

New Horizons in English Studies 3/2018

## LANGUAGE & DIDACTICS



Arkadiusz Pietluch

UNIVERSITY OF RZESZÓW

arekpie122@gmail.com

---

### Extraordinary Motivation or a High Sense of Personal Agency: The Role of Self-Efficacy in the Directed Motivational Currents Theory<sup>1</sup>

**Abstract.** The purpose of this article is to explore a possible correlation between the concept of self-efficacy and the occurrence of a highly intense motivational surge to which Dörnyei refers to as a Directed Motivational Current. To this end, the first two parts are of purely theoretical nature and aim to familiarise a reader with the background information behind our constructs. The quantitative part of our study supports the existence of a strong correlation between our primary variables. The final section is devoted to the qualitative analysis and discussion of our research project and has revealed a few noteworthy implications, such as the importance of a facilitative structure and a tendency for the value of self-efficacy to increase during a DMC experience.

**Keywords:** self-efficacy, personal agency, Directed Motivational Currents Theory, eudaimonic well-being, motivation

#### 1. The concept of self-efficacy

Before we commence with a more in-depth analysis of theoretical underpinnings behind the *Directed Motivation Current Theory*, let us first focus on another concept which is of significant relevance for the sake of this paper. The notion of personal agency was devised by a major motivational scholar Albert Bandura in the 1960s as

---

<sup>1</sup> The article is partially based on the author's MA thesis in English Philology at the University of Rzeszow, written under the supervision of Marta Dick-Bursztyn, Ph.D.

a central point to the *Self-Efficacy Theory*. Due to its multidimensional nature, the construct has had a considerable impact on many diverse fields, including sport, education, and addiction treatment. Unlike other traditional psychological conceptions, self-efficacy is hypothesised to vary depending on a domain of functioning and circumstances surrounding the occurrence of our behaviour. The primary assumption behind the theory coined by Bandura implicates that our perception of self-efficacy conditions our actions, behaviour, and motivation. Grounded in the *Social Learning Theory*, Bandura (1997, 3) shaped and popularised the understanding of self-efficacy as “beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments.” For this reason, it might be said that the term refers to the way human beings judge the likelihood of success in situations they perceive as challenging, usually within contexts which demand a considerable amount of effort. The feeling of control over difficult events has been found to have positive effects on emotional well-being, social interaction, and cognitive performance. Following Lenz et al. (2002, 35), “a firm belief in the possibility of accomplishing a task can trigger a proper level of motivation.” More importantly, the scope of self-efficacy somewhat exceeds the field of psychology, also overlapping on the areas fundamental for the sake of this paper, such as foreign language learning. Schunk (1985, 215) puts forward the view that “our sense of personal agency may be a better predictor of success than any prior accomplishment, skills or knowledge.” That is, self-efficacy is believed to govern our perseverance in case of obstacles and means we are willing to exert to obtain the desired goals. On these grounds, personal beliefs regulate whether an individual will proceed with a certain behaviour, how much effort will be devoted, and for how long a person is likely to sustain the devotion to the cause, especially in the event of adversities. The commonly held opinion seems to be that people who place a lot of confidence in their own capacities are also more determined and, as a natural consequence, the expectancy of favourable outcomes guarantees activation of a sufficient effort. On the other end of the spectrum, a low sense of personal agency results in hesitation which is frequently followed by a deficient incentive for showing a greater dedication to the cause. Forthwith, such individuals are also inclined to be discouraged by even minor hardships and are more likely to prematurely abandon a task.

The level of perceived self-efficacy, which influences our apprehension of the world, also plays a fundamental role in pursuing behavioural strategies. To Bandura's mind (1997, 2), “people and their affective states are based more on what they believe than on what is objectively true.” Following this logic, human behaviour is conditioned by our own perception of our capabilities rather than the skills we actually possess. Henceforth, instead of exhibiting a constant sensation of threat, those who are convinced of the value of their skills and knowledge regard life adversities as areas for possible improvement. Even more interestingly, initial difficulties rarely have a negative effect on the perception of personal agency. In such cases, the engagement is additionally fostered by a genuine interest and a sense of challenge, encouraging an individual to pursue an objective further and to focus on the elimination of spotted

shortcomings. Quite the opposite approach can be observed in the case of individuals for whom the sense of personal capacities is lacking. Bandura (ibid.) also claims “that such people have lower aspirations and are not likely to be dedicated to the cause.” Challenging situations prompt a feeling of an inevitable failure, to an extent that general stress levels are subject to a sharp increase. Instead of aiming attention at how to efficiently deal with an issue, human beings who characterised their personal agency as low are more apt to concentrate on their own lack of skills and competency. Low self-efficacy beliefs often lead to a firm conviction that it is better to withdraw from a task so that the additional stress can be avoided, rather than to devote a more significant amount of effort to chase our objectives.

