Occupational therapy students’ experience with using a journal in fieldwork and factors influencing its use

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ABSTRACT
The aims of this study were to (1) describe journal use in occupational therapy fieldwork and students’ preferences regarding use, and (2) document factors that influence this use. We used a mixed method design: Quantitative data were collected through an online survey developed by the research team, and qualitative data from a focus group. Respondents were in the third-year of the professional bachelor’s–master’s continuum curriculum in occupational therapy. Descriptive and content analyses were used. We found that most of the 32 students who completed the survey used a traditional structured journal, daily at the beginning of fieldwork and less often at the end. The majority spent less than 30 minutes completing the journal during and outside fieldwork time. For 19/32 participants, the preceptor’s feedback was received weekly via different means. This use did not reflect participants’ preferences as 48% of the students considered journal use helpful in fostering reflective practice. Eight influencing factors emerged from the focus group (n = 4): student’s communication skills, student’s communication preferences, journal structure, frequency of use, student’s workload, and three other factors related to the social environment. In conclusion, journal use and students’ preferences vary and are influenced by different personal and contextual factors. To optimize journal use, a reflective approach is desirable.

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Introduction
Occupational therapy students are expected to develop a spectrum of key competencies considered essential to play the profession’s seven critical roles and meet current population needs (CAOT, 2012). These roles include that of scholarly practitioner, which involves the use of daily reflective practice to improve students’ practices and continuing education throughout their professional lives. Reflective practice is also a teaching method that is necessary, even vital to students’ professional and personal development (R. Epstein & E. Hundert, 2002; R. M. Epstein & E. M. Hundert, 2002; Mann,
Gordon, & MacLeod, 2009; Moon, 2004; Parsons & Zhang, 2014). This practice requires learners to look at their experiences objectively, ask themselves questions, try to understand their actions and identify their learning needs. In addition, it helps students to solidify their knowledge, create new knowledge, increase their autonomy, self-awareness and self-assessment, and generalize what they have learned (Boud, Keogh, & Walker, 2013; Mäkki & Lindblom-Ylänne, 2012; Schon & DeSanctis, 1986). This process may take place through a written reflective journal, internalized thoughts or discussions with others (Boud et al., 2013).

Following a search in the PsychINFO, Medline and Embase databases using the keywords Reflective journal* or learning journal* or reflect* practice* or logbook* or training journal* and Health Personnel* or Occupational Therapy and student* or internship* or education* or trainee*, only six articles specifically on the topic of reflective journals during clinical experience were found and four of these articles were exploratory qualitative studies (Bouchard, 2012; Chirema, 2007; Klimczak, 2002) or employed a mixed design (Richardson & Maltby, 1995) while the others were systematic reviews (Mann et al., 2009; O’Connell & Dyment, 2011).

Reported use of reflective journals included communication of student with their preceptors, raise students’ awareness of their personal experiences, reflect, and put theory into practice (Bouchard, 2012; Chirema, 2007; Klimczak, 2002; Richardson & Maltby, 1995) Intrinsically factors influencing its use were personality (Chirema, 2007; Klimczak, 2002) difficulty putting reflections in writing (Chirema, 2007; Richardson & Maltby, 1995) not seeing its relevance or have had negative experiences in the past (Mann et al., 2009). The social environment (preceptors’ attitude and guidelines) was also found as having a substantial impact on the use of reflective practice and journals in fieldwork (Bouchard, 2012; Chirema, 2007; Klimczak, 2002; Mann et al., 2009; O’Connell & Dyment, 2011; Richardson & Maltby, 1995).

Although journals are often recommended to be used in clinical fieldwork to foster reflective practice, it is not clear if actual use by students matches their preferences as well as what factors influence the most its use. Thus, the purpose of this study was to:

1. Describe journal use and occupational therapy students’ preferences concerning its different uses during their clinical training;
2. Document the factors that influence journal use in fieldwork, as perceived by the students.

The framework used for this study was the Canadian Model of Occupational Performance and Engagement (CMOP-E) (Polatajko, Townsend, & Craik, 2013). In this model, journal use is an activity that falls under the ‘productivity’ occupational area. This activity can be described according to the characteristics of human occupation, namely who, what, when, where, how and why. It is inevitably influenced by other activities done during clinical training (such as team meetings, writing charts), by certain dimensions of the student (for example, how important he/she considers journal use) and by certain elements in the student’s environment (for example, guidelines regarding journal use). The results of the analysis of the dynamic, interdependent relationship between these concepts were used to describe journal use and identify factors that influence its use as perceived by the students.
Methods

Design

This study used a mixed method two-phase sequential design (Pluye & Hong, 2014). Quantitative and qualitative data were collected via an online survey (phase 1) to document students’ uses of the journal, preferences regarding its use, and perception of factors influencing its use. In phase 2, a focus group meeting was held to identify and document additional factors perceived as influencing journal use in clinical fieldwork. This study was approved by the local University Research Ethics Committee.

