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# *Metacognitive translator competence: From other-regulation to self-regulation*

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Abstract

This paper explores the construct of metacognition and metacognitive skills in relation to translator training. It attempts to illustrate the role of metacognition as a facilitative factor in the professional translator career. Given that it is of primary importance in translator education to help translation students recognize the need for lifelong education and further development of their skills, the article discusses models of self-regulated learning and stresses the need for a transition from other-regulation to self-regulation. Metacognitive approach to translator training conceives of translator competence as based on personal resources, that is, aspects of the self that refer to the sense of ability to successfully meet demands, which make up the psychological capital of the translator (Pietrzak, 2022). Metacognitive translator competence is understood here as the ability to self-regulate cognitive processes that contribute to goal achievement and translator professional success (ibid.). The article reports on an exploratory study on translation graduates with particular attention to the effects of metacognitive awareness on their professional development. The data collected and analyzed in the study show correlations between metacognitive awareness and professional development as reflected in the career path and perceived success.[1]

*Keywords*: translator competence; translator expertise; translation education; translator training; metacognitive skills; self-regulation; metacognitive awareness

[1] The present article is based on the research conducted and discussed in the forthcoming monograph on metacognitive translator training (Pietrzak, 2022).

## 1. Introduction

Due to the dynamic nature of the translation market and new demands that the covid-19 pandemic has put on society, it is hard to predict the skills that will be useful for translators in their future career. It is therefore important for the translator to be self-reliant and self-directed enough to adapt to the ever-changing demands of the profession. With a view to preparing trainee translators for entering the contemporary market, it needs to be taken into account that the work of the translator nowadays is associated with continuous self-development based not only on deepening their knowledge by acquiring skills and experience, but also many other strategic skills necessary for efficient functioning in the translation industry.

Keeping in mind the need for learner autonomy, in recent years, the traditional transmissionist or teacher-cantered approach to translator education has become less popular. This approach is now considered to be too "procedure-oriented and content-oriented teaching" (Klimkowska & Klimkowski, 2015, p. 212) since the main assumption behind translator education is no longer just a transfer of knowledge. Translator education has increasingly been student-cantered and holistic, integrating aspects of transactional and transformative approaches (Miller, 1996). The aim behind these approaches has been guiding learners in their knowledge construction, with a gradual transfer responsibility and regulation of the learning process from the teacher to the student. Taking into account the dynamics of the current translation market, mastering metacognitive awareness and skills such as self-regulation or self-reflection, appears superior to the acquisition of structured knowledge.

## 2. The translator as a lifelong learner

The development of the self in the process of learning is consistent with the concept of lifelong learning which is focused on personal development and engages students as complex personalities. Jarvis et al. (2003, p. 89) observe that "the whole idea of lifelong learning and the learning society entails a notion of the individual self-directed learner." Autonomous, self-directed learning encompasses the external and the internal dimensions when learners act on the basis of the knowledge gained and use their personal agency to apply it in their future working environment.

As Klimkowski stresses, a holistic approach to learning means, that "the students and the teachers are thought of as human beings taking part in educational initiatives as beneficial for their lifelong development" (2015, p. 92). Lifelong learning involves students' personal resources and aims to prepare them to stay open to lifelong educational experiences. The idea of translator education as engaging students in their own learning process aims at empowering them to

acquire skills and self-regulate their future activities and continue to improve their performance quality and effectiveness.

Lifelong learning is a crucial element of professional development. In his theory of adult learning, Knowles emphasizes the idea of personal growth and ability to learn. Learners who take initiative "learn more things, and learn better, than do people who sit at the feet of teachers passively waiting to be taught" (Knowles, 1975, p. 14). He defines self-directed learning as "a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes" (Knowles, 1975, p. 18). This form of learning is considered to be taking responsibility for one's own life, which reflects the natural process of maturation and psychological development.

## 3. Metacognition or self-regulation?

There seems to be some terminological confusion, both in educational research and in translation studies, regarding the use of the terms metacognition and self-regulation. Both these terms are used within the framework of educational, cognitive and developmental psychology, but the term metacognition seems to have been used first. It was Flavell (1979) who defined it, in developmental psychology, focusing on the development of child autonomy and control of their actions when interacting with others. The term self-regulation started to be used later and is often understood as the ability to control or regulate one's actions that involves an interaction of personal, behavioral and environmental processes (Bandura, 1989).

The term metacognition is sometimes claimed to be reserved for the construct of metacognitive *knowledge* only. For instance, according to Paris and Winograd (1990), *metacognition* does not include such constructs as control and regulatory activities which should be referred to as *self-regulation*. As Boekaerts (1999, p. 446) explains, self-regulation involves the ability to engage in "self-generated thoughts, feelings, and actions" in order to achieve certain goals. In self-regulated learning, there are two general organizing constructs, "(1) knowledge/beliefs and (2) strategies used for regulation" (Hofer & Pintrich, 1998, p. 65). Thus, in educational settings self-regulation is most often used to refer to controlling the process of acquiring and using metacognitive knowledge.

