

Professional Identity and Burnout among Pre-School, Elementary, and Post-Elementary School Teachers in Israel

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Received: November 6, 2014

Accepted: November 28, 2014

Online Published: December 4, 2014

doi:10.5430/jct.v4n1p1

URL: <http://dx.doi.org/10.5430/jct.v4n1p1>

Abstract

The novelty of the present study is its attempt to distinguish between pre-school, elementary, and post-elementary school teachers, regarding the relationship between professional identity and burnout. Two hundred and forty teachers responded to two questionnaires: professional identity and teacher burnout scales. Pre-school teachers were found to be less burned out than their elementary and post-elementary school colleagues, for both general burnout score, and the factors of non-fulfillment and depersonalization. Regarding general burnout, no significant difference was found between elementary and post-elementary school teachers. Elementary school teachers had significantly higher scores for general professional identity and its factors than pre-school and post-elementary school teachers. Regression equations of different kinds were found for predicting burnout according to professional identity factors and years of experience.

Keywords: *professional identity; burnout; teacher; pre-school*

1. Theoretical Background

1.1 Teachers' Professional Identity

Boak, Bond, Dworet, and Kompf (1996) maintained very little research has been performed regarding teachers' professional identity, primarily because of difficulties in defining it. Similarly, Beijaard, Verloop, and Vermunt (2000) maintained we understand very little about the process leading to the crystallization of teachers' professional identities. Rodgers and Scott (2008) called for teachers to strengthen professional identity awareness.

Beijaard et al. (2000) point out that teachers' professional identity affects their feeling of professional efficacy, as well as readiness to cope with changes in the educational process. The researchers concluded that it is important to examine how teachers crystallize professional identity, for reasons including its effect on judgment and professional decisions.

Kramer and Hoffman (1981) defined teachers' professional identity as a feeling of belonging to, and identification with, the profession. Kramer and Hoffman (1981) and Galante (1985) found professional identity was a key predictor of teacher burnout. Friedman (2000) maintains professional identity is the internal response to the question, "Who am I as a professional?" This definition is very similar to that of the concept "professional self image," and Friedman doesn't distinguish between the two concepts. Similarly, Kozminski (2008) also points out that professional identity answers the question "Who or what am I as a professional?"

In an earlier study we drew readers' attention to the existence of two perspectives of professional identity: psychological and professional (Fisherman & Weiss, 2011). We can place Turner (1978) in the psychological school, focusing on a person's identification with work. Turner even set a person's ability to cut himself off from his work, or change jobs, as a criterion of professional identity. Similarly, Avraham's (1986) concept of professional identity includes perception of one's qualities, talents, feelings, professional values, and interactions with other people he has contact with while working. Among those espousing the professional viewpoint, we may include Moore (1970), who focused on the person's social evaluation as a professional, professional status, and the profession's image.

Coldron and Smith (1999) describe a teacher's professional identity as the teacher's personal and social biography.

They believe part of this identity is individual choice, while part is assigned by society. Thus, Coldron and Smith accept the opinions of Louden (1991) and Goodson (1992), who maintain a teacher's identity is composed of personal and social biographies. They believe these two biographies affect the teachers' experiences as teachers, and their personal identity as teachers. Tickle (1999) raises several similar points. He sees two components to teachers' professional identity: (a) how teachers see themselves; (b) how society views them. The first incorporates aspects such as what is important in one's work and professional life, while the second includes how colleagues, parents, customers, and pupils, see the teacher. Tickle adds an understanding of interaction between teachers' self perception and how they think their environment views them.

Recently, Rogers and Scott (2008) stated four assumptions regarding professional identity: (a) built and dependent on a range of contexts (social, cultural, historical, and political); (b) built via relations with others; (c) dynamic; and (d) strives to be coherent. Despite the researchers' contribution, their theory contains no definition of professional identity, but does comment on its consolidation process.

We may learn about the confusion surrounding teachers' professional identity from Beijaard, Meijer, and Verloop (2004). They surveyed 22 studies about teachers' professional identity, and divided them into three groups: research focusing on how teachers shape professional identity, characteristics of teachers' professional identity, and life stories as an expression of professional identity. Examining the studies illustrated an interesting point. There was no definition of professional identity in 45% (n=10) of the studies, 55% contained different definitions of teachers' professional identity, while 11 out of 12 focused on teachers' comments on their work. This finding supports the conclusions of Feiman-Nemser and Floden (1986), who opined that the world of teaching is subjective, and what is important is how teachers interpret their teaching. Corley (1998) also adopted this approach, and spoke of "adopting the role of teachers." As expected, the ten studies surveyed by Beijaard et al. (2004) dealt with teachers' life stories.

