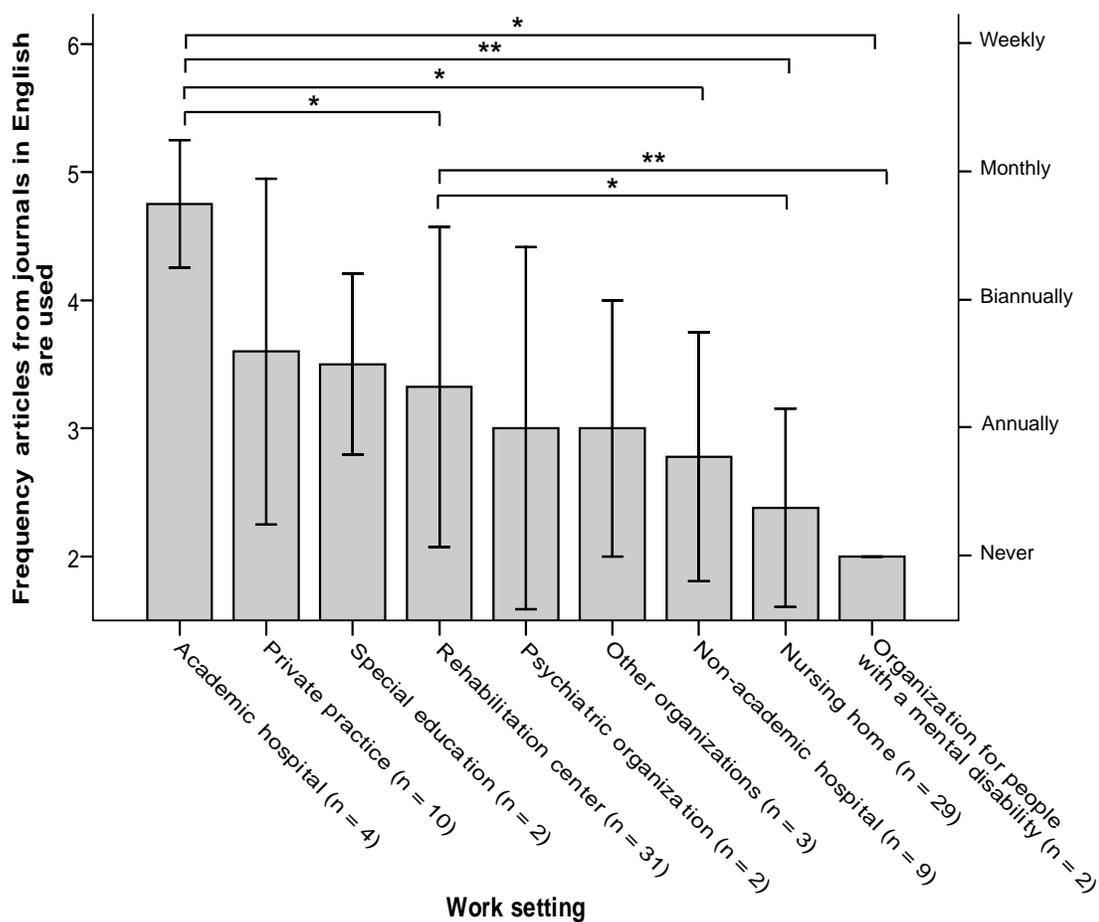


Figure 4. Reported frequency of use for articles from English-language professional journals used by Dutch OTs according to work environment (mean score \pm SD; * $p < .05$ and ** $p < .01$ for indicated work settings). OTs working in academic hospitals indicated reading articles from journals in English most frequently which may indicate better access in the workplace to this source and / or a work environment that is more supportive of EBP.

Table 7. Barriers to Evidence-Based Practice Experienced by Dutch OTs – Positively Phrased Statements

Barriers statement (n)	M ± SD	A n (%)	SA n (%)	N n (%)	SD n (%)	D n (%)
My employer provides a sufficient amount of time to read professional literature. (98)*	2.28 ± 1.138	3 (3.1)	13 (13.3)	23 (23.5)	28 (28.6)	31 (31.6)
My employer provides enough time during work hours to access research evidence. (98)*	2.32 ± 1.181	4 (4.1)	14 (14.3)	22 (22.4)	27 (27.6)	31 (31.6)
Research is written in a way that is easy to understand. (98)*	2.37 ± .913	0 (0)	11 (11.2)	32 (32.7)	37 (37.8)	18 (18.4)
I can use electronic databases to search for research information without any difficulties. (88)*	2.70 ± 1.306	10 (11.4)	15 (17)	22 (25)	21 (23.9)	20 (22.7)
I understand the statistical analyses in research articles. (98)*	2.89 ± 1.217	7 (7.1)	30 (30.6)	22 (22.4)	23 (23.5)	16 (16.3)
I am able to critically appraise research evidence. (100)	3.27 ± 1.153	15 (15)	32 (32)	24 (24)	23 (23)	6 (6)
Management at my workplace supports the implementation of new treatment plans based on research information. (98)*	3.50 ± 1.212	23 (23.5)	33 (33.7)	18 (18.4)	18 (18.4)	6 (6.1)
I feel capable to make changes in therapeutic procedures at my work place using research evidence. (98)*	3.56 ± 1.185	24 (24.5)	33 (33.7)	21 (21.4)	14 (14.3)	6 (6.1)
My colleagues from other professions support the use of research evidence in practice. (98)*	3.74 ± 1.019	25 (25.5)	36 (36.7)	27 (27.6)	7 (7.1)	3 (3.1)
My occupational therapy colleagues support the use of research evidence in practice. (99)*	3.91 ± 1.051	37 (37.4)	27 (27.3)	26 (26.3)	7 (7.1)	2 (2)
I can use the Internet as a tool to search for research information without any difficulties. (99)*	4.07 ± 1.118	46 (46.5)	29 (29.3)	13 (13.1)	7 (7.1)	4 (4)

A = agree, SA = somewhat agree, N = neither agree nor disagree, SD = somewhat disagree, D = disagree

Scoring system: 5 = agree / 4 = somewhat agree / 3 = neither agree nor disagree / 2 = somewhat disagree / 1 = disagree

n = number of respondents; *n = <100 due to missing data and/or "not-applicable" answers

Table 8. Barriers to Evidence-Based Practice Experienced by Dutch OTs – Negatively Phrased Statements

Barriers statement (n)	M ± SD	A n (%)	SA n (%)	N n (%)	SD n (%)	D n (%)
I find it difficult to determine if evidence is of good quality. (95)*	2.26 ± 1.074	24 (25.3)	40 (42.1)	16 (16.8)	12 (12.6)	3 (3.2)
It is hard to translate conclusions of research studies to the treatment of individual clients. (99)*	2.56 ± 1.081	13 (13.1)	44 (44.4)	22 (22.2)	14 (14.1)	6 (6.1)
I have difficulties in searching the Internet for evidence. (94)*	2.56 ± 1.205	15 (16)	41 (43.6)	19 (20.2)	8 (8.5)	11 (11.7)
I find statistical analyses in research articles hard to understand. (100)	2.58 ± 1.232	20 (20)	35 (35)	22 (22)	13 (13)	10 (10)
Formulating a clinical question to a clinical problem is difficult for me. (95)*	2.83 ± 1.342	15 (15.8)	34 (35.8)	13 (13.7)	18 (18.9)	15 (15.8)
I find it difficult to use evidence written in a foreign language. (98)*	2.98 ± 1.436	19 (19.4)	23 (23.5)	18 (18.4)	17 (17.3)	21 (21.4)

A = agree, SA = somewhat agree, N = neither agree nor disagree, SD = somewhat disagree, D = disagree, n = number of respondents.

Scoring system: 1 = agree / 2 = somewhat agree / 3 = neither agree nor disagree / 4 = somewhat disagree / 5 = disagree

n = number of respondents; *n = <100 due to missing data and/or "not-applicable" answers

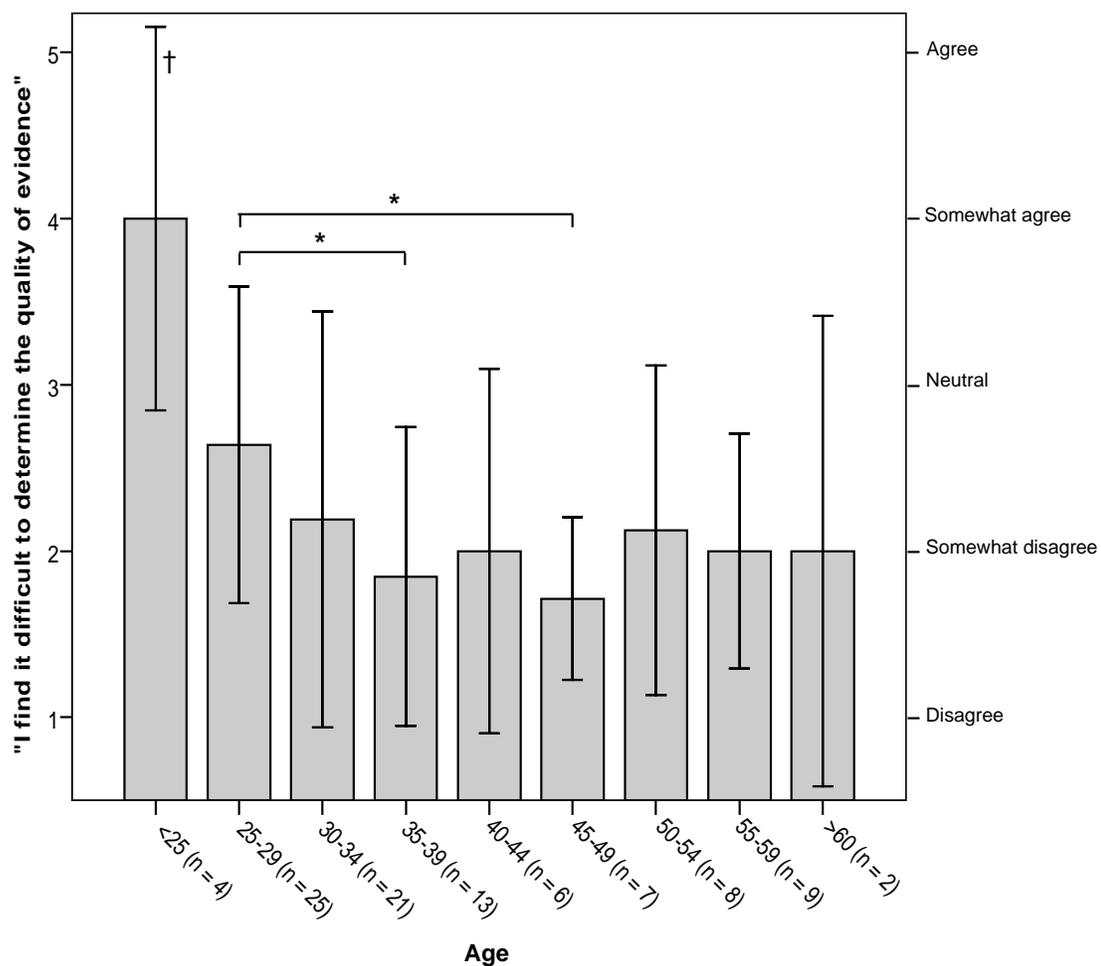


Figure 5. Reported difficulty experienced by Dutch OTs in determining quality of evidence presented according to age categories (mean score \pm SD). Younger OTs reported the least difficulty, perhaps reflecting a recent emphasis on EBP content in Dutch OT education curricula ($\dagger p < .05$ vs. all other age categories; $p < .05$ for indicated age category).

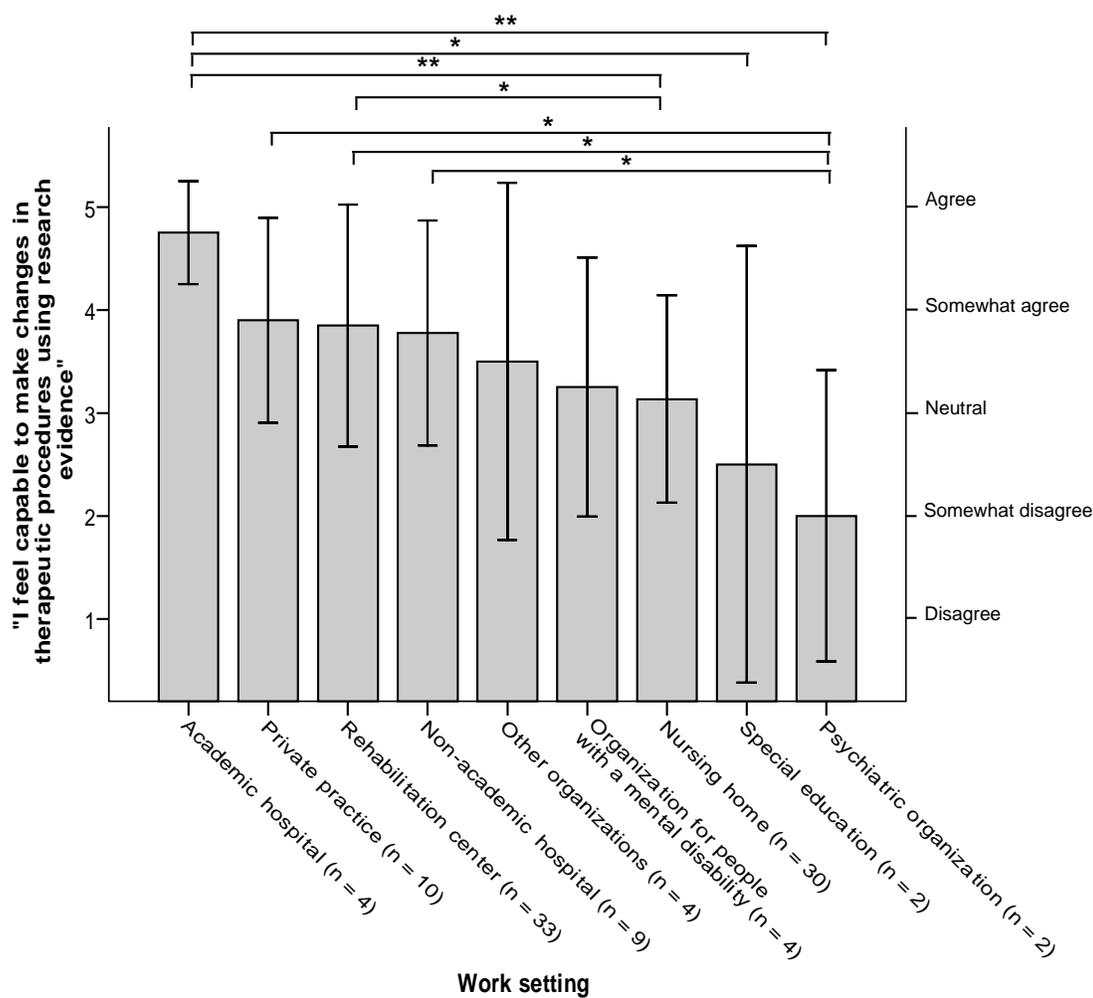


Figure 6. Dutch OTs' perception of their capability to make changes in therapeutic procedures based on research evidence (mean score \pm SD; * $p < .05$ and ** $p < .01$ for indicated work settings). OTs working in academic hospitals reported having the greatest capability to use research evidence to change therapeutic procedures. This may indicate the advantages of a large organization possessing the resources needed for EBP.

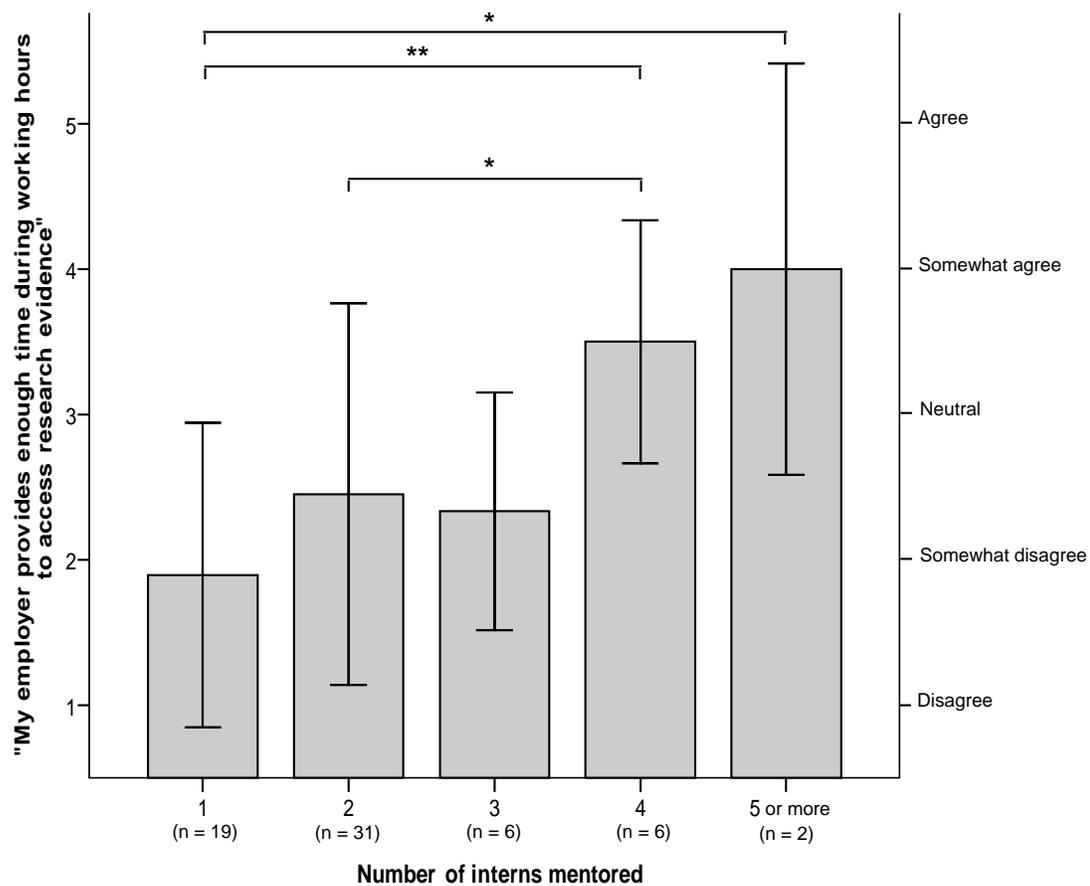


Figure 7. Comparison of the time available to OTs for accessing research evidence in the work setting relative to the number of OT students mentored in the prior 2-year period (mean score \pm SD; * $p < .05$; ** $p < .01$), demonstrating a positive relation between extent of mentorship experience and time to access research evidence.

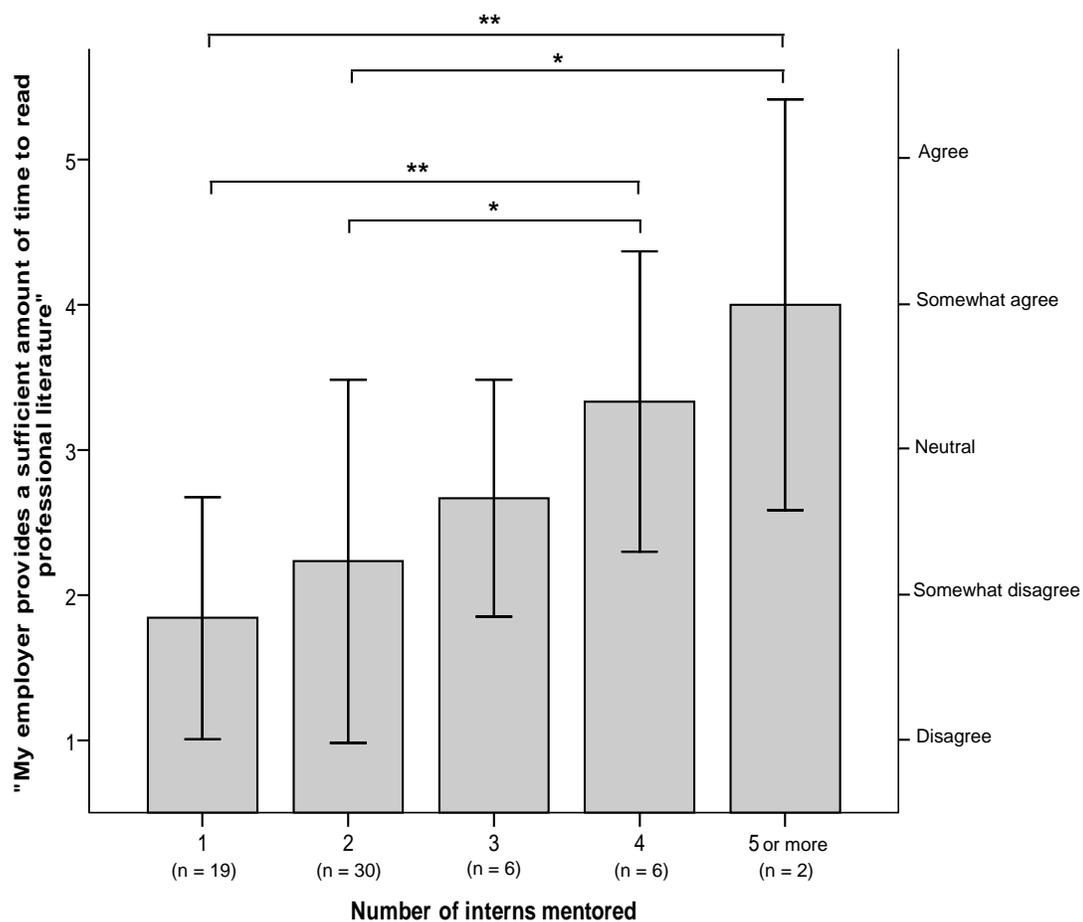


Figure 8. Comparison of the time available to mentoring OTs for reading research evidence relative to the number of student interns mentored in the prior 2-year period (mean score \pm SD). Although statistical differences were found ($*p < .05$; $**p < .01$), few respondent reported they were provided sufficient time to read evidence.

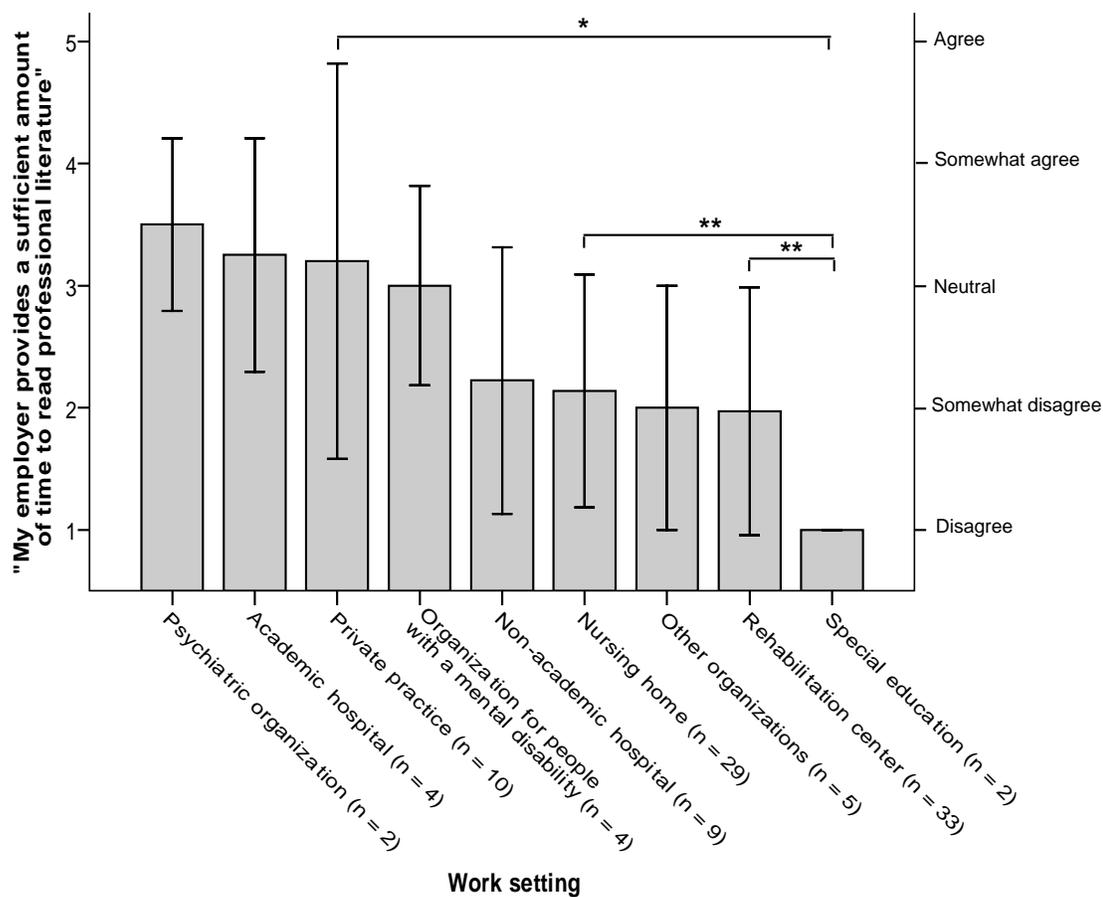


Figure 9. The perception of Dutch OTs regarding time provided by their employer to read professional literature according to work setting (mean score \pm SD; * $p < .05$; ** $p < .01$). The differences among settings are apparent, but means for most work settings are neutral or lower. No significant differences among work settings were found based on the time provided to access evidence.

Appendix A: Questionnaire in Dutch & Questionnaire in English

Enquête onder Nederlandse ergotherapeuten

Wilt u voor de hieronder genoemde bronnen aangeven hoe vaak u deze bronnen gebruikt tijdens het maken van beslissingen met betrekking tot de behandeling van cliënten (klinische beslissingen)?

Wanneer een bron betrekking heeft op (bij)scholing, wilt u dan aangeven hoe vaak u de informatie verkregen tijdens die scholing gebruikt tijdens uw werk?

Mocht u geen toegang hebben tot een bepaalde bron geef dit dan aan door de laatste kolom ("ik heb geen toegang tot deze bron") aan te vinken.

	Dagelijks*	Wekelijks	Maandelijks	Eenmaal per half jaar	Jaarlijks	Nooit	Ik heb geen toegang tot deze bron
Ervaring	<input type="radio"/>						
Intuïtie	<input type="radio"/>						
Cliënt	<input type="radio"/>						
Naasten van de cliënt	<input type="radio"/>						
Collega ergotherapeuten	<input type="radio"/>						
Collega's van andere disciplines	<input type="radio"/>						
Ergotherapeuten in opleiding	<input type="radio"/>						
Studieboeken	<input type="radio"/>						
Ergotherapie richtlijnen	<input type="radio"/>						
Overige richtlijnen	<input type="radio"/>						
Congressen	<input type="radio"/>						
Workshops	<input type="radio"/>						
Intramurale scholing	<input type="radio"/>						
Post-hbo/wo cursussen	<input type="radio"/>						
Internet websites	<input type="radio"/>						
Samenvattingen van artikelen van elektronische databanken (bijv. OTseeker, doconline, Pubmed)	<input type="radio"/>						
Artikelen uit het Nederlands tijdschrift voor ergotherapie.	<input type="radio"/>						
Volledige artikelen van andere professionele/ wetenschappelijke tijdschriften geschreven in het Nederlands.	<input type="radio"/>						
Volledige artikelen van professionele/wetenschappelijke tijdschriften geschreven in het Engels.	<input type="radio"/>						
Overige	<input type="radio"/>						

* elke werkdag

Enquête onder Nederlandse ergotherapeuten

Zou u voor de onderstaande stellingen aan willen geven in welke mate u het met deze stellingen eens of oneens bent? (selecteer één antwoord per stelling).