## 4. Metacognitive awareness

Some researchers claim that learners who are more metacognitively aware also have better results and perform better than other learners (e.g., Ganz & Ganz

1990; Garner & Alexander, 1989). It needs to be stressed here that differences in learners' performance are not necessarily related to differences in intellectual aptitude but rather differences in their metacognitive awareness (Swanson, 1990). Schraw and Dennison (1994, p. 460) explain that "metacognitive awareness allows individuals to plan, sequence, and monitor their learning in a way that directly improves performance."

Metacognitive awareness encompasses both knowledge of cognition and regulation of cognition, as presented in the two-component models of metacognition (Brown, 1987; Flavell, 1987). As discussed in Pietrzak (2022), it is reflected in knowledge and regulation of cognition in that the knowledge of cognition measures "an awareness of one's strengths and weaknesses, knowledge about strategies and why and when to use those strategies" and regulation of cognition measures "knowledge about planning, implementing, monitoring and evaluating strategy use" (Schraw & Dennison, 1994, p. 471). Metacognitive awareness means being aware of the knowledge and all the processes that help to plan, monitor and evaluate the knowledge so it can be defined as the awareness of how we learn.

A preliminary study on the effect of metacognition on translation students' performance (Pietrzak, 2018) shows that trainees with greater metacognitive skills tend to be more successful in their translation process and that the level of self-regulatory skills, especially translation-related skills, is correlated with their performance quality as reflected in their grades (see Pietrzak, 2018, pp. 827-834). Some findings of the study on metacognitive awareness of translation graduates (Pietrzak, 2022) presented in this article show that metacognitively aware graduates have better results in their professional development as reflected in their career path, job satisfaction or perceived success.

## 5. Metacognitive translator competence

As regards education, *cognitive* skills refer to learning and *metacognitive* skills refer to managing learning.[2] Metacognition is regarded as an important part of learning since it contributes to learning results and better performance among adults (Baker, 1989; Garner & Alexander, 1989). Although the initial focus of researchers has been laid on child development (Flavell, 1979; James, 1983; Piaget, 1964; Vygotsky, 1986), they gradually became more interested in expert thought processes, trying to use them to improve teaching methods (Hatano & Inagaki, 1986). Given that metacognition involves using "higher-level knowledge and strategies to regulate lower performance," it helps learners "to use their attentional

[2] See Pietrzak (2022) for a discussion of concepts from educational psychology and studies of metacognition aimed at investigating how metacognitive skills and strategies affect translating and developing translator competence.

resources more efficiently, to process information at a deeper level, and to monitor their performance more accurately" (Schraw et al., 2000, p. 223).

Metacognitive knowledge is not the same as having metacognitive skills (Baker, 1994). Baker (1994, p. 206) observes that the term self-regulation is sometimes understood as "skills included within the regulatory component of metacognition." Metacognitive skills are often considered to be the broadly-conceived regulation (Brown, 1978). The terminology used to discuss metacognitive skills also differs as they are called monitoring skills (Flavell, 1979, p. 910) or regulatory skills (White & Fredriksen, 2005, p. 211). Metacognitive skills concern the procedural knowledge from among the three categories of metacognitive knowledge: declarative (person knowledge, that is, the awareness of one's own capabilities), procedural knowledge (task knowledge, that is, the knowledge of the nature and processing demands of an activity), and conditional knowledge (or strategy knowledge, that is, the knowledge of when to employ and how to adapt specific strategies) (see Flavell, 1979; Paris et al., 1984; Schraw 2001).

Metacognitive skills refer to "conscious control processes such as planning, monitoring of the progress of processing, effort allocation, strategy use and regulation of cognition" (Papaleontiou-Louca, 2003, p. 16). Moreover, metacognitive knowledge, metacognitive experiences and metacognitive skills are considered to "form overlapping sets" which "complement and enrich each other" and „are constantly informing and eliciting one another during the course of a cognitive task" (ibid.). These are therefore such skills as: planning, monitoring, reflecting (Baker, 1994), but also executive processes such as: predicting, checking, revising, evaluating, coordinating and controlling (Brown, 1978). Metacognitive approach conceives of translator competence as based on personal resources (Pietrzak, 2022). Personal resources are here understood as aspects of the self that refer to the sense of ability to successfully meet demands, which make up the psychological capital of the translator. Metacognitive translator competence can therefore be defined as the ability to self-regulate cognitive processes that contribute to goal achievement and translator professional success.

Metacognitive skills involved in the process of both translating and learning to translate are mostly included within the regulatory component of metacognition (Pietrzak, 2022). It needs to be observed here that some metacognitive skills can be considered domain-specific (Davidson & Sternberg, 1998) and are related to the characteristics of the particular discipline. Strategies that support learning depend on specific features of the discipline as well the tasks and goals of the learning process. In the discipline of translator education, as Muñoz Martín (2014, p. 26) observes, all of the mental processes referred to as strategic behavior "map onto metacognition." According to Shreve (2006, p. 39), metacognition "involves active control over the cognitive processes involved in translation."