## 2. Core features of the Directed Motivational Currents Theory

The concept of motivation, along with various theories and their interpretations that emerged along the way, has been propelling a vigorous debate for several decades. As one may expect, the construct has had a tremendous impact on the field of Second Language Acquisition, dominating the research practice within the field in question. This practice would only seem logical as almost everyone has, at a certain moment in their life, experienced a period of heightened motivation, allowing one to successfully pursue their goals and targets. Upon reviewing the theoretical background behind our concept, however, one can easily notice a rather peculiar trend. That is, as mentioned by Henry et al. (2015, 330), “the usual practice of motivation research has been to examine motivation in terms of generalizable factors, where the focus is directed to single constructs and attention is paid to between-group differences.” Although much research was devoted to the well-renowned psychological notions as such, each of them received, what appears to be, a rather momentary attention. In similar fashion, Dörnyei et al. (2016, 13) claim that “no mainstream motivation theory has yet attempted to link goal-related dispositions with specific behavioural occurrences over time.” Therefore, the research into how to combine behavioural patterns and psychological constructs affecting our pursuits to the benefit of overall motivation is currently scarce.

In an attempt to address this omission, Dörnyei and his colleagues coined a novel theory which elaborates on the phenomenon described as an intense motivational surge, allowing an individual to initiate and, then, maintain a long-term motivated behaviour. As outlined by Dörnyei et al. (2014, 10), a Directed Motivational Current<sup>2</sup> is a “conceptual framework which depicts unique periods of intensive motivational involvement both in pursuit of and fuelled by a highly valued goal.” Combining a definite vision of the desired self with a clear action structure, a DMC enables human beings to engage in a series of tasks providing a great sense of enjoyment realised in

<sup>2</sup> For the sake of convenience, from now on we will also use the acronymised form of Directed Motivational Current, that is DMC.

accomplishing highly relevant goals. Even more importantly, Dörnyei et al. (2014, 98) assert that “the progression of such a motivational drive is further scaffolded by sets of behavioural routines, for instance, regular amounts of time spent on a task.” Proximal subgoals are also of utmost importance here, as they allow an individual to sustain the flow of energy, providing a sense of satisfaction when one of the short-term targets is achieved. Take, for example, a person approaching a deadline for a piece of writing in the academic context. The student operating within the DMC zone would focus all his or her efforts on submitting a piece of work matching the best of its own abilities, with the vision of being offered a dream job fuelling the motivational structure. Prior to the deadline, proceedings of such a person become highly intensified and focused, to an extent where the vision of fulfilling one's dreams becomes the most significant part of life, whereas the other daily pursuits are deemed somewhat irrelevant.

Considering the subject of this paper, we shall now focus on drawing similarities between the core components of the *Directed Motivational Current Theory* and the concept of self-efficacy. According to Dörnyei et al. (2014, 99), “the most salient feature of a DMC is its directional nature, as such a powerful motivational drive cannot happen without a well-defined target or outcome that can provide cohesion for one's efforts and help focus energy on final goal attainment.” Possessing such a clearly defined goal bears tremendous importance for sustaining a proper level of motivation, channelling our actions towards activities which favour the accomplishment of the ultimate objective. Contrary to the random cases of great motivation, when human beings perform tasks for the sake of sheer enjoyment, a DMC is distinguished by the very straightforwardness of its nature. According to Dörnyei et al. (ibid.), “a person operating within a DMC has a directional desire to reach a certain future state.” More significantly though, the experience also includes a strong sensory element so that an individual is capable of visualising his or her own condition and emotions once the goal is achieved. In a similar fashion, Bandura (1994, 73) asserts that “a strong sense of efficacy enhances human accomplishment, making people more eager to approach demanding tasks.” This efficacious outlook favours genuine interest and proper engagement which is extremely relevant, especially in case of initial hardships. In both cases, however, an activity becomes an integral part of one's personality, evolving from a random pursuit into a constituent of one's concept of self.