	<i>Mee eens</i>	<i>Enigszins mee eens</i>	<i>Niet mee eens of oneens</i>	<i>Enigszins mee oneens</i>	<i>Mee oneens</i>
Mijn werkgever biedt voldoende tijd voor het volgen van bijscholing (workshops, cursussen etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inschrijvingskosten weerhouden mij ervan om belangrijke bijscholing (workshops, cursussen etc.) te volgen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mijn werkgever biedt voldoende tijd om tijdens werktijd naar wetenschappelijk bewijs te zoeken.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mijn werkgever biedt mij voldoende tijd om vakliteratuur te lezen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het management op mijn werk ondersteunt het implementeren van nieuwe behandelmethoden gebaseerd op onderzoeksbewijs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mijn collega ergotherapeuten ondersteunen het gebruik van onderzoeksresultaten in de praktijk.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mijn collega's van andere disciplines ondersteunen het gebruik van onderzoeksresultaten in de praktijk.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik voel me in staat tot het doorvoeren van veranderingen in therapeutische procedures op mijn werkplek op basis van wetenschappelijk bewijs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik ben in staat om onderzoeksresultaten kritisch te beoordelen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik vind het moeilijk om de statistische analyses in wetenschappelijke artikelen te begrijpen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Enquête onder Nederlandse ergotherapeuten

Zou u voor de onderstaande stellingen aan willen geven in welke mate u het met deze stellingen eens of oneens bent? (selecteer één antwoord per stelling).

	Mee eens	Enigszins mee eens	Niet mee eens of oneens	Enigszins mee oneens	Mee oneens	N.V.T.
Ik kan probleemloos gebruik maken van het Internet (bijv. zoekmachines, webpagina's) als een middel om onderzoeksinformatie te zoeken.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik kan probleemloos gebruik maken van elektronische databanken (bijv. Otseeker, DocOnline, pubmed) om onderzoeksinformatie te zoeken.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik ondervind problemen bij het zoeken naar bewijs via het Internet.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik vind het lastig om een zoekvraag te formuleren naar aanleiding van een praktijkprobleem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik vind het lastig om bewijs te gebruiken dat niet in het Nederlands geschreven is.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Onderzoek is zo opgeschreven dat het eenvoudig te begrijpen is.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is lastig om onderzoeksresultaten te vertalen naar de behandeling van de individuele cliënt.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Er is weinig onderzoek welke van toepassing is op mijn praktijksituatie.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik begrijp de statistische analyses die beschreven worden in wetenschappelijke artikelen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Onderzoeksresultaten zijn relevant voor mijn praktijksituatie.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Enquête onder Nederlandse ergotherapeuten

Zou u voor de onderstaande stellingen aan willen geven in welke mate u het met deze stellingen eens of oneens bent? (selecteer één antwoord per stelling).

	<i>Mee eens</i>	<i>Erigszins mee eens</i>	<i>Niet mee eens of oneens</i>	<i>Erigszins mee oneens</i>	<i>Mee oneens</i>	<i>N.v.T.</i>
Ik vind het lastig om te bepalen of bewijs van goede kwaliteit is.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik bedenk hoe ik bewijs had kunnen toepassen op een uitbehandelde client voordat ik het bij een huidige cliënt toepas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overleg met collega's helpt mij bij het toepassen van bewijs in de praktijk.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik bespreek het beschikbare bewijs met de cliënt of zijn naasten wanneer we een behandelbesluit nemen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De kwaliteit van al het onderzoeksbewijs is goed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ergotherapeuten in opleiding helpen mij met het implementeren van onderzoeksresultaten.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik vraag ergotherapeuten in opleiding om informatie te zoeken die bijdraagt aan het op lossen van een klinisch probleem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Enquête onder Nederlandse ergotherapeuten

Zou u voor de onderstaande stellingen aan willen geven in welke mate u het met deze stellingen eens of oneens bent? (selecteer één antwoord per stelling).

	<i>Mee eens</i>	<i>Enigszins mee eens</i>	<i>Niet mee eens of oneens</i>	<i>Enigszins mee oneens</i>	<i>Mee oneens</i>
Onderzoek is essentieel voor het beroep ergotherapie.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evidence-based practice heeft een negatief effect op het beroep.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evidence-based practice is een tijdelijke trend.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Onderzoek helpt bij het opbouwen van een wetenschappelijke basis voor het klinisch handelen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Onderzoek en klinische ervaring zijn beide even belangrijk.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Onderzoeksbewijs helpt mij bij het maken van klinische beslissingen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is te moeilijk om onderzoeksresultaten in de praktijk te gebruiken.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zou graag werken volgens de principes van evidence-based practice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het kost te veel inspanning om bewijs in de praktijk te gebruiken.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meer ergotherapeuten zouden bewijs moeten gebruiken om richting te geven aan het uitoefenen van hun beroep.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Klinische ervaring is belangrijker voor mij dan onderzoek bij het nemen van klinische beslissingen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Enquête onder Nederlandse ergotherapeuten

Wat is uw geslacht?

- Vrouw
- Man

In welk werkveld werkt u momenteel? Als u meer dan één werkplek heeft kunt u meerdere opties aanvinken.

- Verpleeghuis
- Revalidatiecentrum
- Academisch ziekenhuis
- Algemeen ziekenhuis
- Psychiatrische instelling
- Instelling voor verstandelijk gehandicapten
- Instelling voor visueel gehandicapten
- Zelfstandige praktijk
- Speciaal onderwijs
- Dagverblijf/activiteitencentrum
- Anders

Wilt u hieronder aangeven met welke doelgroep(-en) u binnen uw huidige werkplek(-ken) werkt.

- Volwassenen
- Kinderen
- Beide

In welke andere werkvelden heeft u als ergotherapeut gewerkt gedurende u loopbaan? U kunt meerdere antwoorden selecteren.

- Verpleeghuis
- Revalidatiecentrum
- Academisch ziekenhuis
- Algemeen ziekenhuis
- Psychiatrische instelling
- Instelling voor verstandelijk gehandicapten
- Instelling voor visueel gehandicapten
- Zelfstandige praktijk
- Speciaal onderwijs
- Dagverblijf/activiteitencentrum
- Anders
- Ik heb niet in andere organisaties gewerkt gedurende mijn loopbaan.

Enquête onder Nederlandse ergotherapeuten

Wilt u hieronder aangeven met welke doelgroep(-en) u binnen uw voormalige werkplek(-ken) heeft gewerkt.

- Volwassenen
- Kinderen
- Beide
- Niet van toepassing

Hoeveel uur per week werkt u als ergotherapeut?

Hoeveel collega ergotherapeuten (uzelf niet meegerekend) heeft u binnen uw huidige werkplek?

Heeft u in de afgelopen twee jaar ergotherapeuten in opleiding begeleid (excl. snuffel stages)?

- Ja
- Nee

Indien u "ja" geantwoord heeft op de vorige vraag, geef dan hieronder aan hoeveel ergotherapeuten in opleiding u begeleid heeft gedurende deze twee jaar (excl. snuffel stages).

- 1
- 2
- 3
- 4
- 5
- Meer dan 5

Enquête onder Nederlandse ergotherapeuten

Wat is het hoogste niveau van scholing dat u ten aanzien van ergotherapie heeft afgerond?

- Bachelors (HBO)
- Masters (WO)
- Ph.D.

Wat is het hoogste niveau van scholing dat u in een ander vakgebied heeft afgerond?

- Bachelors (HBO)
- Masters (WO)
- Ph.D.
- Ik heb geen opleiding gedaan in een ander vakgebied dan ergotherapie

In welk jaar heeft u uw diploma ergotherapie voor het door u als hoogst aangegeven niveau behaald? Schrijf hieronder in welk jaar u afstudeerde, bijvoorbeeld "2000."

Waar heeft u uw ergotherapie diploma('s) behaald? U kunt meerdere antwoorden geven wanneer u meer dan één opleiding ergotherapie heeft gedaan.

- In Nederland
- Anders, nl: _____

Hoeveel jaar bent u al werkzaam als ergotherapeut?

_____ jaar

Tot welke leeftijdscategorie behoort u?

- | | | | | |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> < 25 | <input type="checkbox"/> 25 - 29 | <input type="checkbox"/> 30 - 34 | <input type="checkbox"/> 35 - 39 | <input type="checkbox"/> 40 - 44 |
| <input type="checkbox"/> 45 - 49 | <input type="checkbox"/> 50 - 54 | <input type="checkbox"/> 55 - 59 | <input type="checkbox"/> 60 < | |

Heel erg bedankt voor het invullen van de enquête.

U kunt de enquête ingevuld terugsturen in de gefrankeerde enveloppe.

Thank you so much for taking the time to fill out this questionnaire. This will help to gain a better understanding of how occupational therapists take clinical decisions and which needs exist related to making clinical decisions. All the information you provide will be treated in a confidential manner.

Instructions:

- On every page you will find a "next" button, if you click on this it will bring you to the next page.
- The bar on the bottom of the screens will tell you how far along you are with filling out the questionnaire.
- Most questions will only require you to check one and sometimes more answers by using you mouse or touch pad.
- When you finish filling out the questionnaire please click on the submit button on the last page of this survey.

To verify if you belong to the target group of this study I would like to request you to answer the question below.

Are you currently working as an occupational therapist in the Netherlands and a member of 'Ergotherapie Nederland' (previously known as 'de Nederlandse Vereniging voor Ergotherapie')?

- Yes
- No

Section A

1. Please indicate for the sources mentioned below how often you use them to guide the decisions you make with regards to a client treatment (clinical decisions)?

When a source involves (continuing) education, please indicate how often you use the information gained from this education in your practice?

If you do not have access to particular sources please check "I have no access to this source" (last column).

	Daily*	Weekly	Monthly	Biannually	Annually	Never	I have no access to this source
Experience							
Intuition							
Client							
Clients' family/ friends							
Occupational therapy colleagues							
Colleagues from other professions							
Occupational therapy interns							
Textbooks							
Occupational therapy guidelines							
other guidelines							
Conferences							
Workshops							
In-service education							
Post-graduate education							
Internet websites							
Abstracts from electronic databases (e.g. OTseeker, DocOnline, Pubmed)							
Full text articles from the EN journal							
Full text articles from other scientific journals in Dutch.							
Full text articles from							

scientific journals written in English.							
Other							

*Every work day.

Section B

2. Please indicate how strongly you agree or disagree with the following statements by checking the appropriate box (check one answer per statement).

Statement	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree
My employer provides enough time to attend continuing education courses.					
Enrollment costs prevent me from attending important continuing education courses.					
My employer provides enough time during working hours to access research evidence.					
My employer provides a sufficient amount of time to read professional literature.					
Management at my workplace supports the implementation of new treatment plans based on research information.					
My occupational therapy colleagues support the use of research evidence in practice.					
My colleagues from other professions support the use of research evidence in practice.					
I feel capable to make changes in therapeutic procedures at my workplace using research evidence.					
I am able to critically appraise research evidence.					
I find statistical analyses in research articles hard to understand.					

Please indicate how strongly you agree or disagree with the following statements by checking the appropriate box.

Statement	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	NA
I can use the Internet (e.g. search engines, websites) as a tool to search for research information without any difficulties.						
I can use electronic databases (e.g., OTseeker, DocOnline, pubmed, etc.) to search for research information without any difficulties.						
I have difficulties in searching the internet for evidence.						
Formulating a clinical question to a clinical problem is difficult for me.						
I find it difficult to use evidence written in a foreign language.						
Research is written in a way that is easy to understand.						
It is hard to translate conclusions of research studies to the treatment of individual clients.						
There is little research that applies to my practice.						
I understand the statistical analyses in research articles.						
Research outcomes are relevant to my practice.						

Please indicate how strongly you agree or disagree with the following statements by checking the appropriate box (check one box per statement).

Statement	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	NA
I find it difficult to determine if evidence is of good quality.						
I imagine applying evidence to past cases before applying it on a current client.						
Discussion with peers helps me to integrate research evidence into practice.						
I discuss the available evidence to the client or clients' support system as we make treatment decisions.						
The quality of all research evidence is good.						
Occupational therapy interns help me with the implementation of research findings.						
I ask occupational therapy interns to find information needed to solve a clinical problem.						

Please indicate how strongly you agree or disagree with the following statements by checking the appropriate box (check one box per statement).

Statement	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree
Research is essential to the occupational therapy profession.					
Evidence-based practice has a negative effect on the profession.					
Evidence-based practice is a temporary trend.					
Research helps to build a scientific knowledge base for clinical practice.					
Research and clinical experience are equally important.					
Research evidence helps me to make clinical decisions.					
It is too difficult to use research evidence in clinical practice.					
I would like to work according to the evidence-based practice principles.					
It takes too much effort to use evidence in clinical practice.					
More occupational therapists should use evidence to guide their practice.					
Clinical experience is more important to me than research in making clinical decisions.					

Section C: Demographic questions

3. What is your gender?
 - Female
 - Male

4. Which best describes your current work setting? If you work at more than one setting, select more organizations.
 - Nursing home
 - Rehabilitation center
 - Academic hospital
 - Non-academic hospital
 - Psychiatric organization
 - Organization for mentally disabled
 - Organization for visually disabled
 - Private practice
 - Special education
 - Daycare/activity center
 - Other (specify)_____

5. Please indicate with which group(s) you work within your current work setting(s).
 - Adults
 - Children
 - Both

6. Over the course of your entire career, in what other occupational therapy settings have you worked? You may select more than one answer.
 - Nursing home
 - Rehabilitation center
 - Academic hospital
 - Non-academic Hospital
 - Psychiatric organization
 - Organization for mentally disabled
 - Organization for visually disabled
 - Private practice
 - Special education
 - Daycare/activity center
 - Other (specify)_____
 - I did not work in any other settings during my career.

8. Please indicate the group(s) with whom you have worked in these past settings:
 - Adults
 - Children
 - Both
 - Not applicable

9. How many hours per week are you working as an occupational therapist?
 <5 5-9 10-14 15-19 20-24 25-29
 30-34 35-36 >36
10. How many occupational therapist colleagues are working at your current work setting (excluding yourself)?

11. Have you been a mentor for occupational therapy interns in the past two years? (excl. short orientations)
 Yes
 No
- If yes, for how many occupational therapy interns were you a mentor in this two year period? (Excl. short orientations)
 1 4
 2 5
 3 more than 5
12. What is your highest *occupational therapy* degree completed?
 Bachelors
 Masters
 Doctorate
13. What is the highest degree obtained in a major other than occupational therapy?
 Bachelors
 Masters
 Doctorate
 I did not study another discipline other than occupational therapy.
14. In which year did you obtain your highest occupational therapy degree? Please enter the year you graduated e.g. '2000'.

15. Where did you obtain your occupational therapy degree(s)? You can check more than one answer if you obtained more than 1 degree in occupational therapy.
 the Netherlands
 Other: _____
16. How many years have you been practicing as an occupational therapist?
 _____ Year(s)
17. To which age category do you belong?
 <25 25-29 30-34 35-39 40-44 45-49
 50-54 55-59 >60

Appendix B: Pre-Notice Letter in Dutch & in English

Utrecht, 19 mei 2008

Beste (naam van geselecteerde ergotherapeut),

Binnen enkele dagen zult u een uitnodiging ontvangen waarin u wordt verzocht om deel te nemen aan een onderzoek doormiddel van het invullen van een korte online vragenlijst. Deze uitnodiging zal naar u verstuurd worden door Carola Döpp en zal instructies bevatten over hoe de vragenlijst geopend kan worden. De informatie die u daarmee geeft zal een bijdrage leveren aan het vergroten van ons inzicht in hoe ergotherapeuten, zoals u, klinische beslissingen nemen en welke behoeften ergotherapeuten hebben met betrekking tot het maken van klinische beslissingen.

Ergotherapie Nederland (EN) zou u willen verzoeken om deel te nemen aan dit onderzoek. De resultaten zullen een bijdrage leveren aan ons doel om het beroep van ergotherapeut in Nederland verder te versterken en te ontwikkelen. We zullen het zeer waarderen als u de tijd wilt nemen om de vragenlijst in te vullen en te versturen.

Bij voorbaat dank voor uw bijdrage.

Met vriendelijke groeten,

Naam van vertegenwoordiger EN

Functie

Ergotherapie Nederland

Utrecht, May 19th 2008

Dear (name of selected OT),

Within the next few days you will receive a request to take part in a research study by completing a brief questionnaire online. This invitation to participate in the study will be sent to you by Carola Döpp and will include instructions on how to access the survey. Your response will help to increase our understanding of how occupational therapists - like you - make clinical decisions, and of the needs of occupational therapists related to clinical decision making.

The Dutch Association of Occupational Therapy is encouraging your involvement with this study. The findings will support our continuing effort to strengthen and advance the occupational therapy profession in the Netherlands. We will appreciate having you take a few moments to complete and submit this questionnaire.

Thank you in advance for your willingness to help enhance the practice of occupational therapy in the Netherlands.

Sincerely,

Representative of the Dutch Association of Occupational Therapy
Function
Dutch Association of Occupational Therapy

Appendix C: Invitation to Participate Sent by Email in Dutch and English



Department of
Occupational Therapy Education

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in Everyday Life*

Beste ergotherapeut,

Hoe maakt u klinische beslissingen? Welke bronnen gebruikt u om deze klinische beslissingen te maken? Hoe staat u tegenover het gebruik van onderzoeksresultaten in de praktijk? Welke barrières ervaart u met betrekking tot het gebruiken van bepaalde bronnen voor het maken van klinische beslissingen? Als Nederlandse ergotherapeut studerend in het buitenland ben ik geïnteresseerd geraakt in hoe ergotherapeuten in Nederland deze professionele kwesties benaderen. Ik werk aan een studie die deze kwesties onderzoekt als een onderdeel van mijn vervolgopleiding ergotherapie. De resultaten van dit onderzoek zullen helpen om een beter inzicht te krijgen in hoe Nederlandse ergotherapeuten, zoals u, klinische beslissingen nemen. Daarnaast zullen de resultaten helpen om inzichtelijk te maken welke behoeftes ergotherapeuten hebben met betrekking tot het maken van deze klinische beslissingen. Onder klinische beslissingen wordt in dit geval verstaan het maken van beslissingen met betrekking tot de behandeling van cliënten.

Uw naam is willekeurig geselecteerd uit het ledenbestand van Ergotherapie Nederland (EN, voorheen Nederlandse Vereniging voor Ergotherapie). Ik zou het zeer op prijs stellen als u bereid zou zijn om een korte vragenlijst in te vullen op Internet. Ik ben hierbij geïnteresseerd in uw oprechte mening. Persoonlijke informatie zal vertrouwelijk behandeld worden en niet worden weergegeven in rapporten of artikelen. Mochten er vragen zijn die u niet wilt beantwoorden dan kunt u deze vragen open laten.

Het zal ongeveer 10 tot 15 minuten van uw tijd nemen om deze vragenlijst in te vullen. Gebruik de volgende link om de vragenlijst te openen: [URL link](#). Mocht dit niet werken dan kunt u deze link kopiëren en in de adresbalk van uw internetbrowser plakken. Deze link zal actief blijven tot en met (datum tot wanneer link actief zal blijven). Ik zou het op prijs stellen als u daarom de vragenlijst voor deze datum kan invullen.

Bij voorbaat dank voor uw medewerking aan dit onderzoek! De informatie die u geeft zal bijdragen aan de ontwikkeling van ons beroep. Mocht u een samenvatting willen ontvangen van de resultaten van dit onderzoek stuur mij dan een email via cdopp@kumc.edu en ik zal u deze toesturen na het afronden van het onderzoek. Als u nog vragen heeft met betrekking tot dit onderzoek of het meedoen aan dit onderzoek dan kunt u mij ook een email sturen, ik zal deze dan zo spoedig mogelijk beantwoorden.

Met vriendelijke groeten,

Carola M.E. Döpp, BSc.
Ergotherapeut



Department of
Occupational Therapy Education

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Date

Dear occupational therapist,

How do you make your clinical decisions? Which sources do you use to make these clinical decisions? How do you feel about using research in your practice and what barriers do you experience related to sources used for clinical decision-making? As a Dutch occupational therapist studying abroad, I have become interested in how occupational therapists in The Netherlands approach these professional issues. I am conducting a study to examine these issues as part of my Masters' degree in occupational therapy. The results of this study will aid understanding of how Dutch occupational therapists - like you - make clinical decisions, and about your needs related to clinical decision making.

Your name was selected randomly from the membership list of the Dutch association of occupational therapy. I would be highly appreciative if you to are willing to complete my brief on-line questionnaire. I am interested in your honest opinions. Personal information will be treated confidentially and no personal information will be exposed in reports or articles. If there are any questions you do not want to answer you may leave these questions blank.

This questionnaire will take 10 to 15 minutes of your time to complete. You may access the questionnaire using the link provided here ([URL link](#)). This link will remain active until (date until link would be active). I would appreciate having you complete the questionnaire by that date.

Thank you very much in advance for your cooperation! The information you provide will provide insight into how clinical decisions are made by Dutch occupational therapists, and will contribute to development of our profession in The Netherlands. If you wish to receive a summary of the study results please send an e-mail to cdopp@kumc.edu and I will provide a summary to you once the study is completed. If you have any questions with regard to the study, or your participation in the study, please send me an email and I will be glad to answer your questions.

Sincerely,

Carola M.E. Döpp, BSc
Occupational Therapist

Appendix D: Invitation to Participate Sent by Postal Services in Dutch and
English



Department of
Occupational Therapy Education

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in Everyday Life*

Naam
Adres
Postcode, plaats
Land

Datum

Beste (naam ergotherapeut),

Hoe maakt u klinische beslissingen? Welke bronnen gebruik u om deze klinische beslissingen te maken? Hoe staat u tegenover het gebruik van onderzoeksresultaten in de praktijk en welke barrières ervaart u met betrekking tot bronnen die gebruikt kunnen worden voor het maken van klinische beslissingen? Als Nederlandse ergotherapeut studerend in het buitenland ben ik geïnteresseerd geraakt in hoe ergotherapeuten in Nederland deze professionele kwesties benaderen. Ik werk aan een studie die deze kwesties onderzoekt als een onderdeel van mijn vervolgopleiding ergotherapie. De resultaten van dit onderzoek zullen helpen om een beter inzicht te krijgen in hoe Nederlandse ergotherapeuten, zoals u, klinische beslissingen nemen. Daarnaast zullen de resultaten helpen om inzichtelijk te maken welke behoeftes ergotherapeuten hebben met betrekking tot het maken van deze klinische beslissingen. Onder klinische beslissingen wordt in dit geval verstaan het maken van beslissingen met betrekking tot de behandeling van cliënten.

Uw naam is willekeurig geselecteerd uit het ledenbestand van de Ergotherapie Nederland (EN, voorheen Nederlandse Vereniging voor Ergotherapie). Ik zou het zeer op prijs stellen als u bereid zou zijn om een meegestuurde vragenlijst in te vullen. Ik ben hierbij geïnteresseerd in uw oprechte mening. Persoonlijke informatie zal vertrouwelijk behandeld worden en niet worden weergegeven in rapporten of artikelen. Mochten er vragen zijn die u niet wilt beantwoorden dan kunt u deze vragen open laten.

Het zal ongeveer 10 tot 15 minuten van uw tijd nemen om deze vragenlijst in te vullen. Wanneer u de vragenlijst heeft ingevuld dan kunt u deze terug sturen in de bijgevoegde gefrankeerde envelop. Ik zou het op prijs stellen als u de vragenlijst voor vrijdag 20 juni 2008 zou willen invullen en retourneren.

Bij voorbaat dank voor uw medewerking aan dit onderzoek! De informatie die u geeft zal bijdragen aan de ontwikkeling van ons beroep. Mocht u een samenvatting willen ontvangen van de resultaten van dit onderzoek stuur mij dan een email via cdopp@kumc.edu en ik zal u deze sturen na het afronden van het onderzoek. Als u nog vragen heeft met betrekking tot dit onderzoek of het meedoen aan dit onderzoek dan kunt u mij ook een email sturen. Ik zal deze dan zo spoedig mogelijk beantwoorden.

Met vriendelijke groeten,

Carola M.E. Döpp, B.Sc.
Ergotherapeut

3033 Robinson . Mail Stop 2003 . 3901 Rainbow Boulevard . Kansas City, KS USA 66160-7602
voice: 913-588-7195 • fax 913-588-4568 • web: <http://www.ot.kumc.edu/> • email: cdopp@kumc.edu



Department of
Occupational Therapy Education

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Name
Address
Postal code/ city
Country

Date

Dear (name occupational therapist),

How do you make your clinical decisions? Which sources do you use to make these clinical decisions? How do you feel about using research in your practice and what barriers do you experience related to sources used for clinical decision-making? As a Dutch occupational therapist studying abroad, I have become interested in how occupational therapists in The Netherlands approach these professional issues. I am conducting a study to examine these issues as part of my Masters' degree in occupational therapy. The results of this study will aid understanding of how Dutch occupational therapists - like you - make clinical decisions, and about your needs related to clinical decision making.

Your name was selected randomly from the membership list of the Dutch association of occupational therapy. I would be highly appreciative if you to are willing to complete the enclosed questionnaire. I am interested in your honest opinions. Personal information will be treated confidentially and no personal information will be exposed in reports or articles. If there are any questions you do not want to answer you may leave these questions blank.

This questionnaire will take 10 to 15 minutes of your time to complete. After completing the questionnaire you can return it by using the enclosed franked envelope. I would appreciate it if you could return the completed questionnaire by Friday June 20th 2008.

Thank you very much in advance for your cooperation! The information you provide will provide insight into how clinical decisions are made by Dutch occupational therapists, and will contribute to development of our profession in The Netherlands. If you wish to receive a summary of the study results please send an e-mail to cdopp@kumc.edu and I will provide a summary to you once the study is completed. If you have any questions with regard to the study, or your participation in the study, please send me an email and I will be glad to answer your questions.

Sincerely,

Carola M.E. Döpp, BSc
Occupational Therapist

Appendix E: First Reminder Mailing in Dutch and English



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Beste ergotherapeut,

Twee weken geleden heb ik u een verzoek gestuurd om een internetenquête in te vullen waarin u gevraagd werd naar de manier waarop u klinische beslissingen neemt en welke behoeftes u hebt met betrekking tot het maken van klinische beslissingen. Volgens mijn gegevens is deze nog niet geretourneerd.

Ik stuur u deze tweede email om te benadrukken dat uw enquête zeer belangrijk is voor het verkrijgen van correcte onderzoeksresultaten. Ook al is deze enquête naar meerdere ergotherapeuten verstuurd, de resultaten van het onderzoek zullen alleen representatief zijn wanneer een hoog percentage van de aangeschreven ergotherapeuten reageert op de enquête.

Mocht u de enquête hebben ontvangen en niet tot de doelgroep van het onderzoek behoren, dan zou het waarderen wanneer u de eerste vraag met “nee” beantwoordt en de enquête vervolgens verstuurt. Ik zal u dan verwijderen uit de lijst van ergotherapeuten die willekeurig geselecteerd zijn voor dit onderzoek en u zal dan verder geen bericht meer ontvangen met betrekking tot dit onderzoek.

Ik hoop dat u de enquête alsnog zou willen invullen en retourneren. U kunt de volgende link gebruiken om toegang te verkrijgen tot de enquête: [URL link](#). Deze link zal actief blijven tot (datum tot wanneer link actief blijft). Persoonlijke informatie zal vertrouwelijk behandeld worden en niet worden weergegeven in rapporten of artikelen.