Therefore, in translation studies, the terms metacognitive and self-regulatory skills are often used interchangeably.

## 6. Self-regulated learning: From other-regulation to self-regulation

Self-regulated learning is "an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and the contextual features in the environment" (Pintrich, 2000, p. 453). Self-regulation involves three cyclical phases: forethought phase, performance phase or volitional control and self-reflection phase (Schunk & Zimmerman, 1998, p. 3). There are slight differences between the models of self-regulated learning, for instance, Winne and Hadwin (1998) describe self-regulated learning as comprising four flexibly sequenced phases of recursive cognition: definition of task; goals and plan(s); studying tactics; adaptations; four phases of self-regulated learning are also suggested by Pintrich (2000) who distinguishes between monitoring and control, as he claims that self-regulated learning follows the processes called: forethought, planning and activation; monitoring; control; reaction and reflection. Nevertheless, the assumption that is common for all the proposed models is that learners show potential for control over certain aspects of their cognition, motivation and behavior.

Given that there are numerous occasions on which students are left on their own with their learning, especially nowadays with distance-learning and other post-pandemic training environments, in order to help students become more self-reliant, translator educators need to encourage learners to transfer from the state of other-regulation to self-regulation (Brown, 1987). The idea here is that the teacher takes an instructive role in order to guide students and lead them to convert self-regulation strategies to adjust to collaborative learning (Hadwin & Oshige, 2011). Examples of other-regulation interventions include "proleptic/dyactic instruction, cognitive behavior modification, informed training, and reciprocal teaching" (Manning, 1991, p. 29).

The guidance from other-regulation to self-regulation is a crucial component of effective learning. Studies on self-regulatory processes show that "learning to be both the regulator and the object of regulation are equally important for the development of self-regulation" (Bodrova & Leong, 2007, p. 81). Ultimately, less assistance is provided when the learner takes more responsibility for the performance of the task (ibid.). According to Winne and Hadwin (1998, 2008), choices and outcomes in each phase of regulation are linked with social and environmental conditions. Regulatory processes have been studied within collaborative groups as socially shared regulation, social regulation or co-

regulation (Hadwin & Oshige 2011), which refers to the processes that groups use to regulate their joint work on a task (Vauras et al., 2003). Shared regulation or co-regulation is a mutual and reactive process, "born when other regulation occurs and is acted on in terms of individual or shared regulatory planning, monitoring, evaluating, or strategic action targeting behaviour, motivation, affect, or cognition" (ibid.). In order to ensure high quality of other-regulation, it needs to be socially shared (Pietrzak, 2022).

Since collaborative learning involves complex regulatory processes, a distinction needs to be made between other-regulation aimed at guiding and other-regulation aimed at controlling regulatory processes in a group (Pietrzak, 2022). The latter is called *directive other-regulation* (Rogat & Adams-Wiggins, 2014) and focuses on controlling others. It involves "detailing exactly what group members should do, determining the next step of the task, and maintaining control of monitoring and task contributions" (ibid.). In fact, Hadwin et al. (2018) regard directive other-regulation as "a constraint for self- and shared regulation." The second type other-regulation, which is aimed at guiding, is called *facilitative other-regulation* and it involves supporting students in regulatory processes. Rogat and Adams-Wiggins (2014, p. 879) consider facilitative other-regulation to be higher quality regulation with coequal regulation, integrating ideas, and "sustaining a shared focus on developing the task product through the use of high-quality content and disciplinary regulation." Co-regulatory mechanisms are both independent and interdependent as they go beyond teacher-student interaction but require constant guidance (see Pietrzak, 2022).

## 7. Metacognitive awareness of translation graduates[3]

The following section demonstrates selected findings from the study designed to investigate translation graduates' metacognition (Pietrzak, 2022). Links between the variables (such as their self-perceived success, career choices, overall satisfaction and career development) were measured using quantitative correlational methods. The data gathering tool is a self-report instrument comprising items distributed across six sections, that is, demographic information, work, studies, self-concept, metacognitive awareness, assessment. Metacognitive awareness is regarded here as a variable that is reflected in the total score obtained by the respondent on metacognition scale. The section of the questionnaire devoted to measuring metacognitive awareness was designed to explore respondents' awareness of their strengths and weaknesses as well as their awareness about regulation, planning, monitoring and evaluating. Items used for measuring

[3] For a full discussion of the findings, please see Pietrzak (2022).

metacognitive awareness are based on the Metacognitive Awareness Inventory developed by Schraw and Dennison (1994) and the scale used here is a redesigned version of the scale used in the previous study (Pietrzak, 2018). The questionnaire was administered to 452 students who graduated from the University of Łódź for 8 consecutive years between 2012 and 2019. All the respondents were graduates from fulltime BA studies who specialized in translation. Although the scope of the study is limited to the context of one university, it well illustrates an apparently universal pattern of how metacognitive awareness influences the professional life of translation graduates (Pietrzak, 2022).

