

Teachers' Beliefs about the Needs of Students: Teachers as Local Experts (A Qualitative Analysis)

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Abstract

The link between students' psychological needs and educational practice is often left unexamined in teacher training. Also underexplored are teacher beliefs about the needs of students. The present study asked practicing educators in the Republic of Tatarstan ($N = 195$), considered to be experts in the local culture as well as experts in child development, to tell us what they considered to be vitally important needs for the psychological well-being of students. Whether considered from the perspective of frequency counts or from the perspective of categories identified by independent raters, the theme of *relationships* emerged as centrally important in the teacher-generated responses. Implications for practice and for research are discussed.

Keywords: teacher training; self-determination theory; education; psychological needs; student motivation.

Представления учителей о психологических потребностях учеников: учителя как эксперты местной культуры

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Аннотация

В процессе подготовки учителей часто не учитывается значение и роль базовых психологических потребностей учеников в осуществлении педагогической деятельности. Также недооценивается роль представлений педагогов о психологических потребностях учеников. В исследовании мы обратились к учителям, работающим в Республике Татарстан ($N = 195$) как экспертам местной культуры, а также экспертам в области развития детей и попросили рассказать нам, какие потребности они считают жизненно важными для психологического благополучия учеников. Ответы учителей анализировались по частоте упоминания тех или иных потребностей, кроме этого независимые эксперты на основе качественных критериев отнесли каждый ответ к определенной категории потребностей. Независимо от способа анализа центральными в представлениях учителей стали потребности, связанные с взаимо-

отношениями ребенка с другими людьми. Обсуждаются последствия для педагогической деятельности и исследований.

Ключевые слова: подготовка учителей; теория самодетерминации; образование; психологические потребности; мотивация учеников.

Introduction

It seems obvious that educational practice should be based on the developmental needs of the student. Yet it is perhaps equally evident that teacher training rarely focuses on the link between student needs and practice. This discrepancy led us to ask the question, “What do practicing teachers, themselves, believe about the developmental needs of students?” In this article, we report the responses to this question of practicing educators from the Republic of Tatarstan who were participants in a continuing education / recertification program. First, however, we provide some background by elaborating on the concept of needs as that concept is addressed in contemporary psychology, highlighting the importance of the construct for teaching and learning.

The concept of ‘needs’

Over the years, the concept of needs has fallen in and out of favor in the field of psychology. One reason for this is that theories that incorporate a concept of needs have not always been explicit about the definition of a need, or else have adopted a definition that does not clearly distinguish between a need and a want or desire. When this happens, the list of candidate needs tends to grow to the point that it becomes untenable and, for all practical purposes, untestable. An example is the theory of Henry Murray (1938), whose Thematic Apperception Test (TAT), still in use today, attempts to provide the psychologist a window into the unconscious needs fueling the client’s current conflicts (Ryan & Manly, 2005). Murray’s theory ultimately posited no fewer than 20 ‘needs,’ some of which would seem on the surface to be mutually exclusive, such as the need for achievement and the need for abasement. The fundamental problem with this and similar theories, however, is the lack of a conceptually clear, empirically testable definition of a need.

Murray’s theory of needs is not in much evidence these days, aside from the rather limited sphere in which clinicians may continue to use his TAT as a projective test. Of more lasting popular interest has been Maslow’s (1943) hierarchical theory of needs. In Maslow’s perspective, ‘lower-level’ needs (for example, physiological needs for food, water, warmth, rest, as well as the need for safety) must be satisfied before ‘higher-level’ needs (for example, for belongingness, esteem, and self-actualization) can become activated and salient. Maslow’s pyramid-shaped hierarchy is easily remembered and readily recognizable, and has enjoyed popular influence in the realms of business and education, despite the scant empirical evidence in support of the model (see Reeve, 2005; Ryan & Deci, 2017).