Bij voorbaat dank voor uw medewerking aan dit onderzoek! Mocht u een samenvatting willen ontvangen van de resultaten stuur mij dan een email via cdopp@kumc.edu en ik zal u deze toesturen na het afronden van het onderzoek. Ook als u vragen heeft met betrekking tot dit onderzoek of het meedoen hieraan dan kunt u mij een email sturen. Ik zal deze dan zo spoedig mogelijk beantwoorden.

Met vriendelijke groeten,

Carola M.E. Döpp, B.Sc.
Ergotherapeut



Department of
Occupational Therapy Education

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Dear Occupational Therapist,

Two weeks ago I sent a request to fill out an online questionnaire in which you were asked about the way you make clinical decisions and which needs you have with regards to making clinical decisions. To the best of my knowledge, it has not yet been returned.

I sent you this second email to emphasize that your questionnaire is very important in order to obtain accurate results. Although we have sent this questionnaire to more occupational therapists, the results of this study can only be representative when a large percentage of the selected therapists respond.

If you received the questionnaire and you have concluded that you are not eligible for this study, I would appreciate it when you would answer the first question with “no” and submit the questionnaire. After doing this I will remove your name from the list of occupational therapists who were selected at random for this study and you will no longer receive messages related to this study.

I hope you are willing to fill out and submit the questionnaire. You can use the following link to access the questionnaire: [URL link](#). This link will remain active until (date until which link is active). Personal information will be treated in a confidential manner and will not be displayed in reports or articles.

Thank you very much in advance for your cooperation! If you wish to receive a summary of the study results please send an e-mail to cdopp@kumc.edu and I will provide you with one once the study is completed. If you have any questions with regard to the study, or your participation in it, please send me an email. I will answer you as soon as possible.

Sincerely,

Carola M.E. Döpp, B.Sc.
Occupational Therapist

Appendix F: Second Reminder Mailing in Dutch and English



Department of
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Beste ergotherapeut,

Gedurende de afgelopen maand heeft u tweemaal een verzoek ontvangen om een enquête in te vullen met betrekking tot de manier waarop ergotherapeuten klinische beslissingen nemen.

Het doel van dit onderzoek is om inzicht te krijgen in de manier waarop ergotherapeuten klinische beslissingen nemen en welke bronnen zij hiervoor gebruiken. Een tweede doel is om inzicht te verkrijgen in welke behoeftes ergotherapeuten hebben met betrekking tot het maken van klinische beslissingen. Deze informatie zal bijdragen aan de ontwikkeling van ons beroep.

De sluitingsdatum voor het invullen en versturen van de enquête komt dichterbij. Ik stuur u deze laatste email met het verzoek om alsnog de enquête in te vullen omdat u een andere mening kan hebben dan andere ergotherapeuten die al gereageerd hebben. Het is daarom belangrijk voor het verkrijgen van correcte resultaten dat zoveel mogelijk aangeschreven ergotherapeuten reageren.

Uw medewerking aan dit onderzoek is vrijwillig en het is uw keus om te reageren of niet. Mocht u de enquête hebben ontvangen en niet tot de doelgroep van het onderzoek behoren, dan kunt u de eerste vraag met "nee" beantwoorden. Uw naam zal dan verwijderd worden uit de lijst van ergotherapeuten die willekeurig geselecteerd zijn voor dit onderzoek.

Ik hoop dat u de enquête alsnog zou willen invullen en retourneren. U kunt de volgende link gebruiken om toegang te verkrijgen tot de enquête: [URL link](#). Deze link zal actief blijven tot (datum tot welke link actief is). Persoonlijke informatie zal vertrouwelijk behandeld worden en niet worden weergegeven in rapporten of artikelen.

Als laatste zou ik u willen bedanken voor het overwegen om aan dit onderzoek mee te werken. Mocht u een samenvatting willen ontvangen van de resultaten stuur mij dan een email via cdopp@kumc.edu en ik zal u deze toesturen na het afronden van het onderzoek. Als u vragen heeft met betrekking tot dit onderzoek of het meedoen aan dit onderzoek dan kunt u mij ook een email sturen. Ik zal deze dan zo spoedig mogelijk beantwoorden.

Met vriendelijke groeten,

Carola M.E. Döpp, B.Sc.
Ergotherapeut



Department of
Occupational Therapy Education

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Dear Occupational Therapist,

During the last month you have received two requests to fill out an online questionnaire with regards to the way occupational therapists make clinical decisions.

The purpose of this research study is to gain an understanding of how Dutch occupational therapists make clinical decisions, and about their needs related to clinical decision making. This information will attribute to the development of our profession.

The deadline for filling out the questionnaire is approaching. I am sending this last email to request your participation one last time because you might have other opinions than occupational therapists who already submitted the questionnaire. It is therefore important in order to get accurate results to get a response from as many occupational therapists as possible who were selected for this study.

If you received the questionnaire and you have concluded that you are not eligible for this study, I would appreciate it when you would answer the first question with “no” and submit the questionnaire. After doing this I will remove your name from the list of occupational therapists who were selected at random for this study.

I hope you are willing to fill out and submit the questionnaire. You can use the following link to access the questionnaire: [URL link](#). This link will remain active until (date until link is active). Personal information will be treated in a confidential manner and will not be displayed in reports or articles.

Thank you very much in advance for your cooperation! If you wish to receive a summary of the study results please send an e-mail to cdopp@kumc.edu and I will provide you with one once the study is completed. If you have any questions with regard to the study, or your participation in it, please send me an email. I will answer you as soon as possible.

Sincerely,

Carola M.E. Döpp, B.Sc.
Occupational Therapist

Appendix G: Comprehensive Literature Review

This research study will investigate evidence-based practice among Dutch OTs. Although several studies have been conducted to evaluate the use of evidence-based practice in other countries, only one study has been conducted among OTs in the Netherlands. Since evidence-based practice plays an important role in determining the quality of clinical practice, it is important to be aware of the extent to which Dutch OTs utilize principles of evidence-based practice. By exploring attitudes towards evidence-based practice, the barriers encountered, the evidence sources used, and the implementation of evidence-based practice, knowledge helpful to development of evidence-based practice will be obtained, and the quality of the occupational therapy profession in the Netherlands can be enhanced using this information.

Evidence-Based Practice and the Netherlands

Research about evidence-based practice in a profession, including how it is implemented and the extent to which it is incorporated, is considered as very important by the Dutch government. This is not reflected in the number of studies conducted about evidence-based practice in the occupational therapy profession, since only one Dutch study has addressed evidence-based practice. In a progress report from 1997, the Minister of Health, Welfare, and Sports stated that medical practice should be based more on scientific underpinnings than upon tradition. She acknowledged that tradition, feeling, and personal conviction have a place in professional healthcare practices. This statement is in agreement with the definition of

evidence-based practice that is used for this study and is stated later in this proposal. This view agrees with the definition of evidence-based practice used in this present proposal which is that evidence-based practice means making clinical decisions based on individual clinical expertise, the best available evidence and the values and preferences of the individual client.

Furthermore, the Health Council of The Netherlands states that patients and regulatory authorities want more transparency in clinical decision making (Health Council of the Netherlands, 2000). Medical practitioners in The Netherlands therefore have a greater need for support of evidence in the process of clinical decision making than before (Health Council of the Netherlands, 2000). Evidence-based practice that improves the quality of care is important for the therapist because clients will insist on receiving care based on the most recent evidence. Clients can be expected to become more informed about methods of care due to the ease of access to electronic media and the internet, and these informed consumers will expect health care professionals to be able to justify health care plans (Kuiper, Verhoef, de Louw, & Cox, 2004).

The Dutch Association of Occupational Therapy (Ergotherapie Nederland; EN) emphasizes four important areas in occupational therapy practice: practicing in the clients' environment, working client-centered, working together, and evidence-based practice. Evidence-based practice clearly is seen as being significant to the profession (Van Bodegom, Van Der Biezen, Hoekert, & Bulthuis, 2007). Since these areas are only described in a recent report there is no example about activities

undertaken by the EN to increase or stimulate evidence-based practice. They do have services that are geared toward increasing the quality of the occupational therapy profession in The Netherlands. A register for OTs started in June 2000. Although it is not a requirement for OTs to register, registration is encouraged by the EN. A new OT can choose to enroll in the initial register upon graduation from OT school. An OT may apply for enrollment into the quality register after five years after enrolling in the initial register. Requirements for this quality register relate to work experience and professional development e.g., post-graduate courses, workshops, mentor interns (Nederlandse Vereniging voor Ergotherapie, 2007). Although this is a feasible way of assuring a profession's quality, it does not necessarily enhance or encourage practicing according to evidence-based practice principles.

Only a single study (De Haas, Heine, Karsten, Tigchelaar, & Van Uden, 2006) has been conducted among Dutch OTs to address use of evidence-based practice principles, focusing on implementation of evidence-based guidelines for occupational therapy in post-stroke rehabilitation. One year after the appearance of the guidelines, the authors reported that progress had been made with the implementation of the guidelines, but that several domains discussed in the guidelines required improvement with regard to implementation. The authors stated that an increased awareness with regard to changing the work method and insight in the benefits of the change are essential to promoting implementation (De Haas, et al., 2006).

Previous Studies to Evidence-Based Practice

In spite of the emphasis placed on evidence-based practices in The Netherlands, a study addressing the same aspects of evidence-based practice among OTs in The Netherlands as the study proposed in this document has not been conducted. Studies addressing similar aspects of evidence-based practice have been done in other countries such as the United States, Canada, Australia, and England among OTs and other professionals such as nurses.

The perception of evidence-based practice among OTs has been addressed by several studies. Curtin and Jaramazovic (2001) found that over 90% of their respondents in England perceived evidence-based practice as a good thing and a professional goal. These authors also reported that English OTs believed clinical experience to be more important than research. Philibert et al. (2003) reported similar findings in a study of members of the American Association of Occupational Therapy (AOTA) from five different states. These authors reported that most of their respondents agreed that research is useful to practitioners ($M=4.60$ $SD=1.11$ on a Likert-type scale from 1 to 6). These respondents did not agree, however, that therapists should use only those practices supported by research evidence; they tended to be neutral or disagree with this statement ($M=3.40$; $SD=1.22$). Dysart and Tomlin (2002) surveyed another sample of AOTA members and found that 46% of their respondents valued clinical experience over research and theory. By contrast, a recent study also surveying AOTA members showed that 98% of the respondents

agreed or somewhat agreed that research helps to build a scientific knowledge basis (Cameron, et al., 2005).

This apparent division of viewpoints may be resolved by considering findings of a study of elite Canadian OTs (Craik & Rappolt, 2006). These participants valued clinical experience because it helped them to understand the research literature, and to determine if the research evidence was applicable to individual clients. Supporting this interpretation of the interrelation of evidence and experience, a study that included OTs from seven different regions in England found that more than 90% of the respondents felt research is needed to continually improve practice, that clinical practice should be based on research, and that research helps to build a scientific knowledge base for practice (Humphris et al. 2000).

In summary, the studies conducted among OTs from England, the United States, and Canada all found that evidence-based practice was viewed as good and useful. Clinical experience also was highly valued by OTs from these different countries. Clinical experience can be complementary to the use of research evidence, since evidence-based practice refers to the integration of research evidence, clinical experience and input from the client (Kuiper, et al., 2004; Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000).

In a study of Danish cardiac nurses, the participating nurses generally had a positive attitude towards evidence-based practice (Egerod & Hansen, 2005). Nurses also valued personal experience highly valued in the clinical decision making process, with 82% of head nurses and 88% of bedside nurses sharing the opinion that

evidence-based practice is relevant to nursing (Egerod & Hansen, 2005; Thompson, et al., 2001). All head nurses and 83% of bedside nurses also believed that evidence-based practice promotes the profession of nursing.

Barriers to using evidence do exist, preventing OTs from using research evidence in combination with clinical experience and information from clients. The diffusion of innovations model (Rogers, 1995) suggests four different types of characteristics are important for adoption of change. These are characteristics of the organization (the work setting), characteristics of the adopter (in this case the OT), characteristics of the communication (accessibility and presentation of evidence), and characteristics of the innovation (the evidence). Barriers can be expected to occur that may influence any of these four characteristics.

A lack of time was reported by several studies, as being a major factor that prevented evidence-based practice among OTs in several different countries (Curtin & Jaramazovic, 2001; Dysart & Tomlin, 2002; Humphris, Littlejohns, Victor, O'Halloran, & Peacock, 2000; McCluskey, 2003; Pollock, Legg, Langhorne, & Sellars, 2000; Sweetland & Craik, 2001). The study by Dysart and Tomlin (2002) found that a lack of time was cited as a barrier more frequently by OTs working in nursing facilities and long term care facilities relative to those working in other settings. Although time available for pursuing evidence may be a major barrier, this factor alone does not prevent implementation of evidence-based practice. Other organizational factors that have been cited as contributing barriers include workload pressure (McCluskey, 2003), high staff turnover (Curtin & Jaramazovic, 2001;

Humphris, et al., 2000), and lack of appropriate resources (Curtin & Jaramazovic, 2001). Another major enabling factor for evidence-based practice is support from management or department (Curtin & Jaramazovic, 2001). Lysaght et al. (2001) found that activities supported by the workplace were performed more frequently, supports findings by Curtin and Jaramazovic (2001) and Rogers (1995). The latter study states that interpersonal channels (peers) have a great influence on an individual's decision to adopt or reject an innovation. A lack of time, a lack of support from colleagues or management, and a lack of authority to implement new ideas are barriers that also have been identified among nurses (Bryar, et al., 2003; Funk, Champagne, Wiese, & Tornquist, 1991; Oranta, Routasalo, & Hupli, 2002; Parahoo, 2000).

Barriers reported by several studies in Great Britain and Australia that concern characteristics of the OT include a lack of skills and training in critically appraising, or understanding, research evidence (Curtin & Jaramazovic, 2001; Humphris, et al., 2000; McCluskey, 2003; Pollock, et al., 2000; Sweetland & Craik, 2001; Upton & Upton, 2006). Half of the respondents in the study by McCluskey (2003) also reported a low level of skills in formulating a research question and skills needed to search databases. A similar outcome was reported in studies among nurses (Bryar, et al., 2003; Funk, et al., 1991; Oranta, et al., 2002; Parahoo, 2000). Furthermore, a study of AOTA members showed that these participants found it difficult to use electronic databases (Dysart & Tomlin, 2002) and to translate research findings to their individual clients (Dysart & Tomlin, 2002; Pollock, et al., 2000).

One survey question asked of Finnish nurses was ‘The research is published in a foreign language’ (Oranta, et al., 2002). This item was identified by the participating nurses as the single greatest barrier to implementing evidence-based practice in their settings. Furthermore, a study among Danish nurses also indicated that bedside nurses used evidence-based journals written in English least frequent as a source of knowledge (Egerod & Hansen, 2005). Other studies among nurses from non-English speaking countries found similar findings (Kajermo, Nordström, Krusebrant, & Björvell, 1998; Kuuppelomaki & Tuomi, 2003). Since most studies related to evidence-based practice among OTs have been conducted and reported in countries where English is the primary language, this language barriers was not previously identified. This is an important item to address in the proposed study, since the Dutch participants’ primary language is not English.

Difficulties in accessing certain evidence resources also were reported. First, a lack of convenient access to relevant information technology (Curtin & Jaramazovic, 2001) such as electronic databases (50% of the respondents) (Dysart & Tomlin, 2002) was reported. This lack of access results in OTs who never or rarely perform computerized searches of the literature (Rappolt & Tassone, 2002). Dysart and Tomlin (2002) reported high enrollment costs for continuing education as a barrier of accessibility. Other studies report a relatively high percentage of respondents that have convenient access to libraries (95%), librarians (85%), the Internet (53%) (Humphris, et al., 2000), research articles, and continuing education classes.

Most studies of barriers to evidence-based practice show that most barriers are related to characteristics of the work setting, the OT, and the accessibility and presentation of evidence. Other characteristics of the evidence itself also have been reported as being barriers. The most frequently reported of these sorts of barriers are that the research is not relevant to practice (Sweetland & Craik, 2001), that research evidence is seen as unclear and difficult to understand, that research conclusions do not translate into useful treatment plans for individual clients, and that research evidence shows conflicting conclusions (Dysart & Tomlin, 2002). These last three were identified as barriers by one third of the respondents in the study.

In conclusion, barriers described by studies from different countries are similar. Time available for pursuing research issues or information was found to be important in all studies. A lack of skill in appraising research evidence critically was determined to be an important barrier in Australia and Great Britain, but not in the United States. The study in Australia found that formulating a question and a lack of skills to search for evidence also were important, these were not described as important factors in Great Britain and the United States. Time was found to be important in all studies. The findings from these different countries imply that the nature of barriers to implementing evidence-based practice is quite similar in different countries, but that the relative importance of the barriers is different for OTs in different countries. Thus, it may be expected that the barriers experienced by Dutch OT are similar to those described by OTs in Australia, Great Britain, and the United States, but that relative importance of such barriers are different.

Several studies also addressed which sources of evidence are used by OTs to make clinical decisions. The sources that are most highly rated by respondents in several studies are continuing education (Dysart & Tomlin, 2002; Philibert, Snyder, Judd, & Windsor, 2003) such as workshops, conferences, seminars (Lysaght, Altschuld, Grant, & Henderson, 2001), and courses (Curtin & Jaramazovic, 2001). Lysaght et al. (2001) reported that workshops, conferences, and seminars were seen as more useful if it involved practical, hands-one, clinically relevant learning. Three studies also revealed high rates of OTs who consulted with a mentor or peer to solve problems and / or make clinical decisions (Curtin & Jaramazovic, 2001; Lysaght, et al., 2001; Philibert, et al., 2003). A study comparing professionals from fourteen different professions showed that both OTs and speech and language therapists were most likely to act on evidence provided by colleagues of the same profession. The mean of the scores of 86 OTs was a 4.37 on a 5-point scale (Upton & Upton, 2006). The number of participants reading journal articles differed greatly among several studies. A study among OTs from the South West and South East of England and the Channel Islands found that 93.8% of the respondents were reading journal articles (Curtin & Jaramazovic, 2001). It was not reported how frequently this percentage of participants read journal articles. Another study among a selection of members of the National Association of Neurological OTs in England stated that only 50% of the respondents used research papers occasionally, a little more than 30% used them monthly, and less than 10% used them daily (Sweetland & Craik, 2001). These

findings suggest the sources used in both Great Britain and the United States are quite similar.

The frequency of using resources was found to be associated with the years of experience (or research experience) (Philibert, et al., 2003), academic degree, and region of practice (Dysart & Tomlin, 2002), with a higher frequency of use among OTs having a higher academic degree, from metropolitan areas, and with more research experience (Dysart & Tomlin, 2002). By contrast, Cameron et al. (2005) found an inverse correlation between years of experience and the building of a scientific base. The longer a person practiced, the less likely this person was to build his or her intervention on a scientific basis. They also stated that the data of their sample suggested that the more educationally advanced practitioners are, less likely it is that they rely on a scientific basis for clinical interventions (Cameron, et al., 2005). As this study involved a relatively small sample (131 OTs) this correlation should be tested among other (larger) samples. Furthermore, the use of higher levels of evidence was associated with the time since qualification as an OT, with people qualified between 1 and 5 years using higher levels of evidence (Sweetland & Craik, 2001). This outcome may be attributable to the fact that evidence-based practice has only been a focus of interest in occupational therapy curricula for the last five to ten years. So, OTs who graduated within this range have probably more knowledge about evidence-based practice and might be better able to apply this principle to their practice.

Studies of sources of knowledge used for clinical decision making in the nursing profession indicate that textbooks (Egerod & Hansen, 2005; Thompson, et al., 2001) and human sources are the most used sources (Egerod & Hansen, 2005). As can be seen above this last source was also frequently used by OTs. Nurses revealed that they used human sources most frequent because they are very accessible (Thompson, et al., 2001). Although nursing and occupational therapy professions differ, studies of evidence-based practice in both professions have shown similar outcomes.

Different theories, frameworks, and strategies for evidence-based practice and research utilization have been developed for occupational therapy and other professions (Bennett & Bennett, 2000; Brown & Rodger, 1999; Craik & Rappolt, 2003; Kuiper, et al., 2004), but very little is known about how OTs currently implement evidence into their practice. Craik and Rappolt (2003) studied this issue, using a small sample of OTs who met very specific criteria and who were from a specific geographical area (11 elite OTs from the Greater Toronto area) the results do give an indication about how OTs might implement research evidence in practice. Participants stated that gathering valuable evidence related to the client and the treatment context was important in order to implementing evidence. The OTs found the Occupational Performance Process Model (OPPM) a very helpful guide to collect this data (Craik & Rappolt, 2003). Furthermore, clinical experience was perceived as a vital source of evidence for making clinical decisions and a condition essential to making research utilization possible (Craik & Rappolt, 2003, 2006). Case analyses, in

which the potential impact of the evidence is visualized on old cases, were found helpful to translate the research findings into practical information applicable to current clients. Besides these analyses the participants stated that discussions and consultations with peers made it easier to integrate evidence into practice.

According to the diffusion of innovations model (Rogers, 1995) certain conditions must exist before implementation of evidence (the innovation) can occur. The first stage of this model is the knowledge stage in which a person is exposed to the innovation and gains understanding about it. In the context of evidence-based practice this means that the OT must be aware of the existence of the evidence. The OT also must gain knowledge necessary to practice according to the evidence. This means that the OT must develop an understanding about the evidence-based practice process. He or she needs to be able to ask an answerable question, to find the best evidence to address the question, critically appraise the evidence, integrate the evidence with clinical expertise and knowledge about the client, and to evaluate the entire process (Sackett, et al., 2000). In the persuasion stage, the second stage, the OT needs to look actively for more information about the evidence. Based on this information and how the person receives it, a favorable or unfavorable attitude towards the innovation is formed (Rogers, 1995). In this second stage the OT will most likely base his or her attitude toward the evidence on the known advantages of the evidence, the compatibility of the evidence with their values, beliefs, and previous evidence, the difficulty of understanding and using the evidence, if the evidence is easy to try in practice, and if the effects the evidence can be observed (Rogers, 1995).

The decision stage is the stage in which the OT engages in activities to adopt or reject the found evidence. Only after these previous three stages can implementation occur in the implementation stage. This implementation is also based on the characteristics of the organization, the OT, the communication, and the evidence. Implementation of evidence into practice demands a behavior change in the OT. Because of this the three previous stages do not guarantee actual implementation. In this stage the OT will need more information about the evidence he/she wants to use in practice in order to be able to implement it.

Once the OT has found evidence for a particular situation, this information needs to be discussed with the clients and their family (Tickle-Degnen, 1998, 2000). In this way clients are able to make an informed decision about their treatment and take into account if the proposed assessment or intervention fits their values and preferences (Bennett & Bennett, 2000; Tickle-Degnen, 1998). Important in discussing the evidence with the client is that information is given concerning the clients' occupational status in relation to the quality of life, the quality and nature of the treatment or assessment proposed by the OT, and information about the probable outcomes. All this needs to be communicated in a way that is understandable for the client (Tickle-Degnen, 2000).

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Appendix H: Comparison on EBP between Countries and Professions

The study described in the main thesis document explored the attitudes of Dutch occupational therapists (OTs) regarding evidence-based practice (EBP), the sources of evidence used by these therapists, and the nature of barriers they encounter when EBP is employed. This appendix presents a comparison between results of that study and findings reported by prior studies of EBP among OTs in other countries, and a comparison with results of studies examining EBP in other health professions. Dutch OTs share common views with their international colleagues and experience many of the same barriers, but important differences also exist.

Evidence-Based Practice in Different Countries

A majority of respondents in studies conducted in the Netherlands, Australia, and the UK perceived EBP positively (Bennett, et al., 2003; Humphris, Littlejohns, Victor, O'Halloran, & Peacock, 2000). Although respondents perceived EBP as positive, our study and a UK study, also conducted among OTs, showed that a proportion of therapists thought that it was too difficult to implement EBP (Humphris, et al., 2000). This proportion, however, was much greater in our study. A possible explanation for this might be that a higher percentage of participants in the English study had a Master's degree compared to our study, where only 3% had obtained that degree. Bennett et al. (2003) found that those with higher qualifications were more confident in their skills for EBP.

Comparison between studies addressing the use of resources as a basis for clinical decisions illustrated similarities and differences between countries. All

studies addressing the use of resources, including the present study, found the use of colleagues as a source of evidence is considered very important by OTs, regardless of country (Bennett, et al., 2003; Curtin & Jaramazovic, 2001; Lysaght, Altschuld, Grant, & Henderson, 2001; Philibert, Snyder, Judd, & Windsor, 2003). In contrast with our study of Dutch OTs, OTs from the US and the UK tended to use research literature more frequently even though these studies were conducted several years ago (Dysart & Tomlin, 2002; Sweetland & Craik, 2001). This difference may be caused by the presence of a language barrier as reported in our present study, a discrepancy in the average educational level, a difference in capacity of the national occupational therapy associations, and/or a difference in healthcare systems between the US and the Netherlands. Additionally, all participants in our study had access to the Internet and websites were used frequently for clinical decisions. Studies conducted in Australia, the US, and the UK reported a lower proportion of therapists having access to or using the Internet as a resource (Curtin & Jaramazovic, 2001; Dysart & Tomlin, 2002; McCluskey, 2003). The period of time elapsing between our study and prior studies might have contributed to differences based on technological development and more ready access to that technology. This difference might, however, also be caused by a greater degree of Internet usage among the general population in the Netherlands compared to the US, the UK, or Australia (Miniwatts Marketing Group, 2000-2008).

Similarities and differences also can be found when comparing the barriers experienced by OTs practicing in different countries. A lack of time (Bennett, et al.,

2003; Curtin & Jaramazovic, 2001; Dysart & Tomlin, 2002; Humphris, et al., 2000; McCluskey, 2003; Philibert, et al., 2003; Sweetland & Craik, 2001), a lack of skills or confidence to search for evidence via the Internet (Bennett, et al., 2003; Dysart & Tomlin, 2002; McCluskey, 2003), a lack of understandability of research articles (Curtin & Jaramazovic, 2001; Dysart & Tomlin, 2002; Humphris, et al., 2000), and a lack of skills necessary to determine the quality of evidence or critically appraise evidence (McCluskey, 2003) are barriers shared by therapists from different countries. A finding unique to the present study was the positive influence of colleague and management support on the use of sources of evidence. Other studies examined relationships between barrier variables and demographic information only, or did not report on associations between variables at all.

Evidence-Based Practice in Different Professions

Research related to EBP also has been conducted among professionals from other healthcare disciplines, such as nurses and physical therapists. These studies suggest that a majority of nurses and physical therapists also hold positive attitudes toward the use of EBP (Egerod & Hansen, 2005; Jette, et al., 2003; Salbach, Jaglal, Korner-Bitensky, Rappolt, & Davis, 2007; Thiel & Ghosh, 2008; Upton & Upton, 2005), similar to the attitude of Dutch OTs reported by this present study as well as other (Curtin & Jaramazovic, 2001; Humphris, et al., 2000; Philibert, et al., 2003).

Similar to OTs participating in our study the most preferred source of information used by nurses were colleagues (Lathey & Hodge, 2001; McCaughan,

Thompson, Cullum, Sheldon, & Raynor, 2005; Secco, et al., 2006). Nurses reported they used non-computerized sources such as textbooks, personal references, and quick reference guides secondary to human sources (Lathey & Hodge, 2001; Secco, et al., 2006) and used computerized/Internet-based sources least frequently (McCaughan, et al., 2005). By contrast, Dutch OTs used Internet websites more frequent as a source of evidence for clinical decisions than did nurses. Information from electronic databases, however, was rarely used by Dutch OTs. Important is our finding that the Dutch OTs participating in our study reported using robust sources of evidence least frequently. Physical therapists used this source more often, with 70% of the respondents using professional literature to make clinical decisions two or more times per month (Jette, et al., 2003). Although several differences between the subjects studied may have contributed to this effect, a difference in the distributions of educational level is also likely to contribute greatly to this difference.