### 7.1. Sample structure: employment and career paths

More than 70% of the graduates are female and approximately half of them are between 24 and 26 years old. As for their employment status, 76% of the respondents are employed and 43% of them work as translators. Only 35% want to work as a translator and 28% do not know if they want to work in this profession. Only 7% of the respondents declare that they do not work at all.

Table 1 Employment status of the translation graduates

| | | Sample | |
|---|---|---|---|
| | | *N* | % |
| Did you go to work abroad after your studies? | Yes | 14 | 9.1 |
| | Yes, but I have already returned | 11 | 7.1 |
| | No | 128 | 83.1 |
| | No answer | 1 | 0.6 |
| Did you continue your studies after completing your undergraduate studies? | Yes, in the same subject | 23 | 14.9 |
| | Yes, but in a different subject | 105 | 68.2 |
| | No | 25 | 16.2 |
| | No answer | 1 | 0.6 |
| Do you work? | Yes | 117 | 76.0 |
| | Not at the moment | 25 | 16.2 |
| | No | 11 | 7.1 |
| | No answer | 1 | 0.6 |
| Do you work as a translator? | Yes | 67 | 43.5 |
| | No | 86 | 55.8 |
| | No answer | 1 | 0.6 |
| Do you want to work as a translator? | Yes | 54 | 35.1 |
| | No | 56 | 36.4 |
| | I do not know | 43 | 27.9 |
| | No answer | 1 | 0.6 |
| If you work - the services you provide at work can be described as: | Translation services | 29 | 18.8 |
| | Services not related to translation | 72 | 46.8 |
| | Not applicable (I don't work) | 49 | 31.8 |
| | No answer | 4 | 2.6 |

The employment status of translation graduates is significantly more often ($p < .001$*) declared by men (82%) than by women (60%). The strength of the association here is moderate with a Cramer's V coefficient of $V = .346$. Nearly 40% of women indicated that they were temporarily not working (nearly 40%). Employment is also significantly related to age ($p < .001$*), but the strength of the association is slightly weaker ($V = .287$). It is not surprising that this percentage is the lowest for people aged 21-23 (50%), almost every third person at this age does not work. On the other hand, almost all (96%) of translation graduates aged 27-29 are employed and there are no graduates who have never taken up any job. Out of the respondents aged 30 or more, only one person did not work at all.

As for their career choices, translation graduates mainly work in non-translation services; it concerns more than every third person, half of the employed (slightly more often women than men and more often people aged 27+ than the younger ones). What is particularly interesting here, among people aged 30+, no one indicated language teaching – jobs mentioned here are related only to translation and other fields different from what they studied. A large proportion of translation graduates work in a different industry (approx. 14% of respondents) or in the office (13%). As presented in Table 2, working as a translator was listed in the fourth place (10% of respondents).

Table 2 Type of work performed by graduates (overall and by sex and age)

| | Overall | | Sex | | Age | |
|---|---|---|---|---|---|---|
| | | | Female | Male | 21-26 | 27 or more |
| | *N* = 117 | *N* = 154 | *N* = 112 | *N* = 40 | *N* = 99 | *N* = 54 |
| Language teaching | 50.4 | 38.3 | 42.0 | 30.0 | 32.3 | 50.0 |
| Working in a different field of industry | 17.9 | 13.6 | 14.3 | 12.5 | 9.1 | 22.2 |
| Office work | 17.1 | 13.0 | 14.3 | 10.0 | 18.2 | 3.7 |
| Working as a translator | 13.7 | 10.4 | 7.1 | 20.0 | 11.1 | 9.3 |
| Working as a translator in an institution or corporation | 6.0 | 4.5 | 3.6 | 7.5 | 3.0 | 7.4 |
| Working as a translation agency coordinator | 4.3 | 3.2 | 3.6 | 2.5 | 4.0 | 1.9 |
| Teaching and second-job translating | 2.6 | 1.9 | 0.9 | 5.0 | 2.0 | 1.9 |
| Working at a different position in an institution or corporation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other | 4.3 | 3.2 | 3.6 | 2.5 | 3.0 | 3.7 |

Men indicated working as a translator clearly more often than women. Taking into account the age factor, in addition to the previous conclusion, it can be noticed that younger graduates more often than older graduates do office work, and older graduates more often than the younger ones work in a different field of industry. Translation graduates are mainly employed full-time (nearly 2/3 of the employed, that is, approx. 43% of all respondents).