The second distinguishing feature of a DMC is its noticeable facilitative structure. This being said, a clearly tailored path of a current is a prime determiner of whether our endeavour will result in the goal attainment. Following Henry et al. (2015, 331) such a structure “includes a facilitative element, granting an individual with progress checks maintaining the momentum of the current.” Each part of the framework functions as an incentive on its own, propelling further efforts of an individual. Significantly, each and every DMC must be consciously and explicitly inaugurated. Hence, a structure has a clear starting point, where the combination of both cognitive and contextual factors initiates a stream of motivational energy. As we may read in Dörnyei et al. (2014, 100), once this launch has occurred, “the continued motivated behaviour is sustained through

the inclusion of a number of regular subgoals, serving both as proxy targets and as criteria to evaluate progress.” Needless to say, such progress checks provide an individual with affirmative feedback being an extreme aid in maintaining one's motivation throughout the project. Dörnyei et al. (ibid.) also claim that these “subgoals divide long-term progression into smaller chunks, which fuel further actions.” Likewise, feedback is also a crucial factor in building self-efficacy beliefs. Bandura (1994, 75) points out that “persuasive boosts in perceived self-efficacy lead people to try hard enough to succeed, allowing human beings to mobilise greater effort when problems arise.” On these grounds, properly adapted subgoals can significantly foster our engagement by creating a sense of progress and, by the same token, making the final goal more attainable.

Positive emotionality is considered to be the final element required for a DMC to emerge. As previously mentioned, within the *Directed Motivational Current Theory*, a goal is highly personalised to an extent that it becomes an integral part of our behavioural routine. According to Henry et al. (2015, 332), this experience “can be understood as actualising one's potential, generating a feeling of intense personal pleasure.” This situation may be the reason why positive emotionality in a motivational framework is related to the concept of eudaimonic well-being, as opposed to the satisfaction human beings experience when an isolated goal is achieved. As Waterman (2008, 236) elaborates “eudaimonia is a constellation of subjective experience including feelings of rightness and centeredness in one's actions, identity, and competence.” Such an experience evokes an intense sensation of personal development so that some activities, which were previously considered boring and irrelevant, can suddenly become a source of great joy, provided they are a part of a DMC structure. Dörnyei et al. (2016, 101) explain that such a shift results in the fact that “pursuits which were once tedious evolve into endeavours being conducive to the accomplishment of the higher purpose.” Notably, eudaimonic experience creates a reciprocal effect within a Directed Motivational Current. Henry et al. (2015, 332) indicate that “the enjoyment projected from the overall emotional loading of the target vision permeates each step along the way, even including engagement in activities that, outside the stream, could seem boring.” Along similar lines, positive emotional states are understood to be one of the key features for the successful self-efficacy building. Not only does it govern whether an individual will engage in a task but also affects our judgement of perceived personal agency. Whereas positive emotionality towards a task enhances our self-efficacy, despondent mood was found to significantly diminish the quality of our proceedings.

### 3. Research

In the following section, we aim to analyse and present the outcomes of the research project conducted on adult learners of English as a foreign language. More specifically, the primary purport is to investigate the correlation between the concept of self-efficacy and the occurrence of a period of highly motivated behaviour.

### 3.1. Statement of the problem

Although Directed Motivational Current is a recent conjecture, the theoretical underpinnings of the theory are rather well-investigated. On the other end of the spectrum, the research into how individual psychological constructs, such as anxiety and self-efficacy, can leverage the occurrence of the motivational surge is currently lacking. For this reason, our project is meant to first identify the potential DMC cases and, then, examine the level of personal agency displayed by our subjects. Henceforth, we aim to shed some light on the following research questions:

- 1) Is there any correlation between a high value of self-efficacy and the frequency at which a highly intense motivational surge occurs?
- 2) Is it possible to assume that operating within a DMC structure influences the sense of general self-efficacy?

### 3.2. Research Participants

The data required for the purpose of this study was drawn from several universities in Rzeszow, offering both public and private education. At the very beginning, the subjects were assured that their participation was to be voluntary and that it would not affect their final grade in any way. The research body consisted of 212 adult learners, all of them currently pursuing a bachelor's degree in English Studies. Of the total population, 114 participants were female and 108 male, with an age range between 20 and 42 (the majority of our subjects indicated their belonging to the 19–30 bracket – 69.34%).