Population

The target population was third-year students in the four-and-a-half-year program leading to a professional master’s degree in occupational therapy who used journals in their year-3 clinical fieldwork. The 9 weeks of fieldwork took place during October and December 2015. Memory bias was minimized since data were collected in March 2016, about 3 months after the end of the fieldwork. In phase 1, selected students received an email from the program secretary inviting them to complete the online survey. At the end of the survey, participants were asked to volunteer to take part in phase 2, the focus group, by providing their contact information and details regarding availability.

Data collection

Online survey

The online survey was developed by the first author and its content was validated by a group of experts (research team). The content was based on the CMOP-E, a literature review and experts’ knowledge/experience. It was pretested with six year-4 students.

The online survey was composed of 58 multiple choice or Likert scale questions concerning the students’ characteristics, experience with using a journal, preferences regarding its use, and time spent writing entries in their journal. Some questions also addressed the journal’s perceived usefulness, feedback received and overall view of journal use in clinical fieldwork. Participants were also asked to rank their engagement while using the journal on a visual analogue scale ranging from 0 (not at all engaged) to 10 (fully engaged). Space was provided for comments.

Focus group

Qualitative data were also collected during a 90-minute focus group meeting. Participants were first asked about their overall experience with using a journal in their clinical fieldwork and to rate it out of 10 (where 10 = really liked it and 0 = did not like it at all). A discussion followed concerning positive and negative aspects based on the students’ personal experience with using journals in their last clinical fieldwork placement. To stimulate the discussion, a checklist was provided with the following potential influencing factors: workload, time, models, personality, use, period to complete, frequency, requirements, preceptor.
Data analysis

Descriptive statistics (frequency and percentage) were used for the data collected in phase 1 (online survey). Cross tabulation and chi square test were also used to document if any dependence between two variables was statistically significant.

The content of the focus group discussion (phase 2) was transcribed in full. A thematic analysis was performed using QDA Miner 4.1.27 and following a moderate induction process (Anadon & L’Hostie, 2001). The transcript was coded by putting labels on meaningful units and then grouping them into themes anchored in the CMOP-E. Themes and subthemes were also added according to the content of the discussion. Coding validity and reverse coding were done to check for coherence between segments (i.e. check if segments referred to the meaning of the code assigned).

Sample size

For a cohort of 110 students and based on a participation rate between 15 and 20% (Fan & Yan, 2010; Shih & Xitao Fan, 2008), the targeted sample size for phase 1 was at least 14 to 18 students. For phase 2, a sample size of 8 to 10 participants was targeted so the group was small enough to allow all participants to express their views and large enough to obtain a variety of opinions (Desrosiers & Lariviére, 2014; Moreau et al., 2004).

Results

The participation rate in phase 1 was 29% (n = 32/110). One questionnaire was incomplete, which accounts for variations in the denominator. The sample was comparable to the occupational therapy student population in terms of age (28/32; 87.5% aged 19 to 24) and gender (29/32; 91% women). Four students between 19 and 24 years of age participated in the focus group in phase 2.

Although varied, the journals used were mostly traditional structured models (71.9%). They were used daily at the beginning of fieldwork (71.8%) but less often and at varying frequencies at the end of fieldwork. Journals were used both during (46.9%) and outside (53.1%) fieldwork times. The majority of participants received feedback weekly (61.3%) by various means. The participants’ experience with using journals did not necessarily reflect their preferences (see Table 1).

In addition, 54.5% of the participants who wrote the journal once a week at the end of the fieldwork thought this frequency was ideal for them (n = 6/11, $\chi^2 = 111,355$, $p < 0.01$). Of the 29 participants who preferred to write the journal during fieldwork times, nearly half (48.3%) had to fill it out outside fieldwork times (n = 14/29, $\chi^2 = 93,850$, $p < 0.01$). As for the feedback received, 11 of the 12 participants who received feedback from their preceptor once a week appreciated this feedback ‘somewhat’ or ‘a lot’ (n = 11/12, $\chi^2 = 118,372$, $p < 0.01$). Of the 21 participants who had the opportunity to discuss journal entries with their preceptor, 80.1% appreciated the feedback they received from their preceptor ‘somewhat’ or ‘a lot’ (n = 17/21, $\chi^2 = 112,342$, $p < 0.01$).