Most of the studies Beijaard reviewed were of qualitative research. Possibly this is one reason for the small number of definitions, and dependence on subjective interpretation of teacher behaviors and views. We can understand the studies Beijaard et al. reviewed according to post-modern concepts. It's reasonable to assume the post-modern concepts are divided according to the assumption that a positive solution of conflict identity signifies a coherent identity. Similarly, some would attribute the argument to the disagreements between modern and post-modern positions (Spector-Marzel, 2008).

In an earlier study (Fisherman & Weiss, 2011), we suggested distinguishing between a professional story, or narrative, and professional identity, where the narrative is the story of a teacher's professional life as seen and defined by the teacher, and professional identity is somewhat more objective and quantifiable. The concept "professional narrative" may be compared to what Friedman and Gavish (2003) term the crystallization of the professional self.

The professional narrative is, possibly, what many describe as the teacher's various voices continuing an endless, internal conversation which enable the teacher to understand herself, while someone external (the researcher) studies the teacher's interpretations of reality (Riessman & Speedy, 2007).

If this approach has any truth, then every teacher encompasses two professional entities: professional identity and professional narrative. Professional identity is shaped in an approximately linear process, from a diffuse professional identity to a stable and crystallized professional identity. However, professional narrative is constructed by a ongoing process throughout the teacher's professional life. It is highly flexible, complex, multifaceted, and constantly interacts with the teacher's educational, psychological, cultural, and social surroundings.

The study by Fisherman and Weiss (2011) introduced the concept of professional identity according to an empirical study including a pilot study, in which "experts" responded to a questionnaire, and follow-up study which included a sample of teachers in Israel. Factor analysis resulted in four factors, estimated as representative of professional identity: (a) career choice confidence; (b) professional efficacy; (c) sense of mission, and (d) reputation.

1.2 Burnout

There is a broad consensus regarding the very serious implications of teacher burnout (Friedman & Gavish, 2003). Burnout influences the teacher's moral behavior in school, and hinders achievement of Department of Education goals. A burned out teacher affects school culture and may even affect his or her colleagues' work satisfaction (Friedman & Gavish, 2003). The teaching profession is considered to be one of the most exhausting (Greenfeld, 1990; Farber, 2000). Kyriacou (1987) described teacher burnout as physical, emotional, and behavioral exhaustion. In his opinion, teacher burnout includes phenomena associated with tension, frustration, anxiety, anger, and depression, and in extreme cases, mental breakdown. Spaniol and Caputo (1979) divided expressions of burnout into two categories: personal and organizational. Personal expressions include physical symptoms such as fatigue, headache, dizziness,

heart disease, morbidity of the digestive track, and psychological symptoms including depression, anger, emotional instability, worry, guilt feelings, feelings of alienation, and a tendency to criticize others. Organizational expressions of teacher burnout include frequent absence from school, low enthusiasm levels, poorer work performance, (in quantity and quality), communication failures, scanty feedback, closed-mindedness, and the lack of willingness to consider new ideas. Similarly, Dunham (1980) described the two main responses of teacher burnout. The first is frustration, found to be connected to various physical sensations, from sleep disorders, to symptoms of depression. The second is anxiety, linked to lack of confidence, limited abilities, and absent-mindedness. Dunham opined that burnout causes phenomena such as absences from school, leaving the profession, and early retirement. Maslach and Jackson (1981) suggested three categories of teacher burnout, which Friedman (1992) validated. According to the researchers, one can distinguish three burnout categories: bodily and mental exhaustion, non-fulfillment, and depersonalization.

Schwab (1983) described a three-stage development of burnout:

1. Fatigue, emotional dryness, and the desire to remain at home.
2. Negative feelings about students (the teacher finds it hard to remain calm and demonstrate support for his students).
3. The loss of the feeling of self-realization through one's work, and frustration.

Friedman (1992) described teacher burnout in the following way: The teacher begins his work as an educator with enthusiasm, energy, and a sense of mission. When confronted with difficulties and pressures from teaching, doubts begin to appear regarding his or her personal ability, and everything connected with exploitation of his intellectual resources and self-fulfillment as a teacher. Feelings of non-realization increase along with fatigue levels. Finally there is almost insurmountable fatigue, characterized by the desire to cut off contact with students and abandon teaching.

1.3 Factors behind Teacher Burnout

Many researchers have addressed factors involved in teacher burnout. These may be attributed to three groups: personal, environmental, and organizational (Gavish, 2002; Friedman & Gavish, 2003).