Table 3 Form of employment of working graduates (overall and by sex and age)

| | Overall | | Sex ($p$ = .457) | | Age ($p$ = .871) | |
|---|---|---|---|---|---|---|
| | | | Female | Male | 21-26 | 27 or more |
| | $N$ = 154 | $N$ = 104 | $N$ = 77 | $N$ = 27 | $N$ = 59 | $N$ = 45 |
| Full-time worker | 42.9 | 63.5 | 66.2 | 55.6 | 64.4 | 62.2 |
| Part-time worker | 2.6 | 3.8 | 3.9 | 3.7 | 5.1 | 2.2 |
| Self-employed | 5.2 | 7.7 | 9.1 | 3.7 | 6.8 | 8.9 |
| Freelancer | 14.9 | 22.1 | 18.2 | 33.3 | 22.0 | 22.2 |
| Double employment (e.g. self-employment and a part-time job) | 1.9 | 2.9 | 2.6 | 3.7 | 1.7 | 4.4 |
| No answer | 32.5 | x | x | x | x | x |

Approximately every fourth working graduate is a freelancer and every twelfth is self-employed (see Table 3). Women more often than men work full-time, and men more often than women work as freelancers. Age is much less important in this regard. It is worth noting that among people up to 23 and 30+, freelancers or part-time workers are more frequent than in other age groups, while full-time and double forms of employment are less frequent than in other age groups. Neither sex nor age significantly differentiate the forms of employment ($p$ > .05). Almost every second working graduate chose their current job consciously, the rest of the respondents declare that it was rather a coincidence. As for the main factors that determined the choice of their current job, the graduates (allowed to choose multiple response options) mentioned mainly four of them, that is, comfort of work, potential for professional development, income and convenient working hours. The social usefulness of the job was indicated clearly less often (8% of the employed). Both sex and age are of no importance in this respect.

The graduates who have already worked as translators rate the impact of the field of study on their career choice higher than for those who have never worked in this profession; here, 67% respondents from the first group, compared to 45% from the second group, rate this relation at 4 or 5 (where 5 represents "strongly agree"). Similar conclusions apply to plans regarding their current occupation; 70% of those planning to work as a translator see such a correlation at 4 or 5 (where 5 represents "strongly agree"). These relations are statistically significant (with $\alpha$ = .06 for the first variable). As for the form of employment, entrepreneurs and freelance translators constitute the highest percentage of answer 5 – "strongly agree" (44-50%), although in total answers indicating agreement (4 or 5) were most frequent for freelancers (74%) and full-time employees (55%). 60% of those who work as a translator chose this job consciously, and for 40% it was a coincidence. Similar proportions can also be noted for those who chose a different occupation (the differences are not statistically significant, $p$ = .795). Similar results apply to future plans to work as a translator ($p$ = .985) and translation services provider ($p$ = .857). Working in translation-related fields is, therefore, more often a conscious choice of graduates rather than a coincidence.

Translation graduates who work as translators chose their occupation (significantly more often than others) because of the convenient working hours. This reason for career choice has been indicated by half of those working as translators. Other reasons are job satisfaction (62.5%), potential for professional development (75%) and social usefulness of the job (18.8%), with three reasons that come to the fore - the potential for development, convenient working conditions and job satisfaction (see Table 4).

Table 4 Factors that influenced career choice and type of work performed

| | Income | Convenient working hours | Job satisfaction | Convenient working conditions | No better job offer | Potential for professional development | Social usefulness of the job |
|---|---|---|---|---|---|---|---|
| Freelance translators | 31.3 | 50.0* | 62.5* | 68.8 | 31.3 | 75.0* | 18.8* |
| Translation agency coordinators | 20.0 | 20.0 | 60.0 | 40.0 | 40.0 | 40.0 | 0.0 |
| Translators employed in institutions or corporations | 71.4* | 71.4* | 42.9 | 100.0* | 28.6 | 57.1 | 14.3 |
| Language teachers | 57.6* | 50.8* | 35.6* | 62.7* | 20.3 | 52.5* | 10.2 |
| Teachers and second-job translators | 33.3 | 33.3 | 33.3 | 33.3 | 0.0 | 33.3 | 33.3 |
| Office workers | 55.0* | 50.0* | 40.0 | 60.0* | 35.0* | 50.0 | 5.0 |
| Workers employed in a different field of industry | 61.9* | 33.3 | 47.6* | 47.6 | 28.6 | 38.1 | 4.8 |

*p* – probability in the *chi*-square test or the exact Fisher test, * – statistical significance level ($\alpha = 0.05$)

When it comes to working as a translator in other institutions, people who do this job appreciate convenient working conditions (this applies to all respondents in this group), income and convenient working hours (they differ significantly in this respect from other respondents). When it comes to language teaching, the most important factors were convenient working conditions (62.7%), income (57.6%), as well as the potential for professional development, convenient working hours and job satisfaction (the percentage is higher than for other graduates combined).

## 7.2. Metacognitive awareness

Metacognitive awareness of translation graduates has been tested with a 15-item scale (detailed answers for each of the items are presented in Figure 1). In order to quantitatively measure the dimensions of metacognitive awareness, the respondents of the survey were asked to self-rate Likert-scale statements by ascribing a value to the degree of their agreement on a 5-point scale. The rating scale comprised five ordered response levels which presented a balanced scale of answer choices ranging from (1) strongly disagree/definitely no; (2) disagree; (3) neither agree nor disagree; (4) agree; to 5) strongly agree/definitely yes. The scale items were randomized. The statistical analysis conducted on the data collected in the study is presented below.