In contrast to these approaches, self-determination theory (SDT), a contemporary theory of motivation, personality, and development (Deci & Ryan, 1985; Ryan & Deci, 2017), provides a strong definition of a need. According to SDT, a need is that which is essential for growth, integration, and well-being. The emphasis in this definition on what is *essential* clearly distinguishes a need from a want or desire. Further, linking the satisfaction of a need with specific outcomes (in terms of growth, integration, and well-being) makes the construct an empirically testable one. When a need is satisfied, it leads to positive outcomes that are specified *a priori*; when a need remains unsatisfied, or when it is actively thwarted or undermined, negative outcomes would be anticipated.

Thus far, empirical work within the SDT tradition has identified three psychological needs: the need for competence, the need for relatedness, and the need for autonomy.

Competence, sometimes called mastery or self-efficacy, refers to the need to feel capable of having an impact on one's environment, the belief that one's actions are linked to desired or intended outcomes. *Relatedness* reflects the fact that humans are social beings; it is the ongoing need for meaningful and mutual relationships throughout one's life. Lastly, *autonomy* is the experience of being the 'author' of one's actions, the feeling that one can make personally meaningful and valued choices. Importantly, SDT's model of needs is not hierarchical, as is Maslow's; the needs are presumed to be salient to the person at all times and in all circumstances (Ryan & Deci, 2017).

To that end, the research investigating SDT's three needs has demonstrated a link between need satisfaction and positive outcomes in various domains such as sports (Ntoumanis & Standage, 2009), business and industry (Gagne & Deci, 2005), counseling and psychotherapy (Ryan, Lynch, Vansteenkiste, & Deci, 2011), and, importantly, education (Niemi & Ryan, 2009). We turn now to a discussion of the research on psychological needs and education.

It is important however to preface that discussion with a brief overview of the closely-related construct of intrinsic motivation. Indeed, historically, SDT began with the investigation of intrinsic motivation as a counter-point to the dominance of behaviorism in psychology and education in North America. Briefly, when intrinsically motivated, a person engages in an activity for the interest or enjoyment that are inherent in the activity, itself, as opposed to doing so for some separable reward (Deci & Ryan, 1985; Ryan & Lynch, 2003). The prototypical example of intrinsically motivated activity is play, which we point out is a characteristic of much of the learning activity of childhood (see Pyle & DeLuca, 2017). Through play, children both use their current skills while at the same time stretching those skills and acquiring new ones. Regrettably, intrinsic motivation for learning generally decreases as children progress through school. This change in motivation is not accidental but happens systematically, as a result of the consistent use of pressure and reinforcement contingencies such as rewards, which have been found to undermine intrinsic motivation for various activities, learning among them (Niemi & Ryan, 2009; Ryan & Lynch, 2003; Ryan & Weinstein, 2009). On the other hand, research consistently shows that when students are intrinsically motivated – when they engage in learning activities for reasons that feel more internal, personally valued and personally chosen – students reliably demonstrate better outcomes, including academic performance, perseverance at challenging tasks, creativity, retention (versus dropping out), and well-being (Deci & Ryan, 1985; Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004). Given such evidence for the importance and benefits of intrinsic motivation for learning, early researchers in the SDT tradition began to explore how to create learning environments that would support rather than undermine students' natural, intrinsic motivation for learning. This search led researchers back to the concept of needs.

It turns out that intrinsic motivation, in virtually any domain of activity, is enhanced and supported by satisfaction of the psychological needs for relatedness, competence, and autonomy (Deci & Ryan, 1985; Ryan & Deci, 2017). With respect to learning and education, of the three needs, autonomy has received the most empirical scrutiny and support to date. Specifically, in classrooms in which teachers support student autonomy, students demonstrate not only greater autonomy or intrinsic motivation for learning (Niemi & Ryan, 2009), but also greater creativity, preference for challenging rather than easy tasks, better performance, longer retention, and better general well-being (Deci & Ryan, 1985; Ryan & Deci, 2017; see also Affuso, Bacchini, & Miranda, 2017; Alivernini & Lucidi, 2011; Fan, Williams, & Wolters, 2012). However, all three of the needs have been found to be important for students' internal motivation and other outcomes (Niemi & Ryan, 2009; Reeve & Halusic, 2009).

