THE IMPACT OF CRITICAL CONSCIOUSNESS ON TEACHER CONCEPTIONS AND BELIEFS ABOUT TEACHING AND LEARNING: THE MEDIATOR ROLE OF CAREER IDENTITY

Gabriela Monica ASSANTE, PhD [5],
„Alexandru Ioan Cuza" University of Iași, Faculty of Psychology and
Educational Sciences, panzaru.monica@yahoo.com

Abstract: *The present study investigated the connections between teacher education students' teacher conceptions about teaching and learning (i.e. constructivist conceptions, traditional conceptions), career identity and critical consciousness components (i.e. critical agency, critical reflection, critical action). The sample included 141 (mean age=21.95, SD=3.17) future primary school or kindergarten teachers enrolled in the second and third year at the university. Self-reported measures were employed to assess students' teacher conceptions about teaching and learning, their career identity and critical consciousness components. The results showed that the career identity was significantly positively related to constructivist conceptions whilst the traditional conceptions held no significant associations. Constructivist conceptions were also significantly positively related to critical agency, critical action, and egalitarianism. Career identity mediated the relation between teacher conceptions about teaching and learning and critical agency. Further, the educational implications of the findings are thoroughly discussed.*

Keywords: *critical consciousness; teacher conceptions; career identity; mediation*.

1. Introduction

The present article aims to investigate the emancipatory role of critical consciousness regarding the career commitment, teachers' beliefs and conceptions concerning teaching in future kindergarten and primary school teachers. The rationale guiding this study implies as Diemer and Blustein (2006) puts it, the persistent asymmetry in educational and vocational resources in different urban communities relative to resources. It is generally accepted that this asymmetry it is primarily socio-political in nature (Watts, Griffith, & Abdul-Adil, 1999) and results in socio-political barriers to the career development process of young people (Diemer & Blustein, 2006; Constantine, Erickson, Banks & Timberlake, 1998).

---

[5] Gabriela Monica Assante, PhD, „Alexandru Ioan Cuza" University of Iași, Faculty of Psychology and Educational Sciences, panzaru.monica@yahoo.com

Because these barriers to the career development process are primarily socio-political, it follows that the capacity to address these socio-political barriers (known in this study as critical consciousness) may assist urban adolescents in engaging effectively with the career development process. Moreover, critical consciousness with its focus on praxis and critical agency, the nature of the action corresponding to the nature of individuals understanding (Freire, 1970), should have a significant impact on teachers' beliefs and intentions concerning teaching. Referring to individuals the ability to analyse, navigate, and challenge the restrictive social forces critical consciousness is shaping in the same time the life of the individual as well as the community (Freire, 1970; Duncan-Andrade & Morrell, 2008). To summarize, in the present study we were interested in analysing the influence of teacher education students' critical consciousness on their career identity, and, consequently, on their teaching beliefs and conceptions concerning teaching and learning.

1.1. Critical consciousness: models, components and role

Current formulations of critical consciousness concept are mainly grounded in Freirean thought, and refer to three central elements: critical reflection, critical motivation (or efficacy), and critical action. The process of developing reflection and action is a core element in Critical Consciousness Theory because critical consciousness implies a process of learning to easily identify social, political, and economic contradictions, and to take action against the oppressive elements of social reality. Critical reflection refers to a process of learning to put under scrutiny the social conditions and structures that lead to marginalize groups of people. The perceived capacity and commitment to address such injustice refers to critical motivation. Specifically, critical reflection refers to a social analysis and moral rejection of societal inequities, such as social, economic, ethnic, and gender inequities that constrain individual agency and well-being. Critically reflective people have a systemic framework in which they view social problems and inequalities. Critical action refers to engaging individuals or groups of people to change perceived injustices. Specifically, this refers to individual or collective action taken in order to change societal aspects, such as institutional policies and practices, which are perceived to be unjust. Critical efficacy refers to the perceived capacity to influence social and political change by either individual or collective action. It is more likely for people to engage in this process if they have the feeling that they can determine change (Diemer, Rapa, Voight & McWhirter, 2016).