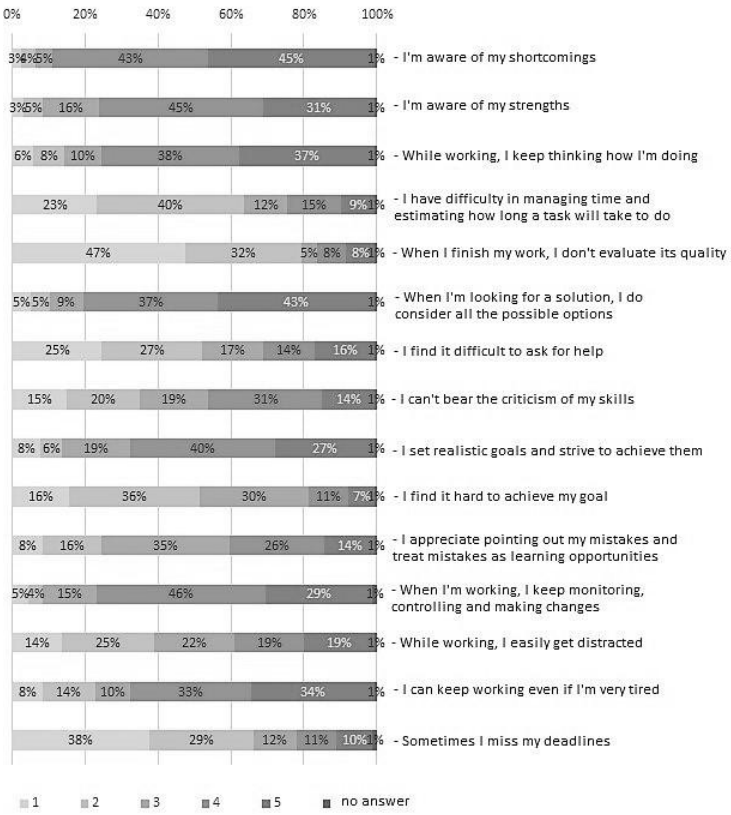


Figure 1 Dimensions of metacognitive awareness

For most of the analyzed metacognitive aspects, the respondents' metacognitive self-assessment is high, with the median value 4). The following issues stand out in particular (see Figure 1):

- 'I am aware of my shortcomings' – the percentage of agreement is 88%, including 45% of respondents who strongly agree (with the average of 4.25);
- 'When I am looking for a solution I do consider all the possible options' – the percentage of agreement is 80%, including 43% of respondents who strongly agree (with the average of 4.08);
- 'When I finish my work, I don't evaluate its quality' – the percentage of disagreement is 79%, including 47% of respondents who strongly disagree (with the average of 4.04);
- 'I am aware of my strengths' – the percentage of agreement is 76%, including 31% of respondents who strongly agree (with the average close to 4);
- 'When I am working, I keep monitoring, controlling and making changes' – the percentage of agreement is 75%, including 29% of respondents who strongly agree (with the average close to 4);

– 'While working, I keep thinking how I am doing' – the percentage of agreement is 75%, including 37% of respondents who strongly agree (with the average close to 4).

The lowest rating, with the median and mean close to 3, concerns two issues: being easily distracted ('While working, I easily get distracted' - with strong diversification of opinions, i.e. 38% of positive answers and 39% of negative answers), as well as bad tolerance for criticism ('I cannot bear the criticism of my skills' – with 45% of positive answers and 35% of negative answers) (Pietrzak, 2022).

Opinions in this respect are similar for both women and men of different age (see Table 5). As for getting easily distracted while working, there are statistically significant differences observed between women and men (although men appear to have greater difficulty with this issue). Significant differences ($p$ = .054), also in favor of women, are also observed with regard to time management. As regards the age, significant differences are observed in relation to two issues (Table 5). The first one is reflecting on how it is going ($p$ =.002*); people aged 30 and more assess this aspect significantly lower than all the other age groups (this is confirmed by the results of the post hoc test - the probability is .001 or it is close to 0). The second issue is the ability to work despite being tired ($p$ = .022*) – here, in turn, people aged 30+ scored higher than the younger ones, especially than those aged 27-29 (in the post hoc test $p$ = .014).