Thus, based on the existing evidence, it seems clear that satisfaction of students' psychological needs has important implications for the educational process. Although some teacher preparation programs make note of the concept of intrinsic motivation (Reeve, 2005; Reeve & Halusic, 2009), very little is done to anchor this motivational orientation in the satisfaction of the child's psychological needs. Given the important implications for practice, how teachers think about students and their needs is clearly relevant and needs to be explored. The present study aims to further our understanding of teacher conceptions about the child's psychological needs.

As noted, SDT has identified three psychological needs. In theory, the possibility remains that other needs exist. Finding the balance between SDT's parsimonious approach to needs and the less parsimonious and less empirically testable approaches of Murray (1938) and Maslow (1943) would seem to pose an important challenge to researchers. This leads us to another important tenet of SDT: that the three psychological needs identified thus far (for competence, relatedness, and autonomy) are *basic* or *universal*, that is, that they are shared in common by all human beings, regardless of cultural or other contextual factors. This of course is a strong and even controversial claim to make (e.g., Markus & Kitayama, 1991), but thus far the evidence supports the claim in countries not only in North and South America and Europe, but also in China, Japan, South Korea, and Russia, among others (e.g., Chirkov, 2009; Chirkov, Ryan, & Sheldon, 2011; Jang, Reeve, Ryan, & Kim, 2009; Zhou, Ma, & Deci, 2009). In each of these cultural settings, whether or not the underlying need construct is explicitly valued, to the extent that people experience satisfaction of the needs for competence, relatedness, and autonomy, they experience better outcomes, as predicted by the theory.

But it seems reasonable to ask: What do teachers who are trained and embedded in a non-Western context think about the developmental needs proposed by Western-oriented theories, and what do they, themselves, as local experts, consider to be important for the child? As a first step in exploring these questions, Lynch and Salikhova (2016) recently tested how practicing teachers in Russia ($N = 247$) would rate a set of 26 statements drawn from Maslow's hierarchical theory of needs and from self-determination theory. In addition, they included in the list of candidate needs an item to reflect the existential notion of *meaning in life* as well as several items intended to reflect local cultural values. When asked to rank-order these statements in terms of their importance for the healthy psychological development of the child, these teachers ranked *meaning* as the most important to the child's development, followed by SDT's constructs of *relatedness* and *competence*. Next in terms of importance they ranked Maslow's constructs of *self-actualization*, *self-esteem*, and *safety*, in that order, followed by SDT's *autonomy* and lastly Maslow's *physiological* needs.

The findings of Lynch and Salikhova (2016) call attention to an important issue. Thus far, the research on SDT's concept of needs has been largely nomothetic and quantitative in nature. In other words, the constructs under investigation have been defined by Western, English-speaking psychologists; quantitative scales have been developed (initially in English, for the most part) to measure these constructs; and then these same scales have been administered to members of another culture (with attention paid to producing good translations into the local language) and statistical tests performed to determine whether satisfaction of the needs by members of the new culture would also be associated with the kind of positive outcomes predicted by the theory. This approach is of course the gold standard in contemporary empirical research, and the results have generally supported the predictions made by SDT regarding the relation of need satisfaction to various outcomes. But it leaves open the question of whether there might possibly be *more* than three, genuine (i.e., truly essential) psychological needs. In particular, what would happen

if researchers were to ask representatives of a local culture – local experts – what *they* considered to be essential for the healthy psychological development of the child? This is the question that prompted the current study.

The present research

Prior research has demonstrated the importance of psychological need satisfaction to the educational experience of students, in terms of student motivation, academic outcomes, and well-being, among other indicators. To date, this research has largely been nomothetic and quantitative in nature. In addition, little is known about the beliefs of practicing teachers concerning the psychological needs of their students. The present study attempted to address this gap in the literature by asking practicing educators, viewed as local experts (both in terms of culture and in terms of professional training), what they considered to be most important for their students' psychological development.