1.3.1 Personal Factors

Some emphasized professional orientation (Farber, 1991), low self image (Friedman & Lotan, 1985) and external locus of control (Mazur & Lynch, 1989), lack of confidence (Holt, Fine, & Tollefson, 1987), low self esteem (Byrne, 1999; Brenninkmeijr, Vanyperen & Buunk, 2001; Villa & Calvete, 2001), coping style (Kyriacou & Pratt, 1985), self efficacy (Brouwers & Tomie, 2000), a sense of having scant control (Santavirta, Solovieva, & Theorell, 2007) and professional self image (Avraham, 1972; Friedman & Farber, 1992; Friedman & Lotan, 1993; Hughes, McNelis, & Hoggard, 1987). In this context it should be noted that Friedman and Farber maintain there is a mutual relationship between professional self image and burnout, with poor professional self image causing burnout, affecting teacher professional self image.

1.3.2 Environmental Factors

Environmental causes of burnout include teacher-student interaction (Byrne, 1999; Darling-Hammond, 1990; Farber, 1983; Friedman & Farber, 1992; Lortie, 1975; Nias, 1999), teacher-colleague interaction (Dvir, 2007; Lortie, 1975; Mishor, 1994), teacher-principal interaction (Billingsley & Cross, 1992; Byrne, 1999; Mazur & Lynch, 1989; Rozenholtz, 1989) and teacher-parent interaction (Cohen, Higgins, & Ambros, 1999; Kelchtermans, 1993).

1.3.3 Organizational Factors

Organizational factors influencing burnout were: low salary (Trendall, 1989), lack of respect from society (Mazur & Lynch, 1989), few advancement opportunities (Fimian & Santoro, 1983; Travers & Cooper, 1996), role conflict (Mazur & Lynch, 1989; Smylie, 1990; Byrne, 1999), overload (Byrne, 1994; Maslach & Leiter, 1997), organizational changes (Farber, 2000), and unreasonable demands (Santavirta et al., 2007).

Gavish (2002) describes the three main approaches to burnout research differently:

1. The theory of preservation of resources (COR), was developed by Taris, Schreurs, and Schaufeli (1999). They believe demands of the profession threaten the individuals' resources, and, therefore become a source of tension, leading to fatigue. Resources help overcome the need to cope with defensive behavior, and improve the teacher's feeling of competence, neutralizing burnout. Ashforth and Lee (1996) support this approach, having performed statistical analysis on sixty earlier studies.

2. Organizational factors. Friedman (2000) and Friedman and Farber (1992) maintain the diminishing of the feeling of competence caused by environmental factors contributes to burnout. Friedman and Farber note that in circumstances where environmental-organizational factors are driven by individuals with a high degree of self confidence, achieving goals and expectations will probably contribute to burnout. Teachers sure of their talents expect those talents will lead to appropriate financial compensation. When it fails to arrive, or is a disappointing amount, likelihood of burnout increases. Friedman (2000) refers to such a situation as a gap between expected levels, as opposed to observed levels of self-confidence.
3. Existential perspective. Pines (2000) maintained burnout is the expression of the absence of existential significance the individual expected to derive from working. Burnout is connected to career choice, parts of which are tied to unconscious aspects of the person, motivated by childhood experiences, gratification of needs, etc. Choice carries hope, aspirations, and a very high level of involvement of self. Professional success lends significance to a person's actions. When teachers fail to achieve these aspirations, they feel they lack importance and become burned out.

The goal of the present study is examining the connection between professional identity and burnout in the population of pre-school, elementary, and post-elementary school teachers.

2. Method

2.1 Sample

Our study included 240 teachers: 60 pre-school, 90 elementary, and 90 post-elementary school teachers. They had spent 1-37 years in the profession. Average number of years teaching was 16.87 ($SD=9.51$). A random sampling of the teachers included teachers from 7 pre-schools, 6 elementary schools (4 state-secular and 2 state-religious), and 4 post-elementary schools (3 state-secular and 1 state-religious). We worked solely with female teachers because they greatly outnumbered male teachers in the public school system.