The majority of students (23/32) spent less than 30 minutes completing their entries in the journal. Half of the participants (16/32) thought they devoted an appropriate amount of time to writing it while the other half (16/32) thought they spent too much time on it. All of the participants who took more than 30 minutes to write entries in the
journal (n = 9/32) thought they spent too much time on it ($\chi^2 = 119,683, p < 0.001$). Of the 23 participants who completed the journal in less than 30 minutes, 69.6% (16/23) thought this amount of time was satisfactory ($\chi^2 = 119,683, p < 0.001$).

With respect to the usefulness of the journal, nearly half of the participants, i.e. 48.4% (n = 15/31), thought the journal helped to foster reflective practice ‘a lot’ or ‘somewhat’. The large majority of students found it ‘a little’ or ‘not at all’ helpful for the other uses suggested (see Table 2).

All in all, the majority of participants appreciated the feedback they received concerning their journal entries (96.8%, n = 30/31), thought they had enough supervision time (80.6%, n = 18/31), felt that their preceptor showed an interest in using the journal (100%, n = 31/31), and thought that it helped them deepen their reflection (80.6%, n = 25/31). With respect to collaboration with the preceptor, 78.2% (n = 25/32) collaborated with their preceptor in choosing how to use it, 50% (n = 16/32) thought the types of use were adapted to their needs during fieldwork, and 93.5% (n = 29/31) of the participants felt comfortable expressing their comments related to journal use during fieldwork. In addition, the majority of participants admitted they had not been completely truthful in what they wrote because of the supervision; 21/31 (67.7%) strayed

### Table 1. Participants’ experiences and preferences regarding types of journal use.

| Experience                                      | Preference                                      |
|-------------------------------------------------|------------------------------------------------|
| **Journal model**                               | **Preference**                                  |
| Frequency (%)                                   | Frequency (%)                                   |
| N = 32                                          | N = 32                                          |
| Traditional$^1$                                  | 23 (71.9)                                      |
| Competency-based learning (CBL)$^1$             | 19 (59.4)                                      |
| None$^2$                                        | 7 (21.9)                                       |
| Other$^2$                                       | 1 (3.1)                                        |
| **Frequency of journal use at beginning of fieldwork** | **Frequency of journal use at end of fieldwork** |
| Once a day                                      | Once a day                                      |
| 23 (71.9)                                       | 12 (38.7)                                      |
| Approximately once every 2 days                 | Approximately once every 2 days                |
| 3 (9.4)                                         | 5 (16.1)                                       |
| Once a week                                     | Once a week                                     |
| 6 (18.8)                                        | 11 (35.5)                                      |
| As needed                                       | As needed                                       |
| 0 (0.0)                                         | 3 (9.7)                                        |
| **Frequency of journal use at end of fieldwork** | **Time when entries made in journal**           |
| N = 31                                          | During fieldwork time                           |
| Once a day                                      | 15 (46.9)                                      |
| Approximately once every 2 days                 | Approximately once every 2 days                |
| 5 (16.1)                                        | 5 (16.1)                                       |
| Once a week                                     | Once a week                                     |
| 11 (35.5)                                       | 12 (38.7)                                      |
| As needed                                       | As needed                                       |
| 3 (9.7)                                         | 4 (12.9)                                       |
| **Time when entries made in journal**           | **Frequency of feedback re: journal entries**   |
| During fieldwork time                           | Once a day                                      |
| 15 (46.9)                                       | 7 (22.6)                                       |
| Outside fieldwork time                          | Approximately once every 2 days                |
| 17 (53.1)                                       | 5 (16.1)                                       |
| **Frequency of feedback re: journal entries**   | Once a week                                     |
| Once a day                                      | 19 (61.3)                                      |
| Approximately once every 2 days                 | As needed                                       |
| 5 (16.1)                                        | 0 (0.0)                                        |
| Once a week                                     | **Type of feedback received re: journal entries** |
| 11 (35.5)                                       | Read and signed                                |
| As needed                                       | 2 (6.5)                                        |
| **Frequency of feedback re: journal entries**   | Read and written comments                       |
| Once a day                                      | 7 (22.6)                                       |
| Approximately once every 2 days                 | Read and discussed                             |
| 5 (16.1)                                        | 12 (38.7)                                      |
| Once a week                                     | Discussion initiated by student                 |
| 10 (32.3)                                       | 6 (19.4)                                       |
| As needed                                       | Read, written comments and discussed            |
| 12 (38.7)                                       | 3 (11.0)                                       |
| **Type of feedback received re: journal entries**| Variable                                        |
| Read and signed                                | 6 (19.4)                                       |
| 1 (3.2)                                         | Discussion initiated by student                 |
| Read and written comments                       | 1 (3.2)                                        |
| 17 (54.8)                                       | Variable                                        |

1Traditional model and CBL are proposed to preceptors and students by fieldwork directors in the occupational therapy program at the University.