The relation between reflection and action is reciprocal. Critical reflection being generally considered as preceding critical action. In other words, people do not act without the awareness that their social conditions are unjust. Freire (1970) emphasized that when individuals engage in an analysis of their social conditions, they feel compelled to act towards changing them. Accordingly, as people act on changing their social conditions, this would result in a deeper understanding of structural oppression. The circular process of critical consciousness development refers to the simultaneous growth of critical reflection and critical action. However,

there can also be times when critical action does not meet its purpose, which can lead to frustration, rather than an increased awareness of societal inequities (Watts, Diemer & Voight, 2011).

As emphasized by Watts and Hipolito-Delgado (2015), the central elements of critical consciousness theory were supporting awareness of socio-political circumstances, encouraging critical questioning, and fostering collective identity. In the scientific literature, theories and conceptualizations of critical consciousness usually describe some combination of critical social analysis, collective social identity, political self-efficacy, and actions designed to promote social justice (Watts, Diemer & Voight, 2011). Therefore, critical consciousness has been considered as an antidote to injustice mainly because it advances awareness, motivation, and agency to identify, challenge and change social and structural constraints (Diemer, Rapa, Voight & McWhirter, 2016).

1.2. Career development theory and career identity

One of the most salient theories regarding career development was developed by Super (1950). In its final form this theory stresses that vocational maturity is a multidimensional characteristic which develops with age at different rates in different individuals. It has a significant role in the prediction of occupational satisfaction. occupational success, and career success (Super & Jordaan, 1973). Super's (1980) theory highlights the successful tasks of career development at each developmental stage. For the youth that means developing a connection to the adult world of work, as well as a strong vocational identity (Diemer & Blustein, 2006). The career development theory also takes into consideration aspects related to social context, like race, gender, and social class. Moreover, Blustein, McWhirter and Perry (2005) with their emancipatory communitarian perspective which incorporates the socio-political context into Super's Career Development Theory. This perspective situates the career development process within the social context which can have restrictive effect regarding the access to opportunity among marginalized groups, such as undergraduate students. As Super (1980) puts it young people need to clarify their vocational identity and moreover to develop a connection to their future career. We agree with Diemer and Blustein (2006) which suggests that career identity together with the commitment to the notion of a career could indicate progress in the relevant developmental tasks of young people as suggested by Super (1980). Career and vocational identity refer to the possession of a clear and stable picture of one's goals, interests, and talents. In fact, these are the characteristics that determine relatively untroubled decision-making, confidence in one's ability to make good decisions when facing various inevitable environmental ambiguities (Holland, Johnston & Asama, 1993). Career commitment being defined as one's motivation to work in a chosen vocation, represents a multidimensional construct. Three components of the construct can be described. First, career identity which implies establishing a close emotional association with one's career. Second, career planning includes determining one's developmental needs and setting career goals.

Third, career resilience defined as resisting career disruption in the face of adversity (Carson & Bedeian, 1994).

The existing literature regarding the relationship between critical consciousness and progress in career development does not clarify the link between the two. Some unexpected results were offered by Conchas' (2001) study which showed that young people with both lower and higher levels of critical consciousness invested in the career development process. Also, Fine's (1991) study found that adolescents with greater critical consciousness tended to drop out of high school, rather than more effectively engage with the career development process. In contrast, O'Connor's (1997), as well as Chronister and McWhirter (2004) research results indicated that critical consciousness contributes to remaining invested in the career development process and maintaining a sense of hope for their vocational future. Therefore, observing or resisting injustice determined individuals to believe that action desired social outcomes despite structural limitations (O'Connor, 1997). Finally, Diemer and Hsieh (2008) as well as, Diemer and Blustein (2006) observed that critical consciousness may determine young people to surpass socio-political barriers and engage with career development processes. Therefore, the previously mentioned studies show that greater levels of critical consciousness relate to greater clarity and increased commitment to future careers. By maintaining a critical awareness regarding the socio-political barriers young people may best engage in the career development process.

