A critical review of questionnaire use in learner strategy research

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ABSTRACT

This paper reviews the use of questionnaires in Language Learner Strategy (LLS) research. It starts with a brief overview of popular methods in LLS research, with a focus on the use of questionnaires/survey tools, and then presents five criticisms concerning the wide and uncritical use of questionnaires in LLS research. While the paper fully acknowledges the valuable contributions made by survey studies in the past, as well as their potential in the future, it calls for a change from the current over-dependence on questionnaires towards the use of multi-method and qualitative approaches in LLS research.

Introduction

Over the past two decades, the questionnaire has emerged as one of the most widely used data-elicitation tools in LLS research. Questionnaires have helped to generate a broad picture of strategy use across different learner populations and to establish relationships between various learner factors and learners’ strategy use (Oxford and Crookall 1989; Oxford and Burry-Stock 1995; Cohen 1998; McDonough 1999; Hsiao and Oxford 2002). However, the growing popularity of questionnaire use has been problematic. In particular, one or two questionnaire tools tend to be used uncritically across different research contexts, in spite of the need to respect local realities (LoCastro 1994; Hsiao and Oxford 2002; Yamamori et al 2003).

This paper reviews applications of questionnaires in LLS research. Throughout the paper, I refer to ‘learner strategy’ and ‘learning strategy’ interchangeably as the same thing, although I am aware that different researchers may treat the two terms differently. I put aside terminological differences in order to have a clear focus in this paper because my primary concern is a review of LLS research from a methodological perspective. This review begins with an overview of methods used in LLS research. I then re-examine LLS studies using questionnaires and discuss a number of criticisms raised about questionnaire use in the LLS research community. The paper ends with a proposal that more research effort be channelled towards multi-method, particularly qualitative, enquiries in LLS research, in
line with a social turn in second language acquisition (Block, D 2003; Oxford 2003; Sealey and Carter 2004).

Due to the overwhelming presence of LLS survey research using the Strategy Inventory for Language Learning (Oxford 1990), commonly referred to as SILL, a large portion of criticisms and reservations about questionnaire use in LLS research will be inevitably directed to the studies that make use of this particular strategy inventory. However, this article does not criticise SILL per se, but the uncritical use of SILL in LLS research. It expresses concern about the over-dependence on survey tools, especially one or two questionnaires, as this may produce findings that distort the complexity of individual learners’ realities across various learning contexts and thus undermine the pedagogical applications of the findings from such surveys.

**Research methods used in LLS research**

Most LLS research involves some sort of learners’ self-report (Oxford and Burry-Stock 1995), while other methods, such as observation, have also been used to triangulate interview findings (e.g. O’Malley et al 1985a and b). Based on previous LLS reviews (Oxford and Crookall 1989; Oxford 1993; Oxford and Burry-Stock 1995; Cohen 1998), the most popular data collection methods adopted by LLS researchers include the following:

- survey tools or written questionnaires (e.g. Ehrman and Oxford 1989; Gu and Johnson 1996; Fan 2003)
- interviews (e.g. O’Malley et al 1985a and b; O’Malley and Chamot 1990; Li and Munby 1996; Gao 2003; Gu 2003; Gan, Humphreys and Hamp-Lyons 2004; Parks and Raymond 2004)
- think-aloud protocols or verbal reports (e.g. Block, E 1986; Lawson and Hogben 1996; Goh 1998; de Courcy 2002; Nassaji 2003)
- diaries or dialogue journals (e.g. Carson and Longhini 2002)
- recollective narratives (e.g. Oxford et al 1996; He 2002)
- observation (as in O’Malley et al 1985a and b; O’Malley and Chamot 1990).

In LLS research, ‘student-completed, summative rating scales’ (survey methods) have proven to be one of the most popular methods for LLS researchers (Oxford and Burry-Stock 1995; Bedell and Oxford 1996). Oxford and Burry-Stock (1995) are confident that such a methodological approach can be cost-effective and allow both researchers and participants to gain a rapid understanding of the participants’ strategy use. Therefore, questionnaires have been used in various LLS studies, not only those about