Barriers related to the implementation of EBP reported by the Dutch OTs are very similar to those experienced by nurses and physical therapists overall. A lack of time (Bryar, et al., 2003; Funk, Champagne, Wiese, & Tornquist, 1991a, 1991b; Jette, et al., 2003; Kuuppelomaki & Tuomi, 2003; Parahoo, 2000; Retsas & Nolan, 1999; Salbach, et al., 2007) and a lack of understanding statistical analysis (Bryar, et al., 2003; Kuuppelomaki & Tuomi, 2003; Parahoo, 2000; Salbach, et al., 2007) were barriers found among Dutch OTs, nurses, and physical therapists. In addition, evidence presented in a foreign language has been reported by nurses from other non-English speaking countries as a barrier to EBP (Egerod & Hansen, 2005; Kajermo,

Nordström, Krusebrant, & Björvell, 1998; Oranta, Routasalo, & Hupli, 2002). Physical therapists, like Dutch OTs, reported they experienced an inability to generalize findings to the treatment of patients (Jette, et al., 2003; Salbach, et al., 2007). Nurses identified the importance of the work environment as a facilitator to EBP (Funk, et al., 1991a; Oranta, et al., 2002; Parahoo, 2000). Differences in barriers were also found, with nurses reported not having enough authority to change patient care procedures (Funk, et al., 1991a, 1991b; Kuuppelomaki & Tuomi, 2003; Parahoo, 2000), while this was not reported as a major barrier by Dutch OTs. A lack of cooperation from physicians reported by nurses may underlie this difference (Kuuppelomaki & Tuomi, 2003; Oranta, et al., 2002; Parahoo, 2000).

Taken together, findings of our study and of other studies indicate that OTs from different countries as well as professionals from different healthcare professions hold a positive attitude toward EBP and use colleagues as a source of evidence most frequently. OTs from different countries used robust sources of evidence less than they used their colleagues as a source of evidence. The frequency robust resources were used, however, varied among different studies. Support for EBP in the workplace by management and colleagues increased use of multiple and /or robust sources of evidence according to the results of our study. OTs from the Netherlands and other countries, as well as a variety of other healthcare professionals identified a lack of time and lack of skills related to EBP. Differences among the predominating languages, education levels, and healthcare system may contribute to differences in how EBP occurs in different countries and professions.

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Appendix I: Implications for the Dutch Occupational Therapy Community

This appendix describes implications for the Dutch occupational therapy community emerging from findings of the study described in the main thesis document. That study explored the attitudes of Dutch occupational therapists (OTs) regarding implementation of evidence-based practice (EBP) in the Netherlands, the sources of evidence used by these therapists, and the nature of barriers they encounter when EBP is employed. These implications discussed in this appendix extend beyond a description of attitudes and barriers, and are described for different groups that can contribute to a more optimal implementation of EBP among OTs practicing in the Netherlands.

Implications for Practicing Occupational Therapists

Several findings suggest that a lack of skills needed to practice according the EBP principles is a limiting factor that should be addressed by OTs. More than half of the Dutch OTs taking part in this study thought that it takes too much effort to implement evidence in practice, or that it is too difficult to do this. If therapists were to enhance those skills related to EBP and become familiar with their application, OTs would become more confident in using EBP principles and the perceived effort needed to apply evidence in practice may decrease. This argument is supported by the findings of Bennett et al. (2003), who reported an association between having higher academic qualifications, or being trained in EBP, and the confidence of OTs in employing EBP skills.

The high rates of OTs in our sample reporting barriers related to skills suggest a majority of Dutch OTs may benefit from further education regarding availability of types of sources of evidence, how these sources may be accessed, how to search for information using traditional or electronic databases, how to evaluate the quality of gathered evidence, how to interpret statistical analysis, how to interpret the methods used in a study, and how to translate gathered evidence to treatments for individual clients. Dutch OTs also needed to use EBP principles in an efficient manner, as another important barrier was reported to be limited time to access and read sources of evidence. Information and skills related to EBP can be obtained in different ways. Advanced academic training, often a Master's degree provides an opportunity to gain more knowledge about EBP and may be geared toward research skills as a part of that knowledge. Other possibilities for acquiring advanced knowledge or skills related to EBP include attending EBP workshops and courses offered by different organizations such as Ergowijs and Ergologie (Ergowijs, 2008; Ergologie, 2007). Instructional texts about EBP also are available for OTs to familiarize themselves with EBP (Kuiper, Verhoef, de Louw, & Cox, 2004; Logister-Proost, 2007). Although OTs can be trained in the use of EBP principles, prerequisites for adopting EBP are that therapists are aware of the benefits of EBP, and that therapists are motivated to make use of recent evidence to support clinical decisions.

The Dutch OTs surveyed reported to use human sources most frequently when making clinical decisions. Although information gained through the experience of colleagues offers valuable insight, sole use of such sources when making clinical

decisions is not best practice. It is therefore more appropriate to use these insights in combination with more robust sources of evidence, such as research evidence published in peer-reviewed journals. The majority of the Dutch OTs surveyed, however, reported they seldom or never made use of journal articles or even abstracts obtained from electronic databases. As the majority of respondents did not report problems in accessing these sources, access alone is not likely to be the cause of this limited use. The preference to use less robust sources may stem from general acceptance of this approach, factors related to the workplace, and consumer acceptance of this approach.

A caution is that the Dutch OTs were not questioned whether they were able to access professional journals or publication databases from their work environment and during working hours. In this case a higher proportion of therapists might have lacked the time or resources in the workplace to access evidence. This interpretation suggests that improved outcomes may be achieved by increased management support and by therapists and managers addressing these workplace barriers.

An increased use of more robust sources of evidence will enhance the quality of occupational therapy services, and will benefit the quality of care delivered by the healthcare organization in general. Returning to the literature on a routine basis is another factor that facilitates a therapist's ability to keep track of the latest developments in their area of specialty and the profession in general. Attending postgraduate education or being trained in using EBP both are associated with the frequency literature searches are conducted and textbooks are used (Bennett, et al.,

2003). These observations suggest that instructions in how to gather, evaluate, and incorporate research findings into clinical practice are factors likely to increase the frequency more robust sources of evidence are used.

Implications for Employers

Training OTs in order to enhance their skills related to EBP is one approach to optimizing delivery of occupational therapy services. Eliminating barriers related to the work environment, however, also is a critical element in accomplishing this goal. These may include factors that limit therapists from pursuing training to acquire these skills, from accessing and reading sources needed for clinical decision making, or from implementing evidence in their clinical practice. The majority of Dutch OTs surveyed stated that their workplace supports implementation of evidence in practice, and that management and colleague support play major roles in the implementation of EBP. This support was associated with an increased perception of the therapist's ability to alter treatments through the use of evidence, and with an increased use of in-service education, abstracts from electronic databases, and professional articles in English when making clinical decisions.

Managers can promote improved delivery of occupational therapy services by providing OTs with the resources needed to work according to EBP principles. Provision of dedicated time to permit evaluation of the professional literature during working hours, and sufficient resources to do so (such as access to multiple databases, including those providing full text articles), would address several major barriers

reported by the Dutch OTs we surveyed. In particular, providing sufficient time to access and read professional literature would decrease the negative influence of one major barrier experienced by Dutch OTs. Another barrier to the implementation of EBP would be addressed if employers promoted continuing or advanced education opportunities related to EBP. Possession of the necessary EBP skills and receiving the necessary workplace support and resources contribute greatly to optimizing the quality of occupational therapy care. Employers may influence change by expecting treatment plans proposed in team meetings to be supported by evidence and that the support be documented. A consequence of this expectation, however, is that sufficient time during working hours then must be provided for OTs to access, read, and evaluate sources of evidence.

Another approach to encourage implementation of EBP in the workplace is establishing regular journal club meetings. These meetings could be organized according to discipline or specialty, or be multidisciplinary. These meetings create time to discuss the content and quality of research, or use of found evidence related to individual clients. Regular journal club meetings also may help to create an environment in which employees are expected to work according to EBP principles. The authors of an exploratory study, evaluating the use of journal clubs in England, reported that staff should be involved in the initial organization of a journal club to encourage participation and investment in the activity. Also, participation in a journal club could be used to negotiate time needed for OTs to access and read literature (Dingle & Hooper, 2000).

Our study among Dutch OTs found that new graduates use their colleagues more frequently as a resource for providing occupational therapy care relative to more experienced colleagues. This was despite less experienced therapists being more likely to experience fewer difficulties in determining the quality of evidence. One explanation of these conflicting findings may be related to the educational level and expectations from the workplaces of these new clinicians. New OTs, like newly graduated nurses as discussed by De Vos (2005) might possess the skills needed for EBP but become discouraged when they discover these skills are not used on a regular basis by colleagues working in their practice setting (De Vos, 2005). Furthermore, new employees seldom have the authority or the self-confidence to change established practices. Widespread acceptance and integration of EBP principles into clinical practice therefore seems unlikely solely based on new graduates entering the workforce (De Vos, 2005).

Active promotion of EBP in the workplace by administrators, managers, and colleagues and perhaps consumers is necessary to improve the transfer of EBP from the educational to the practice setting. A time that may be suitable to improve this transfer is when OTs mentor OT interns. Both individuals profit professionally from adopting an open-minded yet critical outlook regarding EBP, with the OT intern sharing expertise related to gathering and assessing research evidence, and the therapist helping translate this information into clinical practices.

Implications for the Educational System

Although the Dutch educational system recently incorporated the teaching of EBP throughout the entire degree program, the majority of working OTs in the Netherlands have not had the benefit of this education. Continuing education opportunities must be made readily available for this group of OTs. One approach is for OTs to return to formal education and obtain an advanced post-professional degree, such as the European Master of Science in Occupational Therapy¹, the only Master's degree in the Netherlands specific to occupational therapy. Although this is an efficient means to learn about EBP and the research process, this program is not easily accessible to working OTs, due to a limited annual enrollment, costs, travel requirements (students travel to multiple different countries to attend courses), and competition for admission (applicants are accepted from countries other than just the Netherlands). Although this program provides good education, as well as opportunities to meet colleagues from different countries and to establish stronger relations across the occupational therapy communities in Europe, a more accessible alternative is needed to be able to educate more Dutch OTs. An alternative for Dutch OTs is to pursue the Master's degree in Evidence-Based Practice², an advanced practice degree program offered to professionals from multiple disciplines. An added benefit of this program is the exposure and training with interdisciplinary colleagues.

Other continuing education opportunities are available and, for many working OTs, represent more feasible approaches to gain knowledge about EBP. These

¹ www.ot-euromaster.nl

² www.studeren.uva.nl/postinitieel/object.cfm/objectid=EE716EF0-1037-44D3-833EAF2E734B513B

opportunities include participating in short courses or workshops (Ergowijs, 2008; Ergologie, 2007). Based on our findings from Dutch OTs, these courses should focus on informing the course participants about the sources of evidence that are available, how these sources of evidence can be accessed, how to search for information using electronic databases, how to determine quality of evidence found, how to interpret the statistical analyses and methodology presented in research articles, how to translate evidence to treatment of an individual client, and how to do all of these activities in an efficient and effective manner.

The effectiveness of different strategies aimed at the implementation of EBP has been subject of multiple research investigations. A pre-post study among OTs evaluating the effect of a two-day EBP workshop measured a significant increase in knowledge about EBP, an increase in positive attitude toward EBP, and increased confidence in searching and appraising evidence (McCluskey & Lovarini, 2005). However, no significant change in behaviors related to implementing EBP in practice was found. A lack of time to pursue these activities may have been a limiting factor in this study, as 88% of the participants still indicated time constraints as a barrier upon follow-up at 8 months (McCluskey & Lovarini, 2005). A randomized controlled trial conducted among health care professionals from the UK (physicians, professions allied to medicine, and healthcare managers/administrators) evaluated the effects of a half-day workshop on critical appraisal and reported a similar lack of behavioral or practical changes related to EBP (Taylor, Reeves, Ewings, & Taylor, 2004). The only positive effects of participating in the workshop were a statistically significant increase in

overall knowledge related to EBP, a trend toward increased critical appraisal skills of systematic reviews, and an increased use of robust sources of evidence of which only use of the Cochrane Library increased significantly (Taylor, et al., 2004). In both studies, the brief duration of the workshops may account for the marginal changes reported. This interpretation suggests that more time should be invested in teaching OTs how to use EBP, possibly spread out over several sessions. This may be achieved by providing a series of workshops scheduled to allow time between each workshop for implementing EBP principles in practice settings, followed by discussion and reflection on the experience at the subsequent workshop session. The effectiveness of the manner in which novel information is presented may also play a role. Bero et al. (1998) published an overview summarizing a series of 18 systematic reviews, and stated that passive dissemination of information only leads to small change in practice. These authors also indicate that a multifaceted approach, consisting of at least two different types of strategies, is more effective than when only one type of strategy is used (Bero, et al., 1998). A multifaceted approach in educating OTs how to work according to EBP may be implemented by using instructional coaches in addition to workshops or courses. Instructional coaches provide on-site professional development by building a partnership with a professional (in this case the occupational therapist). Within this partnership the coach helps the professional to incorporate research-based practices by using their communication skills and their knowledge of evidence-based practices (Knight, 2009). Another educational approach is to make use of web-based technologies to

provide continuing education through workshops and training courses offered in an online format. A recent meta-analysis demonstrated that providing a web-based intervention is better than not providing any intervention at all. No convincing evidence exists, however, that demonstrates web-based methods are either more or less effective than traditional methods (Cook, et al., 2008). In conclusion, the findings related to the provision of continuing education suggest that the education of OTs also should be based on current best evidence, and incorporate techniques that facilitate use of EBP.

The educational system also can ease the transition from educational to practice settings, beginning at the internship stage. Currently, OT mentors can attend a course that provides information about mentoring OT students and what is expected of these students. Stated this way, it is presumed that only the intern learns from the mentoring relationship. To establish a mentoring relationship beneficial for both the OT and the student, EBP information may be added to mentoring courses or an additional course focused on EBP might even be developed. Kuiper et al. (2004) stated that OT students are not likely to induce change in clinical practice, because the influence of the internship environment and workplace culture on the OT student is much greater (Kuiper, et al., 2004). The availability of a course focused on EBP for mentors would allow mentoring OTs to assist the OT student in learning to translate evidence to clinical practice, and may stimulate mentoring OTs to learn about current EBP principles and techniques from the student.

Because more robust sources of evidence seem to be used more frequently by OTs in the US and the UK, internships in these countries may also be beneficial for Dutch OT students. The perspectives provided by these international environments may provide students with examples of how EBP may be implemented, as well as role models and mentors having experience using EBP principles.

Implications for Researchers

More than half (56%) of the Dutch OTs surveyed indicated they thought research was not written in a way easy to understand. This view was associated with a perceived inability to determine the quality of evidence. Although important that OTs increase these skills, researchers contribute to this barrier by the way in which research findings often are reported. The language and format of research articles seem focused on communication with other researchers, but hinder easy interpretation by therapists or other non-researchers. A strategy to resolve this issue is to include a section in each article discussing the clinical application of the research findings. In addition, research may need to be disseminated more broadly, beyond publishing in peer-reviewed journals alone. While peer-review is a necessary first step, conveying the findings to the clinical community by participating in continuing education, or speaking at conferences also are important steps to establish widespread adoption of evidence.

A language barrier prevented many Dutch OTs from using articles reporting research results in English. Most occupational therapy studies are reported in English,

but it is important for this information to reach Dutch OTs. This need is addressed to a degree by Critically Appraised Papers (CAP) or Critically Appraised Topics (CAT). These CAPs and CATs present Dutch-language summaries of (mostly) foreign-language research reports, which allow Dutch OTs to be informed about the literature. Although CAPs and CATs may be sufficient to allow readers to be informed about a topic, more detail as provided in the original papers is needed to implement an intervention thoughtfully in practice. A solution may be for the professional organization or interest groups to translate full reports and make these available to Dutch OTs.

Implications for the Professional Organization

The Dutch Occupational Therapy Association (Ergotherapie Nederland; EN) plays a role in encouraging the implementation of EBP in the Netherlands. The facilitation of EBP requires that the professional organization develops and promotes a clear, positive statement regarding EBP (Grol & Wensing, 2001) to convey the importance of this clinical aspect to the members of the organization. Even though the EN has stated that knowledge should be created, shared, and made accessible in order to strengthen the occupational therapy profession (Van Bodegom, Bulthuis, Coops, Kuiper, & Van Os van den Abeelen, 2008), our study indicated many OTs (between 37% and 53% depending on the source) do not use robust sources of evidence in their clinical practice. The EN is creating an online learning environment to support knowledge development and transfer. An important element that could be supported

through this online environment is easy access to higher levels of evidence, although this feature was not addressed specifically. To make high level sources more accessible to Dutch OTs, the professional organization could choose to provide members with access to full text articles by subscribing to evidence databases (Kuiper, et al., 2004). This feature would be beneficial for Dutch OTs, especially for those working in organizations that do not or cannot provide this access. The EN website does provide information about where to access higher-level evidence, but a more proactive approach to disseminating this information may prove beneficial. Research updates, links to internet resources, or periodic reviews of recent findings could be provided as a service to EN members.

The learning platform now being developed by the EN will include education on EBP as is stated on their website. Not only should information be made available regarding workshops and courses sponsored by EN, but EN members would benefit from a more complete overview of all continuing education opportunities offered through other organizations and agencies. A centralized listing of these opportunities would help Dutch OTs make informed decisions regarding where and how they would like to enhance their professional skills.

Both the EN and other healthcare organizations can seek novel opportunities for continuing education related to integration of research and practice, such as actively promoting and facilitating (regional) journal clubs (Kuiper, et al., 2004) or by providing access to check lists or templates that assist OTs in determining the quality of research or other evidence. The organization of a national conference is another

opportunity to facilitate interactions among researchers and practitioners, and thus facilitate translation of research findings into practice (Grol & Wensing, 2001). The EN is intending to organize a national occupational therapy conference to be held in alternate years (Van Bodegom, et al., 2008). Finally, our results showed that employers of OTs have a major influence on the implementation of EBP. In an effort to decrease barriers that occur in the workplace, the EN can function as a facilitator for OTs and employers by discussing workplace barriers experienced by OTs with employers or representatives of different organizations.

Implications for Occupational Therapy Consumers

Consumers of occupational therapy must also play a role in the adoption of EBP. Not only is practicing according to the most recent and robust evidence important, but equally important is communicating about the evidence forming the basis for clinical decisions with the client. Information relevant to the client's situation should be communicated at a level that is understandable (Tickle-Degnen, 2000) in order for the client to make an informed decision about the proposed occupational therapy intervention. This is an essential element of EBP that makes the EBP process client-centered.

Encouraging clients to ask questions about the proposed interventions, treatments used, and advice given is beneficial for the clients, who will become better informed through this process. The process also is beneficial to the OT, who will be challenged both to pursue evidence to support their clinical practice and to understand

the found evidence so they can convey it to the client. An anecdote reported by Logister-Proost (2007) illustrated one approach to initiating this mutual beneficial process. Realizing that a proactive approach was needed for implementing EBP on a regular basis an insightful OT created a poster placed on the entrance of the OT clinic. The poster stated “Your occupational therapist works according to the most recent scientific evidence. Ask your occupational therapist about the effectiveness of your occupational therapy treatment!” (Logister-Proost, 2007).

The implications discussed in this report suggest that a variety of barriers experienced by Dutch OTs remain to be addressed in order to facilitate optimal implementation of EBP. This goal will, in turn, lead to realizing an optimal quality of OT services in the Netherlands. OTs, employers, researchers, educators, and professional organizations all must consider how they may alter existing practices, expectations, and culture in order to contribute to reaching this common goal.

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Appendix J: Codebook

Below the abbreviated names and the specific variable they represent are displayed. Also the way they were coded in the data file is displayed and explained below.

QFILTER

Are you currently working as an occupational therapist in the Netherlands and a member of the Dutch Association of Occupational Therapy (EN)?

1 = Yes

2 = No

SURVEYTYPE

1 = Internet survey

2 = Paper survey

RESPONDENTTYPE

1 = Early respondent

2 = Late respondent

SECTION A

EXP

Frequency the occupational therapist (OT) uses experience to guide clinical decisions.

INT

Frequency the OT uses intuition to guide clinical decisions.

CLIENT

Frequency the OT uses information given by the client to guide clinical decisions.

CLIENTFAM

Frequency the OT uses information given by family and friends of the client to guide clinical decisions.

OTCOLL

Frequency the OT uses information given by OT colleagues to guide clinical decisions.

NONOTCOLL

Frequency the OT uses information given by non-OT colleagues to guide clinical decisions.

OTINT

Frequency the OT uses information given by an occupational therapy intern to guide clinical decisions.

TEXTB

Frequency the OT uses information from textbooks to guide clinical decisions.

OTGUID

Frequency the OT uses occupational therapy guidelines to guide clinical decisions.

GUID

Frequency the OT uses other guidelines to guide clinical decisions.

CONF

Frequency the OT uses information gained at conferences to guide clinical decisions.

WSHOP

Frequency the OT uses information gained at workshops to guide clinical decisions.

INSED

Frequency the OT uses information gained at in-service education to guide clinical decisions.

POSTGRADED

Frequency the OT uses information gained at post graduate education to guide clinical decisions.

INTWEBS

Frequency the OT uses information gained from internet websites to guide clinical decisions.

ABSELECDATAB

Frequency the OT uses abstracts from electronic databases to guide clinical decisions.

ARTENJOURN

Frequency the OT uses articles from the EN journal to guide clinical decisions.

ARTDUTCH

Frequency the OT uses articles from other professional journals in Dutch to guide clinical decisions.

ARTENGL

Frequency the OT uses articles in English from professional journals to guide clinical decisions.

OTHER

Frequency the OT uses any other sources to guide clinical decisions.

Responses

The responses to all of the sources above are coded as follows:

90 = Not applicable

7 = Daily (every workday)

6 = Weekly

5 = Monthly

4 = Biannually

3 = Annually

2 = Never

1 = I have no access to this source

SECTION B

Below the abbreviations of the several statements are displayed as well as the actual statements they represent and the codes used for the answers. Statements that are followed by a minus sign when reverse coding applied.

ST_B_1

My employer provides enough time to attend continuing education courses.

ST_B_2

Enrollment costs prevent me from attending important continuing education courses.
(-)

ST_B_3

My employer provides enough time during working hours to access research evidence.

ST_B_4

My employer provides a sufficient amount of time to read professional literature.

ST_B_5

Management at my workplace supports the implementation of new treatment plans based on research information.

ST_B_6

My occupational therapy colleagues support the use of research evidence in practice.

ST_B_7

My colleagues from other professions support the use of research evidence in practice.

ST_B_8

I feel capable to make changes in therapeutic procedures at my workplace using research evidence.

ST_B_9

I am able to critically appraise research evidence.

ST_B_10

I find statistical analyses in research articles hard to understand. (-)

ST_B_11

I can use the Internet (e.g. search engines, websites) as a tool to search for research information without any difficulties.

ST_B_12

I can use electronic databases (e.g., OTseeker, DocOnline, pubmed, etc.) to search for research information without any difficulties.

ST_B_13

I have difficulties in searching the internet for evidence. (-)

ST_B_14

Formulating a clinical question to a clinical problem is difficult for me. (-)

ST_B_15

I find it difficult to use evidence written in a foreign language. (-)

ST_B_16

Research is written in a way that is easy to understand.

ST_B_17

It is hard to translate conclusions of research studies to the treatment of individual clients.(-)

ST_B_18

There is little research that applies to my practice. (-)

ST_B_19

I understand the statistical analyses in research articles.

ST_B_20

Research outcomes are relevant to my practice.

ST_B_21

I find it difficult to determine if evidence is of good quality. (-)

ST_B_22

I imagine applying evidence to past cases before applying it on a current client.

ST_B_23

Discussion with peers helps me to integrate research evidence into practice.

ST_B_24

I discuss the available evidence with the client or clients' support system as we make treatment decisions.

ST_B_25

The quality of all research evidence is good. (-)

ST_B_26

Occupational therapy interns help me with the implementation of research findings.

ST_B_27

I ask occupational therapy interns to find information needed to solve a clinical problem.

ST_B_28

Research is essential to the occupational therapy profession.

ST_B_29

Evidence-based practice has a negative effect on the profession. (-)

ST_B_30

Evidence-based practice is a temporary trend. (-)

ST_B_31

Research helps to build a scientific knowledge base for clinical practice.

ST_B_32

Research and clinical experience are equally important.

ST_B_33

Research evidence helps me to make clinical decisions.

ST_B_34

It is too difficult to use research evidence in clinical practice. (-)

ST_B_35

I would like to work according to the evidence-based practice principles.

ST_B_36

It takes too much effort to use evidence in clinical practice. (-)

ST_B_37

More occupational therapists should use evidence to guide their practice.

Responses

For statements in a positive direction (in favor of EBP):

5 = agree

4 = somewhat agree

3 = neither agree nor disagree

2 = somewhat disagree

1 = disagree

For statements in a negative direction (not in favor of EBP):

1 = agree

2 = somewhat agree

3 = neither agree nor disagree

4 = somewhat disagree

5 = disagree

The option not applicable will be coded as 90 in both cases.

The last statement below will be analyzed separately and not be part of the sections related to occupational therapists their attitude towards evidence-based practice. This is done because this statement cannot be coded using the same codes as the previous statements (it is not positively or negatively stated with regards to EBP).

ST_B_38

Clinical experience is more important to me than research in making clinical decisions.

5 = agree

4 = somewhat agree

3 = neither agree nor disagree

2 = somewhat disagree

1 = disagree

SECTION C

GEND

Gender

1 = Female

2 = Male

NR_OF_WORKPL

The number of settings the occupational therapist currently works. (No coding needed)

CURRWORKPL

Workplace the OT works currently:

1 = Nursing home

2 = Rehabilitation center

3 = Academic hospital

4 = Non-academic hospital

5 = Psychiatric organization

6 = Organization for mentally disabled

7 = Organization for visually disabled

8 = Private practice

9 = Special education

10 = Daycare/activity center

11 = Other

12 = Nursing home + Rehabilitation center

13 = Nursing home + Non-academic hospital

14 = Nursing home + Private practice

15 = Nursing home + Organization for mentally disabled

16 = Nursing home + Psychiatric organization

17 = Nursing home + Other

18 = Rehabilitation center + Special education

19 = Rehabilitation center + Private practice

20 = Rehabilitation center + Non-academic hospital

21 = Rehabilitation center + Other

22 = Organization for mentally disabled + Daycare/activity center

23 = Organization for mentally disabled + Private practice

24 = Psychiatric organization + Private practice

25 = Private practice + Other

26 = Non-academic hospital + Private practice

CURRGROUP

The group(s) the OT works with in his or her current workplace:

- 1 = Adults
- 2 = Children
- 3 = Both

NR_OF_SETTINGTYPES

The number of other setting types the OT has worked at during his/her entire career (excluding the one he or she works in currently). The answers are not coded.