2The other model used by one student was described as follows: 1) Activities done, 2) Knowledge required, 3) Difficulties encountered and strengths, 4) Objectives, 5) Reflections and action plan.
from the truth to meet requirements, and 17/31 (54.8%) for fear of being judged by their preceptor. Finally, a few students (12/31; 38.7%) indicated that their preceptors shared their experiences with them.

The general perception of journal use in fieldwork was quite negative: only 35.5% (11/31) appreciated their experience, and 29% (9/31) considered that journal use added value to the fieldwork. However, a majority of participants (21/31; 67.8%) would rather use than not use the journal and thought that the workload related to its use was appropriate (19/31; 61.3%). The students’ mean level of engagement when using the journal was 5.74 /10 ± 2.45 (on a scale of 0 to 10, where 0 = not at all engaged and 10 = fully engaged).

**Focus group**

Participants were asked to rate their overall appreciation of journal use in fieldwork out of 10 (where 10 = really liked it and 0 = did not like it at all). Two of the participants in particular did not appreciate the experience: participant 2 (P2) rated it at 5 out of 10 and participant 4 (P4) at 3 out of 10. On the other hand, participants 1 (P1) and 3 (P3) rated their appreciation at 7 and 8 out of 10, respectively, but both said there was room for improvement.

Participants indicated four uses for the journal, namely that it fosters (1) reflective practice, (2) development of professional competencies, (3) communication between preceptor and student, and (4) positive self-image (see Table 3).

Eight influencing factors related to journal use, including some that differed from those suggested in the checklist, emerged from the focus group discussion. Three of the

| Usefulness                                                                 | Frequency (%) |
|---------------------------------------------------------------------------|---------------|
| Encourages communication with preceptor                                    |               |
| A lot                                                                      | 2 (6.5)       |
| Somewhat                                                                  | 7 (22.6)      |
| A little                                                                  | **19 (61.3)** |
| Not at all                                                                | 3 (9.7)       |
| Fosters reflective practice                                               |               |
| A lot                                                                      | 5 (16.1)      |
| Somewhat                                                                  | 10 (32.3)     |
| A little                                                                  | 15 (48.4)     |
| Not at all                                                                | 1 (3.2)       |
| Fosters development of professional competencies                          |               |
| A lot                                                                      | 3 (9.7)       |
| Somewhat                                                                  | 8 (25.8)      |
| A little                                                                  | **16 (51.6)** |
| Not at all                                                                | 4 (12.9)      |
| Facilitates positive relationship with preceptor                          |               |
| A lot                                                                      | 1 (3.2)       |
| Somewhat                                                                  | 10 (32.3)     |
| A little                                                                  | 14 (45.2)     |
| Not at all                                                                | 6 (19.4)      |
| Enhances involvement in the learning process                               |               |
| A lot                                                                      | 3 (9.7)       |
| Somewhat                                                                  | 9 (29.0)      |
| A little                                                                  | 15 (48.4)     |
| Not at all                                                                | 4 (12.9)      |
Influencing factors were related to the student’s social environment, namely (1) preceptor’s availability, (2) feedback quality (i.e. time to get feedback, type of feedback, and demand to deepen reflection), and (3) preceptor’s attitude to journal entries. Only one influencing factor was related to the physical environment, namely journal structure (i.e. relevance of proposed categories and journal format). Two influencing factors were related to the student, namely the student’s communication skills and communication preferences. Finally, two were related to the student’s occupations, namely a high workload and frequency of writing journal entries (see Table 4).