2.2 Instruments

2.2.1 The Teacher Burnout Questionnaire for Measuring Teacher Burnout (Friedman, 1999)

This scale is an improvement over the previous scale for measuring teacher burnout. It was developed by Friedman and Lotan (1985), and based on the burnout scale of Maslach and Jackson (1981). The scale included 14 items, comprising 3 sub-scales:

1. Emotional fatigue – Individual examples: “I feel teaching is physically difficult for me.” “I feel teaching tires me out too much.” In Friedman's study (1999) internal reliability was calculated according to Cronbach's alpha, and found to be $\alpha=.90$. In the present study, internal reliability was $\alpha=.91$.
2. Non-fulfillment – For example: “I feel I'm not realizing myself in teaching. I feel as a teacher I'm not getting along in life.” In Friedman's study (1999) internal reliability was calculated according to Cronbach's alpha, and found to be $\alpha=.82$ while in the present study, $\alpha=.74$.
3. Depersonalization – For example: “I feel my students don't really want to learn” and “I thought I would like students much better than the ones I have now.” In Friedman (1999) internal reliability was calculated and was $\alpha=.79$. In the present study, internal reliability was calculated as $\alpha=.82$.

2.2.2 Teachers' Professional Identity Scale (Fisherman & Weiss, 2010)

This scale is based on the scales developed by Kramer & Hoffman (1981), Galante (1985), and Fisherman (2004). The scale items were selected from the above-mentioned scales, interviews with the teachers' teachers, and questionnaires distributed to the teachers' teachers. A detailed description of the scale's development can be found in Fisherman and Weiss (2011). A preliminary analysis (an E.F.A., of 41 items, to which 180 teachers responded, produced 4 tested factors in relation to 27 items. Reliability of the factors, according to the Cronbach's alpha formula was from .59 to .92... factor analysis supports A.F.C.) indicates a complete match between the 4-factor model and the empirical data. The context measurements were above .95, and error measurement less than .05.

The four factors found: (a) career choice confidence: including items such as “I realize my potential through teaching, I'm certain I did well by choosing teaching.” The reliability of that factor, according to Cronbach's alpha formula in the original research, was $\alpha=.92$. In the present study, $\alpha=.96$; (b) professional efficacy: expresses the degree to which the teacher feels she has the knowledge, skills, and tools to be a good teacher. Example statements: “I know the tricks of the trade in teaching, and what to do in that profession.” The factor's reliability, according to Cronbach's alpha in

the previous study, was $\alpha=.88$. In the present research, $\alpha=.96$; (c) sense of mission: expresses the degree to which the teacher feels teaching is a mission. Example statements: “For me, teaching is a calling,” “I’ve always felt my mission in life was to be a teacher.” The reliability of this factor, according to Cronbach’s alpha, was $\alpha=.65$ in the original research, but $\alpha=.91$ in the present study; (d) reputation: expresses the teacher’s view of the profession. Example statements: “When I see a teacher, I feel admiration for him,” “When someone acts disrespectfully toward teachers I feel he is hurting me.” The reliability of this factor according to Cronbach’s alpha is $\alpha=.59$. In the present research (after removing item #27, which caused a reduction in reliability) $\alpha=.73$.

3. Results

To determine whether there were significant burnout differences between the three groups, we performed an ANOVA, as well as a one-way, Sidak-type test for the sources of differences. Table 1 contains a description of the findings.

Table 1. Means, *SD*, and Post-Hoc Comparisons for Multiple Comparisons of Burnout Scores for Three Teachers’ Groups

	A pre-school N=60		B elementary school N=90		C post -elementary N=90		<i>F</i> _{4,235}	<i>p</i>	Significant post-hoc analysis
	Mean	<i>SD</i>	Mean	<i>SD</i>	Mean	<i>SD</i>			
Emotional fatigue	2.86	.94	3.13	1.05	3.00	.74	2.13	.12	
Non-fulfillment	2.41	1.01	2.80	.85	2.67	.94	4.81	.009	B>A
Depersonalization	2.48	.87	2.88	.98	3.19	.84	10.13	.000	C>B>A
Total burnout score	2.59	.79	2.94	.79	2.94	.71	5.24	.006	B>A C>A

Table 1 shows that for general burnout and separate burnout factors (non-fulfillment and depersonalization), there were significant differences between the groups, while there were no significant differences between the groups regarding emotional fatigue. The pre-school teachers were the least burned out of the three groups relevant to this factor. No significant differences were found regarding general burnout between elementary and post-elementary school teachers. The elementary school teachers were more burned out regarding non-fulfillment than pre-school teachers, but not when compared with post-elementary school teachers. Regarding non-fulfillment, post-elementary school teachers were more burned out than elementary school teachers, while the latter were more burned out than pre-school teachers. For depersonalization, the post-elementary school teachers were more burned out than the elementary school teachers, who were more burned out than the pre-school teachers.

To determine whether there were significant differences between the three groups in relation to their professional identity we performed an ANOVA, as well as a Sidak-type test for the sources of differences. Table 2 describes the findings.