### 3.3. Research instruments

As our research intended to measure two distinct phenomena, it was extremely important to ensure the credibility of our project. To this end, we decided to apply the principle of data triangulation, administering two questionnaires for the purpose of evidence collection. As suggested by Cohen and Manion (2000, 254) such a method “explains more fully the richness and complexity of human behaviour by studying it from more than one standpoint.” Our subjects were requested to state their opinions and views so that proper scientific results could be obtained. Each questionnaire included straightforward instructions, advising the learners to mark an answer they deem the most appropriate. Although the tools were designed to stand by themselves, these guidelines were also provided verbally prior to the research. The time limit was not specified; however, on average, the participants required no less than 20 minutes to complete both questionnaires.

In the initial stage of our study, the subjects were requested to complete the *General Self-Efficacy Scale* stemmed from Schwarzer and Jerusalem (1995). The tool itself consists of 12 items, with the primary aim of measuring coping competence and the degree of resourcefulness. The amount of confidence learners place in their innate ability to address difficulties encountered in daily life and the degree of effort exerted to resolve such



issues was also taken into consideration. Following the data collection, all questionnaires were scored and evaluated, starting from 1 (not at all true) to 4 (exactly true). In order to ensure successful correlation at further stages, the results were rounded to specify an even number.

The next instrument utilised for the purpose of the study was created to investigate the possible cases of people experiencing a DMC phenomenon, regardless of a setting. The *DMC Disposition Survey* derived from Muir (2016) is more complex in its structure compared to the previous questionnaire, consisting of both multiple choice and open questions. Regarding the former, a similar procedure to the preceding tool was applied: that is the answers were scored and rounded up for the sake of correlation. This being said, the lowest possible answer was 1 (strongly disagree), whereas 5 (strongly agree) marked the highest value possible. The latter, on the other hand, was extremely vital for exploring individual DMC cases in-depth. In general, the tool was meant to examine whether our subjects have ever witnessed an intense motivational surge, the duration of such an occurrence, the attitude towards the experience in question and, finally, their eagerness to encounter such a circumstance in the future.

3.4. Data analysis and discussion

Having in mind that a true Directed Motivational Current is a rather rare phenomenon, we had to first scrutinise our questionnaires in terms of whether the motivational experience described by a student fulfils the core theoretical underpinnings so that it can be classified as an intense motivational drive. Specifically, we have taken into account such features as directionality, the presence of a facilitative structure, and the emotional loading experienced during the process. On these grounds, 88 cases were identified as bearing importance for our further analysis, constituting 41.5% of the entire research body. In efforts to address the first research question, that is, to examine the possible relationship between the occurrence of a DMC phenomenon and the general level of personal agency, we have decided to run Spearman's rank correlation coefficient. This very choice was based on the fact that the Shapiro-Wilk normality test has indicated for our data to be far from a normally distributed population. More precise findings are summarised in the *Table 1* below.

Table 1. Shapiro-Wilk normality test

	Shapiro-Wilk		
	Statistics	Df	Relevance
General Self-Efficacy (1–4)	.971	88	.025
DMC Disposition (1–5)	.767	88	.000

As previously mentioned, the correlation between the data yielded by the two questionnaires administered for the purpose of this study was further examined by means of Spearman's rank correlation coefficient. *Table 2* presents a concise summary of the results.

Table 2. Spearman's rank correlation coefficient

level of General Self-Efficacy (1–4)	DMC Disposition (1–5)	
	Spearman's correlation	.685**
	Correlation coefficient	.000
	N	88

The analysis of the table above proves that there is indeed a strong correlation (0.685) between a steady sense of personal agency and experiencing an intense burst of motivational energy, which can be further labelled as a case of a Directed Motivational Current. Furthermore, the results obtained during the examination are statistically relevant ( $p < 0,01$ ), indicating that an increase in the value of one variable is accompanied by an increase in the value of the other factor.

The second stage of our investigation was focused on a closer examination of the answers provided to the open questions included in the *DMC Disposition Questionnaire*. The data was scrutinised on several separate occasions, each time producing a significant amount of notes and remarks. In an attempt to address the second research question, each and every survey was also analysed to expand on the shape of self-efficacy beliefs associated with experiencing an intense motivational surge. Finally, the last stage of the study aimed at identifying commonalities and dissimilarities in the way a DMC was experienced. Following the consent received from the research participants; below we will present some quotations describing their DMC experience along with the corresponding interpretation.

