

HOW EMOTIONS ARE DEVELOPED: INSIGHTS FROM VYGOTSKY' AND LEONTIEV'S WORKS

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Abstract. *Teacher and learners' emotions are a significant factor that influences the implementation of adult education. The research aim is to explore the works of Vygotsky and Leontiev for modelling the development of emotions in adult education. Theoretical analysis aimed at theory building about emotion development in adult education was applied to the present research. Exploratory type of research was implemented and described in this paper. The present work reflects the insights from the theory of Activity by Leontiev, and the theories of Interiorization, Cultural-historical Activity, and Concept Formation by Vygotsky. The research results in conclusions that teacher's and learners' emotions develop in adult education through the educational process. The educational process is gradually implemented in certain sequence. The educational process starts from teaching and external emotions in Phase 1, moves to peer-learning and quasi-emotions in Phase 2, and proceeds further to learning and internal emotions in Phase 3. The inter-connections between intrapersonal and interpersonal levels of emotions were described. The research allows building a theory on emotion development. The research limitations were identified. Directions of further work were proposed.*

Keywords: *development of the system of external and internal perspectives, educational process, emotion development, emotions of teachers and learners, interpersonal perspective, intrapersonal perspective, quasi-emotions.*

Introduction

Each single step in adult education is accompanied by teachers' and learners' emotions (Ahrens & Zascerinska, 2023). The individual's emotions

from the intrapersonal perspective can be different and even contradictory in one and the same situation (Ahrens & Zascerinska, 2022). This complexity of individual's emotions in adult education is increased in a class by different and contradictory emotions between the teacher and learners or from the interpersonal perspective. The problem related to teachers' and learners' emotions in a class in adult education enables the research questions:

- Are there any inter-connections between the intrapersonal and interpersonal perspectives related to emotions?
- How are emotions developed?
- How to organise the development of emotions in a class?

The research aim is to explore the works of Vygostky and Leontiev related to the development of emotions in adult education.

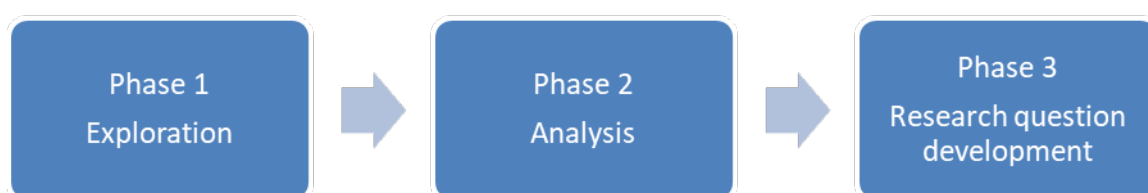
The present work intends to contribute to building the theory on the development of emotions.

Methodological Approach

Theory-building is important because it provides a framework for analysis, facilitates the efficient development of the field, and is needed for the applicability to practical real-world problems (Wacker, 1998). Theory-building research deals with the detailed definition of concepts, the outline the domain, search and description of existing relationships aimed at explaining the reasons and procedures of the intertwined relationships, and finally the occurrence of specific phenomena is estimated (Wacker, 1998).

The present research builds the theory on the basis of the System-Constructivist Theory (Ahrens, Zascerinska, & Aleksejeva, 2021). In the present work, researchers' experience is the key factor in the process of theory building (Maslo, 2007). It means that with the enrichment of researchers' experience, the built theories can be advanced.

The exploratory method for theory building is applied within the boundaries of this work. The exploratory method of analysis in the present work means tends to obtain insights on under-explored phenomenon in order to base the foundation for further investigations. The exploration is implemented in three phases reflected in Figure 1.



*Figure 1 The phases of the implementation of the exploratory method
(created by the authors)*

The exploratory method was selected for implementation in this work. One of the reasons was that the exploratory method does not prescribe a framework to follow (Ahrens, Foerster, Zaščerinska, & Wasser, 2020). This lack of formal structures allows researchers to be flexible in developing their own procedures (Ahrens, Foerster, Zaščerinska, & Wasser, 2020).