1.3. Conceptions and intentions concerning teaching

We choose to investigate the conceptions and intentions to teaching similar to the way Gow and Kember (1993) formulated them. They describe two teaching orientations or conceptions, learning facilitation and knowledge transmission. The learning facilitation orientation characterizes teachers who conceive teaching as a facilitative process to help pupils develop problem solving skills and critical thinking abilities. This orientation more often involves interactive class sessions. Teachers are more involved and do no neglect their role in providing motivation and stimulating interest. This approach is also known as the constructivist conception about teaching and learning (Chan & Elliott, 2004). Turning to the other side of the argument, teachers whose focus is on knowledge transmission are valuing more the subject than the process of learning. For them, the teacher is the expert in the discipline. The main goal of the educational process is preparing pupils as future professionals (Gow & Kember, 1993). This is known as the traditional approach to teacher and learning and is represents what Freire called the "banking model" of education.

We find conceptions and intentions concerning teaching more informing than teachers approach to teaching, which in turn might reflect the behaviour that the teacher is constrained to adopt by the institution, the curriculum or the pupils themselves. By investigating the approach to teaching, it is likely to reveal teacher's perceptions of the teaching environment than their own conception of

teaching. That is, a specific response to a defined teaching situation that will be directly manifested in the teacher's classroom behaviour (Martin et al., 2000).

In this sense, after considering Freire's approach to critical consciousness we expect to find a strong relationship between higher levels of critical consciousness and the constructivist orientation to teaching. Although the literature provides mixed evidence, our view is that critical consciousness may be instrumental in navigating the career development process for young people. We believe that urban adolescents may view the attainment of a meaningful and rewarding career as a means of empowering themselves.

2. Method

The main objective of the present research was to investigate the extent to which critical consciousness components (e.g. critical action, critical reflection, critical agency etc.) influence career commitment as well as teacher beliefs and conceptions about teaching and learning in future primary school and kindergarten teachers. Four questionnaires were administered to 141 teacher education students enrolled in the second and third year of a bachelor's degree program. The questionnaires evaluated the level of career identity, critical consciousness components and the conceptions about teaching and learning held by students. The participants were also asked to provide various demographic information such as age, gender and area of living.

2.1. Participants

The sample included 141 university undergraduates enrolled in the second- and third-year bachelor's degree teacher education program. The participants age range between 20 and 42 years old (M=21.95, SD=3.17). Participation in the study was completely voluntary and anonymous. Upon the instructions given by the researcher, participants completed the self-reporting measures.

2.2. Instruments

The Teaching and Learning Conceptions Questionnaire (TLCQ) generally refers to two different conceptions of the teaching/learning core (Chan & Elliott, 2004). These may be referred to as Traditional (18 items) and Constructivist (12 items). In the traditional conception, teaching is seen as a nonproblematic transfer of knowledge or an untransformed manner from an expert to a novice. Learning is then the absorption of transferred knowledge. In the constructivist conception, learning is the creation and acquisition of knowledge by the learner through reasoning and justification while teaching is the provision and facilitation of the learning process rather than transmission of knowledge. Students were asked to rate their responses for the 30 items on a five-point Likert scale (1 = strongly disagree and 5 = strongly agree).

The critical consciousness scale (Diemer, Rapa, Voight & Park, 2017) evaluated the critical reflection perceived inequality (8 items), critical action/socio-political participation (9 items), and critical reflection /egalitarianism (4 items). Respondents were asked to answer each of these items on a six-point Likert-type agreement scale from 1 = strongly disagree to 5 = strongly agree for critical reflection items and, for critical action items, on a five-point behavioural frequency scale ranging from 1 = never did this to 5 = at least once a week.

The critical agency subscale from the McWhirter's measure for critical consciousness (McWhirter & McWhirter, 2015) was also used to measure critical motivation/agency, or youths' perceived capacity and motivation to produce social change—this measure being the only one of the critical consciousness measures that explicitly measures critical motivation through the critical agency subscale (6 items). Agency is connected to the notion of internal political efficacy. The scale items reflect a moral concern with inequity, motivation to address it, and perceived ability to make a difference (Diemer, McWhirter, Ozer & Rapa, 2015). Response options range from 1 = strongly agree to 6 = strongly disagree.

Career identity was measured using the three-item sub-scale from the career commitment measure (Carson & Bedeian, 1994). Career identity reflects the extent to which participants identify with an elected career path. Respondents were asked to rate these items on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree).