Table 5 Metacognitive dimensions: mean and median by age

| | 21-23 | 24-26 | 27-29 | 30+ | 21-23 | 24-26 | 27-29 | 30+ | *p* |
|---|---|---|---|---|---|---|---|---|---|
| | Average | | | | Median | | | | |
| I am aware of my shortcomings | 4.36 | 4.31 | 4.17 | 4.00 | 4.00 | 5.00 | 4.00 | 4.00 | .727 |
| When I am looking for a solution, I do consider all the possible options | 4.07 | 4.12 | 4.09 | 3.57 | 4.00 | 4.00 | 4.00 | 4.00 | .876 |
| When I finish my work, I do not evaluate its quality [R.] | 4.14 | 3.98 | 4.21 | 3.43 | 5.00 | 4.00 | 5.00 | 5.00 | .669 |
| I am aware of my strengths | 4.00 | 3.88 | 4.15 | 3.29 | 4.00 | 4.00 | 4.00 | 4.00 | .252 |
| When I am working, I keep monitoring, controlling and making changes | 3.79 | 3.93 | 4.06 | 3.29 | 4.00 | 4.00 | 4.00 | 4.00 | .581 |
| While working, I keep thinking how I am doing | 4.36 | 3.93 | 4.09 | 1.86 | 4.50 | 4.00 | 4.00 | 2.00 | .001* |
| Sometimes I miss my deadlines [R.] | 4.07 | 3.73 | 3.79 | 3.00 | 4.00 | 4.00 | 4.00 | 4.00 | .703 |
| I set realistic goals and strive to achieve them | 3.57 | 3.71 | 3.91 | 3.14 | 4.00 | 4.00 | 4.00 | 4.00 | .622 |
| I can keep working even if I am very tired | 3.64 | 3.75 | 3.45 | 4.86 | 4.00 | 4.00 | 4.00 | 5.00 | .022* |
| I have difficulty in managing time and estimating how long a task will take [R] | 3.07 | 3.64 | 3.64 | 2.71 | 3.50 | 4.00 | 4.00 | 1.00 | .306 |
| I find it hard to achieve my goal [R.] | 2.86 | 3.44 | 3.62 | 3.00 | 3.00 | 4.00 | 4.00 | 3.00 | .097 |
| I find it difficult to ask for help [R.] | 2.93 | 3.32 | 3.36 | 3.43 | 3.00 | 4.00 | 4.00 | 4.00 | .758 |
| I appreciate pointing out my mistakes and treat mistakes as learning opportunities | 3.21 | 3.29 | 3.04 | 3.14 | 3.00 | 3.00 | 3.00 | 3.00 | .662 |
| While working, I easily get distracted [R.] | 2.57 | 3.00 | 2.96 | 3.00 | 3.00 | 3.00 | 3.00 | 4.00 | .725 |
| I cannot bear the criticism of my skills [R.] | 2.71 | 3.15 | 2.51 | 2.86 | 3.00 | 3.00 | 2.00 | 3.00 | .054 |

[R] reverse coding of responses

*p* - probability in the Kruskal-Wallis test, * - statistically significant differences (α = .05)

The overall score on the metacognitive awareness scale can be measured as the sum total points for individual items of the scale (the items whose higher

original value indicated a lower metacognitive awareness have been transformed and marked with $^{R}$ in Table 5). With the Cronbach's alpha coefficient reaching the level of 0.842 (clearly above the usually adopted limit of 0.7), the reliability of such a measurement is high. The metacognitive awareness variable can take values from 15 to 75, and the higher the level of this variable, the higher the metacognitive awareness of the graduates (Pietrzak, 2022).

On average, translation graduates score the average of 53.8 on the metacognitive awareness scale with a maximum of 75 (with the mean absolute deviation =/- 8.51), and half of them achieve a score of no lower than 55. The sample is dominated by respondents with scores higher than the mean (there are people with an unusually low metacognitive awareness), and the distribution of this variable is more slender than the corresponding normal distribution (the results are more focused around the mean than in the normal distribution). As in the case of the self-concept variable, both the skewness coefficient (-1.367) and the kurtosis (3.408) indicate some deviations from a normal distribution; they are, however, acceptable when parametric methods are applied (Pietrzak, 2022).

Women do not differ significantly from men in terms of the overall metacognitive awareness (independent samples *t*-test, $p = .379$) (Figure 2). The mean result for women is $M = 54.24$ (+/- 8.09), $Me = 55$, and for men: $M = 52.85$ (+/- 9.59), $Me = 55$.

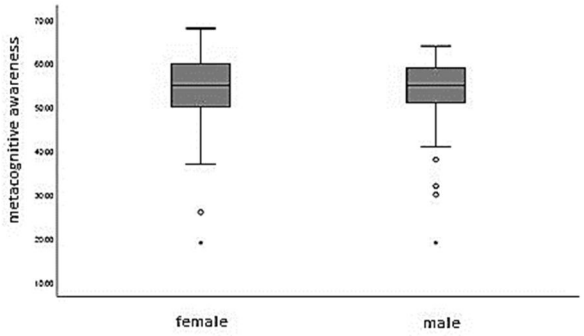


Figure 2 Metacognitive awareness by sex

The respondents aged 21-23 achieve an average metacognitive awareness of 54.38 ($SD = 6.12$), and half of them - not lower than 55. In turn, the respondents aged 24-26 achieve the following results: $M = 54.27$ ($SD = 9.08$), $Me$=55, and those aged 27-29: $M = 53.81$ ($SD = 7.10$), $Me = 53$, while those aged 30 and more have it at a much lower level: $M = 48.49$ (with clearly higher differentiation – standard deviation $SD = 13.06$), $Me = 47$.