PREVWORKPL

Other work settings where the OT has worked during their career:

- 1 = Nursing home
- 2 = Rehabilitation center
- 3 = Academic hospital
- 4 = Non-academic hospital
- 5 = Psychiatric organization
- 6 = Organization for people with a mental disability
- 7 = Organization for people with a visual disability
- 8 = Private practice
- 9 = Special education
- 10 = Daycare/activity center
- 11 = Other
- 12 = Nursing home + Rehabilitation center
- 13 = Nursing home + Non-academic hospital
- 14 = Nursing home + Private practice
- 15 = Nursing home + Organization for people with a mental disability
- 16 = Nursing home + Psychiatric organization
- 17 = Nursing home + Other
- 18 = Rehabilitation center + Special education
- 19 = Rehabilitation center + Private practice
- 20 = Rehabilitation center + Non-academic hospital
- 21 = Rehabilitation center + Other
- 22 = Organization for people with a mental disability + Daycare/activity center
- 23 = Organization for people with a mental disability + Private practice
- 24 = Psychiatric organization + Private practice
- 25 = Private practice + Other
- 26 = Non-academic hospital + Private practice
- 27 = Non-academic hospital + Other
- 28 = Rehabilitation center + Daycare/activity center
- 29 = Organization for people with a visual disability + Other
- 30 = Nursing home + Daycare/activity center + Non-academic hospital
- 31 = Nursing home + Psychiatric organization + Other
- 32 = Nursing home + Rehabilitation center + Psychiatric organization

- 33 = Nursing home + Rehabilitation center + Non-academic hospital
 34 = Nursing home + Psychiatric organization + Organization for people with a mental disability
 35 = Nursing home + Organization for people with a mental disability + Special education
 36 = Nursing home + Rehabilitation center + Other
 37 = Academic hospital + Special education + Other
 38 = Nursing home + Organization for people with a mental disability + Daycare/activity center + Other
 39 = Organization for people with a visual disability + Special education + Other
 40 = Nursing home + Rehabilitation center + Special education + Daycare /activity center
 41 = Nursing home + Psychiatric organization + Special education + Daycare / activity center
 42 = Rehabilitation center + Organization for people with a visual disability + Special education + Daycare/activity center
 43 = Rehabilitation center + Psychiatric organization + Organization for people with a visual disability + Daycare/activity center
 44 = Nursing home + Organization for people with a mental disability + Private practice + Special education + Daycare /activity center
 45 = Nursing home + Rehabilitation center + Non-academic hospital + Organization for people with a mental disability + Daycare /activity center + Other
 46 = Nursing home + Non-academic hospital + Other
 47 = I did not work in any other setting during my entire career

PASTGROUP

The group(s) of clients the OT worked with during his or her entire career:

- 1 = Adults
 2 = Children
 3 = Both
 90 = Not applicable

HOURSWK

Number of hours the OT works each week.

- 1 = <5
 2 = 5-9
 3 = 10-14
 4 = 15-19
 5 = 20-24
 6 = 25-29
 7 = 30-34
 8 = 35-36
 9 = >36

NRCOLL

The number of colleagues the OT has at his or her current workplace.
(no coding needed)

MENTOR

Have you been a mentor to an OT student in the past two years?

1 = Yes

2 = No

NRINTERNS

If the OT answered yes to the previous question, they are asked how many OT student they have mentored.

1 = 1

2 = 2

3 = 3

4 = 4

5 = 5

6 = more than 5

90 = Not applicable

OTDEGR

Highest OT degree obtained.

1 = Bachelors

2 = Masters

3 = Doctorate/PhD

NONOTDEGR

The highest non OT degree obtained.

1 = Bachelors

2 = Masters

3 = Doctorate

4 = I did not study another discipline other than OT

YRGRAD

Year in which the highest OT degree was obtained. (year = the code).

GRADCOUNTRY

The country in which the OT obtained his or her OT degree(s).

1 = the Netherlands

2 = other

3 = the Netherlands + another country

GRADCOUNTRY_SPEC

If option 2 or 3 were selected in the previous question, respondents were asked in what other country the degree was obtained.

YRSPRACT

The number of years the OT has been practicing. (number of years = code)

AGE

The age category to which the OT belongs:

1 = <25

2 = 25-29

3 = 30-34

4 = 35-39

5 = 40-44

6 = 45-49

7 = 50-54

8 = 55-59

9 = >60

Other:

- Each variable is represented by a column in the data file.
- The rows represent an individual occupational therapist.
- Missing answers will be provided with the code 99
- Participants who failed to answer more than 10% of all questions are deleted from the dataset.

Appendix K: Raw Data

	Q20	Q1 A 1	Q1 A 2	Q1 A 3	Q1 A 4	Q1 A 5	Q1 A 6	Q1 A 7	Q1 A 8	Q1 A 9
1	1	1	1	1	2	2	2	5	5	3
2	1	.	.	.	.	.	.	.	.	.
3	1	1	1	1	1	1	1	5	5	5
4	1	1	2	1	3	4	1	2	3	3
5	1	0	0	0	0	0	0	0	0	0
6	1	1	1	1	2	1	2	3	5	5
7	1	1	1	1	1	1	1	5	2	3
8	1	1	3	1	1	2	2	4	4	4
9	.	.	.	.	.	.	.	.	.	.
10	1	1	1	1	3	2	2	5	6	6
11	1	1	1	1	2	1	2	2	2	3
12	2	0	0	0	0	0	0	0	0	0
13	1	1	1	1	1	1	1	5	2	3
14	1	1	1	1	2	2	2	4	5	5
15	1	1	1	1	1	3	2	4	2	2
16	.	.	.	.	.	.	.	.	.	.
17	1	1	1	1	1	2	2	2	2	2
18	1	1	1	1	2	2	2	4	3	2
19	1	1	1	3	3	2	2	4	4	6
20	1	1	1	1	2	1	2	3	4	3
21	1	1	1	1	3	4	2	6	5	6
22	1	1	1	1	2	1	1	4	3	3
23	2	0	0	0	0	0	0	0	0	0
24	1	2	3	2	2	2	2	6	3	3
25	1	1	2	1	1	1	1	7	3	4
26	1	1	2	1	1	2	2	3	4	3
27	1	1	2	2	2	1	2	6	3	4
28	1	1	1	1	2	1	1	5	4	4
29	1	1	1	1	2	2	2	4	4	4
30	1	1	1	1	1	1	1	5	4	3
31	1	1	2	3	3	2	2	5	4	5
32	1	1	1	1	2	3	3	5	4	4
33	1	1	1	1	2	2	2	3	3	4
34	1	1	2	1	3	2	2	4	3	3
35	1	1	1	1	2	2	1	6	4	1
36	1	1	1	2	2	1	2	7	6	7
37	2	.	.	.	.	.	.	.	.	.
38	1	1	1	2	2	3	3	7	3	5
39	1	2	1	1	2	3	1	2	3	4
40	1	2	2	2	2	2	2	4	3	5
41	1	1	1	4	5	2	2	6	4	6
42	2	.	.	.	.	.	.	.	.	.
43	1	1	1	1	3	2	2	4	4	2
44	2	1	1	1	2	1	1	4	3	4
45	2	1	1	1	1	4	3	6	4	6
46	1	1	2	1	1	2	2	3	3	3
47	1	1	1	2	2	3	3	4	2	2

	Q1 A 10	Q1 A 11	Q1 A 12	Q1 A 13	Q1 A 14	Q1 A 15	Q1 A 16	Q1 A 17	Q1 A 18
1	5	5	5	5	6	3	5	3	4
2	.	.	.	.	.	.	.	.	.
3	5	5	5	5	5	2	6	3	6
4	4	4	4	4	5	4	5	4	5
5	0	0	0	0	0	0	0	0	0
6	5	5	5	5	6	4	6	4	6
7	3	4	4	5	5	2	5	3	5
8	4	3	3	2	3	3	6	4	4
9	.	.	.	.	.	.	.	.	.
10	6	4	4	5	5	2	6	3	6
11	3	4	4	5	5	3	5	4	4
12	0	0	0	0	0	0	0	0	0
13	4	5	5	5	5	6	7	3	6
14	5	4	5	5	5	3	6	5	5
15	5	2	2	3	1	6	5	3	5
16	.	.	.	.	.	.	.	.	.
17	2	4	4	4	5	2	6	3	6
18	4	4	5	5	4	3	4	4	4
19	3	5	5	5	5	3	4	3	6
20	5	5	5	5	5	2	5	4	5
21	6	4	4	6	5	6	6	6	6
22	3	5	5	6	6	2	4	3	4
23	0	0	0	0	0	0	0	0	0
24	7	7	7	7	7	4	6	4	4
25	4	5	5	6	5	2	5	4	5
26	4	5	5	5	5	4	6	6	5
27	6	5	4	5	5	3	6	4	5
28	4	5	5	4	5	3	4	5	4
29	4	4	7	7	7	2	6	4	6
30	3	4	5	6	5	2	7	4	7
31	5	5	5	3	5	3	5	5	5
32	4	4	4	4	5	3	5	3	4
33	4	6	6	5	3	2	6	5	5
34	3	4	4	5	1	3	6	5	5
35	1	4	1	1	1	3	4	3	4
36	7	6	6	7	5	3	7	4	7
37	.	.	.	.	.	.	.	.	.
38	6	5	5	7	6	3	7	4	7
39	5	5	4	4	5	3	6	4	3
40	5	4	4	5	6	4	4	3	5
41	5	5	4	5	4	4	5	4	5
42	.	.	.	.	.	.	.	.	.
43	3	5	5	5	5	5	5	3	4
44	5	5	4	5	0	1	4	3	4
45	1	4	5	6	6	2	4	6	5
46	3	5	5	5	5	2	5	3	6
47	3	4	4	7	5	1	3	2	3

	Q1 A 19	Q1 A 20	Q3 A 1	Q3 A 2	Q3 A 3	Q3 A 4	Q3 A 5	Q3 A 6	Q3 A 7	Q3 A 8
1	5	6	2	3	4	3	2	3	3	3
2	.	.	.	.	.	.	.	.	.	.
3	6	2	.	.	.	.	.	.	.	.
4	5	7	3	3	3	4	3	3	2	2
5	0	0	.	.	.	.	.	.	.	.
6	6	6	4	1	5	5	4	1	1	2
7	4	4	2	2	5	5	2	1	1	2
8	6	0	1	4	5	4	2	4	4	1
9	.	.	.	.	.	.	.	.	.	.
10	6	0	1	2	3	4	4	4	4	3
11	4	2	2	5	5	4	3	3	4	2
12	0	0	0	0	0	0	0	0	0	0
13	6	5	1	3	4	4	2	1	2	3
14	6	6	1	4	3	3	2	1	1	2
15	6	3	2	5	5	5	4	2	2	2
16	.	.	.	.	.	.	.	.	.	.
17	6	6	2	3	4	3	3	3	3	2
18	5	4	2	2	0	5	4	1	2	2
19	6	0	2	3	4	5	2	3	2	4
20	5	0	5	2	5	5	2	3	2	4
21	6	6	5	1	5	5	4	1	2	5
22	5	0	2	5	4	3	2	2	3	3
23	0	0	0	0	0	0	0	0	0	0
24	4	4	4	2	4	4	2	2	2	4
25	6	0	4	2	5	5	5	2	2	4
26	6	0	5	4	5	5	1	1	2	2
27	6	0	4	1	5	5	4	3	3	4
28	4	0	2	4	1	2	1	1	1	1
29	6	3	5	1	5	3	5	3	3	3
30	7	7	4	5	5	5	5	3	3	5
31	6	5	1	2	3	2	1	1	1	2
32	4	0	2	5	3	2	1	1	1	1
33	6	6	2	5	5	5	1	1	1	1
34	6	0	5	2	5	5	3	4	4	2
35	4	1	2	2	4	4	1	1	2	2
36	7	6	2	2	5	5	5	5	5	5
37	.	.	.	.	.	.	.	.	.	.
38	7	5	2	2	4	4	3	1	2	1
39	4	5	2	5	1	1	2	1	1	1
40	5	0	3	2	3	3	0	2	2	0
41	5	4	4	2	4	5	4	2	3	2
42	.	.	.	.	.	.	.	.	.	.
43	4	5	1	3	5	4	2	2	3	2
44	5	5	.	.	.	.	.	.	.	.
45	6	6	1	4	5	5	5	3	3	3
46	6	6	4	3	3	3	2	3	2	2
47	6	1	1	5	3	2	3	3	3	2

	Q3 A 9	Q3 A 10	Q4 A 1	Q4 A 2	Q4 A 3	Q4 A 4	Q4 A 5	Q4 A 6	Q4 A 7	Q4 A 8
1	4	2	1	1	2	2	2	4	2	3
2	.	.	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.	.	.
4	2	2	2	4	2	2	2	4	2	3
5	.	.	.	.	.	.	.	.	.	.
6	4	3	1	2	3	4	3	3	3	3
7	1	1	1	1	5	5	4	4	2	3
8	5	1	5	5	1	1	1	4	4	5
9	.	.	.	.	.	.	.	.	.	.
10	5	1	1	1	2	2	2	4	2	2
11	2	2	3	5	2	5	4	5	4	3
12	0	0	.	.	.	.	.	.	.	.
13	1	3	1	3	3	2	3	3	3	3
14	4	1	1	4	2	2	1	5	3	4
15	3	1	5	5	1	4	1	5	2	3
16	.	.	.	.	.	.	.	.	.	.
17	3	5	1	1	5	4	5	3	4	3
18	2	4	1	2	3	4	4	3	2	3
19	4	1	2	4	2	2	2	4	3	3
20	2	2	1	2	2	4	4	4	2	3
21	5	5	1	6	1	3	2	5	2	3
22	2	3	1	6	3	5	5	2	5	5
23	0	0	0	0	0	0	0	0	0	0
24	3	2	1	3	4	5	3	5	2	6
25	4	2	1	2	2	2	1	4	3	3
26	2	2	1	4	3	4	4	4	2	3
27	2	2	4	5	2	3	3	4	2	3
28	1	2	1	1	5	6	5	4	4	5
29	4	2	6	6	6	2	1	4	2	2
30	5	3	3	5	1	6	3	5	1	1
31	3	2	1	6	2	3	2	4	3	3
32	3	4	2	3	3	3	5	3	5	4
33	3	1	2	5	1	1	4	5	1	5
34	4	5	2	5	1	1	2	5	5	4
35	1	2	3	3	2	2	5	3	5	2
36	4	4	1	6	5	5	1	3	6	1
37	.	.	.	.	.	.	.	.	.	.
38	3	2	2	6	2	1	2	4	1	1
39	2	2	2	3	3	2	3	0	3	1
40	1	4	1	3	3	5	5	2	4	2
41	2	4	1	5	3	4	5	3	1	2
42	.	.	.	.	.	.	.	.	.	.
43	3	2	3	4	2	2	6	3	2	3
44	.	.	.	.	.	.	.	.	.	.
45	2	2	1	1	2	4	2	3	2	3
46	3	1	3	3	1	1	1	6	1	3
47	2	3	2	3	3	3	2	5	4	3

	Q4 A 9	Q4 A 10	Q2 A 1	Q2 A 2	Q2 A 3	Q2 A 4	Q2 A 5	Q2 A 6	Q2 A 7	Q5 A 1
1	4	2	3	4	2	4	5	5	3	2
2	.	.	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.	.	.
4	4	3	2	3	3	2	5	3	2	2
5	.	.	.	.	.	.	.	.	.	.
6	3	1	2	4	1	4	3	3	3	1
7	4	1	3	3	1	2	3	2	2	1
8	5	1	1	1	1	4	5	2	2	1
9	.	.	.	.	.	.	.	.	.	.
10	4	4	2	5	2	5	3	6	3	1
11	3	3	4	3	1	2	5	3	6	1
12	.	.	.	.	.	.	.	.	.	.
13	2	2	2	2	1	1	2	2	3	2
14	5	3	2	4	3	3	4	6	6	2
15	5	2	1	5	2	2	3	5	1	1
16	.	.	.	.	.	.	.	.	.	.
17	2	2	3	3	1	2	5	3	2	1
18	2	2	2	3	2	3	4	5	5	1
19	4	1	1	5	2	5	5	2	2	1
20	4	3	2	4	2	3	3	4	4	1
21	5	3	1	5	3	2	3	6	6	2
22	2	1	4	3	2	1	2	5	2	1
23	0	0	0	0	0	0	0	0	0	0
24	4	2	2	6	2	2	4	5	3	1
25	2	3	1	4	2	2	4	2	2	1
26	4	3	2	2	2	3	3	3	2	1
27	2	1	4	3	1	2	3	4	5	1
28	2	1	2	5	2	4	5	5	5	1
29	6	3	6	6	2	6	5	6	6	1
30	5	3	1	5	3	2	5	5	5	1
31	4	2	2	4	2	1	3	2	1	1
32	2	2	2	3	1	1	3	4	2	2
33	5	2	1	5	1	1	3	5	1	1
34	5	1	1	5	2	4	5	2	4	1
35	2	1	2	1	1	2	5	3	4	1
36	3	5	3	6	6	6	4	6	6	2
37	.	.	.	.	.	.	.	.	.	.
38	5	3	1	6	1	2	3	6	6	1
39	3	3	2	4	2	2	3	3	3	2
40	2	2	4	4	1	2	4	2	2	1
41	2	4	4	3	1	5	5	2	6	2
42	.	.	.	.	.	.	.	.	.	.
43	4	2	3	5	2	2	3	4	3	2
44	.	.	.	.	.	.	.	.	.	.
45	3	3	1	6	6	6	5	6	6	1
46	3	1	6	2	1	2	6	3	3	1
47	4	4	2	4	2	2	3	2	4	2

	Q5 A 2	Q5 A 3	Q5 A 4	Q5 A 5	Q5 A 6	Q5 A 7	Q5 A 8	Q5 A 9	Q5 A 10	Q5 A 11
1	4	4	3	2	3	3	2	2	2	3
2	.	.	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.	.	.
4	4	2	2	2	2	4	3	3	3	2
5	.	.	.	.	.	.	.	.	.	.
6	5	5	1	1	1	5	1	2	2	2
7	5	5	1	1	1	4	1	4	1	2
8	5	5	2	1	2	4	2	1	2	1
9	.	.	.	.	.	.	.	.	.	.
10	5	3	1	1	2	1	3	1	2	1
11	2	5	1	3	2	3	2	3	2	3
12	.	.	.	.	.	.	.	.	.	.
13	4	0	1	2	1	2	2	2	2	2
14	4	3	2	2	4	2	3	1	2	1
15	5	5	1	2	2	2	2	2	1	1
16	.	.	.	.	.	.	.	.	.	.
17	4	4	2	1	2	3	2	3	2	2
18	4	4	2	2	2	2	2	2	2	2
19	5	4	1	4	1	3	2	3	1	2
20	4	5	1	1	3	2	2	1	1	2
21	5	3	1	1	3	3	3	3	3	2
22	4	5	1	2	1	4	1	5	2	2
23	0	0	0	0	0	0	0	0	0	0
24	4	4	2	2	2	2	2	2	3	3
25	4	4	2	2	3	3	2	1	3	3
26	5	5	1	2	2	3	2	2	3	2
27	0	5	2	4	4	2	2	2	2	3
28	5	5	1	2	2	3	3	4	2	1
29	4	3	2	3	3	2	2	3	2	4
30	3	3	1	1	2	1	3	1	3	1
31	5	5	1	2	1	4	1	2	1	3
32	3	4	2	4	3	4	3	4	3	2
33	5	5	1	1	3	2	1	5	1	5
34	3	3	2	1	2	3	2	2	2	2
35	5	5	1	1	1	4	1	2	1	2
36	3	4	2	2	5	1	5	3	3	1
37	.	.	.	.	.	.	.	.	.	.
38	3	3	2	2	2	1	3	2	3	2
39	4	3	2	3	3	3	3	3	3	2
40	5	5	1	1	2	4	2	4	2	2
41	3	4	2	5	4	2	3	1	3	1
42	.	.	.	.	.	.	.	.	.	.
43	4	4	2	2	2	3	2	2	2	3
44	.	.	.	.	.	.	.	.	.	.
45	5	5	1	1	1	4	2	3	1	3
46	3	3	1	4	1	2	1	2	1	4
47	4	3	3	2	3	3	3	3	3	2

	Q6	Q22 1	Q22 2	Q22 3	Q22 4	Q22 5	Q22 6	Q22 7	Q22 8	Q22 9	Q22 10	Q22 11
1	1	0	1	0	0	0	0	0	0	0	0	1
2	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.	.	.	.	.
4	1	0	0	0	1	0	0	0	0	0	0	0
5	.	.	.	.	.	.	.	.	.	.	.	.
6	1	0	1	0	0	0	0	0	0	0	0	0
7	1	0	1	0	0	0	0	0	0	1	0	0
8	1	0	1	0	0	0	0	0	0	0	0	0
9	.	.	.	.	.	.	.	.	.	.	.	.
10	1	0	1	0	0	0	0	0	0	0	0	0
11	1	0	1	0	0	0	0	0	0	0	0	0
12	.	.	.	.	.	.	.	.	.	.	.	.
13	1	1	0	0	0	0	0	0	0	0	0	1
14	1	1	1	0	0	0	0	0	0	0	0	0
15	1	0	1	0	0	0	0	0	0	0	0	0
16	.	.	.	.	.	.	.	.	.	.	.	.
17	1	1	0	0	0	0	0	0	0	0	0	0
18	1	1	0	0	0	0	0	0	0	0	0	0
19	1	0	1	0	0	0	0	0	0	0	0	0
20	1	1	0	0	0	0	0	0	0	0	0	0
21	1	1	0	0	1	0	0	0	0	0	0	0
22	1	1	0	0	0	0	0	0	1	0	0	0
23	1	0	0	0	0	0	0	0	0	0	0	0
24	1	0	1	0	0	0	0	0	0	1	0	0
25	1	1	0	0	0	0	0	0	0	0	0	0
26	1	0	1	0	0	0	0	0	0	0	0	0
27	1	0	1	0	0	0	0	0	0	1	0	0
28	1	0	1	0	0	0	0	0	0	0	0	0
29	1	1	0	0	0	0	0	0	0	0	0	0
30	1	0	1	0	0	0	0	0	0	0	0	0
31	2	1	0	0	0	0	0	0	0	0	0	0
32	1	0	1	0	0	0	0	0	0	0	0	0
33	1	0	1	0	0	0	0	0	0	0	0	0
34	1	1	0	0	0	0	0	0	0	0	0	0
35	1	0	1	0	0	0	0	0	0	0	0	0
36	1	0	0	0	0	0	0	0	0	0	0	1
37	.	.	.	.	.	.	.	.	.	.	.	.
38	1	0	0	0	0	1	0	0	1	0	0	0
39	1	0	0	0	0	0	1	0	1	0	0	0
40	1	0	0	0	0	0	0	0	0	0	0	1
41	1	0	0	0	0	0	0	0	0	1	0	0
42	.	.	.	.	.	.	.	.	.	.	.	.
43	1	0	1	0	0	0	0	0	0	0	0	0
44	.	.	.	.	.	.	.	.	.	.	.	.
45	1	0	0	0	0	0	0	0	0	1	0	0
46	1	0	0	0	1	0	0	0	0	0	0	0
47	1	0	0	0	0	0	0	0	1	0	0	0

	Q24 11	Q24 12	Q25	Q10	Q11	Q8	Q13	Q14	Q15	Q16 1	Q17 1	Q17 2
1	1	0	1	39	4	1	2	1	4	2004	1	0
2	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.	.	.	.	.	.
4	0	0	1	20	0	1	2	1	4	1983	1	0
5	.	.	.	.	.	.	.	.	.	.	.	.
6	0	0	1	34	18	1	2	1	4	2003	1	0
7	0	0	3	32	6	2	0	1	4	2003	1	0
8	0	0	1	25	7	1	1	1	4	1996	1	0
9	.	.	.	.	.	.	.	.	.	.	.	.
10	0	0	3	24	18	1	3	1	4	1997	1	0
11	1	0	1	24	28	1	0	1	1	1987	1	0
12	.	.	.	.	.	.	.	.	.	.	.	.
13	1	0	1	24	2	1	1	1	1	1978	1	0
14	0	0	1	32	2	1	1	1	1	2005	1	0
15	1	0	1	24	20	1	1	1	4	1991	1	0
16	.	.	.	.	.	.	.	.	.	.	.	.
17	0	0	1	39	3	1	3	1	1	2000	1	0
18	0	0	1	36	7	2	0	1	4	2003	1	0
19	1	0	1	34	3	1	2	1	4	1999	1	0
20	0	0	1	36	4	1	1	1	4	2003	1	0
21	0	0	1	28	5	1	2	1	4	1984	1	0
22	0	0	1	35	5	1	1	1	4	2003	1	0
23	0	0	0	0	0	0	0	0	0		0	0
24	0	0	3	34	8	1	1	1	4	2004	1	0
25	0	0	1	24	2	2	0	1	4	1990	1	0
26	0	1	4	24	7	1	1	1	4	1997	1	0
27	0	0	1	40	16	1	2	1	1	2002	1	0
28	0	0	1	28	30	1	2	1	2	1997	1	0
29	0	0	3	32	7	2	0	1	4	2004	1	0
30	0	0	1	36	5	1	2	1	4	1999	1	0
31	0	0	1	36	4	1	2	1	4	1988	1	0
32	1	0	1	32	34	1	4	1	4	1995	1	0
33	0	0	3	21	18	1	1	1	4	1992	1	0
34	0	1	1	16	4	1	2	1	4	1993	1	0
35	0	0	1	36	18	2	0	1	4	2004	1	0
36	0	1	4	24	2	2	0	1	1	1998	1	0
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38	0	0	2	32	3	2	0	1	1	1967	1	1
39	0	0	3	32	2	2	0	1	4	1975	1	0
40	1	0	3	32	1	2	0	1	2	1999	1	0
41	0	1	2	20	1	2	0	1	2	2005	1	0
42	.	.	.	.	.	.	.	.	.	.	.	.
43	0	0	3	32	4	1	3	1	4	2002	1	0
44	.	.	.	.	.	.	.	.	.	.	.	.
45	0	0	2	0	0	2	0	1	4	1980	1	0
46	1	0	1	40	11	1	6	1	4	1975	1	0
47	0	0	1	32	0	1	3	1	1	1980	1	0

	Q23	Q24 1	Q24 2	Q24 3	Q24 4	Q24 5	Q24 6	Q24 7	Q24 8	Q24 9	Q24 10
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4	1	1	1	0	0	0	0	0	0	0	0
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6	1	0	1	0	0	0	0	0	0	0	0
7	2	1	1	0	0	1	0	0	0	1	0
8	2	0	1	0	0	0	0	0	0	0	0
9
10	1	1	1	0	0	0	0	0	0	0	0
11	1	1	0	0	0	0	0	0	0	0	0
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13	1	0	0	0	0	0	0	0	0	0	0
14	1	0	0	0	0	0	1	0	0	0	1
15	1	0	0	0	0	0	0	1	0	0	0
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17	1	1	0	0	0	0	0	0	0	0	0
18	1	1	1	0	0	0	0	0	0	0	0
19	2	0	0	1	0	0	0	0	0	1	0
20	1	1	0	0	1	0	0	0	0	0	0
21	1	0	1	0	0	0	0	0	0	0	0
22	1	0	1	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	2	0	1	0	0	0	0	0	0	1	0
25	1	0	1	0	0	1	0	1	0	0	1
26	1	0	0	0	0	0	0	0	0	0	0
27	3	1	0	0	0	0	0	0	0	0	0
28	1	1	0	0	0	0	0	0	0	0	0
29	1	0	0	0	0	0	1	0	0	0	0
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31	1	0	1	0	0	0	0	0	0	0	0
32	1	0	1	0	1	0	0	0	0	0	0
33	1	1	0	0	0	0	0	0	0	0	0
34	1	0	0	0	0	0	0	0	0	0	0
35	1	1	0	0	0	0	0	0	0	0	0
36	3	0	0	0	0	0	0	0	0	0	0
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38	2	0	1	0	0	0	0	0	0	0	1
39	3	1	0	0	0	1	0	0	0	1	1
40	2	0	0	0	0	0	0	1	0	1	0
41	2	0	0	0	0	0	0	0	0	0	0
42
43	3	1	1	0	1	0	0	0	0	0	1
44
45	2	0	1	0	0	0	0	0	0	0	0
46	1	1	0	0	0	1	0	0	0	0	0
47	3	1	1	0	0	1	0	0	0	0	0