It seems that even though our subjects witnessed their DMCs at various stages of their life and in completely different contexts, all participants highlight how their personal agency had evolved during the process. For Ola, who has been combining a full-time job with pursuing her degree for nearly two years, writing her bachelor's thesis was a starting point for her DMC experience. As she puts it:

*I was always struggling to find a proper motivation to study. Being very busy at work left me with a little time to engage myself in the academic life. However, when searching for the topic of my thesis, I finally found the subject which inspired me. From now on, I could not wait to read, write, and do all the things connected with it. More importantly, I surprised myself with how much I was able to do!*

As she admits, while experiencing the period of intensified motivation, the belief in her own coping abilities has also peaked. Suddenly, she found herself capable of finding the balance between her working and academic life. Being more organised and highly motivated to submit her thesis on time, she also managed to improve her proceedings at work. Experiencing a DMC has had a tremendous impact on her life and she stresses that she would like to witness such a motivational drive again. Contrary to the short periods of regular motivation, her experience lasted for nearly a year.



Compared to our previous subject, the DMC experience described by Diana was set in an entirely different context. A couple of years ago, she was presented with an opportunity to run a large-scale training scheme for her company, which involved living in Spain for several months. She recalls the experience in the following way:

*At first, I was really excited. Being an eager traveller myself, this seemed to be a fantastic chance to experience something new. There was, however, a single condition – I had to improve my Spanish so that I could communicate effectively with my new colleagues at work. Considering I had only a couple of months, I became extremely stressed and nervous. As the deadline was approaching, I enrolled myself in an intensive language course and then it has all started. I wanted to be busy with the language all the time! I quickly became able to communicate with the fellow students and, in the end, I was sent to conduct the training!*

When asked about her memories concerning the period, Diana recalls only positive things about that time. However, prior to the DMC launch, that is the moment when she began to attend the language course, one can easily notice the fluctuation in the level of her self-efficacy. Although anxious at first, she improved her own perception of coping abilities, altering the attitude towards the forthcoming challenge. The gradual development of communicative skills provided our subject with affirmative feedback which was of utmost importance for maintaining the commitment to the cause. While summarising her experience, Diana mentions how proud she was with her achievement, especially in the presence of the obstacles mentioned above. For this reason, she would gladly welcome an opportunity to experience a similar period of intense motivation in the future.

Yet, the story of Daniel is a completely different illustration of a DMC phenomenon. Unlike our previous participants, for whom being presented with a challenge was the starting point of an intense motivational surge, he claims that his DMC was initiated while observing other highly motivated individuals. Below, we may find his own description of the DMC launch:

*At that point in my life, I found it extremely difficult to motivate myself. I had no vision whatsoever of what I wanted to do. One day, when I was visiting my friends, they told me about the trip to Argentina they had been planning for months. As this was not easily affordable, they both took extra hours at work to gather the necessary funds. Although they were obviously very tired, I was astonished by how much they enjoyed every small progress bringing them closer to their dream holidays. I found this extremely motivating and soon decided to join them in their efforts.*

In this case, it seems that Daniel's DMC was triggered by observing his friends and, thus, finding a highly personalised goal of his own. Similarly to the concept of modelling described by Bandura, where observing other human beings can inspire the growth of self-efficacy, seeing how excited his colleagues were provided our subject

with the incentive required to embrace the new challenge. Also worthy of note is the fact that this event has completely altered his attitude towards life so that he was no longer struggling with the lack of motivation. At this point, we may observe a steadily growing sense of personal agency, allowing our subject to not only become more effective at work but also accomplishing his new goal.

One of the primary goals behind this paper was to broaden the current state of knowledge regarding the DMC construct and, by the same token, to investigate whether any correlation between the value of self-efficacy and the occurrence of a Directed Motivational Current exists. Based on the insights we have gained, it seems only logical to assume that not only are our two variables mutually dependent but also experiencing an intense motivational surge can greatly facilitate the development of self-efficacy beliefs. This being said, although the majority of our participants were generally convinced about their coping abilities prior to the emergence of the motivational drive, while experiencing a DMC, their sense of personal agency was subject to a noticeable increase. This assumption is further confirmed by the results obtained through Spearman's correlation coefficient, indicating that a rise in the value of one variable can be equated with a simultaneous growth of the other.