A methodological approach describes the implementation of research practices and procedures within a set of defined theoretical principles (Zaščerinska, Ahrens, & Bassus, 2015; Ahrens & Zaščerinska, 2016). Principles are defined as the synergy of beliefs and assumptions that directs researcher in expressing his/her attitude to the world, implementation of his/her actions based on the accepted behaviour's norms (Ahrens & Zascerinska, 2015).

The methodological approach in this work is implemented in accordance with the development of the system of external and internal perspectives (Zaščerinska, 2010). The law of development, also known as interiorization, was defined by Vygotsky (Vigotskis, 2002). The methodological approach of this work stems from Vygotsky's law of development (Ahrens & Zascerinska, 2022).

The methodology implies not only the differentiation of the perspectives but also their synergy (Zascerinska, Aleksejeva, Zascerinskis, & Abjalkiene, 2022). Figure 2 illustrates that the methodology of the present approach proceeds in three phases.

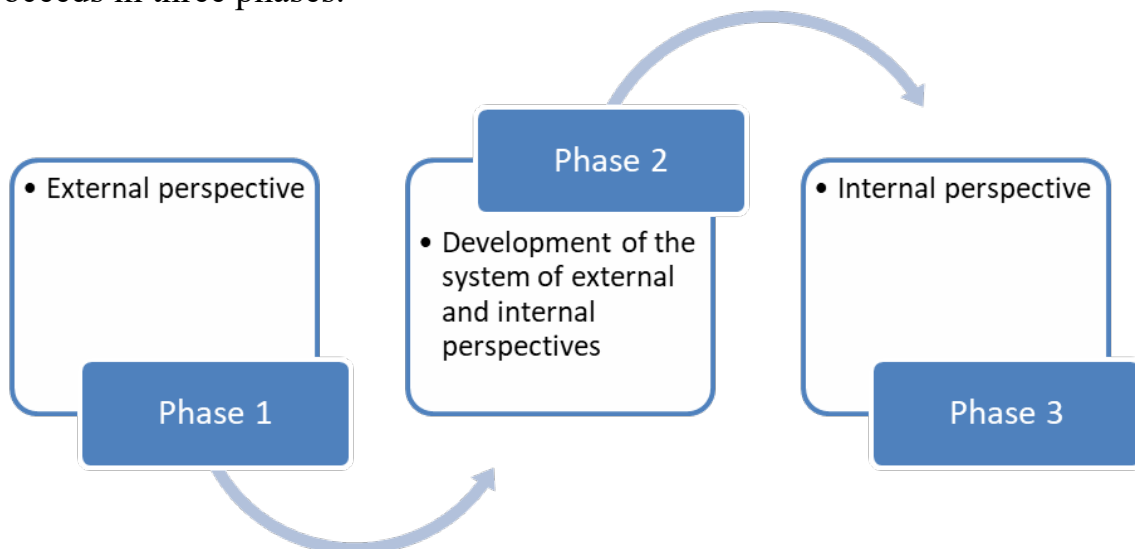


Figure 2 The phases of the implementation of the methodological process of the research (created by the authors)

Research Results

Individual's emotions can change from one emotion to another, as shown in Figure 3, fast, just in seconds (Ahrens & Zascerinska, 2022).

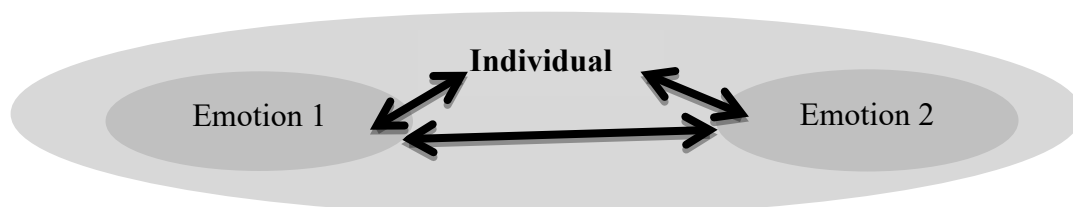


Figure 3 *The intrapersonal perspective on individual's emotions (created by the authors)*

Teachers' and learners' emotions, being the “mechanism” of activity's movement (Leont'ev, 1978), drive the educational process (Ahrens & Zascerinska, 2022) in adult education. Consequently, teachers' and learners' emotions are the key factor that impacts teachers' and learners' motivation to continue the educational process (Ahrens & Zascerinska, 2022).