Method

Participants and Procedures

Participants ($N = 195$, 92% female) were practicing educators from across the Republic of Tatarstan, located in the Russian Federation, who were recruited through a continuing education / recertification program in which they were taking part. The participants ranged in age from 20 to 70 years old, with a mean age between 30 – 40 years. Included in the sample were teachers (73.4%), psychologists (7.2%), school administrators (1.5%), and methodologists (1%); the remainder (16.9%) did not report profession. The level of education varied, with 5.5% having completed high school, 77.9% having completed an undergraduate or equivalent degree, and 9.2% having completed a doctoral degree. In terms of place of work, 5.6% reported currently working at an orphanage, 60.5% in a school setting, 23.5% at a university or institute setting, and 8% selecting "other." In terms of the children with whom participants worked, 9.7% reported working with children from 0 – 3 years old, while others worked with children 4 – 7 years old (15.4%), 7 – 16 years old (43.6%), and older than 16 years (19.5%).

In addition, we were interested in whether participants had had educational experiences that might have shaped their beliefs about the needs of children. In part, we wanted to ensure that their beliefs could be considered 'local' (acknowledging of course our necessarily imprecise use of that term here). Accordingly, we asked whether they had completed any professional training outside the country (89.2% said "no"), and whether they had worked with colleagues from outside the country (80.5% said "no"). When asked if they had ever heard of self-determination theory, 80.1% said "no."

Materials

Participants were presented a packet of materials including demographic items, several distractor questions, and the target item:

Psychological needs. For normal development the organism needs to satisfy biological needs for food, water, warmth. For the normal development of the personality the satisfaction of psychological needs is necessary. Write down what in your view are the three most important needs that are vitally essential for the development of a psychologically healthy personality.

In the survey packet three lines were then provided for participants to write their responses. Many participants supplied a single word per line, while others used a phrase to capture their thought. There were no restrictions placed on them in this respect. Not everyone chose to use all three lines. All materials were presented in the Russian language,

and were administered by local students from an undergraduate psychology program at Kazan Federal University (located in the capital of the Republic of Tatarstan).

Analytic Strategy

In order to analyze the responses, two approaches were utilized. First, we explored the data in terms of word or concept frequencies. It struck us as important to determine which words or concepts appeared most frequently in the listings provided by the local experts (the teachers): presumably it would be meaningful and noteworthy if some ideas appeared more often than others. As a second step, we also had a group of four independent raters read through and organize participant responses using a kind of modified Q-sort technology. They were instructed to organize the words and phrases into groups, based on conceptual similarity. These raters were native speakers of Russian, all with an education in psychology, but were otherwise blind to the details of our study.

Results

Word / concept frequencies. Cumulatively, participants provided 444 responses to the target item about children’s needs. Next, we looked for the words or concepts that appeared most frequently in the lists created by our teacher-experts. Specifically, each time a word or its related root appeared, it was counted. What did we find? Table 1 shows that the highest-frequency words were *communication* ($n = 42$), *love* ($n = 39$), *understanding* ($n = 21$), *family* ($n = 15$), *respect* ($n = 11$), and *care* ($n = 10$). By contrast, words provided by the teacher – experts with a low frequency of occurrence included *success* ($n = 3$), *self-actualization* ($n = 1$), *independence* ($n = 1$), *freedom* ($n = 1$), and *self-confidence* ($n = 1$).

Table 1. Frequency counts: Teacher responses to the question, “What do children need?”

Construct	Count	Construct	Count
Communication	42	Health	5
Love	39	Material wellbeing	5
Understanding	21	Society	5
Family	15	Harmony	3
Respect	11	Self-development	3
Care	10	Social surrounding	3
Attention	8	Success	3
Support	8	Emotionality	3
Education	7	School	2
Acknowledgment-Acceptance	7	Self-actualization	1
Acceptance	7	Independence	1
Friendship	6	Freedom	1
Self-realization	6	Work-Labor	1
Calm	6	Self-confidence	1
Trust	5		