Table 2. Means, *SD* and post-Hoc Comparisons for Multiple Comparisons of Professional Identity for Three Teachers’ Groups

	A pre-school N=60		B elementary school N=90		C post -elementary N=90		<i>F</i> _{4,235}	<i>p</i>	Significant post-hoc analysis
	Mean	<i>SD</i>	Mean	<i>SD</i>	Mean	<i>SD</i>			
Confidence in career choice	1.79	.47	2.46	.79	1.86	.52	39.51	.000	B>A B>C
Sense of mission	1.52	.49	2.50	.98	1.75	.62	48.46	.000	B>A B>C
Reputation	1.81	.59	2.52	.92	1.88	.51	33.69	.000	B>A B>C
Professional efficacy	1.55	.44	2.44	1.02	1.67	.52	43.16	.000	B>A B>C
Total professional identity	1.71	.37	2.47	.81	1.82	.42	49.30	.000	B>A B>C

Table 2 shows the general professional identity score and various professional identity factors of the elementary school teachers were significantly higher than those of pre-school and post-elementary school teachers. Significant differences were not found between the scores of pre-school and post-elementary school teachers in the area of professional identity.

3.1 Relationship between Burnout and Professional Identity

Linear stepwise regression was performed among pre-school, elementary, and post-elementary school teachers to predict the general burnout score, emotional fatigue, non-fulfillment, and depersonalization by the professional identity factors. Analyses were performed on each group separately.

The results appear in Table 3.

Table 3. Results of Stepwise Linear Regression Analysis for A General Burnout Score, Emotional Fatigue, Non Fulfillment and Depersonalization by Professional Identity among Pre-School, Elementary, and Post-Elementary School

	Step	Variables	B	SE B	β	R ²	R ² Δ	F
Predicting variable: general burnout score								
Pre-school	S 1	Confidence	-1.01	.18	-.60	.36		32.27***
Elementary	S 1	Confidence	-1.10	.15	-.71	.40		59.61 ***
	S 2	Efficacy	.30	.15	.18	.43	.03	32.97 ***
Post-elementary	S 1	Confidence	-1.36	.14	-.98	.54		101.3 ***
	S 2	Mission	.39	.12	.34	.59	.05	62.35 ***
Predicting variable: emotional fatigue								
Pre-school	S 1	Confidence	-1.03	.23	-.51	.51		20.32***
Elementary	S 1	Confidence	-1.19	.18	-.58	.34		44.79 ***
	S 1	Confidence	-1.13	.19	-.79	.18		19.88 ***
Post-elementary	S 2	Mission	.59	.16	.49	.30	.12	18.30 ***
Predicting variable: non-fulfillment								
Pre-school	S 1	Confidence	-1.46	.21	-.67	.45		6.89***
	S 1	Confidence	-1.62	.17	-.79	.45		71.46***
Elementary	S 2	Efficacy	.59	.16	.30	.52	.07	47.40 ***
Post-elementary	S 1	Confidence	-1.46	.19	-.80	.64		153.1 ***
Predicting variable: depersonalization								
Pre-school	S 1	Efficacy	-.71	.24	-.36	.13		8.69**
Elementary	S 1	Confidence	-.85	.21	-.44	.12		11.99 ***
	S 2	Efficacy	.43	.20	.24	.17	.05	8.62 ***
	S 1	Confidence	-1.33	.20	-.82	.33		43.41 ***
Post-elementary	S 2	Efficacy	.44	.17	.32	.38	.06	26.55 ***

* $p < .05$

** $p < .01$

*** $p < .001$

Table 3 shows various predictive models in each of the three groups. Among pre-school teachers, professional identity is connected to the comprehensive burnout score and to two burnout factors (emotional fatigue and non-fulfillment) and career choice confidence. Among elementary school teachers, career choice confidence (negative coefficient) and professional efficacy (positive coefficient) predicted comprehensive burnout score, and two of the burnout factors (emotional fatigue and depersonalization). Among post-elementary school teachers, career choice confidence (negative coefficient) and a sense of mission predicted comprehensive burnout score and two burnout factors (emotional fatigue and depersonalization).

4. Discussion

The goal of the present study was examining the relationship between professional identity and burnout among three groups of teachers (pre-school, elementary, and post-elementary school).

For the general burnout score and the burnout factors of non-fulfillment and depersonalization, we found significant

differences between the groups, while there were none for emotional fatigue. The pre-school teachers were the least burned out. No significant differences were found between elementary and post-elementary school teachers.