All these complications, related to teachers' and learners' emotions from both – intrapersonal and interpersonal - perspectives, create a chaotic situation in a class in adult education.

The three research questions formulated in the Introductory section of this paper were analysed on the basis of the synergy between

- the methodological background defined as the System-Constructivist Theory, and
- the methodological approach known as the development of the system of external and internal perspectives.

The results of the analysis presented in this part of the paper contribute to

- on the one side, answering three research questions, and
- on the other side, showing the inter-connectedness of three research questions.

Question 1: *Are there any inter-connections between the intrapersonal and interpersonal perspectives related to emotions?*

Many researchers (Rimé, Bouchat, Paquot, & Giglio, 2020) acknowledge the existence of intrapersonal and interpersonal perspectives or levels of emotions. The intrapersonal level of emotions refers to the internal processes (Schwartz-Mette, Lawrence, Shankman, Fearey, & Harrington, 2021) or, in other words, perspective, and the interpersonal level relates to the social perspective. In other words, the external perspective accentuates social interaction while the internal perspective accentuates cognition (Zascerinska, 2011b). However, mostly the intrapersonal and interpersonal levels of emotions are separately discussed by many scientists, for example Burkitt (2021), Messina, Calvo, Masaro, Ghedin, & Marogna (2021).

Against this prevailing opinion about two separate levels of emotions, the application of the development of the system of external and internal perspectives to the establishment of the relationships between the intrapersonal and interpersonal levels of emotions allows determining that the intrapersonal and interpersonal levels of emotions are interconnected. Moreover, the intrapersonal and interpersonal levels of emotions are defined to the unity. Figure 4 represents the intrapersonal and interpersonal levels of emotions as their unity.

Figure 4 reveals that emotions can be structured into three inter-connected levels:

- The interpersonal perspective,
- The unity of interpersonal and intrapersonal perspectives, and
- The intrapersonal perspective.

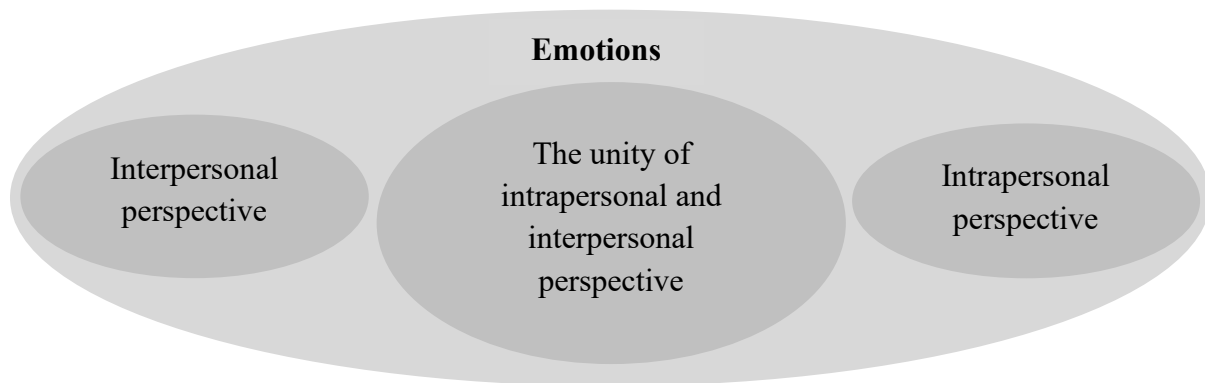


Figure 4 The relationships between the intrapersonal perspective, the interpersonal perspective, and their unity (created by the authors)

When considering emotions within the methodological approach of the present work (the development of the system of external and internal perspectives), the following terminology could be adopted:

- The interpersonal level means the external perspective,
- The unity of interpersonal and intrapersonal levels relates to the unity of external and internal perspectives, and
- The intrapersonal level is regarded as the internal perspective.