	Q17SPECIFIED 2	Q18 1	Q19
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3			.
4		24,5	6
5			.
6		4	2
7		5	2
8		12	4
9			.
10		10	4
11		21	5
12			.
13		15 jaar	8
14		3	2
15		bijna 17	4
16			.
17		7	2
18		5	2
19		9	3
20		5	2
21		1985	6
22		5	2
23			0
24		3,5	2
25		18	5
26		11	3
27		6	2
28		10	3
29		3	2
30		9	3
31		20	6
32		13	4
33		16	4
34		15	4
35		4	2
36		7	3
37			.
38	Amerika	40 jaar	9
39		33 jaar	8
40		8	3
41		2,5	2
42			.
43		5	2
44			.
45		26 jaar	7
46		28	8
47		28	7

	Q20	Q1 A 1	Q1 A 2	Q1 A 3	Q1 A 4	Q1 A 5	Q1 A 6	Q1 A 7	Q1 A 8	Q1 A 9
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51	1	1	1	1	2	2	2	7	3	2
52	1	1	1	1	2	2	2	4	4	3
53	1	1	1	1	3	4	2	7	3	6
54	1	1	1	1	3	2	3	4	2	2
55	1	1	1	1	2	2	2	3	3	4
56	1	1	1	1	2	2	2	2	3	3
57	2	0	0	0	0	0	0	0	0	0
58	1	1	1	1	1	1	1	2	3	3
59	1	1	1	1	3	2	2	3	4	4
60	2	0	0	0	0	0	0	0	0	0
61	1	1	1	1	2	1	1	2	2	5
62	1	1	1	2	2	2	3	7	3	1
63	1	1	1	1	1	2	2	3	4	3
64	1	1	1	1	2	1	1	4	3	4
65	1	1	3	1	2	2	2	3	3	5
66	1	0	0	0	0	0	0	0	0	0
67	1	1	3	1	3	3	2	5	4	5
68	1	1	1	1	2	2	1	4	3	6
69	1	1	1	1	3	4	3	6	4	4
70	2	1	1	2	2	2	2	4	3	1
71	1	1	1	1	2	2	2	5	3	4
72	1	1	6	1	1	4	0	6	4	3
73	2	0	0	0	0	0	0	0	0	0
74	1	1	1	1	2	2	2	4	3	5
75	1	2	2	2	3	3	3	7	7	4
76	1	1	1	1	1	4	2	5	3	5
77	1	1	1	3	4	2	3	4	3	5
78	1	1	2	2	3	3	3	5	5	4
79	1	1	6	1	2	3	2	6	4	2
80	1	1	1	2	3	2	7	0	4	4
81	1	1	1	1	1	1	1	5	4	4
82	1	1	1	1	3	3	2	6	4	5
83	1	1	1	1	1	2	3	4	5	5
84	1	1	1	1	2	2	2	4	3	2
85	1	1	1	1	2	2	2	3	3	4
86	1	1	1	1	1	1	1	4	3	3
87	1	1	1	1	3	1	3	4	3	4
88	1	1	1	1	1	1	1	3	4	3
89	1	1	2	1	2	2	2	4	4	4
90	1	2	2	2	2	2	2	4	3	4
91	1	2	1	2	2	2	3	4	4	3
92	2	0	0	0	0	0	0	0	0	0
93	1	1	1	3	3	3	3	6	4	4
94	1	1	1	1	3	1	2	5	3	2

	Q1 A 10	Q1 A 11	Q1 A 12	Q1 A 13	Q1 A 14	Q1 A 15	Q1 A 16	Q1 A 17	Q1 A 18
48	4	5	5	5	5	3	5	4	4
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50	3	5	5	3	5	5	6	5	5
51	2	4	4	5	7	2	2	2	3
52	2	2	2	4	1	3	4	4	5
53	6	4	4	4	5	3	6	3	5
54	4	5	5	6	4	4	5	3	5
55	4	5	5	5	5	2	2	3	3
56	4	5	5	5	6	2	6	4	5
57	0	0	0	0	0	0	0	0	0
58	3	4	4	3	6	3	3	3	3
59	4	5	5	4	5	4	4	3	3
60	0	0	0	0	0	0	0	0	0
61	1	3	4	3	4	2	3	4	3
62	1	5	5	3	6	1	7	4	6
63	6	5	5	5	5	4	4	5	6
64	4	4	4	5	5	2	6	4	4
65	2	3	3	3	3	2	2	4	4
66	0	0	0	0	0	0	0	0	0
67	5	4	4	5	6	5	6	5	4
68	6	5	5	5	5	3	6	5	6
69	2	5	0	4	5	2	7	5	7
70	1	4	4	4	4	1	1	4	4
71	3	4	4	4	6	5	0	3	5
72	3	5	5	6	5	3	0	3	7
73	0	0	0	0	0	0	0	0	0
74	5	5	5	5	5	3	2	4	5
75	4	6	5	7	7	2	7	3	7
76	6	4	4	0	6	3	4	3	3
77	5	3	3	4	7	3	6	5	5
78	5	5	5	5	5	5	6	6	6
79	3	6	5	7	5	2	6	4	4
80	3	5	5	5	5	4	6	4	6
81	3	4	4	4	4	3	6	4	6
82	4	5	5	5	5	2	3	5	6
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84	5	5	3	3	2	2	3	3	6
85	4	5	5	5	5	2	4	4	6
86	3	4	4	5	5	2	6	5	5
87	5	5	5	4	5	2	4	3	4
88	2	5	5	4	5	1	2	3	4
89	5	5	4	5	5	4	6	4	5
90	4	5	5	4	5	2	5	4	4
91	4	4	4	5	6	3	6	5	5
92	0	0	0	0	0	0	0	0	0
93	6	5	5	4	6	3	7	4	6
94	4	4	7	5	5	3	6	3	5

	Q3 A 9	Q3 A 10	Q4 A 1	Q4 A 2	Q4 A 3	Q4 A 4	Q4 A 5	Q4 A 6	Q4 A 7	Q4 A 8
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49	1	4	2	2	4	5	5	4	4	4
50	3	1	2	3	2	2	2	3	1	2
51	2	5	1	2	5	4	5	3	4	4
52	4	2	3	5	3	2	4	2	5	5
53	2	3	1	6	6	1	1	3	2	1
54	3	3	2	4	2	2	2	3	2	3
55	4	2	2	3	3	2	3	4	2	1
56	4	2	1	4	2	4	4	4	4	5
57	0	0	0	0	0	0	0	0	0	0
58	3	3	2	2	3	1	4	2	1	1
59	2	2	4	4	2	4	5	5	2	2
60	0	0	0	0	0	0	0	0	0	0
61	1	4	1	2	1	4	3	3	3	4
62	2	2	1	6	3	2	2	4	2	2
63	2	2	3	5	2	2	2	3	2	4
64	2	4	3	6	4	4	2	4	2	4
65	3	1	2	2	2	2	3	4	3	4
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67
68	2	2	1	3	6	2	1	3	2	1
69	3	2	2	4	2	2	3	2	1	3
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71	3	3	1	3	2	1	2	3	2	3
72	1	5	1	2	3	5	5	3	3	2
73	0	0	0	0	0	0	0	0	0	0
74	2	1	3	3	2	2	5	5	2	3
75	4	3	1	1	5	4	2	5	3	1
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77	2	2	1	5	1	1	1	4	1	2
78	4	1	2	3	1	1	1	4	2	3
79	1	5	2	2	4	4	4	3	4	4
80	3	3	3	4	4	3	3	4	4	1
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82	4	2	2	2	3	4	3	3	3	1
83	3	1	1	4	3	3	2	4	2	3
84	3	3	3	3	2	2	3	4	4	4
85	4	3	2	3	2	2	3	4	1	3
86	4	5	1	2	1	1	1	5	2	2
87	1	3	1	1	1	3	3	2	2	2
88	1	4	1	3	4	4	5	2	4	5
89	4	2	4	5	1	1	1	4	1	5
90	2	2	1	4	2	2	4	5	2	1
91	3	2	1	4	2	3	4	4	2	3
92	0	0	0	0	0	0	0	0	0	0
93	2	3	5	5	6	3	5	2	4	4
94	3	3	3	3	2	2	4	3	3	3

	Q4 A 9	Q4 A 10	Q2 A 1	Q2 A 2	Q2 A 3	Q2 A 4	Q2 A 5	Q2 A 6	Q2 A 7	Q5 A 1
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50	4	1	1	3	4	3	5	4	2	1
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52	2	2	2	4	2	2	4	5	5	2
53	2	3	3	6	6	6	6	6	6	1
54	3	3	2	6	2	3	6	3	2	1
55	3	1	1	3	1	2	3	5	1	1
56	2	2	2	5	2	4	3	2	1	1
57	0	0	0	0	0	0	0	0	0	0
58	1	1	1	4	1	1	3	2	2	1
59	4	2	2	3	2	3	5	2	3	2
60	0	0	0	0	0	0	0	0	0	0
61	2	1	2	1	1	1	3	6	6	1
62	2	2	2	2	2	2	3	2	6	1
63	3	2	2	5	2	2	3	5	5	1
64	3	2	2	4	2	2	4	6	6	1
65	5	1	2	4	1	2	3	4	2	1
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67
68	2	1	2	2	2	2	2	2	2	1
69	4	4	2	4	4	5	3	2	2	1
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71	3	2	2	4	4	3	4	5	5	1
72	1	4	3	6	6	2	3	6	6	2
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75	5	5	2	6	2	2	6	6	6	2
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77	3	1	2	5	2	5	5	5	2	1
78	4	2	1	3	1	1	3	3	3	1
79	2	2	5	2	4	2	4	4	4	1
80	3	4	3	5	4	4	5	6	6	2
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82	2	3	3	4	2	2	3	6	6	1
83	4	3	6	6	6	6	5	6	6	2
84	3	2	3	4	2	2	2	4	3	1
85	2	3	2	4	3	4	5	3	2	3
86	4	1	1	2	1	1	5	2	2	1
87	1	2	3	2	1	1	3	6	6	1
88	2	2	3	5	2	1	5	4	1	1
89	4	2	1	2	4	5	5	2	5	2
90	4	4	2	2	1	2	5	1	1	1
91	6	2	6	6	1	2	3	6	6	1
92	0	0	0	0	0	0	0	0	0	0
93	2	2	2	3	1	2	3	4	4	1
94	4	3	3	2	1	3	3	4	3	1

	Q5 A 2	Q5 A 3	Q5 A 4	Q5 A 5	Q5 A 6	Q5 A 7	Q5 A 8	Q5 A 9	Q5 A 10	Q5 A 11
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52	4	4	2	2	2	4	2	4	2	3
53	3	3	2	2	2	3	3	3	3	1
54	4	5	2	1	3	1	2	2	2	3
55	5	2	1	1	1	2	2	1	2	3
56	5	5	1	1	2	2	1	2	1	1
57	0	0	0	0	0	0	0	0	0	0
58	2	2	1	5	1	3	3	1	1	1
59	4	5	1	1	2	3	3	3	3	1
60	0	0	0	0	0	0	0	0	0	0
61	5	5	1	1	1	2	1	3	1	3
62	5	5	1	1	1	2	1	2	1	1
63	1	1	1	1	2	5	2	3	1	1
64	4	3	2	2	0	4	2	3	3	3
65	5	5	1	2	2	4	1	5	1	4
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67
68	3	2	1	1	2	1	2	2	2	2
69	5	4	2	1	2	2	3	1	2	1
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71	4	2	2	2	2	2	2	2	2	4
72	3	3	3	3	3	5	3	3	3	3
73	0	0	0	0	0	0	0	0	0	0
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75	3	2	2	2	5	4	2	3	3	2
76
77	5	2	1	1	1	2	2	2	1	2
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79	4	4	1	1	1	4	1	2	1	4
80	3	3	3	3	3	3	3	3	3	1
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82	4	5	1	1	2	2	2	2	3	2
83	3	2	3	2	4	2	3	2	4	1
84	5	5	1	1	1	5	1	5	2	3
85	2	2	3	2	3	2	4	2	3	2
86	5	5	1	1	1	5	1	2	1	2
87	3	3	1	1	2	2	1	2	1	2
88	5	5	1	1	1	4	2	4	2	2
89	5	4	2	4	4	2	3	2	2	2
90	5	5	1	1	2	2	1	3	1	3
91	4	3	3	3	2	4	3	2	3	3
92	0	0	0	0	0	0	0	0	0	0
93	5	5	2	2	2	2	1	3	1	3
94	4	4	2	1	2	3	3	4	2	3

	Q1 A 19	Q1 A 20	Q3 A 1	Q3 A 2	Q3 A 3	Q3 A 4	Q3 A 5	Q3 A 6	Q3 A 7	Q3 A 8
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52	7	7	2	4	2	2	2	2	2	3
53	6	7	2	5	3	3	2	3	2	3
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55	4	0	1	5	4	5	1	2	1	4
56	5	0	5	3	4	4	4	1	2	4
57	0	0	0	0	0	0	0	0	0	0
58	3	3	2	2	3	3	2	3	3	5
59	3	3	2	2	4	5	1	1	1	1
60	0	0	0	0	0	0	0	0	0	0
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62	6	0	2	0	4	4	1	1	1	2
63	6	6	1	5	3	3	1	1	1	1
64	6	3	2	5	2	4	4	2	1	3
65	3	3	1	2	2	3	1	1	2	1
66	0	0
67	5	5
68	6	6	3	2	3	3	2	3	3	3
69	7	5	2	2	4	4	5	5	5	2
70	4	4	.	.	.	.	.	.	.	.
71	6	7	2	2	4	4	1	2	1	2
72	2	0	0	2	0	0	0	0	0	0
73	0	0	0	0	0	0	0	0	0	0
74	2	3	2	5	5	5	1	3	3	2
75	7	7	4	1	2	2	4	4	4	4
76	4	3	.	.	.	.	.	.	.	.
77	6	1	3	5	5	5	4	3	3	2
78	6	6	3	3	4	4	4	3	3	3
79	4	0	5	5	5	5	2	4	3	4
80	6	5	2	3	3	3	2	2	2	3
81	6	3	.	.	.	.	.	.	.	.
82	4	5	1	3	3	3	3	1	1	3
83	6	0	1	4	5	5	4	3	5	4
84	3	7	1	5	4	4	1	1	1	1
85	6	3	2	2	4	4	3	3	3	4
86	5	6	4	2	5	5	1	1	1	1
87	4	2	2	1	3	3	2	2	2	2
88	2	1	2	4	2	3	1	1	1	1
89	6	6	1	2	3	3	4	2	4	2
90	4	0	2	5	2	4	1	2	2	1
91	5	6	1	2	3	4	3	2	3	3
92	0	0	0	0	0	0	0	0	0	0
93	6	0	2	5	4	3	3	3	3	3
94	5	0	4	3	4	4	4	2	2	2

	Q24 11	Q24 12	Q25	Q10	Q11	Q8	Q13	Q14	Q15	Q16 1	Q17 1	Q17 2
48	0	0	1	24	5	1	1	1	4	2001	1	0
49	0	0	1	24	2	1	1	2	4	2007	1	1
50	1	0	1	36	24	1	2	1	4	1976	1	0
51	0	0	1	28	1	1	2	1	4	2006	1	0
52	1	0	1	12	3	1	4	1	1	1988	1	0
53	0	0	3	25	0	1	3	1	4	1975	1	0
54	0	0	2	32	5	1	2	1	4	2003	1	0
55	0	0	3	24	3	1	2	1	4	1998	1	0
56	0	0	1	24	7	1	2	1	4	1982	1	0
57	0	0	0	0	0	0	0	0	0		0	0
58	0	0	1	36	9	2	0	1	4	2007	1	0
59	0	0	1	29	18	2	0	1	1	1982	1	0
60	0	0	0	0	0	0	0	0	0		0	0
61	0	0	3	30	4	1	5	1	1	1995	1	0
62	0	0	2	34	4	2	0	1	4	1971	1	0
63	1	0	3	39	5	1	2	1	4	1983	1	0
64	0	0	3	36	2	1	1	1	4	2002	1	0
65	0	0	1	32	14	1	2	1	4	2000	1	0
66	.	.	.	.	.	.	.	.	.		.	.
67	.	.	.	.	.	.	.	.	.		.	.
68	0	0	1	24	0	1	1	1	4	1986	1	0
69	0	0	3	20	0	2	0	1	1	2001	1	0
70	.	.	.	.	.	.	.	.	.		.	.
71	0	0	1	23	2	2	0	1	4	1999	1	0
72	1	0	1	41	0	1	1	1	4	1982	1	0
73	0	0	1	0	0	0	0	1	4		0	0
74	0	0	3	24	41	1	2	1	1	1982	1	0
75	0	0	1	16	2	2	0	1	4	1972	1	0
76	.	.	.	.	.	.	.	.	.		.	.
77	0	0	3	18	6	2	0	1	4	1987	1	0
78	0	0	0	32	3	2	0	1	1	1999	1	0
79	0	0	1	28	5	2	1	1	4	2004	1	0
80	0	0	3	26	1	2	0	1	1	1976	1	0
81	.	.	.	.	.	.	.	.	.		.	.
82	0	0	1	24	0	2	0	1	4	1997	1	0
83	0	0	1	20	2	1	1	1	4	1976	1	0
84	0	0	1	32	14	1	3	1	4	2001	1	0
85	1	0	1	18	2	1	4	1	4	1993	1	0
86	0	0	1	22	35	1	2	1	4	1988	1	0
87	0	1	4	32	2	2	0	1	4	2007	1	0
88	1	0	2	38	15	1	2	1	4	2000	1	0
89	0	0	1	28	2	1	2	1	4	2001	1	0
90	0	0	3	24	14	1	4	1	4	1983	1	0
91	0	1	4	36	2	2	0	1	4	2006	1	0
92	0	0	0	0	0	0	0	0	0		0	0
93	0	0	3	30	6	1	2	1	4	2001	1	0
94	0	0	3	34	12	1	2	1	4	2004	1	0

	Q17SPECIFIED 2	Q18 1	Q19
48		7	2
49	in Denemarken (Euro	7	3
50		31	8
51		1,5	2
52		20	7
53		33	8
54		4,5	2
55		10	3
56		21	7
57			0
58		1	2
59		26	7
60			0
61		13	4
62		31	8
63		25	6
64		5,5	2
65		7	2
66			.
67			.
68		21	5
69		7	3
70			.
71		9	3
72		26	7
73			0
74		26	6
75		20	8
76			.
77		21	5
78		9	7
79		3,5	1
80		32	8
81			.
82		11	3
83		30	7
84		7	2
85		15	4
86		20	5
87		1	1
88		8,5	3
89		6	3
90		25	6
91		1	1
92			0
93		7	3
94		4	2

	Q20	Q1 A 1	Q1 A 2	Q1 A 3	Q1 A 4	Q1 A 5	Q1 A 6	Q1 A 7	Q1 A 8	Q1 A 9
95	1	1	1	1	3	2	2	5	3	4
96	1	1	1	1	3	3	1	6	3	2
97	1	1	1	2	1	3	2	4	3	5
98	1	1	1	1	2	2	2	2	3	2
99	1	1	3	1	2	2	2	2	4	4
100	1	1	1	1	2	1	1	3	3	4
101	1	1	1	1	2	1	2	4	2	2
102	1	1	1	1	2	2	2	4	4	2
103	1	1	1	1	2	2	2	4	3	3
104	2	0	0	0	0	0	0	0	0	0
105	1	1	2	1	1	0	1	0	3	3
106	1	1	1	1	2	2	2	4	3	5
107	1	1	1	1	2	2	2	5	5	4
108	1	1	1	1	2	1	1	3	3	4
109	1	1	1	1	2	1	1	4	3	1
110	1	1	1	1	1	1	1	7	3	4
111	1	1	1	1	1	2	3	4	4	4
112	1	1	1	1	2	2	2	4	4	4
113	2	.	.	.	.	.	.	.	.	.
114	2	1	2	3	3	3	3	7	4	4
115	1	.	.	.	.	.	.	.	.	.
116	1	1	1	1	3	3	2	4	4	3
117	1	1	1	1	2	2	1	5	4	3
118	2	1	2	2	2	3	3	7	3	4
119	1	1	2	5	3	3	2	6	4	6
120	1	1	1	1	4	1	1	6	4	2
121	1	1	1	1	2	3	2	5	6	2
122	1	1	2	1	2	3	3	4	1	1

	Q1 A 10	Q1 A 11	Q1 A 12	Q1 A 13	Q1 A 14	Q1 A 15	Q1 A 16	Q1 A 17	Q1 A 18
95	4	5	5	5	6	1	6	5	6
96	2	5	5	7	5	3	6	4	4
97	5	5	4	5	5	3	6	4	4
98	3	4	4	5	5	3	5	4	6
99	4	5	4	4	4	3	7	4	4
100	4	4	4	4	6	2	3	4	4
101	3	4	4	7	4	2	3	3	4
102	2	5	5	5	2	4	4	5	4
103	3	5	5	5	5	3	0	6	4
104	0	0	0	0	0	0	0	0	0
105	0	0	0	0	3	3	3	4	4
106	5	5	5	2	5	2	3	3	4
107	6	4	4	4	4	4	6	4	6
108	5	5	5	5	5	6	6	3	6
109	6	5	5	6	5	6	6	3	6
110	4	6	4	4	2	2	6	3	4
111	4	5	5	3	5	3	4	4	6
112	4	4	5	5	5	2	6	4	6
113	.	.	.	.	.	.	.	.	.
114	2	4	4	4	5	1	2	5	3
115	.	.	.	.	.	.	.	.	.
116	3	4	5	5	5	3	3	4	3
117	5	5	4	5	2	6	6	4	6
118	1	5	5	7	6	1	1	0	3
119	4	4	3	3	7	3	4	5	7
120	3	5	5	5	5	3	7	4	7
121	6	5	5	6	5	4	6	5	6
122	2	2	2	7	2	4	4	3	4

	Q1 A 19	Q1 A 20	Q3 A 1	Q3 A 2	Q3 A 3	Q3 A 4	Q3 A 5	Q3 A 6	Q3 A 7	Q3 A 8
95	6	4	2	3	2	2	3	3	3	5
96	4	4	3	2	4	3	3	3	3	3
97	6	2	1	2	1	1	2	3	3	1
98	6	7	1	5	3	4	3	1	2	3
99	4	4	2	2	3	0	2	2	2	3
100	6	6	.	.	.	.	.	.	.	.
101	3	3	4	2	5	4	2	2	2	1
102	4	0	2	2	2	2	2	1	1	2
103	5	4	3	2	2	2	1	1	2	2
104	0	0	.	.	.	.	.	.	.	.
105	4	0	5	0	4	5	4	3	3	3
106	4	3	2	5	5	5	2	1	2	2
107	6	0	1	5	5	5	1	1	1	1
108	6	6	4	5	2	2	5	1	1	1
109	6	6	1	3	5	5	3	2	2	4
110	4	0	2	1	5	5	4	2	3	5
111	6	7	2	5	5	5	3	1	2	1
112	6	6	2	1	2	3	4	3	3	3
113	.	.	.	.	.	.	.	.	.	.
114	3	3	.	.	.	.	.	.	.	.
115	.	.	.	.	.	.	.	.	.	.
116	4	0	1	3	4	4	4	2	2	2
117	6	7	1	5	4	4	2	3	4	3
118	3	1	1	4	1	1	4	4	3	3
119	7	2	4	1	4	4	3	4	2	1
120	7	0	5	2	5	5	2	1	1	4
121	6	6	1	4	4	4	1	1	1	1
122	4	5	1	5	2	2	2	2	2	2

	Q3 A 9	Q3 A 10	Q4 A 1	Q4 A 2	Q4 A 3	Q4 A 4	Q4 A 5	Q4 A 6	Q4 A 7	Q4 A 8
95	5	1	4	5	2	2	1	5	1	1
96	3	3	1	3	5	5	3	3	3	3
97	3	3	1	1	5	5	1	3	2	2
98	2	4	2	4	2	5	5	3	2	2
99	2	1	3	3	2	1	1	3	2	2
100	.	.	.	.	.	.	.	.	.	.
101	1	5	1	1	5	5	5	3	2	5
102	2	1	1	3	2	2	4	4	3	5
103	2	4	1	4	2	2	4	2	2	3
104	.	.	.	.	.	.	.	.	.	.
105	2	5	1	2	2	6	6	3	3	6
106	4	1	4	4	2	2	5	4	3	3
107	2	2	2	5	2	2	2	2	2	2
108	4	1	4	5	2	4	1	2	4	4
109	4	5	5	5	1	1	1	5	1	3
110	2	2	2	6	2	2	2	4	2	1
111	1	2	4	4	1	5	5	3	5	3
112	2	3	2	5	3	2	3	3	2	2
113	.	.	.	.	.	.	.	.	.	.
114	.	.	.	.	.	.	.	.	.	.
115	.	.	.	.	.	.	.	.	.	.
116	2	2	1	5	3	4	4	1	4	2
117	5	1	2	4	6	6	2	5	2	4
118	2	2	1	1	5	4	4	4	3	2
119	2	4	2	2	4	3	5	3	2	1
120	2	3	1	6	2	6	5	3	2	5
121	4	1	1	3	6	6	6	4	3	3
122	2	2	2	5	4	2	2	4	3	2

	Q4 A 9	Q4 A 10	Q2 A 1	Q2 A 2	Q2 A 3	Q2 A 4	Q2 A 5	Q2 A 6	Q2 A 7	Q5 A 1
95	5	6	6	5	2	5	3	6	6	1
96	3	3	3	3	3	3	3	6	6	1
97	3	3	2	3	2	3	3	5	5	1
98	2	3	1	3	1	3	3	2	2	1
99	2	2	1	2	1	1	2	3	2	1
100	.	.	.	.	.	.	.	.	.	.
101	1	1	5	5	2	3	4	4	4	1
102	5	1	4	3	2	2	5	5	5	1
103	1	2	2	4	1	1	4	3	2	1
104	.	.	.	.	.	.	.	.	.	.
105	3	3	.	.	.	.	.	.	.	.
106	3	3	1	4	2	5	5	5	2	1
107	2	1	2	4	1	2	3	3	2	1
108	2	1	3	4	1	2	1	3	4	1
109	5	2	1	5	1	1	3	4	6	1
110	4	4	3	5	5	1	3	6	6	2
111	3	2	1	3	2	1	3	5	1	1
112	2	1	1	5	5	5	5	5	4	1
113	.	.	.	.	.	.	.	.	.	.
114	.	.	.	.	.	.	.	.	.	.
115	.	.	.	.	.	.	.	.	.	.
116	4	4	2	2	1	2	5	2	1	.
117	5	1	1	5	1	2	3	5	5	1
118	6	6	2	6	6	6	5	6	6	1
119	2	3	4	4	3	2	3	6	6	1
120	3	1	4	5	1	4	5	6	6	1
121	5	2	1	6	1	3	3	5	5	1
122	2	3	4	3	2	1	3	5	2	1