The elementary school teachers had more non-fulfillment burnout than the pre-school teachers, but less than the post-elementary school teachers.

The post-elementary school teachers had more depersonalization burnout than the elementary school teachers. High school teachers were more burned out than elementary school teachers, and the latter had more such burn out than the pre-school teachers.

One possible explanation may be found in the distinction made by Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) between role conflict and role ambiguity. The authors opine that role ambiguity has three sources: (a) absence of clear information regarding areas of responsibility, obligation, and rights; (b) absence of clear information about alignment of expectations; (c) absence of available information generated by changes within the organization. Continuing the distinction made by Kahn et al., Huberman and Vandenberghe (1999) found that role ambiguity (in addition to role demands, interpersonal tensions) is a predictor of emotional fatigue and depersonalization. Perhaps the difference between pre-school and elementary school teachers, and between post-elementary school teachers, is connected to differences in role ambiguity regarding expectations and the differences the organization is undergoing. Pre-school teachers have a relatively clear set of expectations. They feel direct responsibility to the parents, and are subject to inspector supervision. The elementary school teacher is subject to more complex expectations than the pre-school teacher. She feels an obligation to the pupils, parents, school administration, and supervisory system. Elementary schools undergo significant and frequent changes: New teaching programs are introduced, including programs focused on specific subjects. Wide-scoped programs (e.g. New Horizon), the new educational approach that sometimes emphasizes the teacher who teaches all subjects and at other times has the teacher play the role of generalist, professional, etc. Possibly the elementary school teacher's role is ambiguous compared to that of the pre-school teacher. Post-elementary school teachers sometimes find themselves in a far more ambiguous role. The teacher has obligations toward students, parents, community, school administration, Ministry of Education, the local municipal council, and others. More complicatedly, the post-elementary schools are owned by the local council or other non-governmental organization, while most elementary schools are government-owned. Teachers sometimes find themselves in the midst of a conflict between various Ministry of Education functionaries, each pulling in a different direction. There is great pressure to teach all the material dictated by the Ministry's officials. The pedagogical difficulties of such a situation often weaken coping ability, yet society expects the teacher to accept responsibility for all the conflicting demands. Perhaps role ambiguity is one of the major keys to understanding variables predictive of burnout.

The overall professional identity score and various professional identity factors of elementary school teachers are significantly higher than those of pre-school teachers, and higher than the post-elementary school teachers. We did not find significant differences in professional identity factors between pre-school and post-elementary school teachers. First, we will examine the difference between pre-school and elementary school teachers. Rodd (1998) lists five characteristics of the competent pre-school teacher: (a) the pre-school teacher works directly with parents, staff, and children, requiring strong administrative and communication skills; (b) the pre-school teacher is responsible for all the children, the entire school day, and in every area of development and knowledge; (c) children are especially sensitive, and require a very high level of self-discipline and highly honed professional ethic from their teachers; (d) the pre-school teacher works in professional isolation. The job requires decision-making and problem-solving abilities; (e) the broad range of ages demands special skills. Possibly the great complexity of the pre-school teachers' role causes a lower level of professional identity.

We can attribute the gap between post-elementary and elementary school teachers' professional identity to their different teacher training. In Israel, a large proportion of post-elementary school teachers were university-trained, while most elementary school teachers studied at colleges of education (Kaniel, 2000). The universities emphasize subject matter, while educational colleges focus on educational methods (Weiss & Fisherman, 2011). Practical training is broad-based, deep, and more teaching-oriented. One can, therefore, assume a great many elementary school teachers were trained at institutions emphasizing teaching. Additionally, teacher training in universities is only during the final year of study for, or after receiving, a bachelor degree, while teacher training colleges combine both areas. Some university students choose to study for a teacher's certificate at an advanced stage of their bachelor's degree (Kaniel, Bart, & Steinberg, 2007). Perhaps for these reasons, many elementary school teachers have a more crystallized professional identity than that of post-elementary school teachers. Obviously, such explanations must be examined in a separate study, using appropriate research design and analysis.

4.1 Relationship between Burnout and Professional Identity

The main burnout predictor in all groups in the sample was career choice confidence, supporting Pines' (2000) perception, emphasizing the existential aspect of burnout. She believed burnout is tied to career choice, parts of which are linked to subconscious aspects, and motivated by childhood experiences, satisfaction of drives, and other factors. Choice implies hopes, aspirations, and a very high degree of involvement of self. Professional success imparts a feeling of significance. However when people fail, they feel their lives have no meaning, and they burn out.