3. Results

The statistical analyses were performed using SPSS version 24 for MacOS. For the instruments applied in the study Cronbach' s alphas were computed to check their internal consistency. Pearson's product-moment correlation was used in the preliminary analyses to examine the associative relationship between variables. The macro PROCESS for MacOS (Hayes, 2013) was used to test the mediation models. This procedure enables simultaneous testing of several mediators and provides bootstrap confidence intervals (CIs) for the indirect effects (Hayes, 2013). Confidence intervals that do not contain zero indicate a significant indirect effect (mediation). In the mediation model, 5000 bootstrap resamples were used in order to estimate confidence intervals. Another valuable feature of this test is that it does not rely on the assumption of normality.

3.1. Correlations between students' critical consciousness components, conceptions about teaching and learning and career identity

Results (Table 1) show significant and positive correlation between constructivist conception, critical agency, career identity and egalitarianism. Therefore, correlations between traditional conception, critical consciousness components and career identity were not significant. Also, there are significant and

positive correlations between egalitarianism and critical agency and a significant negative correlation between critical agency and critical reflection. The critical action component and the traditional conception did not show significant correlations.

Table 1. Alpha Cronbach and correlations between students' critical consciousness components, conceptions about teaching and learning and career identity.

Variables	1	2	3	4	5	6	7
1. Critical reflection	*.872*	-.001	-.218**	-.009	-.026	-.056	-.147
2. Critical action	-.001	*.803*	.080	-.022	-.147	-.183*	.164
3. Critical agency	-.218**	.080	*.769*	.200*	.165	.414**	.396**
4. Egalitarianism	-.009	-.022	.200*	*.852*	.012	.225**	.108
5. Traditional conception	-.026	-.147	.165	.012	*.096*	-.050	.144
6. Constructivist conception	-.056	-.183*	.414**	.225**	-.050	*.872*	.388**
7. Career Identity	-.147	.164	.396**	.108	.144	.388**	*.796*
Mean	28.14	22.08	25.90	22.34	55.97	57.03	13.04
SD	10.07	10.23	3.40	3.19	11.82	4.91	2.27

Note: *p ≤ .05; **p ≤ .01. Alpha Cronbach values are provided on the diagonal

3.2. Career identity as mediator on relationship between critical agency and constructivist conception towards teaching and learning

A simple mediation analysis was conducted using regression analysis and 5000 bootstrap samples to examine whether the effect of critical agency on constructivist conception about teaching and learning was mediated by career identity.

This analysis confirmed that there was a significant total effect of critical agency on constructivist conception about teaching and learning (c), and this relationship remain significant when the effect of career identity was also taken into account (c').

This analysis revealed that critical agency was significantly positively related to career identity (a) and career identity was significantly positively related to constructivist conceptions about teaching and learning when controlling for critical agency (b). See Figure 1 for an illustration of the mentioned effects.

Results showed that career identity partially mediated the effect of critical agency on constructivist conceptions about teaching and learning, as indicated by a significant indirect effect (B = .152, SE = .085, 95% BCa CI: .028, .368), such that the high levels of critical agency predicted high levels of constructivist conceptions

about teaching and learning, and this was both directly and as well underlined by higher levels of career identity.
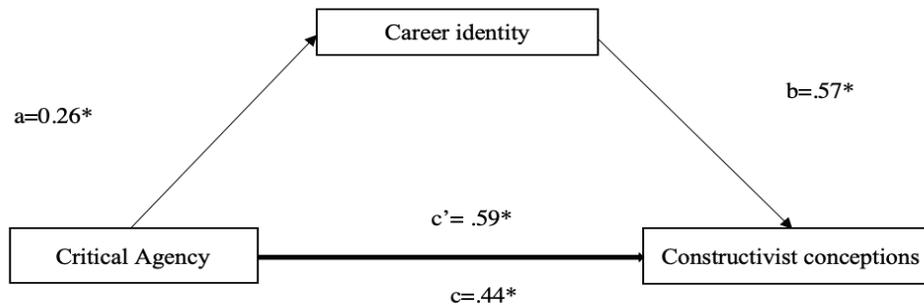

Figure 1. Mediation model regarding the mediating effect of career identity on the relation between critical agency and constructivist conceptions about teaching and learning. Unstandardized coefficients are presented ($p \leq .01$).