	Q5 A 2	Q5 A 3	Q5 A 4	Q5 A 5	Q5 A 6	Q5 A 7	Q5 A 8	Q5 A 9	Q5 A 10	Q5 A 11
95	5	5	1	1	3	3	2	3	3	2
96	3	3	5	1	1	5	3	3	3	2
97	4	4	2	1	2	2	3	2	3	2
98	5	5	1	1	1	2	1	2	1	3
99	2	2	2	1	2	1	2	1	2	1
100	.	.	.	.	.	.	.	.	.	.
101	5	5	1	1	1	2	1	4	1	3
102	5	5	1	1	2	3	2	4	1	3
103	4	2	2	1	2	4	2	3	2	3
104	.	.	.	.	.	.	.	.	.	.
105	.	.	.	.	.	.	.	.	.	.
106	5	5	1	1	1	1	1	3	1	2
107	5	5	1	1	2	2	1	2	1	1
108	5	5	1	1	1	4	1	5	1	4
109	5	5	1	1	1	1	1	1	2	2
110	5	4	1	3	4	2	2	2	3	1
111	5	5	1	1	2	4	3	3	2	3
112	5	4	1	1	1	1	2	1	1	2
113	.	.	.	.	.	.	.	.	.	.
114	.	.	.	.	.	.	.	.	.	.
115	.	.	.	.	.	.	.	.	.	.
116	.	.	.	.	.	.	.	.	.	.
117	5	5	1	1	1	2	2	2	2	2
118	5	5	1	1	1	2	2	2	1	3
119	5	5	1	1	3	1	1	3	2	2
120	4	3	1	2	4	2	3	3	2	4
121	5	5	1	1	1	2	2	2	3	1
122	4	4	1	1	1	4	1	3	1	3

	Q6	Q22 1	Q22 2	Q22 3	Q22 4	Q22 5	Q22 6	Q22 7	Q22 8	Q22 9	Q22 10	Q22 11
95	1	0	0	0	0	1	0	0	0	0	0	0
96	1	0	0	0	0	0	0	0	1	0	0	0
97	1	0	0	0	0	0	0	0	1	0	0	0
98	1	1	0	0	0	0	0	0	0	0	0	0
99	1	1	0	0	0	0	0	0	0	0	0	0
100	.	.	.	.	.	.	.	.	.	.	.	.
101	1	0	1	0	0	0	0	0	1	0	0	0
102	1	0	0	1	0	0	0	0	0	0	0	0
103	1	0	1	0	1	0	0	0	0	0	0	0
104	.	.	.	.	.	.	.	.	.	.	.	.
105	.	.	.	.	.	.	.	.	.	.	.	.
106	2	0	1	0	0	0	0	0	0	0	0	0
107	1	0	0	0	0	0	0	0	0	0	0	1
108	1	0	0	0	1	0	0	0	0	0	0	0
109	1	0	0	0	1	0	0	0	0	0	0	0
110	1	0	0	0	0	0	0	0	0	1	0	0
111	1	0	1	0	0	0	0	0	0	0	0	0
112	1	1	0	0	0	0	0	0	0	0	0	1
113	.	.	.	.	.	.	.	.	.	.	.	.
114	.	.	.	.	.	.	.	.	.	.	.	.
115	.	.	.	.	.	.	.	.	.	.	.	.
116	.	.	.	.	.	.	.	.	.	.	.	.
117	1	1	0	0	0	0	0	0	0	0	0	0
118	0	0	0	0	0	0	0	0	0	0	0	0
119	1	0	0	0	0	0	1	0	0	0	1	0
120	1	1	0	0	0	0	0	0	0	0	0	1
121	1	1	0	0	0	0	0	0	0	0	0	0
122	1	0	0	0	0	0	0	0	1	0	0	0

	Q23	Q24 1	Q24 2	Q24 3	Q24 4	Q24 5	Q24 6	Q24 7	Q24 8	Q24 9	Q24 10
95	1	1	1	0	0	0	0	0	0	0	0
96	3	1	0	0	0	0	0	0	0	0	0
97	2	0	0	0	1	0	0	0	1	0	0
98	1	0	0	0	0	0	0	0	0	0	0
99	1	0	0	0	0	1	0	0	0	0	0
100	.	.	.	.	.	.	.	.	.	.	.
101	3	1	1	0	0	0	0	0	0	0	0
102	1	0	0	0	0	0	0	0	0	0	0
103	1	1	0	0	0	0	0	0	0	0	0
104	.	.	.	.	.	.	.	.	.	.	.
105	.	.	.	.	.	.	.	.	.	.	.
106	1	1	0	0	0	1	1	0	0	0	0
107	1	1	0	0	0	0	0	0	0	0	0
108	3	1	0	0	0	0	0	0	0	0	0
109	1	1	1	0	0	0	0	0	0	0	0
110	2	1	1	0	1	0	1	0	0	1	1
111	2	1	0	0	0	0	0	0	0	0	0
112	1	0	0	0	0	0	0	0	0	0	0
113	.	.	.	.	.	.	.	.	.	.	.
114	.	.	.	.	.	.	.	.	.	.	.
115	.	.	.	.	.	.	.	.	.	.	.
116	.	.	.	.	.	.	.	.	.	.	.
117	1	0	0	0	0	0	0	0	0	0	0
118	3	0	1	0	0	0	0	0	0	1	0
119	2	0	0	0	0	0	0	0	0	0	0
120	1	1	0	0	0	0	0	0	0	0	0
121	1	0	0	0	0	0	0	0	0	0	0
122	2	1	0	0	0	0	1	0	1	1	0

	Q24 11	Q24 12	Q25	Q10	Q11	Q8	Q13	Q14	Q15	Q16 1	Q17 1	Q17 2
95	0	1	3	22	2	2	0	1	4	2007	1	0
96	1	0	1	8	0	2	0	1	1	1997	1	0
97	0	0	2	32	2	1	2	1	4	2002	1	0
98	0	0	0	16	4	1	2	1	4	1996	1	0
99	0	0	1	20	2	1	2	1	1	1990	1	0
100	.	.	.	.	.	.	.	.	.		.	.
101	0	0	1	36	15	2	0	2	4	2009	0	1
102	0	1	4	30	15	1	2	1	4	2002	1	0
103	0	0	1	24	3	1	2	1	4	1999	1	0
104	.	.	.	.	.	.	.	.	.		.	.
105	.	.	.	.	.	.	.	.	.		.	.
106	0	0	1	32	2	1	2	1	4	1978	1	0
107	1	0	1	24	6	1	1	1	4	1986	1	0
108	0	0	1	24	5	1	4	1	1	1983	1	0
109	0	0	1	30	9	2	0	1	4	2002	1	0
110	1	0	3	35	3	2	0	1	4	2001	1	0
111	0	0	1	20	35	2	0	1	4	1998	1	0
112	0	1	1	20	6	1	1	1	4	1997	1	0
113	.	.	.	.	.	.	.	.	.		.	.
114	.	.	.	.	.	.	.	.	.		.	.
115	.	.	.	.	.	.	.	.	.		.	.
116	.	.	.	.	.	.	.	.	.		.	.
117	0	1	4	30	5	1	2	1	4	1996	1	0
118	1	0	3	0	1	2	0	1	1	1982	1	0
119	0	1	2	36	6	2	0	1	1	2000	1	0
120	0	0	1	20	2	2	0	1	4	2006	1	0
121	0	1	1	24	9	2	0	1	4	1994	1	0
122	0	0	3	41	0	1	2	1	4	1978	1	0

	Q17SPECIFIED 2	Q18 1	Q19
95		1	2
96		9	4
97		6 jaar	3
98		12 jaar	3
99		18	8
100			.
101	European Master	1	1
102		6	2
103		9	4
104			.
105			.
106		15	7
107		20	6
108		25	9
109		6	2
110		6	2
111		10	3
112		11	3
113			.
114			.
115			.
116			.
117		12	3
118		22	6
119		8	3
120		1	2
121		14	4
122		27	7

Appendix L: Coded Data

The data shown below is the result of coding the raw data using the codebook displayed in appendix F. During data analyses additional variables using existing variables were created.

	SURVEY TYPE	RESPONDENT TYPE	QFILTER	EXP	INT	CLIENT	CLIENTFAM	OTCOLL
1	1	1	1	7	7	7	6	6
2	1	1	1	7	6	7	5	4
3	1	1	1	7	7	7	6	7
4	1	1	1	7	7	7	7	7
5	1	1	1	7	5	7	7	6
6	1	1	1	7	7	7	5	6
7	1	1	1	7	7	7	6	7
8	1	1	1	7	7	7	7	7
9	1	1	1	7	7	7	6	6
10	1	1	1	7	7	7	7	5
11	1	1	1	7	7	7	7	6
12	1	1	1	7	7	7	6	6
13	1	1	1	7	7	5	5	6
14	1	1	1	7	7	7	6	7
15	1	1	1	7	7	7	5	4
16	1	1	1	7	7	7	6	7
17	1	1	1	6	5	6	6	6
18	1	1	1	7	6	7	7	7
19	1	1	1	7	6	7	7	6
20	1	1	1	7	6	6	6	7
21	1	1	1	7	7	7	6	7
22	1	1	1	7	7	7	6	6
23	1	1	1	7	7	7	7	7
24	1	1	1	7	6	5	5	6
25	1	1	1	7	7	7	6	5
26	1	1	1	7	7	7	6	6
27	1	1	1	7	6	7	5	6
28	1	1	1	7	7	7	6	6
29	1	1	1	7	7	6	6	7
30	1	1	1	7	7	6	6	5
31	1	1	1	6	7	7	6	5
32	1	1	1	6	6	6	6	6
33	1	1	1	7	7	4	3	6
34	1	1	1	7	7	7	5	6
35	1	1	1	7	6	7	7	6
36	1	1	1	7	7	6	6	5
37	1	1	1	7	7	7	6	5
38	1	1	1	7	6	7	6	6
39	1	1	1	7	7	7	5	6
40	1	1	1	7	7	7	6	6
41	1	1	1	7	7	7	6	6
42	1	1	1	7	7	7	5	4
43	1	1	1	7	7	7	5	6
44	1	1	1	7	7	7	6	6
45	1	1	1	7	7	7	6	6
46	1	1	1	7	7	7	7	7

	NONOTCOLL	OTINT	TEXTB	OTGUID	GUID	CONF	WSHOP	INSED	POSTGRAD ED	INTWEBS
1	6	3	3	5	3	3	3	3	2	5
2	7	6	5	5	4	4	4	4	3	4
3	6	5	3	3	3	3	3	3	2	4
4	7	3	6	5	5	4	4	3	3	6
5	6	4	4	4	4	5	5	6	5	5
6	6	3	2	2	2	4	4	3	3	6
7	6	6	6	5	5	4	4	3	3	5
8	7	3	6	5	4	3	3	3	3	2
9	6	4	3	3	3	4	3	3	3	5
10	6	4	6	6	3	6	6	5	7	2
11	6	6	6	6	6	4	4	4	3	6
12	6	4	5	6	4	4	3	3	4	5
13	6	4	4	2	5	3	3	3	3	5
14	6	5	4	5	3	3	3	3	3	6
15	6	2	3	2	2	4	4	2	3	2
16	7	4	5	5	5	3	3	2	2	6
17	6	2	5	5	1	1	1	1	1	4
18	7	1	5	4	4	3	3	2	3	6
19	6	5	4	5	4	3	3	3	3	4
20	6	2	5	4	2	3	4	3	3	5
21	7	3	4	4	4	3	3	4	3	5
22	6	4	4	4	4	4	1	1	1	6
23	7	3	4	5	5	4	3	2	3	6
24	6	3	4	3	3	3	3	5	3	5
25	5	3	4	4	4	4	4	4	3	5
26	6	5	5	4	4	2	2	3	5	6
27	6	4	5	5	5	4	4	3	7	5
28	7	2	4	7	7	4	7	7	7	5
29	6	1	2	1	1	2	2	1	3	5
30	5	1	5	3	2	3	3	1	2	5
31	7	6	5	4	3	3	4	4	3	5
32	6	4	5	3	3	4	4	3	2	4
33	6	2	4	2	3	3	4	3	4	4
34	6	4	4	6	5	3	3	3	3	3
35	6	5	5	5	5	3	3	3	3	6
36	5	4	6	6	5	4	4	1	3	7
37	6	3	4	5	4	3	3	3	3	5
38	6	4	4	4	5	5	6	5	6	6
39	7	5	4	4	5	3	3	5	3	3
40	6	1	5	6	6	4	4	3	1	6
41	6	4	4	5	6	6	6	4	7	5
42	6	1	5	2	2	4	4	4	3	5
43	5	4	6	6	4	3	3	2	4	4
44	6	5	5	4	4	3	3	3	3	6
45	6	6	5	5	4	3	3	3	2	6
46	7	6	5	5	5	4	4	5	2	5

	ABSELEC DATAB	ARTENJOURN	ARTDUTCH	ARTENGL	OTHER	ST_B_1	ST_B_2	ST_B_3
1	3	5	4	3	2	4	3	2
2	3	4	3	3	1	3	3	3
3	2	4	2	2	2	2	1	1
4	3	5	3	4	4	4	2	1
5	2	4	4	2	90	5	4	1
6	2	5	2	2	90	5	2	3
7	3	4	4	4	6	4	5	1
8	1	5	2	2	3	5	3	2
9	2	3	3	2	2	5	4	3
10	3	5	3	2	5	4	5	1
11	2	5	2	2	2	4	3	2
12	4	4	4	3	4	4	2	99
13	4	5	2	2	90	4	3	2
14	3	4	3	3	90	1	2	1
15	2	2	2	2	2	1	1	1
16	4	5	4	3	90	4	5	2
17	2	4	4	4	4	2	2	2
18	3	4	3	2	90	2	2	1
19	2	2	3	2	90	1	4	1
20	2	4	3	2	90	2	1	1
21	4	3	4	4	90	4	4	5
22	2	4	2	2	5	1	1	1
23	1	4	1	1	1	2	5	1
24	3	3	3	2	3	5	2	3
25	3	5	4	4	90	4	5	3
26	2	3	3	2	2	4	5	1
27	2	3	3	2	90	1	2	1
28	4	5	4	4	7	4	2	2
29	1	4	1	1	2	4	2	1
30	1	4	1	1	3	4	2	2
31	2	4	5	4	3	4	5	5
32	4	5	3	3	90	3	2	3
33	3	4	3	3	4	2	2	2
34	3	5	4	4	3	5	3	1
35	3	5	2	2	2	2	3	3
36	5	6	5	2	7	5	5	3
37	3	4	4	4	90	5	5	2
38	5	4	3	5	5	4	2	1
39	2	3	3	2	2	4	5	4
40	6	6	5	5	6	3	2	1
41	4	4	3	1	1	4	4	4
42	2	5	3	2	1	4	5	3
43	3	5	3	2	2	4	3	1
44	6	5	5	4	90	5	5	2
45	2	4	3	3	90	1	3	2
46	5	5	5	5	5	4	2	3

	ST_B_4	ST_B_5	ST_B_6	ST_B_7	ST_B_8	ST_B_9	ST_B_10	ST_B_11	ST_B_12
1	3	4	3	3	3	2	2	5	5
2	2	3	3	4	4	4	2	4	2
3	1	2	5	5	4	2	3	5	4
4	1	4	5	5	4	5	1	5	5
5	2	4	2	2	5	1	1	1	1
6	2	2	2	2	3	1	1	5	5
7	2	3	3	2	4	4	2	3	1
8	2	4	5	4	3	5	3	5	3
9	3	4	5	5	4	2	1	5	2
10	1	2	4	4	4	3	1	1	1
11	3	3	3	3	4	3	5	5	5
12	1	2	5	4	4	4	4	5	4
13	1	4	3	4	2	2	1	4	2
14	1	4	3	4	2	4	2	5	4
15	1	2	5	4	1	1	5	5	90
16	3	4	4	3	3	4	3	5	90
17	2	4	4	4	2	3	2	5	3
18	1	1	4	4	2	2	2	5	4
19	1	5	5	4	4	4	2	5	2
20	1	2	3	3	2	4	2	2	1
21	4	5	5	5	5	5	2	5	5
22	3	1	3	3	3	2	2	90	90
23	1	1	3	3	1	1	3	3	1
24	4	5	5	5	4	3	2	5	90
25	4	5	5	5	5	3	4	4	3
26	1	5	5	5	5	3	1	4	1
27	1	3	2	2	4	2	5	4	1
28	2	5	5	4	4	5	2	3	3
29	1	1	1	1	1	2	4	5	90
30	2	3	5	4	5	3	2	4	90
31	5	4	5	5	5	4	2	4	3
32	3	99	4	4	99	5	4	5	3
33	1	2	4	3	4	4	4	5	1
34	2	4	4	3	4	3	2	3	2
35	3	4	3	4	4	3	1	3	3
36	4	3	3	3	4	4	3	4	3
37	2	4	5	4	5	5	2	5	2
38	1	4	2	3	5	5	4	4	4
39	2	5	4	4	4	3	1	4	3
40	1	4	5	99	4	4	5	5	4
41	4	4	4	4	3	2	2	3	1
42	3	4	3	4	3	4	3	5	90
43	1	2	3	3	2	3	3	4	2
44	1	5	4	5	2	2	2	4	3
45	2	2	5	4	2	2	2	5	2
46	3	4	3	3	1	3	3	4	4

	ST_B_13	ST_B_14	ST_B_15	ST_B_16	ST_B_17	ST_B_18	ST_B_19	ST_B_20	ST_B_21
1	2	2	2	2	2	3	2	4	3
2	2	2	2	2	2	3	2	3	2
3	3	4	3	3	3	3	3	5	2
4	5	5	4	2	2	3	2	5	3
5	1	1	1	2	4	5	1	5	1
6	2	2	2	2	2	2	2	2	2
7	2	5	4	1	4	3	3	3	4
8	3	2	3	3	3	3	4	4	2
9	2	2	1	1	3	4	1	3	2
10	1	4	1	1	2	3	1	4	1
11	5	4	5	3	4	3	4	4	3
12	3	4	4	3	2	3	4	4	2
13	2	2	2	2	3	3	2	5	1
14	2	4	4	2	2	3	2	3	2
15	1	3	2	1	2	3	1	3	1
16	3	5	5	4	5	5	4	5	4
17	4	5	3	1	2	90	2	4	2
18	2	2	1	2	3	3	4	3	1
19	3	4	4	2	2	3	2	3	2
20	2	3	3	2	2	3	4	5	4
21	5	90	5	2	4	5	4	5	2
22	90	2	1	2	2	2	90	3	90
23	1	90	3	1	1	1	1	3	1
24	2	3	2	2	3	3	2	4	2
25	3	3	5	3	5	4	4	4	2
26	1	1	4	1	1	5	1	4	1
27	1	1	2	1	5	4	1	5	1
28	2	2	5	3	5	2	4	5	2
29	5	5	1	3	90	1	3	1	3
30	2	1	2	2	1	1	1	3	1
31	3	2	3	99	3	1	3	3	2
32	3	5	5	4	4	2	4	4	4
33	3	4	5	3	1	2	4	2	4
34	2	2	90	3	2	3	2	4	3
35	1	1	1	90	1	3	3	5	90
36	3	3	2	1	4	3	2	2	2
37	2	4	2	2	2	2	2	5	2
38	4	5	5	2	4	4	5	5	5
39	2	2	2	3	1	2	2	5	1
40	5	4	5	3	4	4	4	4	4
41	3	2	4	4	5	5	4	4	2
42	90	1	1	3	2	1	4	3	3
43	2	2	2	3	2	3	3	3	2
44	3	2	3	2	2	1	3	5	1
45	2	4	4	2	2	5	4	4	2
46	3	1	4	4	1	1	5	5	1

	ST_B_22	ST_B_23	ST_B_24	ST_B_25	ST_B_26	ST_B_27	ST_B_28	ST_B_29	ST_B_30
1	2	4	2	5	1	3	4	4	4
2	3	3	4	5	3	4	4	4	2
3	2	5	2	3	3	3	5	5	5
4	3	5	4	3	4	4	5	5	5
5	5	5	2	5	4	4	5	5	5
6	1	4	1	3	90	3	5	5	3
7	3	5	4	5	3	90	5	2	5
8	4	5	5	2	4	3	4	4	99
9	2	3	3	4	90	90	4	4	3
10	1	4	4	3	1	5	5	5	5
11	3	5	4	5	3	4	5	4	4
12	3	4	3	4	1	1	5	4	4
13	1	4	1	5	4	4	5	5	4
14	2	4	3	3	2	2	5	4	5
15	1	3	4	3	90	90	4	5	3
16	3	4	5	2	1	4	5	4	5
17	90	4	4	4	1	3	5	4	4
18	2	4	4	4	4	4	5	4	4
19	4	4	3	3	3	4	5	5	5
20	3	5	4	3	2	1	5	99	5
21	1	4	2	5	1	1	5	5	5
22	90	4	90	5	90	90	5	4	3
23	1	3	4	5	1	1	5	3	3
24	2	4	5	3	4	5	5	5	5
25	3	5	5	3	2	4	4	3	4
26	1	5	5	3	1	5	5	5	5
27	1	4	2	5	4	2	5	3	3
28	5	5	4	5	3	2	5	5	5
29	90	90	90	4	90	90	4	3	4
30	90	5	4	3	90	90	5	3	3
31	2	4	4	3	3	3	4	4	3
32	2	5	4	4	4	4	5	5	5
33	3	5	1	5	4	90	4	3	4
34	1	4	4	3	2	3	4	4	4
35	4	5	4	90	3	3	5	3	3
36	2	4	4	3	4	2	4	4	3
37	5	5	5	4	1	4	5	5	5
38	4	4	3	5	1	4	5	5	5
39	3	2	3	5	2	4	5	5	5
40	2	4	4	2	90	90	5	5	5
41	2	4	4	4	1	1	4	4	4
42	90	90	90	90	90	90	5	3	3
43	90	4	3	90	3	4	5	4	5
44	3	5	4	3	1	5	5	5	2
45	1	4	2	3	4	5	5	5	5
46	2	5	5	3	4	4	5	2	2

	ST_B_31	ST_B_32	ST_B_33	ST_B_34	ST_B_35	ST_B_36	ST_B_37	ST_B_38	GEND
1	3	4	3	3	4	2	4	3	1
2	4	4	4	4	3	3	3	4	1
3	5	5	5	5	5	2	4	4	1
4	5	5	5	4	5	4	5	4	1
5	4	5	4	4	4	1	4	5	1
6	5	5	4	1	3	1	4	5	1
7	5	3	4	3	4	3	4	3	1
8	5	4	5	2	4	2	4	4	1
9	4	4	2	2	3	1	4	5	1
10	5	4	4	2	4	2	5	5	1
11	4	5	4	3	4	3	4	4	1
12	4	4	4	2	4	2	4	4	1
13	5	2	5	3	4	3	5	4	1
14	5	5	3	2	4	1	5	4	1
15	5	5	3	3	3	3	3	4	1
16	5	4	5	4	5	5	4	4	1
17	4	4	4	2	4	2	3	3	1
18	4	4	3	3	4	1	3	3	1
19	5	4	4	3	4	2	3	4	1
20	4	2	2	2	4	2	4	3	1
21	5	4	4	3	3	4	4	5	1
22	4	3	3	2	4	3	4	2	1
23	5	5	4	1	3	1	3	5	1
24	5	4	5	4	5	2	5	3	2
25	4	2	3	4	3	4	3	4	1
26	5	5	3	2	5	5	5	1	1
27	4	5	4	3	4	2	4	4	1
28	5	5	5	4	5	2	5	4	1
29	4	4	1	1	1	3	3	5	1
30	4	4	4	1	3	2	3	4	1
31	4	3	3	3	3	3	3	4	1
32	5	5	4	4	4	4	4	4	1
33	4	1	2	2	3	1	3	5	1
34	4	4	4	3	4	2	4	3	1
35	5	2	5	2	5	2	5	2	1
36	3	4	3	3	3	3	3	4	1
37	5	4	4	2	4	2	5	5	1
38	5	4	5	4	5	2	5	2	1
39	5	5	4	2	4	3	4	4	2
40	5	5	4	4	4	4	4	2	1
41	4	4	4	4	4	4	4	3	1
42	4	4	4	3	3	3	3	5	1
43	4	5	3	1	4	2	4	3	1
44	5	5	5	2	4	1	4	3	1
45	5	5	4	2	5	2	5	5	1
46	5	1	5	3	3	1	5	5	2

	NR_OF_WORKPL	CURRWORKPL	CURRGROUP	NR_OF_SETTIN GTYPES	PREVWORKPL	PASTGROUP
1	2	21	1	2	17,00	1
2	1	4	1	2	12,00	1
3	1	2	1	0	47,00	1
4	2	18	2	2	16,00	3
5	1	2	2	0	47,00	1
6	1	2	1	1	1,00	3
7	1	2	1	2	17,00	1
8	2	17	1	99	11,00	1
9	2	12	1	2	22,00	1
10	1	2	1	2	29,00	1
11	1	1	1	0	47,00	1
12	1	1	1	1	2,00	1
13	1	2	2	3	37,00	1
14	1	1	1	1	4,00	1
15	2	13	1	1	2,00	1
16	2	14	1	1	2,00	1
17	2	18	2	0	47,00	3
18	1	1	1	4	43,00	1
19	1	2	1	0	47,00	90
20	2	18	3	1	1,00	1
21	1	2	1	1	1,00	1
22	1	1	1	1	6,00	3
23	1	2	1	1	1,00	1
24	1	1	1	1	2,00	1
25	1	2	1	2	27,00	1
26	1	2	1	1	1,00	3
27	1	1	1	0	47,00	1
28	1	2	1	1	1,00	1
29	99	11	3	0	47,00	90
30	2	24	2	2	28,00	2
31	2	23	3	4	41,00	3
32	99	11	2	4	40,00	3
33	1	9	2	0	47,00	2
34	1	2	3	3	30,00	3
35	1	4	1	3	31,00	1
36	1	8	3	3	32,00	1
37	1	4	1	1	1,00	1
38	2	16	1	1	2,00	1
39	1	2	1	99	11,00	1
40	1	8	3	3	33,00	1
41	1	2	1	3	46,00	1
42	2	22	2	4	42,00	3
43	1	1	1	1	7,00	2
44	1	4	3	0	47,00	3
45	1	1	1	1	4,00	1
46	1	2	1	0	47,00	1

	HOURSWK	NRCOLL	MENTOR	NRINTERNS	OTDEGR	NONOTDEGR	YRGRAD
1	9	4	1	2	1	4	2004
2	5	99	1	2	1	4	1983
3	7	18	1	2	1	4	2003
4	7	6	2	90	1	4	2003
5	6	7	1	1	1	4	1996
6	5	18	1	3	1	4	1997
7	5	28	1	99	1	1	1987
8	5	2	1	1	1	1	1978
9	7	2	1	1	1	1	2005
10	5	20	1	1	1	4	1991
11	9	3	1	3	1	1	2000
12	8	7	2	90	1	4	2003
13	7	3	1	2	1	4	1999
14	8	4	1	1	1	4	2003
15	6	5	1	2	1	4	1984
16	8	5	1	1	1	4	2003
17	7	8	1	1	1	4	2004
18	5	2	2	90	1	4	1990
19	5	7	1	1	1	4	1997
20	9	16	1	2	1	1	2002
21	6	30	1	2	1	2	1997
22	7	7	2	90	1	4	2004
23	8	5	1	2	1	4	1999
24	8	4	1	2	1	4	1988
25	7	34	1	4	1	4	1995
26	5	18	1	1	1	4	1992
27	4	4	1	2	1	4	1993
28	8	18	2	90	1	4	2004
29	5	2	2	90	1	1	1998
30	7	3	2	90	1	1	1967
31	7	2	2	90	1	4	1975
32	7	1	2	90	1	2	1999
33	5	1	2	90	1	2	2005
34	7	4	1	3	1	4	2002
35	9	11	1	6	1	4	1975
36	7	99	1	3	1	1	1980
37	5	5	1	1	1	4	2001
38	5	2	1	1	2	4	2007
39	8	24	1	2	1	4	1976
40	6	1	1	2	1	4	2006
41	3	3	1	4	1	1	1988
42	6	99	1	3	1	4	1975
43	7	5	1	2	1	4	2003
44	5	3	1	2	1	4	1998
45	5	7	1	2	1	4	1982
46	8	9	2	90	1	4	2007