4.1.1 Pre-School Teachers

Among pre-school teachers, career choice predicted general burnout score and the burnout factors: emotional fatigue and a feeling of non-fulfillment. Depersonalization was predicted by professional efficacy. This finding supports Pines (1984), who maintained that the helping person's most important tool is personality, and when unsuccessful fears his or her personality doesn't suit the job. Career choice confidence refers to the confidence felt by the pre-school teacher today regarding her (past) choice of careers: becoming a pre-school teacher. The more she feels she has chosen correctly, the less she will feel emotionally fatigued, and the more she will feel she is fulfilling herself in her work. The pre-school teacher's tasks are greater in number, more complex, and more challenging than those of the elementary school teacher. Oshrat (1999) noted that while pre-school teachers work with little professional assistance, they fulfill many functions, work almost continuously, and have almost daily contact with parents. Alongside her teaching and pedagogical tasks, the pre-school teacher is also its principal (Biger, 2003). This multi-task burden carries a high risk of burnout (Gavish, 2002). It appears that when the pre-school teacher's task becomes difficult for her, she questions if she acted correctly when she chose such a complex profession. These inner deliberations often lead her to reexamine her choice. If her conclusion is positive, her renewed choice of career is likely to diminish her emotional fatigue. We can explain the connection between career choice and self-fulfillment with the help of some of the questionnaire statements referring to confidence in choice. One statement in this section of the questionnaire is "I realize my aspirations through teaching." Therefore, this factor unsurprisingly predicts a lack of self-fulfillment. It is fair to say a feeling of professional efficacy predicts depersonalization. Professional efficacy is the feeling one has the knowledge, tools, and skills to be a pre-school teacher. The depersonalization factor seems extreme, especially if applied to pre-school teachers. The pre-school teacher meets the very young child, and usually loves him. The pre-school teacher who views the very young child pre-school as lacking sweetness or unchangeable, is liable to be very frustrated. Such a teacher will probably feel she lacks the skills necessary to love that child, and others like him; to feel his uniqueness. Such a relationship between teacher and the child she is unable to love appears as extreme in the pre-school, far more than such a case in an elementary school setting. Therefore, this model is more likely to be found in pre-schools, but not in elementary schools.

4.1.2 Elementary School Teachers

The combination of career choice confidence (a negative coefficient) and professional efficacy (a positive coefficient) predicts general burnout score, non-fulfillment, and depersonalization among elementary school teachers. Career choice confidence alone is a predictor of emotional fatigue. Regarding prediction of a general burnout score, non-fulfillment, and depersonalization, it would appear we are seeing compensation, where professional efficacy moderates the negative connection between career choice confidence and burnout. Meaning, career choice confidence is tied negatively to burnout, and this relationship is modified by the feeling of professional efficacy. If the teacher feels diffident about her career choice, she is liable to feel she will not find self-fulfillment in her work, unless she feels she has the knowledge, tools, and skills requisite for a good teacher. The danger of her feeling unfulfilled is then diminished. If she doesn't feel she has the tools required to be a good teacher, she is liable to feel a lack of self-realization, even though she is certain she made the right career choice. A similar explanation fits the model predicting depersonalization and general burnout score. We have already commented on the centrality of career choice confidence in the general burnout score. The question remains as to the reason for professional efficacy's moderating influence on elementary school teachers, as opposed to the other two groups. The question is even more perplexing when comparing elementary school teachers' data with that of pre-school teachers, whose burnout is influenced by career choice confidence, or with that of post-elementary school teachers, whose career choice confidence is moderated by a sense of mission.

Alexander (1992) and Tzidkiyahu and Ronen (2008) divided teacher's roles into two groups: pedagogue and teaching. Junior high school and high school teachers reported their training was devoid of preparation for educating and managing a class. Elementary school teachers spend substantial time in their classes, teach many subjects, and often know their pupils very well. They see themselves more as educators and class managers than post-elementary school teachers, and the higher the grade they teach, the lower their confidence in their teaching ability (Rosen,

2002).

Professional efficacy relates to the feeling of capability to teach, and not to an educator's discrete tasks. Perhaps elementary school teachers are sure of their ability to educate, but less confident in their teaching ability. Friedman and Lotan (1985) noted that over 90% of elementary school teachers believe they impart important values to their pupils. Meaning, they focus more on education than teaching-related tasks. An elementary school teacher confident in her career choice is also confident of her educating ability. Therefore, the negative relationship between career choice confidence and burnout includes a negative relationship between ability to educate and burnout. An elementary school teacher without confidence in her career choice is also diffident about her educating ability. Her burnout level is high. If her feeling of professional efficacy is high, and if she feels she has the knowledge, tools, and skills, her feeling of burnout will be low.