Classification of teacher responses into categories. Next the responses generated by teachers were organized into conceptually related categories by four independent raters, who were asked first to sort the teacher responses into as many categories as they felt were needed, and then, in a next step, to re-sort them into 10 categories. (Note that exact du-

plicates were removed before presenting raters with the list of teacher responses.) Raters were asked to create an appropriate, descriptive label for each category or cluster. Table 2 presents the 10 categories into which the raters organized teacher responses, with the rater's descriptive label for each category. We note, first, that the categories into which the raters sorted teacher responses, and the labels that they created for the categories, were not identical. Some categories included more items, others included fewer items. Table 2 organizes the rater-provided categories according to conceptual similarity (as determined by the authors). Thus for example the first row shows that all four raters identified a category of teacher responses that the rater considered to reflect "family"; the second row indicates that all four raters identified a theme of a "social" dimension in the teacher responses; the third row shows that all four raters discerned a theme pertaining in some way to self-development. Thereafter, the raters differed among themselves in terms of whether three or fewer of the raters identified a similar theme in the teacher-provided responses (for example, three of the four raters found a theme having to do with the physical or biological dimension, but only one rater identified a theme that they called "trust," and so on).

Discussion

Previous studies on the role of student needs in the domain of education have been largely quantitative and nomothetic in nature. The present study represents one of the first attempts to approach the question of student needs qualitatively, from an idiographic perspective. Specifically, practicing educators ($N = 195$) were enlisted as local experts, in terms of both their cultural expertise and their professional expertise, to tell us, in their own words, what they considered to be essential for the healthy psychological development of the child. When considered from the perspective of frequency counts, the responses provided by the practicing educators emphasized things like *communication* ($n = 42$), *love* ($n = 39$), *understanding* ($n = 21$), *family* ($n = 15$), *respect* ($n = 11$), and *care* ($n = 10$). These and, indeed, many of the other teacher-generated responses all seemed to center around one or another aspect of *relationships* as a key to the child's psychological well-being. Notably, concepts that are often emphasized in Western psychology as being of critical importance (e.g., *success*, *self-actualization*, *independence*, *freedom*, *self-confidence*), although included by teachers in the responses they generated, were endorsed with far less frequency, suggesting that these typically Western constructs were not especially important to this group of local experts.

Table 2. Classification of teacher responses by independent raters

Rater 1	Rater 2	Rater 3	Rater 4
Favorable family [19 items]	Family wellbeing [23 items]	Family [14 items]	Family [42 items]
Social aspect of personality development [26 items]	Social sphere [11 items]	Social component [11 items]	Social factors [20 items]
Self-development [14 items]	Self-realization [41 items]	Development / self-development [19 items]	Aspects of development and self-development [15 items]
	Physical and material wellbeing [25 items]	Biological needs [13 items]	Health and activeness [27 items]

Rater 1	Rater 2	Rater 3	Rater 4
Education [28 items]	Cognitive development [11 items]	Pedagogical component [13 items]	
	Spiritual (transcendental) needs [7 items]	Spirituality [25 items]	Spiritual sphere [7 items]
Individuality [10 items]	Creative realization [10 items]		Personality of the child [56 items]
The surrounding environment [17 items]			Social support [5 items]
Support, understanding, and care [26 items]		Love [19 items]	
Emotional aspect of personality development [15 items]	Emotional sphere [53 items]		
	Psychological wellbeing [16 items]	Psychological well-being [20 items]	
	Sphere of communication [40 items]		Communication and friends [24 items]
Engaging in favorite activity [14 items]			Availability of activity [24 items]
			Success in activity [20 items]
		Civic / citizenship component [22 items]	
		Way of life [22 items]	
Trust [39 items]			

When we asked our four independent raters to categorize the teacher-generated responses in terms of conceptual similarity, all four of them identified a theme that they labeled *family*, and all four also identified a *social* dimension within the teacher responses. Thus, as with the frequency counts, the category of *relationships*, broadly speaking, emerged as important in the classifications of the four raters. In this regard, the results of the present study align with at least one of the three psychological needs identified within self-determination theory: the need for *relatedness*.