Question 2: *How are emotions developed?*

This work implies that individuals, including teachers and learners, are born with different emotional abilities (Ahrens & Zascersinska, 2022) or, in other words, emotions are innate. Thus, the situation can be observed when ‘emotionless’ people talk about people who do not show or do not hide very well their emotions (Ahrens & Zascersinska, 2022).

During their lifespan, individuals develop their emotions. It is worth noting that the terms “made”, “constructed”, “developed”, “manufactured”, “learned” and similar are referred synonymously in this research.

The process of emotion development has been investigated by some researchers. Thus, Holodynski discussed emotional development according to the age groups (Holodynski, 2013). He outlined such age groups as neonate, infant, preschooler, child, and adult (Holodynski, 2013). The process of emotion development by Holodynski is structured further into milestones and relevant mechanisms described in the internalisation model (Holodynski, 2013). Another researcher Barrett (2018) proposes that individuals develop their emotions by learning from their own actions (Westlund, 2021).

Analysis of the process described by other researchers directed the researchers of this paper to outline the features required for the process of emotion development. Table 1 presents the relationships between the analysed theories and process features.

*Table 1 Features of the process of emotion development
(Ahrens, Zašcerinska, Lange, & Aļeksejeva, 2021)*

Theory	Feature	A short description of the feature
System Constructivist Theory	System process	The process properties are connected
System Constructivist Theory	Complex process	The process elements are bounded
Activity Theory	Linear process	The process is implemented in phases
Interiorization Theory	Cyclic process	The process can occur again
Cultural-historical Activity Theory	Process is of social nature	The process changes in and by society
Concept Formation Theory	Process if of bi-modal nature	The process proceeds within the external and internal perspectives

Based on our findings reflected in Table 1, the process of emotion development is structured in phases. The inter-connections between the intrapersonal and interpersonal levels of emotions demonstrated in Figure 5 allow identifying three phases in the process of emotion development. There are two assumptions formulated by Leont'ev (Leont'ev, 1978) that help identifying the directions of the emotions process of emotion development:

- Emotions are relevant to the social activity and not to individual actions or operations that realize it.
- As a result, emotions are not subordinated to activity but appear to be its result and the “mechanism” of its movement.

Accordingly to Leont'ev (Leont'ev, 1978), the process of emotion development starts from social activity or the external perspective and moves to individual actions or the internal perspective. The process of emotion development proceeds in three phases as depicted in Figure 5:

- From the external perspective or external emotions in Phase 1,

- Though the unity of the system of the external and internal perspectives or quasi-emotions in Phase 2, and
- To the internal perspective and internal emotions in Phase 3.

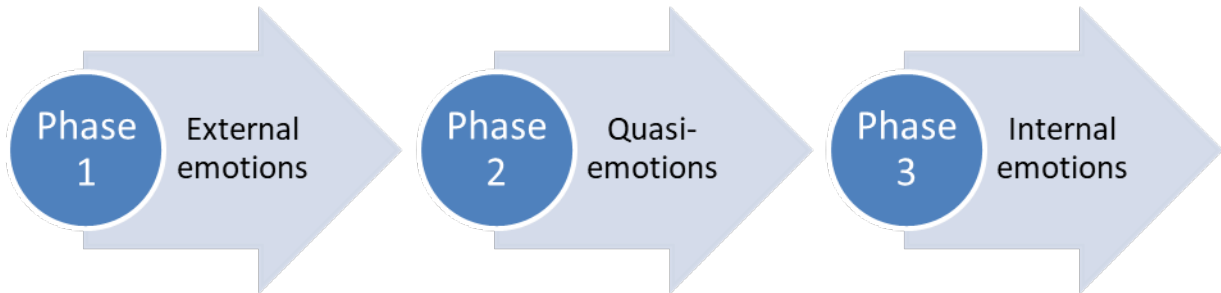


Figure 5 *The process of emotion development* (created by the authors)

It should be highlighted that in contrary to the definition of quasi-emotions as “second-order” beliefs (Dos Santos, 2017), the present work defines quasi-emotions as assymetrical, in flux at various stages and can be interpreted differently at different points in time (Robbins, 2007).