In general language learning strategy research, SILL (Oxford 1990) has been recognised as one of ‘the most comprehensive’ learner strategy survey methods (Ellis 1994: 539; McDonough 1999). SILL has been widely used among LLS researchers (Oxford and Burry-Stock 1995), initially in North America with foreign language learners (eg Ehrman and Oxford 1989; Oxford and Nykios 1989; Nykios and Oxford 1993; Ehrman and Oxford 1995), then increasingly by researchers who work in the Asia-Pacific region (Hashim and Sahil 1994; Bremner 1998; Lin 1999; Ma 1999; Mochizuki 1999; Yang 1999; Mistar 2001; Hsiao and Oxford 2002; Griffiths 2003; Peacock and Ho 2003). In addition, SILL has displayed adaptability for contextualised LLS research. For example Sheorey (1999) modified it for researching strategy use among tertiary students in India. Yamamori et al (2003) used a few strategy items from SILL to investigate the relationship between strategy use, will to learn, and achievement among Japanese English learners. Lan and Oxford (2003) used a children’s version of SILL to investigate young learners’ strategy use in Taiwan. These studies have established a broader picture of the strategy use of thousands of learners across cultures, and have identified many factors that may influence learners’ strategy use, such as learning styles, proficiency, learner beliefs, gender and so on.

**Critiques of questionnaire use in LLS research**

There have been five major criticisms concerning the popular use of questionnaires in LLS studies. First, in general LLS research, researchers have always been confronted with the problem of the diversity in learner strategy classification schemes and learner strategy inventories, which has resulted from various theoretical approaches to defining learner strategy (Willing 1987; McDonough 1999). As a result, it becomes an issue to find a strategy inventory that can best capture learners’ strategy use (Hsiao and Oxford 2002). Second, there have been reservations about using particular questionnaires regardless of the contexts in which these questionnaires were originally developed, as researchers have often been too concerned with ‘universal’ and have therefore underestimated the importance of contextual variations (LoCastro 1994) and task influence (Oxford and Burry-Stock 1995; Bremner 1998; Oxford et al 2004). Third, the wording of some
commonly used questionnaires is susceptible to different interpretations and may lead to different findings in different research contexts, although the same questionnaire is used (eg Gu, Wen and Wu 1995). Fourth, even a well-tested questionnaire may not be able to capture the multi-dimensionality of learners’ strategy use. Finally, the popular use of questionnaires may appear to negate the dynamic and fluid nature of learners’ strategy use and create an impression that learners’ strategy use is a static ‘variable’.

DIVERSITY OR STANDARDISATION?
A well-developed LLS survey tool should be able to capture the way in which strategies are used in reality. However, LLS research has often been characterised by ‘fuzziness’ or ‘little consensus’ (Ellis 1994: 529; Hsiao and Oxford 2002; Griffiths 2004). There have been great difficulties in defining learner/learning strategy and the nature of learner/learning strategy (Cohen 1998; McDonough 1999). Based on different theoretical approaches, various researchers have proposed their own versions of classification schemes for learner/learning strategies. For instance, O’Malley and Chamot’s (1990) classification system has three sub-groups of strategies, which are meta-cognitive, cognitive and socio-affective strategies. Oxford’s (1990) SILL has six sub-categories of strategies (meta-cognitive, memory, cognitive, compensation, social and affective) under two supra-categories (direct and indirect). Oxford and Burry-Stock (1995) list at least ten other questionnaires, which were developed in various research contexts by different researchers.

The diversity in LLS survey tools has caused great problems for researchers in communicating their research findings (Willing 1987; Hsiao and Oxford 2002). In an attempt to address this problem of diversity, Hsiao and Oxford (2002) compare various classification theories of language learning strategies and conclude that a modified version of SILL (without ‘direct’ and ‘indirect’ supra-categories) seems to be most consistent with learners’ reported strategy use. Meanwhile, they also point out that LLS researchers may no longer be able to neglect the possible disadvantages of questionnaire use in LLS research. They make several recommendations for future LLS research. A major thrust of the research directions proposed relates to the importance of learning context and the necessity of developing a task-based strategy inventory. However, enquiries following these recommended lines may work against Hsiao and Oxford’s pursuits for a coherent LLS theory and a primary LLS survey tool. In fact, a concern for learning contexts and task-related strategy use may lead to the breakdown of any standard strategy survey tools in LLS research.
UNIVERSAL OR CONTEXTUAL?

Hsiao and Oxford (2002) reflect a dilemma facing the LLS research community. On one hand, there is a need for a standard tool (theory) to describe learner strategy use among learners across cultures and to engage LLS researchers in discussions over relevant findings. On the other hand, there have been increasingly louder voices urging LLS researchers to attend to local contexts and task-specific language learning situations (LoCastro 1994; Bremner 1998; Yamamori et al 2003: 383; Oxford et al 2004). LoCastro (1994) questions the application of SILL regardless of learning context, since contradictory findings emerged after she compared interview data and questionnaire data. She found that her interview data cast serious doubts on her survey findings.