Also worth noting is the fact that despite being well-aware of the challenges involved in their pursuits, such as an upcoming deadline or the amount of money required to attain a goal, our subjects experienced positive emotionality towards their endeavours throughout the process. Furthermore, in the examples analysed, the presence of a facilitative structure is easily recognisable. Each obstacle our participants had managed to overcome was bringing them closer to accomplishing the desired outcome and, at the same time, provided them with the feeling of extreme joy they had never experienced before. The very intensity of each of the occurrences described above appears to prove that, when in a DMC, an individual is capable of operating at levels significantly higher than in cases of standard motivation. Our analysis also suggests that it is possible to sustain this type of behaviour through personal goal setting and regular progress checks, serving as a source of affirmative feedback. Well-defined targets are of utmost relevance here, as they provide cohesion for effort and shape the paths individuals choose to follow towards the ultimate goal attainment. In all of the cases mentioned, our participants visualised a specific objective, allowing them to focus their energy on accomplishing the goal. Beyond any doubt, self-efficacy suits this framework perfectly, as both elements required to maintain the intense motivation are also important factors in building a healthy perception of one's coping abilities. Additionally, self-efficacious individuals were found to pursue more challenging and distant endeavours — a feature which is clearly demonstrated by the examples specified in the former part of the article.

#### 4. Concluding remarks and suggestions for further research work

Needless to say, the construct of Directed Motivational Currents offers a firm theoretical background to support the concept. To the best of our knowledge, however, it has not been previously explored in an empirical fashion. Furthermore, there appears to be a scarcity when it comes to the research linking a DMC experience with other psychological notions, such as self-efficacy. Therefore, ameliorating this ambiguity was the main objective of our study and we believe that the findings which emerged from the project will contribute to the conjecture's validity. Specifically, not only does our examination provide compelling evidence for the existence of a relationship between self-efficacy and the occurrence of a high motivational surge but also highlights the theoretical underpinnings shared by both concepts.

Leaving the theoretical relevance of comprehending motivational drives aside, the concept created by Dörnyei also has enormous practical potential. For this reason, it is recommended to scrutinise how a DMC operates on a group level. A better understanding of the phenomenon could contribute to developing effective motivational frameworks, aiding the creation of motivational interventions in various settings. The accessibility of such a structure would be of great help in the context of education, where students frequently lack the incentive required to realise their full potential. For the sake of further research work, it would also be vital to conduct a large-scale long-term study so that the possible correlation between *Directed Motivational Currents Theory* and other psychological constructs can be investigated.

#### References

- Bandura, Albert. 1994. "Self-efficacy." In *Encyclopedia of Human Behavior* 4, ed. Vilayanur S. Ramachandran, 71–81. New York: Academic Press.
- Bandura, Albert. 1997. *Self-efficacy: The Exercise of Control*. New York: Freeman.
- Cohen, Louis, and Lawrence Manion. 2000. *Research Methods in Education*. London: Routledge Falmer.
- Dörnyei, Zoltan, Christine Muir, and Zana Ibrahim. 2014. "Directed Motivational Currents: Energising language learning through creating intense motivational pathways." In *Motivation and foreign language learning: From theory to practice*, eds. David Lasagabaster, Aintzane Doiz, and Juan Manuel Sierra, 9–29. Philadelphia: John Benjamins.
- Dörnyei, Zoltan, and Maggie Kubanyiova. 2014. *Motivating learners, motivating teachers*. Cambridge: Cambridge University Press.
- Dörnyei, Zoltan, Alastair Henry, and Christine Muir. 2016. *Motivational currents in language learning: Frameworks for focused interventions*. New York: Routledge.
- Henry, Alastair, Sofia Davydenko, and Zoltan Dörnyei. 2015. "The Anatomy of Directed Motivational Currents: Exploring Intense and Enduring Periods of L2 Motivation." *The Modern Language Journal* 99 (2):329–345.

- Lenz, Elizabeth R., and Lillie M. Shortridge-Baggett. 2002. *Self-efficacy in nursing: Research and measurement perspectives*. New York: Springer Publishing Co.
- Muir, Christine. 2016. "The dynamics of intense long-term motivation in language learning: Directed Motivational Currents in theory and practice." PhD Thesis, University of Nottingham.
- Schunk, Dale. 1985. "Self-efficacy and classroom learning." *Psychology in the Schools* 22: 208–223.
- Schwarzer, Ralf, and Matthias Jerusalem. 1995. "Generalized Self-Efficacy scale." In *Measures in health psychology: A user's portfolio. Causal and control beliefs*, eds. John Weinman, Stephen Wright, and Marie Johnston, 35–37. Windsor, UK: NFER-NELSON.
- Waterman, Alan S. 2008. "Reconsidering happiness: A eudaimonist's perspective." *The Journal of Positive Psychology* 3 (4):234–252.