**Table 3.** Themes related to journal’s perceived usefulness in fieldwork emerging from focus group with transcript extracts supporting these themes (n = 4).

| Themes                                | Excerpts from transcript                                                                                                                                                                                                 |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fosters reflective practice           | It’s a way to report what you did during the day, to reflect on what went well or not so well. Encourages you to reflect on ways you could improve your more problematic aspects. (P1)                                              |
| Fosters development of professional competencies | Often, she (preceptor) took all my weaknesses (written in the journal) and clinical situations that would target them. So I was more or less obliged to work on them. (P4)                                           |
| Encourages communication with preceptor | She knew what I was going through. (P3)                                                                                                                                                                                |
|                                       | It gave me a period with my preceptor when he really took the time for me, for my questions, etc., I really liked that. (P1)                                                                                          |
|                                       | To foster discussion also, ask all our questions that we didn’t have time for during the day. (P2)                                                                                                                   |
|                                       | I feel that it can be better understood in writing than verbally because sometimes it’s misunderstood and all that. I think that can help when things aren’t going well with a preceptor. (P4)       |
| Fosters positive self-image           | They made us put strengths, not just weaknesses. And that really helps to foster a better self-image. Because we have a great tendency to be self-critical and tell ourselves that things went really badly. (P1) |
|                                       | Identifying these strengths is a little point of pride in the day. (P4)                                                                                                                                                 |

**Discussion**

The aim of this study was to describe journal use and students’ preferences regarding the different uses tried during their clinical training and to document factors that influenced journal use, as perceived by the students. According to the results of the questionnaire, the students had varied experiences with different types of journal use (model used, frequency of use, time when students wrote entries, and frequency and type of feedback) and these experiences did not necessarily reflect their preferences. Also, the majority of students took less than 30 minutes to write entries in the journal, and half thought the time they spent on it was enough. Nearly half of the students thought the journal was helpful in fostering their reflective practice but little or no help with the other uses suggested: fostering communication with the preceptor, development of professional competencies, relationship with the preceptor, and involvement in the learning process. The focus group participants also thought the journal could be useful in fostering a positive self-image. More than half of the participants preferred to use the journal than not use it but the majority did not really appreciate the experience, few thought the journal added value to fieldwork, and the students had a relatively low level of engagement when using it. Undoubtedly, all these results could have been affected by the factors documented
Table 4. Factors that have a positive and/or negative impact on journal use with transcript extracts (n = 4).

| Social environment factors          |                          |
|-------------------------------------|--------------------------|
| **Preceptor’s availability**        |                          |
| Often available*                    | +: When you have already had some (verbal) feedback from your preceptor, it can help you go a bit deeper when you write it down. (P3) --: It wasn’t very useful because I was in such a small environment, we had one room for two, so I saw her every day. Basically, I told her right away what was written on my sheet, so it was kind of redundant. (P4) |
| Rarely available**                  | +: When we aren’t in the same office, we may talk to each other a little less, so that gives (the preceptor) a better idea of how we see things, and any questions we still have. (P1) |
| **Quality of feedback re: journal entries** |                          |
| Time to get feedback               |                          |
| ● Short                             | +: I had feedback every time so I knew that what I was doing was not for nothing. (P3) --: It was once a week, my question was too late, I had already answered it during the week. (P1) |
| ● Long                              |                          |
| Type of feedback                   |                          |
| ● Verbal feedback re: journal entries (relevance and time spent) | +: Sometimes you don’t understand where she wants to go with that (written feedback), so to be able to review it verbally, it helps to do it in person and not just in writing. (P3) --: Sometimes she went a bit fast, so in the end the questions that I had or the reflections, we didn’t deepen them much because we didn’t have the time. (P1) |
| ● Presence of feedback             | +: I think that if, for example, he took the sheet and really reviewed it, at least to give me an indication that he read it, that would really help me, I think. (P4) |
| ● Demand to deepen reflection      | --: She wrote some questions for me and I had to give it back to her, I worked on it 3 times the same day. (P2) |
| **Preceptor’s attitude**           |                          |
| +: I didn’t feel judged by them so I didn’t feel bad (writing it down). (P1) --: If you don’t feel he is open (to changes to modify journal use), you’ll be less inclined to talk to him about it. (P3) |

| Personal factors                   |                          |
| **Student’s communication skills** |                          |
| +: That also depends on whether the student is able to express himself and doesn’t feel bad talking about his difficulties; if not, it can help the preceptor be more aware of the situation (when it is written down). (P3) --: I won’t say the first day that I would prefer not to, because that would start the fieldwork off badly. (P4) |
| **Student’s communication preferences** |                          |
| --: I prefer not to use it, I’d rather say it verbally or in a discussion. (P1) |

| Occupational factors               |                          |
| **High workload**                 |                          |
| --: It was an extra load, yes, I saw it was useful but at the same time, considering the lack of time, I found it boring because I too sometimes filled it out quickly because I was fed up. (P3) |
| We did it at lunch time because it was our only time . . . did it in 2 minutes . . . while our food was heating up. (P1) |
| . . . in fieldwork, you really want to take all your time to have fieldwork experiences. That’s why you say to yourself, okay, I’ll leave it and, if worse comes to worst, I’ll do it at home. (P3) |

(Continued)
Table 4. (Continued).