Despite the fact that a different version of questionnaire was designed for English as a Foreign Language (EFL) contexts, many items in the SILL may not be appropriate for particular EFL contexts. For example the item ‘I use flashcards to remember new English words’ may not be appropriate in China where not everybody will know what a flashcard is. Therefore, surveys may have a skewed perspective on learners’ strategy use. Further, task-specific or language skill-specific components have been found to be important in describing learners’ strategy use (Wenden 1991; Cohen 2003). In pedagogic contexts, it is probably more relevant to explore whether specific strategies have an impact on learners’ task-completion or achieved proficiency in particular language skills (Bremner 1998). For example, teachers may help learners to improve their vocabulary acquisition if learners develop appropriate dictionary-use strategies. In fact, Oxford et al (2004) reveal that learners use different strategies according to the level of difficulty of a task. Moreover, a student may not be able to report strategy use in detail in response to a specific language task by using a standard survey tool, such as SILL (Oxford and Burry-Stock 1995). Therefore, it will be difficult to apply large survey findings at classroom level.

HOW OFTEN IS ‘OFTEN’?

The vagueness of wording has been another persistent problem in using questionnaires in LLS research (Gu, Wen and Wu 1995; Bremner 1998). It may be more serious than other problems relating to self-reporting survey tools, such as over-subjectivity, bias, or unreliability and validity in the elicited data. Gu, Wen and Wu (1995) used part of one Likert-scale strategy questionnaire with four different explanations for ‘often’ in the instructions to the same group of Chinese EFL learners on four different occasions. Their findings indicate that different interpretations of instructions (such as
'often') may have caused the learners to produce different answers to the questionnaire at different times. Bremner (1998) also points out that a strategy questionnaire may contain items subject to various interpretations. For example, learners will have a problem in deciding who is 'someone' before rating on the item 'I pay attention when someone is speaking' in the SILL. It will make differences in students’ ratings if ‘someone’ turns out to be a teacher or a close friend. Ambiguity in the questionnaire item wordings may cause further interpretation problems for learners from different pedagogic or cultural contexts. To overcome such problems, it is not enough for researchers to modify a questionnaire to local research contexts. Gu, Wen and Wu (1995) recommend that findings through other research methods, for instance interview or observation, should be used to corroborate findings from a large questionnaire survey.

**DEPTH OR WIDTH?**

A strategy inventory may cover all possible strategic learning behaviours employed by a learner, but it is very difficult to capture the multidimensionality of a strategic human action. One can classify what learners do according to their goals (for learning languages or using languages), relevant linguistic skills (listening or speaking), functions (planning language learning or practising language) and so on (Cohen and Weaver, forthcoming). Furthermore, it may not be easy for one inventory to cover all dimensions of learners’ strategy use. As for the Likert-scale continuum, it is easier to use a frequency scale, ranging from ‘never’ to ‘very often’. But frequency is only one aspect of learners’ strategy use. There are also other issues such as efficacy, attitude and belief. In such cases, researchers (eg Gu and Johnson 1996; Gu 2002; Fan 2003) develop much more complicated and detailed questionnaires to cover various aspects of learners’ learning strategy use. However, even if well-designed and comprehensive questionnaires can cover all aspects and dimensions of language learning behaviours, it is still not enough to embrace the complexity of learners’ strategy use at particular moments in completing a specific task. In the case of writing, for example, the use of L1 may appear to be a L2 writing strategy, which L2 writers may resort to when they have problems in expressing themselves in L2. But think-aloud protocol research on L2 writing processes has produced a much more complex picture. These studies (eg Wang, W and Wen 2002; Wang, L 2003) indicate that learners of differing L2 proficiency all tend to spend a considerable amount of time on L1 during L2 writing processes. L1 switching may serve different purposes for L2 writing, including planning discourse, generating ideas, evaluating language use, searching for words,
text production monitoring or text evaluation (Wang, L 2003). Research also reveals that learners of higher proficiency differ from learners of lower proficiency in L1 switching, not necessarily in frequency but in purposes (Wang, W and Wen 2002; Wang, L 2003). For instance, learners of high proficiency may use L1 for global writing purposes, while learners of low proficiency tend to use L1 without rhetorical concerns. Survey studies may present a big picture of strategy use among a large population of learners but they cannot encapsulate multi-dimensionality and complexity in language learners’ strategy use, and this compromises the applicability of their findings in other contexts.