The analysis of the unemployed respondents ($N = 64$) shows that, as far as self-concept is concerned, its highest level was observed in those who do not work because they do not have such a necessity ($M = 51.7$, $SD = 17.4$), the lowest –

in people whose reason for unemployment is the lack of an interesting job offer (*M* = 47.3, *SD* = 17.5). Respondents who work have significantly higher self-concept and metacognitive awareness than those who were not employed at the time of the study. Similarly, the self-concept of those who consciously chose their current job is (*p* = .018*) higher than that of those for whom it was a coincidence (Figure 3), but there are no significant differences in this respect for metacognition.

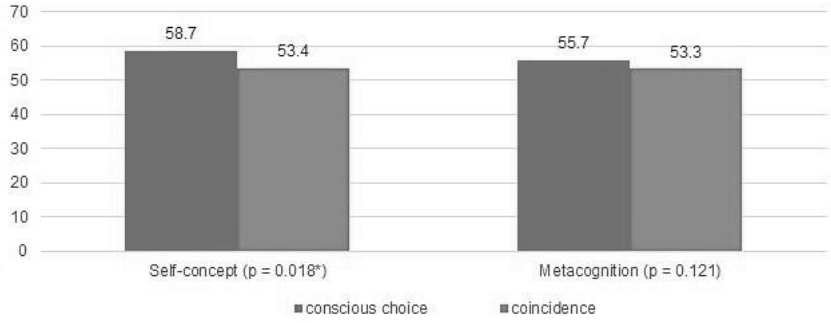


Figure 3 Self-concept and metacognition vs. career choice motivations

When it comes to the correlation between metacognition and career choice motivations (Table 6), the highest levels of both self-concept and metacognitive awareness can be observed in those who justify the choice of the current occupation with the social usefulness of the job.

Table 6 Metacognition and career choice motivations

| Career choice motivation | n | Self-concept | | Metacognitive awareness | |
|---|---|---|---|---|---|
| | | Mean | Standard deviation | Mean | Standard deviation |
| Income | 49 | 57.8 | 8.5 | 55.2 | 5.7 |
| Convenient working hours | 42 | 57.4 | 7.8 | 54.7 | 6.0 |
| Job satisfaction | 40 | 59.2 | 9.7 | 56.6 | 6.0 |
| Convenient working conditions | 57 | 56.5 | 8.0 | 54.8 | 6.2 |
| No better job offer | 23 | 51.3 | 13.0 | 54.1 | 9.8 |
| Potential for professional development | 50 | 59.0 | 8.0 | 55.5 | 5.7 |
| Social usefulness of the job | 8 | 62.5 | 5.0 | 58.4 | 6.7 |

[1] multiple response question

A high self-concept was also observed in those whose career choice motivation was based on the desire for job satisfaction and/or the potential for self-development (mean approx.. 59). Although the differences were smaller in this respect for metacognitive awareness, the respondents who chose their current occupation because there was no better job offer clearly have the lowest self-concept (*M* = 51.3, *SD* = 13.0).

## 8. Conclusion

The findings demonstrated in the article show that translation graduates with higher metacognitive awareness choose their careers more consciously and then consciously identify career paths that are suitable for them. Translation graduates who rate themselves higher on the scale of metacognition are more aware of and responsible for their employment status. It has also been observed that there is a significant correlation between their metacognitive awareness and unemployment (with self-acceptance rate highest among those who do not work because they have no need to do so).

There is a research indication that metacognitive awareness corresponds to the overall satisfaction of translation graduates. Those with higher metacognitive awareness have greater job satisfaction and there is a clear correlation between metacognitive awareness and satisfaction with the current occupation. Moreover, metacognition contributes to career development. Those who rate themselves highly on metacognition levels are satisfied with the amount or work that they have. It also needs to be noted here that the differences in metacognitive awareness are related to neither age nor sex.

Given that graduates with significantly higher metacognitive awareness develop their careers in a more deliberate way, metacognitive awareness seems indispensable in developing and managing a successful translator career. Metacognition is not only an important learning outcome in itself, but it also plays an important role in influencing other desired learning outcomes such as academic achievement, job satisfaction and success. Although the self-report method used in the presented research has left some insight unavailable, the study is seen as potentially relevant for signalling the need for adjusting translator training environment to foster better metacognitive skills in translation students.

Metacognitive aspects of translator education are related to raising students awareness and developing their self-concept in the collaborative construction of translator competence. The focus of metacognitive translator training are skills such as self-reflection, self-regulation, self-feedback, all of which are crucial in the development of translation expertise, "especially outside of optimally structured work environments, training academies, and other places with defined translation workflows and opportunities for feedback„ (Shreve, 2006, p. 32). Such an approach to translator training aims to enable and foster metacognitive awareness through activating students' personal resources. It involves promoting practical experience in metacognitive regulation of the cognitive processes involved in translation and translation service provision.

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