Question 3: *How to organise the development of emotions in a class?*

Adult education is considered to be the process (Zascerinska et al., 2015). The process underlying adult education is well know as the educational process (Ahrens, Zaščerinska, Lange, & Aļeksejeva, 2021). Structuring of the educational process within the methodological approach of this work (the development of the system of the external and internal perspectives) and the process of emotion development allows determining that the organisation of the development of emotions in the educational process outlined in Figure 6 gradually proceeds from teaching, on the one hand, and external emotions, on the other hand, thorough peer-learning, on the one hand, and quasi-emotions, on the other hand, to learning, on the one hand, and internal emotions, on the other hand.

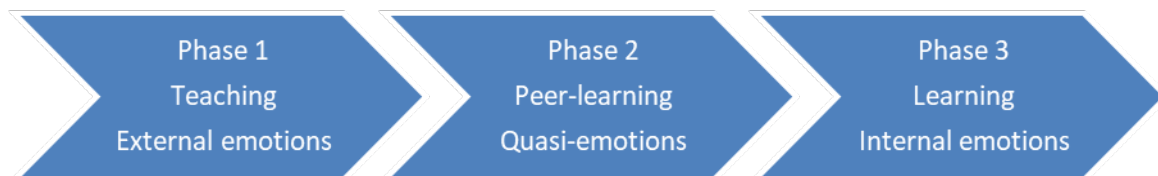


Figure 6 *The process of emotion development in a class* (created by the authors)

Teaching in Phase 1 starts with the preparation of the learners for the process of emotion development, with the schedule of the procedure of emotion development, provision of teaching/learning class with the equipment, setting the purpose, identification of a problem, etc (Zaščerinska, 2011a). Then, Peer-learning in Phase 2 is aimed at doing an exercise and making a decision

(Zaščerinska, 2011a). Learning in Phase 3 focuses on the assessment of individual results and evaluation of individual achievements. Such organisation of the educational process allows learner to move gradually from the external regulation and evaluation in Phase 1 of emotion development through mutual evaluation in Phase 2 to the individual's self-control and self-assessment in Phase 3 (Zaščerinska, 2011a).

Phases in the educational process aimed at emotion development are implemented separately from each other (Zaščerinska, 2011a). The implementation of the following phase is based on the achieved results in the previous phase. Each phase can be repeated until the desired result is achieved.

Conclusions

The theoretical analysis carried out with the present work allows building a theory on emotion development.

The implemented theoretical research allowed for a theoretical finding that emotions are innated. Individuals, including teachers and learners, can be born with different emotional abilities. Consequently, some individuals are more emotional, the others are less emotional.

Intrapersonal and interpersonal levels of individual's emotions are interconnected. Intrapersonal level accentuates cognition, and interpersonal level accentuates social interaction. Both intrapersonal and interpersonal levels of emotions are linked by the unity of both levels as shown in Figure 4.

Individuals' emotions are developed during the lifespan. Both teachers and learners develop their emotions in the educational process implemented within adult education. The educational process encompasses the development of the system of the external and internal perspectives:

- Teaching is identified to be the external perspective or social interaction,
- Peer-learning represents the unity of both perspectives, and
- Learning relates to the internal perspective or cognition.

The educational process is delivered in certain sequence: the educational process

- starts from teaching and external emotions in Phase 1,
- moves to peer-learning and quasi-emotions in Phase 2, and
- proceeds further to learning and internal emotions in Phase 3.

The educational process has to include all the three phases in the proposed sequence in order to reach the objectives of emotion development.

The present work is limited by the implementation of only theoretical analysis. If empirical studies could be carried out, other results could be obtained.

Implications for emotion development in adult education imply the organisation of teacher training on emotion development in adult education as the teacher role in their learners' emotion development is crucial. Teachers' emotions drive the educational process as the teacher plays the cornerstone role in the educational process in adult education. Teaching learners' with different emotional abilities, complicated by their (teacher and learners) multi-cultural backgrounds, has to be thoroughly prepared by the teacher.

Future work could focus on the investigation of the role and impact of quasi-emotions in emotion development. Implementation of empirical studies is proposed for future research. Teacher training course on emotion development will be elaborated.

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