Frequency of writing journal entries

+: The students chose what day they did it. That’s great fun also because you take days when things didn’t go so well… it left some latitude and added relevance. Especially at the end of fieldwork. (P1)
At the start it may be useful each day but after that, as needed. (P3)
Often (at first) you adapt more to the environment. You often have more reflections about yourself too. (P2)
-: Certainly, there are difficulties all the time and you encounter things you are not comfortable with but it’s less often (at the end) than in the first 2–3 weeks (…) doing it less often, I think that can be helpful too. (P3)
I felt bad about not writing anything. Sometimes I wrote bigger to fill up more space. But I found that (at the end of fieldwork) it was really less relevant to do it every day. (P1)
It was really demanding (being required to fill it out every day)… I did it but really just to make him happy. (P2)

Journal structure

-: Don’t think I would have thought to push my reflection as required in the models, just left it like that. (P4)
It obliged us to put strengths, not just weaknesses. That really helps to have a better self-image. Because we tend to be very self-critical and focus on what didn’t go well, but when you are obliged also to reflect on what went well, it helps to give you a better feeling of self-efficacy. (P1)
Okay, the models really focus on difficulties. (The 4 participants said ‘yes’ to confirm what was said) (Facilitator)
I also think it rarely happened (to write) strengths. (P2)
-: The knowledge required about the role, I always had problems putting it. (P4)
Is this communicating? No way! It’s collaborating… I think it targets our difficulty and we can work on it without necessarily saying to ourself ‘Right, it’s this competence’. (P1)

-: Journal format

+: (with a table format) You go more by keywords than by a long text. I feel that by keywords at least it lets you be a bit more concise, and it takes a little less time than to begin making long sentences. (P3)
-: I didn’t have enough space (with a paper table format). Especially at the beginning when it’s a new environment you write things, then it was full, I stopped writing but I could have continued. (P4)

Legend:
+: Participants have positive perception of influencing factors.
-: Participants have negative perception of influencing factors.
* Preceptor often available to give the student feedback and answer questions verbally.
** Preceptor rarely available to give the student feedback and answer questions verbally.
in this study relating to the preceptor, the student, journal structure and frequency of use, or the student’s workload.

Bouchard (2012) qualitative study is the only study we found that examined the preceptor’s availability, albeit briefly. A minority of the nursing students who participated in the study for Bouchard’s master’s thesis indicated in the questionnaire that reflective journals helped their preceptor get to know them and understand their choices. Based on this finding, Bouchard believes that preceptors’ limited availability justifies the use of reflective journals in fieldwork. To our knowledge, ours is the first study to clearly report that preceptors’ availability can have an impact on journal use. It may therefore be wise to consider this factor to encourage communication or avoid having students duplicate their efforts and write things that have already been discussed with their preceptor.

Getting verbal feedback also emerged as a positive factor in some of the studies we identified. The eight nursing students who participated in the focus group in the study by Richardson and Maltby (1995) viewed discussing their reflective journal entries with their preceptor as positive, and the authors noted that journals are a good tool to start a dialogue between student and preceptor. After analyzing 52 questionnaires on nursing students’ views concerning the use of a reflective journal in fieldwork, Bouchard (2012) concluded that the students think the interaction they have with their preceptor because of the journal is important and that this encourages them to use it. Two literature reviews, one of which examined 29 articles and looked at variables that might influence reflective practice by students in the health professions (Mann et al., 2009), and the other that reviewed 75 articles in various disciplines to document factors that influence use of a reflective journal (O’Connell & Dyment, 2011), reported that discussing and deepening reflections particularly fosters the relationship with the preceptor. Therefore, it is not surprising that in our study we found that verbal feedback had a positive impact on journal use and that the great majority of participants preferred this type of feedback.