STRATEGY USE: DYNAMIC OR STATIC?

Some recent studies argue that learners prefer different sets of strategies at different stages of their lives and suggest that learners’ use of strategy is dynamic across time (Schmitt 1997; He 2002; Takeuchi 2003). While learners’ strategy use has rarely been considered ‘unchanging’, it has tended to be viewed as such because of the dominance of quantitative studies in LLS research. As early as the mid-1980s, using learners’ recollective accounts, Wenden (1986) argued that learners’ language learning priorities predetermined their strategy use, and that specific learning events may trigger changes in these. Implicit in Wenden’s findings is the belief that learners’ strategy use is dynamic and temporal, and contingent on their background experiences and perceptions of their language learning needs. Meanwhile, since the 1980s, O’Malley et al (1985a and b) have been investigating the developmental process of strategy uses among high school English as a Second Language (ESL) students in the Cognitive Academic Language Learning Approach (CALLA) project and among young immersion learners at elementary schools (Chamot 2001). Moreover, SILL researchers (eg Oxford and Nykios 1989) have identified dynamic relationships between learners’ strategy use and up to 14 factors, including age, task requirements and so on. But the problem is that the predominance of quantitative studies involving a variety of questionnaires has ironically transformed learners’ ‘strategy use’ into an apparently static variable. The cross-sectional nature of quantitative LLS research has pinned learners’ strategy use down to a single temporal point and masked its potentially dynamic and changeable nature. It is, therefore, a priority for LLS researchers to explore dynamism in learners’ strategy use by using research methods other than questionnaires.
Conclusion

Questionnaires are important in LLS research, since they help us to establish a shared understanding of language learners’ strategy use. Survey studies have been very illuminating and have yielded important findings in the LLS field, so that we now have profiles of the general strategy use of certain learner groups or in specific language skills (vocabulary acquisition). We have also learned from such survey studies that a number of factors influence strategy use and, for instance, the fact that there is a definite but unclear relationship between learners’ strategy use and their language proficiency (e.g. Green and Oxford 1995; Gu and Johnson 1996). We know that learners will improve at least in some aspects of their language learning if we help them to develop their appropriate strategy use (O’Malley 1985a and b; O’Malley and Chamot 1990). But differences in contexts and tasks present problems for the uncritical use of questionnaires in LLS research and make it imperative that researchers take tasks and context more fully into account when investigating strategy use (e.g. LoCastro 1994; Bremner 1998; Yamamori et al 2003; Oxford et al 2004). Similarly, ambiguity in the wording and content cast doubt on the findings of survey tools using Likert-scales (e.g. Gu, Wen and Wu 1995; Bremner 1998). Furthermore, questionnaires may not be able to cover all the dimensions of a learner’s strategy use, and do not allow deep insights into what they do. These insights are important for language teachers who want to offer strategic help to language learners. Lastly, the predominance of questionnaire use has made ‘strategy use’ appear to be a static ‘variable’ in LLS research.

As a result, we may have to rethink this over-dependence on questionnaires and move towards a more qualitative and context-sensitive approach in LLS research (Oxford 2003; Yamamori et al 2003: 383). A multi-method LLS research approach has been favoured by some researchers (McDonough 1999). For instance, Gu (2003) reports a case study of two learners after the administration of a vocabulary learning questionnaire to 978 students. In this case, the questionnaire was still important, but rendered more useful in providing a launching pad for deep and qualitative enquiries into learners’ strategy use. In addition, Oxford et al (1996), as well as He (2002), powerfully demonstrate how recollective and autobiographical accounts can provide profound insights into learners’ strategy use and contexts. More recently, longitudinal, qualitative and ethnographic enquiries have also provided insight into learners’ strategy use, contexts and temporality (Gan, Humphreys and Hamp-Lyons 2004; Parks and Raymond 2004). In fact, similar studies should be encouraged under the current ‘social’ turn in second language acquisition research (Block, D. 2003; Sealey and Carter
2004). In conclusion, multi-method or qualitative enquiries will generate highly contextualised understandings about learners’ strategy use in specific contexts on particular learning tasks and help language teachers to offer better assistance to the learners in other similar contexts and on similar learning tasks.

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REFERENCES