4.1.3 Post-Elementary School Teachers

Career choice confidence (negative coefficient) predicted general burnout score and two out of three burnout factors (emotional fatigue and depersonalization) among post-elementary school teachers. Career choice confidence was the only predictor of non-fulfillment among this group.

Career choice confidence and sense of mission predict burnout, while the coefficient of career choice confidence is negative and the sense of mission is positive. The explanation for the prediction coefficients, however, is similar to that explaining a similar finding for elementary school teachers. We believe the relationship between predictive variables is compensatory. Poor career choice confidence is predictive of burnout, while the moderating factor is a sense of mission.

We must explain why the sense of mission factor moderates the career choice confidence variable, especially among post-elementary school teachers.

Work in a post-elementary school carries a high burnout potential. Gavish (2002) cites many earlier studies pointing to a high burnout level among post-elementary, as opposed to elementary, school teachers. The onset of puberty presents many educational challenges, pupil motivation is not always high, and teachers' status is poor. The burnout level of a post-elementary school teacher unsure of her career choice is liable to be quite high, unless she feels engaged in a mission, and that a career in education allows her to realize her potential. Meaning, teaching and education difficulties in post-elementary schools influence teacher burnout less if she feels teaching is her life mission. This prediction holds especially for post-elementary teachers because of the many tasks and challenges of teaching and education in post-elementary schools. This is supported to a degree by studies by Anderson and Ionesici (1984), who reported that teachers working in junior and senior high schools experience high depersonalization levels, and low self-fulfillment levels.

An alternative explanation could be based on the findings of Zak and Horowitz (1985). They maintain pre-school and elementary school teachers have a greater sense of mission than their colleagues because they feel engaged in a profession with societal values, nurturing the next generation. It may be precisely because pre-school and elementary teachers are steeped in a sense of mission to a greater extent than their colleagues in post-elementary schools, that a situation is created with post-elementary school teachers with a sense of mission being less burned out, despite low career choice confidence. I believe the fact that career choice confidence was the only predictor of non-fulfillment to be attributed to high R-squared, made it very hard to enter an additional predictive variable.

In summary, this study points to differential ties between professional identity and burnout among pre-school, elementary, and post-elementary school teachers. For all groups career choice confidence is a burnout predictor. Among pre-school teachers it is almost the only predictor. Among elementary school teachers, there is also the moderating factor of professional efficacy. Among post-elementary school teachers, the moderating factor is the sense of mission. In Section 1 we mentioned three main approaches to understanding causes of burnout: personal, environmental, and organizational.

In Section 1, we brought two main approaches for explaining professional identity. The approach we termed professional narrative, focusing on subjective personal interpretation, and the approach focusing on professional identity as a variable with various measurable and comparable factors. The differences between groups of teachers and the differential relationships between professional identity and burnout, indicate, in our opinion, the advantage of the multi-factor approach. Moreover, the way the professional identity scale has been developed and the results of the current study hint at the possibility that professional identity is culturally loaded, and may be comprised of different factors in different societies, unlike the burnout variable. We can possibly find relatively universal factors comprising the core of the variable, as well as other factors unique to each culture. Is this a weakness in understanding

professional identity? We believe it is an advantage, since it enables cultural sensitivity to personality variables. Although this cultural sensitivity requires examination of the concept in different cultures, it enables a more thorough approach and sensitivity to different teacher populations. If this is true, we call for comparative research among teachers from different cultures.

The relationship between professional identity and burnout point to personal factors related to burnout. However, the differential relationship among the three groups hints at organizational causes. If this is correct, we can imagine a more complex system of burnout causes, in which personal factors influence burnout by means of moderating factors: the organizational causes. To examine this explanation, further research is clearly necessary, focused on this question and using appropriate statistical techniques.

Our findings have educational implications relevant to teacher training, ongoing professional teacher development, and minimizing dropout from the profession. Investment in developing and crystallizing professional identity is likely to diminish dropout. The findings point to professional identity as a worthwhile focal point for investment. It would seem worthwhile to invest efforts in developing professional identity in the area of career choice confidence for teachers from all three groups, pre-school, elementary, and post-elementary school. Investment in professional efficacy is also recommended for the elementary school teachers. Among post-elementary teachers, we recommend investing in the teachers' sense of mission.

Our study's limits are our sample. This research was exclusively based on a sample of female Israeli teachers. Therefore, we are unable to generalize from our findings to include proclivities of male teachers.

We therefore recommend conducting a separate study for male teachers and similar research in other countries.

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