Implications for practice. The results of the present study have implications both for practice and for research. In terms of practice, the fact that teachers in Tatarstan provided such a strong endorsement of *relationships* speaks to the importance of this construct within the local culture. If we can assume that this *need for relationships* is

for all practical purposes equivalent to SDT's *need for relatedness*, then there are several recommendations for practice that we can make to teachers and teachers-in-training who work with children in this region of the world. First, activities that foster cooperative learning and classroom community conduce toward satisfaction of the relatedness need with one's peers (Reeve & Halusic, 2009). Further, the relationship between student and teacher presumably is also important (Claessens et al., 2017); given that research shows that the kind of relationship that supports feelings of autonomy tends to be the kind of relationship that supports the need for relatedness (Ryan & Deci, 2017), teachers might try to create an autonomy supportive climate in their classrooms. Again, prior research suggests this can be done by taking students' perspective; providing an explanatory rationale for the importance of classroom activities; using non-controlling language; and acknowledging and accepting students' affect, including negative affect (Reeve, 2005; Reeve & Halusic, 2009). Importantly, because needs are posited to be universal (although this is an empirical question; see below), these recommendations should apply to all students in the classroom, rather than needing to be individually tailored (Reeve & Halusic, 2009).

Implications for research. That the construct of relationships was endorsed by many of the sampled educators in Tatarstan as being vitally important to the healthy psychological development of the child speaks to the fact that the construct is valued in this particular society – or, more accurately, that it is valued by this group of cultural and professional experts. To take the next step and argue that the underlying construct is a genuine *need* of children in this cultural setting would require testing whether the presence of relationships (ideally, reflecting the various aspects of relationships identified by the teacher-experts, such as *communication, love, respect, attention*, and so on) is associated in the predicted direction with outcomes for the child such as well-being, integration, and internal motivation. Indeed, in line with the body of SDT research that has supported the case for *relatedness* as a psychological need (e.g., Ryan & Deci, 2017), we would predict this to be the case. But had some other construct been nominated by the local experts in our sample – something not previously identified by SDT or by some other theoretical framework – the next step in terms of a research agenda, we would argue, would be to test whether satisfaction of the candidate need was associated with outcomes such as well-being, integration, and internal motivation. In other words, in our view the utility of the strong *definition* of a need adopted within the SDT framework, as that which is essential for well-being and integration, remains constant; what is subject to empirical verification is whether other psychological needs, either culturally specific or universal (Ryan & Deci, 2017), can be identified.

Limitations. There are several notable limitations of the present study. For example, we have made the argument that the frequency with which a given word or concept was nominated by the local teacher-experts should be taken as an indication of the construct's importance in the local culture. This does indeed seem to make sense, at face value. On the other hand, it is possible that a concept nominated with far less frequency – for example, *calm* or *harmony* or *emotionality* – is in fact a stronger need candidate than concepts that appeared more frequently; that is, perhaps *harmony* ($n = 3$) bears a stronger association to well-being, in this culture, than does *understanding* ($n = 21$). Ultimately, this is an empirical question that would need to be tested. But it calls attention to another limitation of the current study. Terms like *calm, harmony*, and so on are in themselves rather vague; ideally, it would be important to follow up with participants, perhaps in an interview format, to ask them to clarify what they mean by those terms, perhaps giving examples of them that would apply to children in general and to the educational setting in particular. This unfortunately was outside the scope of the present study.

The presence of inconsistencies among the independent raters represents another limitation of the study. What for example is the significance of the fact that Rater 3 placed 14 teacher-generated responses under the heading of “family,” while Rater 4 used this same label to categorize 42 teacher-provided responses? Ultimately, it does seem meaningful that all four raters identified the theme of “family” in the teacher responses, but the issue of discrepancies needs to be further explored.

Conclusion

The present study investigated the beliefs of practicing educators ($N = 195$) about the psychological needs of students. A consistent theme that emerged in their responses, whether considered in terms of frequency counts or in terms of categories created by independent raters, was that of relationships. These educators, whom we considered to be experts both in terms of their own, local culture and in terms of their professional training, considered that relationships with others are vitally important to the development of a psychologically healthy child. Implications for practice and for future research were explored.

Ethical approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent: Informed consent was obtained from all individual participants included in the study.

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