Finally, a majority of the students in our study were less than truthful in what they wrote, and the preceptor’s attitude emerged as a factor that influenced journal use. Two studies on a similar topic reported similar results (Mann et al., 2009; Richardson & Maltby, 1995), namely that the type of environment is an important factor to consider in order to increase the authenticity of what is written and avoid having students write what the preceptor wants to read. However, the studies we found provided little information concerning what constitutes a safe environment and an appropriate attitude on the part of the preceptor so that students who use a reflective journal in fieldwork are authentic in what they write. It could be interesting to examine this aspect in more detail in future studies.

There is little scientific evidence that students’ communication skills and preference for verbalizing rather than writing their reflections influence journal use. In individual interviews, only one of Chirema (2007) three participants stated that he preferred to discuss his reflections rather than using this type of learning tool. Bouchard (2012) also noted that students who find it easy to write down their thoughts are likely to benefit more from journals, but the 52 participants in his study did not clearly report this in the questionnaires they filled out. Thus, although students’ communication skills and preference for verbal communication are factors that emerged from the focus group, the
scarcity of evidence on this aspect could indicate that these factors do not have the greatest impact on journal use in fieldwork.

It is not surprising that some students prefer to use a model to write their reflections. According to the literature, reflective practice must be learned and it can take years of practice to really incorporate this type of learning (Mann et al., 2009; O’Connell & Dyment, 2011). Other students thought that a pre-existing structure could limit their freedom of expression (Bouchard, 2012; Klimczak, 2002); this may be because the students already had experience with reflective practice. The studies we examined paid little attention to the type of reflective journal structure that could be useful, and the systematic review by Mann, Gordon and MacLeod (Mann et al., 2009) reported that there was a lack of literature regarding this aspect. Thus it could be helpful to offer students one or more models and allow them to tailor them to their needs. Also, in light of our results, to foster a positive self-image, the model used should include a category that encourages students to reflect on their strengths.

The frequency of writing journal entries is also a factor that influences journal use in the literature. In their systematic review (n = 29) of reflective practice by students in the health professions, Mann, Gordon and MacLeod (Mann et al., 2009) reported that reflective practice is not always present and seems to be particularly stimulated in complex situations that are meaningful to the person. Thus, journal use may not always be helpful and its frequency of use should be adapted to the student’s needs. In their systematic review, O’Connell and Dyment (2011) reported that reflective journals can be viewed as ‘journals of death’ and students can feel swamped with work and become apathic about the use of reflective practice when required to fill out reflective journals too often.

In our study, a high workload emerged as a factor that had a negative impact on journal use. This limiting factor was also present in other studies we reviewed. A concern of all the participants in the studies by Chirema (2007) and Klimczak (2002) was the time it took to reflect and write their reflective journal. Klimczak (2002) noted that their lack of time when they had a high workload curtailed their reflection in fieldwork. These results agree with the systematic review by Mann, Gordon and MacLeod (Mann et al., 2009), who found that having time to reflect facilitates reflective practice. Conversely, some of the focus group participants seemed to have a low level of engagement in writing their journal when they were short of time (wrote fast, wanted to get it over with). In the studies we examined, there was no specific information about students’ motivation to use reflective journals properly when they had a high workload. Jung and Tryssenaar (1998) looked at the use of a reflective journal by 13 occupational therapy clinical preceptors affiliated with McMaster University in Ontario, Canada, and reported that many of the participants found journal writing demanding. Some did not fill out their journals because of a lack of time and it was not their priority. Therefore, ensuring that students have enough time to write journals properly could be a good strategy to optimize its use.

**Study strengths and limitations**

The complementary expertise of the research team members is a strength of this study. Also, memory bias was minimized since the participants used the journal only a few months before data collection (approximately 3 months). Another strength of the study was the relatively high participation rate in the survey in phase 1. However, the
recruitment rate of participants for the focus group was less than optimal, which resulted in less diversity of opinions and fewer possible comparisons between the participants than if 8 to 10 participants had been recruited (Desrosiers & Larivière, 2014). The validity of the results was negatively impacted by the fact that the questionnaire completed by the participants was developed in-house. On the other hand, to increase the rigor of this questionnaire and limit measurement bias, its content was validated by experts for accuracy, relevance, and order of the questions, and pretested with six occupational therapy students who had previously used a journal in fieldwork. Trustworthiness (credibility) was strengthened by the use of a mixed methods favoring triangulation of the data. Furthermore, verbatim extracts were presented to ensure confirmability and the description of the methods section favors dependability (Denzin & Lincoln, 1994).