4. Conclusions

The purpose of the present study was to investigate the extent to which critical consciousness components, such as critical reflection, critical action, and critical agency/motivation, influence conceptions about teaching and learning as well as career identity. The positive significant correlation of critical agency and the non-significant correlation with the traditional conceptions about learning emphasize the idea that critical agency encourages future teachers to build active learning environments that develop critical thinking, discovery, and participation. Moreover, the constructivist conceptions of teacher education students were found to have significant positive correlation with their career identity, suggesting that a strong sense of belonging contributes to creating a democratic learning environment. In contrast, the traditional conceptions held only non-significant correlations with critical consciousness components. The traditional learning model considers the teacher as the source of knowledge and students as passive recipients of knowledge, illustrating exactly Freire's banking model of education (1970). Such model/conception emphasizes learning by receiving information, especially from the teacher and from textbooks, to help students encounter and learn well-defined concepts (Howard et al., 2000; Prawat, 1992). This is in line with Critical Consciousness Theory, which has emancipatory values that counter the passive transmission and reception of knowledge.

In line with some previous findings (O'Connor, 1997; Chronister & McWhirter, 2004), the positive association between constructivist conceptions and career identity may indicate that critical consciousness contributes to maintaining a sense of hope for the students' future career as teachers. Critical consciousness may lead young people to surpass socio-political barriers and engage with career

development processes. Therefore, we may consider that greater levels of critical consciousness relate to greater clarity and increased commitment to future careers.

The constructivist approach positively correlates also with critical action and egalitarianism, which emphasizes the individual or collective action needed to produce socio-political change; in this case, in changing the traditional approach to learning as well as the endorsement of societal equality in the classroom.

The mediation analysis also reveals a distinctive pattern of influence, with the career identity mediating the relation between critical agency and constructivist conceptions. The results may emphasize the idea that the motivation, agency, and actions needed to address racism and inequity might translate to another type of engagement such as the approach to teaching. It appears that when students have moral concerns regarding inequity, the motivation to address it, the perceived ability to make a difference and the strong career identity develop naturally, with a positive influence on the conceptions about teaching and learning (Diemer, Rapa, Voight & McWhirter, 2015; McWhirther & McWhirther, 2015).

The findings have important implications in the educational setting regarding teachers' awareness of the potential outcome of critical consciousness in shaping the teaching and learning environment via their conceptions toward teaching. The purpose is to develop students' critical agency in order to obtain a democratic learning environment where learning represents the creation and acquisition of knowledge by the learner through reasoning and justification. Then, teaching becomes the provision and facilitation of the learning process rather than the transmission of knowledge (Chan & Elliott, 2004). Another important implication is related to the protective value of the career identity in maintaining a sense of hope for the future career and for the practice of teaching. A strong career identity may encourage the creativity necessary for building interactive learning environment. In conclusion, the usefulness of critical consciousness resides in the fact that it is a way of knowing that involves a critical analysis of reality which leads to critical agency.

Analysing as an active participant and not as a simple observer involves a sense of connectedness with reality. In the classroom, critical consciousness implies a process of collective dialogue, of construction in the course of dynamic social interaction. Therefore, individuals who exhibit some level of critical consciousness may show a sense of moral education that produces a potentially liberating critical consciousness.

References

Blustein, D. L., McWhirter, E. H., & Perry, J. C. (2005). An emancipatory communitarian approach to vocational development theory, research, and practice. *The Counseling Psychologist*, *33*(2), 141-179.

Carson, K. D., & Bedeian, A. G. (1994). Career commitment: Construction of a measure and examination of its psychometric properties. *Journal of vocational Behavior*, *44*(3), 237-262.

Chan, K. W., & Elliott, R. G. (2004). Relational analysis of personal epistemology and conceptions about teaching and learning. *Teaching and Teacher Education*, *20*(8), 817-831.

Chronister, K. M., & McWhirter, E. H. (2006). An experimental examination of two career interventions for battered women. *Journal of Counseling Psychology*, *53*(2), 151.

Conchas, G. (2001). Structuring failure and success: Understanding the variability in Latino school engagement. *Harvard Educational Review*, *71*(3), 475-505.