	GRADCOUNTRY	GRADCOUNTRY_SPEC	YRSRACT	AGE
1	1		4,00	1
2	1		24,50	6
3	1		4,00	2
4	1		5,00	2
5	1		12,00	4
6	1		10,00	4
7	1		21,00	5
8	1		15,00	8
9	1		3,00	2
10	1		17,00	4
11	1		7,00	2
12	1		5,00	2
13	1		9,00	3
14	1		5,00	2
15	1		23,00	6
16	1		5,00	2
17	1		3,50	2
18	1		18,00	5
19	1		11,00	3
20	1		6,00	2
21	1		10,00	3
22	1		3,00	2
23	1		9,00	3
24	1		20,00	6
25	1		13,00	4
26	1		16,00	4
27	1		15,00	4
28	1		4,00	2
29	1		7,00	3
30	3	Amerika	40,00	9
31	1		33,00	8
32	1		8,00	3
33	1		2,50	2
34	1		5,00	2
35	1		28,00	8
36	1		28,00	7
37	1		7,00	2
38	3	in Denemarken (Euromas	7,00	3
39	1		31,00	8
40	1		1,50	2
41	1		20,00	7
42	1		33,00	8
43	1		4,50	2
44	1		10,00	3
45	1		21,00	7
46	1		1,00	2

	SURVEY TYPE	RESPONDENT TYPE	QFILTER	EXP	INT	CLIENT	CLIENTFAM	OTCOLL
47	1	1	1	7	7	7	5	6
48	1	1	1	7	7	7	6	7
49	1	1	1	7	7	6	6	6
50	1	1	1	7	7	7	7	6
51	1	1	1	7	7	7	6	7
52	1	1	1	7	5	7	6	6
53	1	1	1	7	7	7	6	6
54	1	1	1	7	7	7	5	4
55	1	1	1	7	7	7	6	6
56	1	1	1	7	2	7	7	4
57	1	1	1	7	7	7	6	6
58	1	1	1	6	6	6	5	5
59	1	1	1	7	7	5	4	6
60	1	1	1	7	6	6	5	5
61	1	1	1	7	2	7	6	5
62	1	1	1	7	7	6	5	6
63	1	1	1	7	7	7	5	5
64	1	1	1	7	7	7	7	6
65	1	1	1	7	7	7	6	6
66	1	1	1	7	7	7	6	6
67	1	1	1	7	7	7	7	7
68	1	1	1	7	7	7	5	7
69	1	1	1	7	7	7	7	7
70	1	1	1	7	6	7	6	6
71	2	1	1	7	4	6	4	6
72	2	1	1	7	7	6	5	6
73	2	1	1	7	7	7	7	6
74	2	1	1	7	7	6	6	6
75	2	1	1	7	7	7	6	6
76	2	1	1	7	6	5	4	6
77	1	2	1	6	6	6	6	6
78	1	2	1	6	7	6	6	6
79	1	2	1	7	7	5	5	5
80	1	2	1	7	7	7	5	7
81	1	2	1	7	7	7	5	6
82	1	2	1	7	7	7	5	5
83	1	2	1	7	7	6	7	5
84	1	2	1	7	7	7	6	6
85	1	2	1	7	5	7	6	6
86	1	2	1	7	7	7	6	7
87	1	2	1	7	7	7	6	6
88	1	2	1	7	7	7	6	6
89	1	2	1	7	7	7	6	6
90	1	2	1	7	7	7	6	6
91	1	2	1	7	7	7	6	7
92	1	2	1	7	7	7	6	7

	NONOTCOLL	OTINT	TEXTB	OTGUID	GUID	CONF	WSHOP	INSED	POSTGRAD ED	INTWEBS
47	6	5	4	4	4	3	3	4	3	4
48	7	6	6	3	7	5	4	5	4	6
49	5	1	5	7	7	3	3	5	2	7
50	6	5	4	5	2	3	3	3	3	4
51	7	4	5	4	4	4	4	3	3	6
52	6	5	5	3	6	5	5	5	5	6
53	7	4	5	2	2	3	3	3	3	5
54	5	2	4	4	6	3	99	4	3	6
55	6	3	5	4	5	4	4	4	2	3
56	99	2	4	5	5	3	3	2	3	5
57	6	4	5	3	3	3	3	3	3	5
58	5	1	1	4	4	2	3	1	1	6
59	5	4	5	3	3	5	5	4	1	5
60	5	3	3	4	3	3	3	3	3	3
61	6	2	4	6	5	2	3	1	3	6
62	1	99	4	4	5	3	3	3	3	4
63	6	2	4	3	4	3	3	3	3	6
64	5	4	3	3	3	4	4	2	4	5
65	6	4	5	6	3	3	5	5	6	6
66	6	5	5	4	4	3	3	3	3	6
67	7	4	5	5	5	4	4	3	3	6
68	5	4	5	4	3	3	3	4	3	6
69	7	5	4	5	6	3	3	4	3	7
70	6	4	4	4	3	3	4	3	3	4
71	5	2	4	4	4	3	3	3	2	5
72	6	3	4	4	4	3	3	3	3	5
73	7	99	4	5	5	4	99	4	3	5
74	6	6	5	4	4	4	3	4	3	6
75	6	2	5	5	4	3	3	3	3	5
76	6	4	5	4	2	3	3	3	3	5
77	6	4	5	4	4	3	3	4	3	6
78	5	4	4	5	4	4	4	3	2	5
79	5	2	4	4	2	3	3	4	2	5
80	6	3	5	6	4	4	1	3	3	5
81	6	3	5	4	4	3	3	3	2	7
82	7	2	5	6	6	3	3	1	3	5
83	6	4	5	3	3	3	4	3	3	5
84	6	6	5	6	5	4	4	3	3	5
85	6	6	4	4	4	3	4	4	4	5
86	6	4	6	6	5	4	4	1	4	6
87	6	4	4	6	6	3	3	3	6	4
88	6	4	5	5	5	3	3	3	3	5
89	6	4	5	3	3	3	3	6	3	6
90	6	3	3	4	2	4	4	4	4	4
91	7	5	5	4	3	3	3	3	3	2
92	7	4	5	7	2	3	3	2	3	2

	ABSELEC DATAB	ARTENJOURN	ARTDUTCH	ARTENGL	OTHER	ST_B_1	ST_B_2	ST_B_3
47	4	5	5	5	5	4	2	2
48	5	4	5	4	4	5	5	5
49	1	4	2	2	90	4	99	2
50	4	3	2	2	2	5	5	3
51	2	4	4	2	5	4	5	4
52	6	4	4	5	5	5	2	4
53	2	3	2	2	2	3	2	3
54	1	3	1	1	3	4	2	2
55	99	5	3	2	1	4	2	2
56	99	5	1	6	90	99	2	99
57	6	4	3	6	5	4	5	1
58	1	5	1	1	1	2	1	4
59	2	3	3	2	7	3	5	1
60	2	2	2	2	2	3	3	2
61	2	4	4	4	90	1	5	1
62	2	4	2	2	3	4	3	3
63	5	3	2	4	3	5	3	3
64	2	5	2	2	90	5	4	1
65	5	5	2	5	1	5	5	2
66	4	4	2	2	5	4	2	2
67	2	3	3	3	2	2	2	1
68	4	5	4	4	6	4	1	3
69	6	5	4	6	7	4	4	4
70	2	4	3	2	2	5	2	3
71	2	3	2	2	90	5	2	3
72	3	5	3	3	90	4	5	2
73	99	4	4	3	90	4	2	2
74	6	4	3	5	90	5	4	4
75	2	4	3	2	90	4	2	3
76	3	5	2	4	90	4	5	3
77	3	4	4	4	90	4	5	4
78	2	3	3	3	2	5	2	3
79	1	4	2	2	90	4	5	2
80	2	5	3	3	90	2	3	2
81	2	3	2	2	4	4	3	4
82	2	4	4	4	4	3	2	2
83	2	4	4	2	6	5	2	5
84	3	4	2	2	1	5	5	3
85	1	4	4	4	4	4	2	3
86	5	5	4	5	5	2	2	1
87	4	3	4	4	90	4	2	4
88	99	2	4	3	4	3	2	4
89	5	5	4	4	5	4	5	1
90	2	4	2	2	90	5	5	1
91	2	5	2	2	2	2	5	4
92	2	5	2	2	2	5	3	1

	ST_B_4	ST_B_5	ST_B_6	ST_B_7	ST_B_8	ST_B_9	ST_B_10	ST_B_11	ST_B_12
47	1	5	5	5	5	4	2	2	2
48	5	5	5	5	4	5	4	5	4
49	2	5	5	5	4	4	2	5	90
50	3	5	5	5	5	4	2	3	1
51	2	2	4	5	3	4	4	3	90
52	3	5	5	4	5	3	1	4	4
53	3	4	3	3	3	4	2	5	3
54	2	1	1	1	4	3	2	4	2
55	2	5	4	5	4	3	3	5	3
56	99	99	99	99	99	5	5	5	4
57	1	5	3	3	4	4	1	3	3
58	4	2	2	2	2	2	3	5	5
59	1	2	3	3	4	4	2	5	1
60	2	2	3	3	3	2	1	4	3
61	1	4	2	3	2	5	5	4	4
62	3	4	4	4	3	3	3	3	2
63	3	3	5	5	3	2	2	4	4
64	1	2	3	1	2	3	1	5	2
65	2	5	5	5	5	3	3	3	3
66	2	3	3	3	2	2	3	4	3
67	1	5	5	5	5	2	5	5	4
68	3	4	4	4	4	5	3	5	5
69	3	5	5	5	5	5	4	5	3
70	3	2	4	2	4	2	2	2	1
71	4	4	5	5	3	3	3	4	1
72	2	4	4	4	5	4	4	4	2
73	3	4	4	4	3	3	3	4	99
74	4	5	5	4	5	5	5	5	5
75	3	3	4	3	4	2	2	5	2
76	3	3	4	3	4	2	2	5	4
77	2	5	4	4	5	4	2	5	2
78	2	3	4	3	3	3	2	5	2
79	3	3	3	3	3	4	3	1	1
80	2	2	4	4	4	3	3	3	3
81	4	3	3	3	1	1	1	2	1
82	3	3	3	3	3	3	3	5	3
83	5	4	3	3	5	3	3	5	5
84	2	3	5	4	3	4	4	4	2
85	99	4	4	4	3	4	1	3	3
86	2	4	4	4	5	5	5	5	5
87	4	4	5	5	4	4	1	5	3
88	4	5	5	4	4	4	4	5	2
89	1	4	5	4	4	2	1	2	2
90	1	5	5	5	5	4	2	4	1
91	4	1	5	5	5	2	1	2	1
92	1	3	4	4	2	2	5	1	1

	ST_B_13	ST_B_14	ST_B_15	ST_B_16	ST_B_17	ST_B_18	ST_B_19	ST_B_20	ST_B_21
47	2	4	5	1	2	2	2	4	2
48	1	4	3	3	3	4	4	5	2
49	3	2	2	2	2	2	4	4	2
50	2	2	2	3	2	4	3	4	2
51	4	4	2	2	2	4	3	4	2
52	2	2	3	2	3	4	1	5	2
53	90	2	1	3	2	1	4	5	2
54	2	2	3	4	1	3	2	2	2
55	2	1	2	3	2	3	3	4	2
56	3	5	5	3	3	2	5	2	3
57	2	2	5	1	2	3	1	3	1
58	5	4	2	1	3	1	1	1	2
59	1	1	1	2	1	2	3	5	2
60	1	1	1	2	2	3	2	4	1
61	4	4	4	3	4	4	4	4	5
62	4	3	3	2	4	1	3	2	3
63	3	4	3	3	3	1	4	3	3
64	3	3	2	2	2	3	2	3	90
65	2	2	3	2	4	4	3	4	3
66	2	2	3	2	1	3	4	3	2
67	1	1	1	1	2	2	2	5	1
68	1	3	3	4	2	2	5	4	3
69	4	4	5	4	4	5	4	4	3
70	1	1	1	2	1	5	2	4	1
71	2	3	3	2	3	3	3	4	2
72	3	3	4	3	3	2	3	1	4
73	2	1	2	1	3	5	3	4	2
74	5	5	5	2	2	2	5	5	4
75	2	2	1	2	2	5	2	2	2
76	5	5	4	3	3	5	3	4	2
77	2	2	4	1	2	1	2	2	2
78	2	3	4	2	2	3	90	4	90
79	90	3	5	4	4	4	4	4	2
80	2	2	4	3	3	3	2	3	3
81	2	2	1	1	1	1	1	90	90
82	5	5	3	3	3	3	3	3	3
83	5	5	1	3	2	2	3	3	2
84	2	5	5	3	2	2	4	3	1
85	2	1	1	3	2	2	4	4	1
86	5	5	5	3	2	5	5	5	5
87	2	2	4	2	3	5	1	5	4
88	2	2	4	4	2	3	5	4	2
89	2	2	5	2	3	3	3	3	1
90	2	2	2	4	2	2	4	5	2
91	2	4	1	4	4	4	4	5	3
92	1	1	1	1	1	3	1	4	1

	ST_B_22	ST_B_23	ST_B_24	ST_B_25	ST_B_26	ST_B_27	ST_B_28	ST_B_29	ST_B_30
47	3	4	3	5	4	3	4	4	5
48	5	5	5	3	90	90	5	5	5
49	4	4	4	3	4	90	5	5	5
50	1	4	4	3	1	1	5	1	1
51	2	4	4	4	90	90	5	4	3
52	2	5	4	3	2	4	5	5	5
53	4	4	4	2	4	4	5	3	2
54	2	2	1	3	4	4	5	5	4
55	2	2	3	4	1	1	5	4	2
56	90	90	4	3	90	90	4	3	3
57	4	5	4	5	1	5	5	5	5
58	90	4	4	90	90	90	4	3	2
59	1	4	1	5	1	4	5	5	2
60	3	5	5	3	3	3	5	5	5
61	4	2	4	4	2	2	5	4	4
62	1	2	2	5	90	90	4	3	3
63	2	4	4	3	90	90	5	4	5
64	90	90	90	5	90	90	4	3	2
65	2	4	4	2	2	3	5	5	5
66	2	3	2	5	3	4	3	2	2
67	4	5	5	5	4	4	5	5	5
68	4	5	5	3	90	90	5	3	3
69	1	4	5	5	2	5	5	5	5
70	4	2	1	5	4	1	4	5	4
71	2	4	1	5	2	1	4	4	3
72	2	4	4	4	2	4	4	3	3
73	3	4	3	3	4	3	5	5	3
74	3	5	4	5	4	4	5	5	4
75	5	5	5	3	90	90	5	4	4
76	3	5	3	3	1	5	5	5	5
77	4	5	4	5	5	5	5	5	5
78	90	5	4	3	90	90	5	4	3
79	3	5	4	3	2	2	5	5	5
80	4	5	3	3	2	3	5	4	4
81	1	4	1	3	90	90	5	5	5
82	3	3	3	3	90	90	5	3	3
83	3	4	3	3	1	1	5	4	4
84	3	5	3	3	4	4	5	5	5
85	4	5	5	2	3	4	5	2	2
86	1	4	3	4	2	2	5	5	5
87	3	4	4	5	1	1	5	5	5
88	2	5	5	4	3	4	5	4	2
89	2	4	1	5	1	4	5	5	5
90	2	5	4	3	3	4	5	5	5
91	2	5	4	1	3	2	5	5	5
92	1	5	5	3	2	90	5	5	5

	ST_B_31	ST_B_32	ST_B_33	ST_B_34	ST_B_35	ST_B_36	ST_B_37	ST_B_38	GEND
47	5	5	4	3	3	3	3	5	1
48	5	5	5	2	5	3	5	3	1
49	5	5	5	2	5	2	5	5	1
50	5	5	4	5	4	3	5	5	2
51	4	4	99	4	4	3	3	3	1
52	5	4	4	4	5	5	5	2	1
53	5	5	4	1	4	2	4	4	1
54	4	5	4	2	3	1	4	5	1
55	4	4	4	2	4	2	4	2	1
56	3	3	3	5	3	3	3	3	1
57	5	4	4	2	5	1	5	3	1
58	4	4	1	4	4	3	3	4	1
59	5	5	5	2	4	2	5	4	1
60	5	5	5	2	5	1	5	4	2
61	5	5	5	4	5	2	5	2	1
62	3	3	3	3	3	3	3	5	1
63	5	5	4	2	4	2	3	4	1
64	3	4	2	2	3	2	2	5	1
65	5	5	5	5	5	5	4	3	1
66	3	4	3	2	2	2	3	4	1
67	5	5	5	5	5	2	5	4	1
68	5	5	4	2	5	2	5	4	99
69	5	5	5	4	4	4	4	4	1
70	4	2	2	2	3	2	4	4	2
71	4	4	3	3	3	2	4	3	1
72	4	2	4	3	3	2	3	5	1
73	4	4	4	3	4	3	3	4	1
74	5	5	5	4	5	4	4	3	1
75	5	5	4	2	4	4	3	4	1
76	5	5	5	4	3	4	4	3	1
77	5	5	4	2	5	3	5	3	1
78	3	3	4	4	3	2	3	3	1
79	4	4	4	2	5	3	5	3	1
80	4	5	4	3	3	4	4	3	1
81	5	5	3	3	4	3	3	4	1
82	1	5	5	5	3	3	3	4	1
83	4	5	4	2	3	2	3	4	1
84	5	5	5	2	5	2	5	3	1
85	4	5	4	1	4	1	4	5	1
86	5	5	5	2	5	4	5	3	1
87	5	5	4	3	4	4	5	3	1
88	4	5	4	4	4	3	4	3	1
89	5	5	5	1	5	3	5	4	2
90	5	5	4	2	5	2	5	5	1
91	5	5	5	4	5	5	5	2	1
92	5	5	5	1	5	1	4	4	1

	NR_OF_WORKPL	CURRWORKPL	CURRGROUP	NR_OF_SETTIN GTYPES	PREVWORKPL	PASTGROUP
47	1	2	1	2	16,00	1
48	1	8	3	1	3,00	3
49	1	1	1	2	20,00	2
50	1	1	1	99	11,00	3
51	1	1	1	0	47,00	3
52	1	3	1	0	47,00	1
53	2	22	2	1	3,00	1
54	99	11	1	4	40,00	3
55	1	2	1	2	13,00	1
56	1	8	3	3	36,00	1
57	1	2	2	5	44,00	3
58	1	6	3	2	13,00	1
59	1	4	1	2	14,00	3
60	1	1	1	0	47,00	99
61	2	13	1	1	2,00	1
62	1	1	1	1	2,00	3
63	1	5	1	1	4,00	1
64	2	25	1	1	1,00	1
65	1	3	1	2	12,00	1
66	2	15	1	3	27,00	1
67	1	2	2	0	47,00	1
68	99	11	3	0	47,00	90
69	1	2	2	4	38,00	2
70	1	1	1	1	3,00	1
71	1	1	1	1	9,00	2
72	1	2	1	0	47,00	90
73	1	2	1	0	47,00	2
74	1	3	2	2	13,00	1
75	1	4	1	1	1,00	3
76	1	4	1	2	21,00	3
77	2	18	2	1	4,00	3
78	2	26	3	0	47,00	90
79	1	1	1	1	6,00	3
80	1	2	1	0	47,00	3
81	1	5	1	2	12,00	3
82	1	8	3	2	17,00	1
83	1	8	2	1	4,00	2
84	1	1	1	0	47,00	99
85	1	1	1	1	5,00	1
86	2	19	3	1	1,00	1
87	1	3	1	0	47,00	90
88	2	20	1	1	1,00	1
89	1	2	1	3	34,00	1
90	99	11	1	2	17,00	1
91	1	4	3	1	1,00	1
92	1	4	1	2	12,00	1

	HOURSWK	NRCOLL	MENTOR	NRINTERNS	OTDEGR	NONOTDEGR	YRGRAD
47	6	18	2	90	1	1	1982
48	7	4	1	5	1	1	1995
49	7	4	2	90	1	4	1971
50	9	5	1	2	1	4	1983
51	8	2	1	1	1	4	2002
52	7	14	1	2	1	4	2000
53	5	99	1	1	1	4	1986
54	5	99	2	90	1	1	2001
55	5	2	2	90	1	4	1999
56	9	99	1	1	1	4	1982
57	5	41	1	2	1	1	1982
58	4	2	2	90	1	4	1972
59	4	6	2	90	1	4	1987
60	7	3	2	90	1	1	1999
61	6	5	2	1	1	4	2004
62	6	1	2	90	1	1	1976
63	5	99	2	90	1	4	1997
64	5	2	1	1	1	4	1976
65	7	14	1	3	1	4	2001
66	4	2	1	4	1	4	1993
67	5	35	1	2	1	4	1988
68	7	2	2	90	1	4	2007
69	9	15	1	2	1	4	2000
70	6	2	1	2	1	4	2001
71	4	1	2	90	1	4	2002
72	6	30	1	1	1	4	1992
73	5	18	2	90	1	4	1973
74	8	12	1	4	2	4	2005
75	7	3	2	90	1	4	1993
76	5	5	1	1	1	4	1991
77	5	14	1	4	1	4	1983
78	8	2	2	90	1	4	2006
79	7	6	1	2	1	4	2001
80	7	12	1	2	1	4	2004
81	5	2	2	90	1	4	2007
82	2	99	2	90	1	1	1997
83	7	2	1	2	1	4	2002
84	4	4	1	2	1	4	1996
85	5	2	1	2	1	1	1990
86	8	15	2	90	2	4	2009
87	7	15	1	2	1	4	2002
88	5	3	1	2	1	4	1999
89	7	2	1	2	1	4	1978
90	5	6	1	1	1	4	1986
91	5	5	1	4	1	1	1983
92	7	9	2	90	1	4	2002

	GRADCOUNTRY	GRADCOUNTRY_SPEC	YRSRACT	AGE
47	1		26,00	7
48	1		13,00	4
49	1		31,00	8
50	1		25,00	6
51	1		5,50	2
52	1		7,00	2
53	1		21,00	5
54	1		7,00	3
55	1		9,00	3
56	1		26,00	7
57	1		26,00	6
58	1		20,00	8
59	1		21,00	5
60	1		9,00	7
61	1		3,50	1
62	1		32,00	8
63	1		11,00	3
64	1		30,00	7
65	1		7,00	2
66	1		15,00	4
67	1		20,00	5
68	1		1,00	1
69	1		8,50	3
70	1		6,00	3
71	1		5,50	2
72	1		16,00	4
73	1		35,00	8
74	1		9,00	3
75	1		14,50	4
76	1		17,00	5
77	1		25,00	6
78	1		1,00	1
79	1		7,00	3
80	1		4,00	2
81	1		1,00	2
82	1		9,00	4
83	1		6,00	3
84	1		12,00	3
85	1		18,00	8
86	2	European Master	1,00	1
87	1		6,00	2
88	1		9,00	4
89	1		15,00	7
90	1		20,00	6
91	1		25,00	9
92	1		6,00	2

	SURVEY TYPE	RESPONDENT TYPE	QFILTER	EXP	INT	CLIENT	CLIENTFAM	OTCOLL
93	1	2	1	7	7	7	7	7
94	1	2	1	7	7	7	7	6
95	1	2	1	7	7	7	6	6
96	1	1	1	7	7	7	6	6
97	1	1	1	7	6	3	5	5
98	1	1	1	7	7	7	4	7
99	1	1	1	7	7	7	6	5
100	1	1	1	7	6	7	6	5

	NONOTCOLL	OTINT	TEXTB	OTGUID	GUID	CONF	WSHOP	INSED	POSTGRAD ED	INTWEBS
93	7	1	5	4	4	2	4	4	6	6
94	5	4	4	4	4	3	3	5	3	5
95	6	4	4	4	4	4	3	3	3	6
96	7	3	4	5	3	3	4	3	6	2
97	6	2	4	2	4	4	5	5	1	5
98	7	2	4	6	5	3	3	3	3	5
99	6	3	2	6	2	3	3	2	3	4
100	5	4	7	7	6	6	6	1	6	4

	ABSELEC DATAB	ARTENJOURN	ARTDUTCH	ARTENGL	OTHER	ST_B_1	ST_B_2	ST_B_3
93	2	5	4	4	90	4	1	1
94	4	4	2	2	1	4	5	1
95	2	4	2	2	2	4	1	4
96	2	4	2	2	1	5	5	2
97	4	3	1	1	6	2	1	2
98	1	4	1	1	90	1	2	1
99	2	3	2	2	2	5	4	2
100	4	5	4	4	3	5	5	4

	ST_B_4	ST_B_5	ST_B_6	ST_B_7	ST_B_8	ST_B_9	ST_B_10	ST_B_11	ST_B_12
93	1	2	4	3	1	4	2	4	90
94	1	3	5	4	5	5	2	2	2
95	3	2	3	3	3	4	3	4	1
96	2	4	3	2	3	1	1	4	2
97	2	3	2	4	5	4	4	4	4
98	1	4	5	5	2	4	3	5	90
99	2	5	5	5	5	2	1	5	3
100	4	4	4	4	4	4	2	4	1

	ST_B_13	ST_B_14	ST_B_15	ST_B_16	ST_B_17	ST_B_18	ST_B_19	ST_B_20	ST_B_21
93	2	2	2	2	2	1	2	2	3
94	1	5	5	3	5	3	3	4	1
95	3	2	3	3	2	2	4	5	1
96	90	90	2	1	2	4	1	5	1
97	4	3	5	3	2	1	4	3	4
98	2	90	5	3	2	5	3	5	4
99	90	90	90	2	3	3	1	4	1
100	4	2	2	2	3	2	4	3	4

	ST_B_22	ST_B_23	ST_B_24	ST_B_25	ST_B_26	ST_B_27	ST_B_28	ST_B_29	ST_B_30
93	1	1	5	3	90	90	4	5	4
94	3	4	5	3	1	5	5	5	5
95	1	1	1	5	1	2	5	5	4
96	1	5	4	3	1	1	5	5	5
97	2	3	4	3	90	90	5	5	5
98	1	5	2	5	90	90	5	4	3
99	90	5	3	3	1	1	5	5	5
100	3	4	5	3	1	4	5	4	4

	ST_B_31	ST_B_32	ST_B_33	ST_B_34	ST_B_35	ST_B_36	ST_B_37	ST_B_38	GEND
93	5	3	2	2	4	2	3	5	1
94	5	5	4	4	3	3	4	3	1
95	5	5	5	1	4	1	5	4	1
96	5	5	5	2	4	2	4	4	1
97	5	5	3	1	5	3	4	4	1
98	5	4	2	2	3	3	4	2	1
99	5	5	5	2	4	2	3	5	1
100	5	5	5	4	5	3	5	3	1

	NR_OF_WORKPL	CURRWORKPL	CURRGROUP	NR_OF_SETTIN_GTYPES	PREVWORKPL	PASTGROUP
93	1	9	2	6	45,00	3
94	1	2	2	1	1,00	1
95	2	17	1	0	47,00	1
96	1	1	1	0	47,00	90
97	2	22	2	0	47,00	2
98	2	17	1	0	47,00	1
99	1	1	1	0	47,00	1
100	1	8	2	3	35,00	3

	HOURSWK	NRCOLL	MENTOR	NRINTERNS	OTDEGR	NONOTDEGR	YRGRAD
93	8	3	2	90	1	4	2001
94	5	35	2	90	1	4	1998
95	5	6	1	1	1	4	1997
96	7	5	1	2	1	4	1996
97	8	6	2	90	1	1	2000
98	5	2	2	90	1	4	2006
99	5	9	2	90	1	4	1994
100	9	99	1	2	1	4	1978

	GRADCOUNTRY	GRADCOUNTRY_SPEC	YRSRACT	AGE
93	1		6,00	2
94	1		10,00	3
95	1		11,00	3
96	1		12,00	3
97	1		8,00	3
98	1		1,00	2
99	1		14,00	4
100	1		27,00	7