**Conclusion**

The results of the two phases of the study show that both journal use and students’ preferences vary and are positively or negatively impacted by different factors related to the preceptor, the student, journal structure, frequency of use, and the student’s workload. It was also interesting to find that, in addition to fostering reflective practice and communication between student and preceptor, journals had other uses that facilitated the student’s experience, such as fostering a positive self-image and positive relationship with the preceptor. Therefore, it would be wise for students and preceptors to reflect on winning strategies for using journals properly and optimizing their use.

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**References**

Anadon, M., & L’Hostie, M. (2001). *Nouvelles dynamiques de recherche en éducation* [New dynamics of educational research]. Québec, Canada: Presses Université Laval.

Bouchard, L. (2012). Les perceptions d’étudiants au baccalauréat en sciences infirmières de l’utilisation du journal d’apprentissage [Perception of baccalaureate nursing students of using a learning journal].

Boud, D., Keogh, R., & Walker, D. (2013). *Reflection: Turning experience into learning*. New York, NY: Nichols Publishing Company.

CAOT. (2012). *Profile of occupational therapist practice in Canada*. Ottawa, Ontario: Author.

Chirema, K. D. (2007). The use of reflective journals in the promotion of reflection and learning in post-registration nursing students. *Nurse Education Today*, 27(3), 192–202.

Denzin, N., & Lincoln, Y. (1994). *Handbook of Qualitative Research*. CA: Sage.

Desrosiers, J., & Larivière, N. (2014). Le groupe de discussion focalisée: Application pour recueillir des informations sur le fonctionnement au quotidien des personnes avec un trouble de la personnalité limite [Focus group discussion: Application to collect information on daily functioning of people with personality trait deficit]. In Corbière M et Larivière N, réd. *Méthodes qualitatives, quantitatives et mixtes: Dans la recherche en sciences humaines, sociales et de la santé*. Québec, QC: Presses de l’Université du Québec (pp. 257–304). Canada.

Epstein, R., & Hundert, E. (2002). *Defining and assessing professional competence*.

Epstein, R. M., & Hundert, E. M. (2002). Defining and assessing professional competence. *JAMA*, 287(2), 226–235.

Fan, W., & Yan, Z. (2010). Factors affecting response rates of the web survey: A systematic review. *Computers in Human Behavior*, 26(2), 132–139.

Jung, B., & Tryssenaar, J. (1998). Supervising students: Exploring the experience through reflective journals. *Occupational Therapy International*, 5(1), 34–47.

Klimczak, M. (2002). *Reflective journal writing: Nursing students’ perspectives*. Canada: U. d. Manitoba.

Mälkki, K., & Lindblom-Yläne, S. (2012). From reflection to action? Barriers and bridges between higher education teachers’ thoughts and actions. *Studies in Higher Education*, 37(1), 33–50.

Mann, K., Gordon, J., & MacLeod, A. (2009). Reflection and reflective practice in health professions education: A systematic review. *Advances in Health Sciences Education, 14*(4), 595–621.

Moon, J. (2004). *A handbook of reflective and experiential learning: Theory and practice*. London: Psychology Press.

Moreau, A., Dedienne, M.-C., Lebrilliart, L., Le Goaziou, M.-F., Labarere, J., & Terra, J. L. (2004). S’approprier la méthode du focus group. *La Revue du praticien* [Focus group method acquisition]. Médecine générale, 18 (645), 382–384.
O’Connell, T. S., & Dyment, J. E. (2011). The case of reflective journals: Is the jury still out? Reflective Practice, 12(1), 47–59.
Parsons, R. D., & Zhang, N. (2014). Counseling theory: Guiding reflective practice. Los Angeles: SAGE.
Pluye, P., & Hong, Q. N. (2014). Combining the power of stories and the power of numbers: Mixed methods research and mixed studies reviews. Annu Rev Public Health, 35, 29–45.
Polatajko, H., Townsend, E., & Craik, J. (2013). Faciliter l’occupation: L’avancement d’une vision de l’ergothérapie en matière de santé, bien-être et justice à travers l’occupation [Enabling occupation II: Advancing an occupational therapy vision for health, well-being & justice through occupation]. Ottawa, Canada: CAOT publications.
Richardson, G., & Maltby, H. (1995). Reflection-on-practice: Enhancing student learning. Journal of Advanced Nursing, 22(2), 235–242.
Schon, D. A., & DeSanctis, V. (1986). The reflective practitioner: How professionals think in action. The Journal of Continuing Higher Education, 34(3), 29–30.
Shih, T.-H., & Fan, X. (2008). Comparing response rates from web and mail surveys: A meta-analysis. Field Methods, 20(3), 249–271.