Constantine, M. G., Erickson, C. D., Banks, R. W., & Timberlake, T. L. (1998). Challenges to the career development of urban racial and ethnic minority youth: Implications for vocational intervention. *Journal of Multicultural Counseling and Development*, *26*(2), 83-95.

Diemer, M. A., & Blustein, D. L. (2006). Critical consciousness and career development among urban youth. *Journal of vocational behavior*, *68*(2), 220-232.

Diemer, M. A., Kauffman, A., Koenig, N., Trahan, E., & Hsieh, C. A. (2006). Challenging racism, sexism, and social injustice: Support for urban adolescents' critical consciousness development. *Cultural Diversity and Ethnic Minority Psychology*, *12*(3), 444.

Diemer, M. A., & Hsieh, C. A. (2008). Sociopolitical development and vocational expectations among lower socioeconomic status adolescents of color. *The Career Development Quarterly*, *56*(3), 257-267.

Diemer, M. A., McWhirter, E. H., Ozer, E. J., & Rapa, L. J. (2015). Advances in the conceptualization and measurement of critical consciousness. *The Urban Review*, *47*(5), 809-823.

Diemer, M. A., Rapa, L. J., Voight, A. M., & McWhirter, E. H. (2016). Critical consciousness: A developmental approach to addressing marginalization and oppression. *Child Development Perspectives*, *10*(4), 216-221.

Diemer, M. A., Rapa, L. J., Park, C. J., & Perry, J. C. (2017). Development and validation of the Critical Consciousness Scale. *Youth & Society*, *49*(4), 461-483.

Duncan-Andrade, J. M. R., & Morrell, E. (2008). *The art of critical pedagogy: Possibilities for moving from theory to practice in urban schools* (Vol. 285). Peter Lang.

Fine, M. (1991). Framing dropouts: Notes on the politics of an urban public high school. State University of New York Press, New York.

Freire, P. (1970). *Pedagogy of the oppressed.* Continuum, New York.

Freire, P. (2005). *Education for critical consciousness*. Continuum, New York.

Gow, L., & Kember, D. (1993). Conceptions of teaching and their relationship to student learning. *British journal of educational psychology*, *63*(1), 20-23.

Hayes, A. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression based approach (1st ed.). New York: The Guilford Press.

Holland, J. L., Johnston, J. A., & Asama, N. F. (1993). The Vocational Identity Scale: A diagnostic and treatment tool. *Journal of Career Assessment*, *1*(1), 1-12.

Howard, B. C., McGee, S., Schwartz, N., & Purcell, S. (2000). The experience of constructivism: transforming teacher epistemology. Journal of Research on Computing in Education, *32*(4), 455–465.

Martin, E., Prosser, M., Trigwell, K., Ramsden, P., & Benjamin, J. (2002). What university teachers teach and how they teach it. In *Teacher thinking, beliefs and knowledge in higher education* (pp. 103-126). Springer, Dordrecht.

McWhirter, E. H., & McWhirter, B. T. (2015). Critical consciousness and vocational development among Latina/o high school youth: Initial development and testing of a measure. *Journal of Career Assessment*, *24*(3), 543-558.

O'Connor, C. (1997). Dispositions toward (collective) struggle and educational resilience in the inner city: A case analysis of six African-American high school students. American Educational Research Journal, *34*(4), 593–632.

Prawat, R. S. (1992). Teachers beliefs about teaching and learning: a constructivist perspective. American Journal of Education, *100*(3), 354–395.

Super, D. E. (1950). Testing and using test results in counseling. *Occupations: The Vocational Guidance Journal*, *29*(2), 95-97.

Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of vocational behavior*, *16*(3), 282-298.

Super, D. E., & Jordaan, J. P. (1973). Career development theory. *British Journal of Guidance and Counselling*, *1*(1), 3-16.

Watts, R. J., Diemer, M. A., & Voight, A. M. (2011). Critical consciousness: Current status and future directions. *New directions for child and adolescent development*, *2011*(134), 43-7.

Watts, R. J., & Hipolito-Delgado, C. P. (2015). Thinking ourselves to liberation?: Advancing sociopolitical action in critical consciousness. *The Urban Review*, *47*(5), 847-867.