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The effect of autonomy-supportive climate in a second chance programme for at-risk youth on dropout risk: the mediating role of adolescents' sense of authenticity

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Abstract

This study aimed to extend the limited knowledge on the motivational and identity aspects of youth at risk in second chance programmes. The study examined the relationships between autonomy-supportive climate, adolescents' sense of authenticity, and their dropout risk, as well as the mediating role that authenticity plays in the relationships, within the context of a second chance programme for at-risk youth. Participants were 181 students at risk from Israel. Results from a multilevel path model analysis support the hypotheses. The findings indicate a positive correlation between autonomy-supportive climate and authenticity of students at risk. The analyses also revealed a negative individual-level relationship between authenticity of students at risk and their dropout risk, and a negative cross-level relationship between autonomy-supportive climate and students' dropout risk. The effect of autonomy-supportive climate on students' dropout risk was partly mediated by students' authenticity. The present study extends the knowledge on the influence of autonomy-supportive climate on schooling by pointing out cross-level relations between this climate and youths' authenticity, and by shedding light on the connection of these constructs with dropout risk. As this model of relationships is often reflected in the pedagogical rationale behind the design of second chance programmes for youths at risk, the study has important practical implications for policymakers, administrators, and teachers leading these programmes.

Keywords Authenticity · Autonomy-supportive climate · Second chance programme · Self-determination theory · Students at risk

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About 15% of youths in the USA are not in school or work settings, and are considered disconnected youths (Bray et al. 2016; Hair et al. 2009). Similar percentages have been found in other countries, for example, 16% in Israel (Cebu Lal 2017) and 12.7% in the UK (Goldie et al. 2016). These youths are often referred to as "at risk" or "disconnected". Youths at risk are defined as "failing in school and unsuccessful in making the transition to work and adult life and as a consequence unable to make a full contribution to active society" (OECD 1995, p. 21). There is a greater likelihood that these youths will develop "delinquency, substance abuse, or other anti-social and self-destructive behaviors" (Wright 1996, p. 4) than youths who are not at risk. Policymakers aspiring to help youths at risk often promote educational settings designed for these youths, referred to as "alternative schools" or "second chance programmes" (Bloom 2010).

The empirical psychological exploration of the motivational aspects associated with youths at risk is limited. For example, one study explored Hispanic minority children at risk at a regular elementary school, in the context of physical activity lessons (Vierling et al. 2007). A focus group study included mixed samples of students from second chance programmes and students from regular schools, and reported general qualitative insights (Higgins 1988). Another study compared goal setting for delinquent, at-risk, and not-at-risk youths (Carroll et al. 1997). Although we have some empirical psychological evidence about youths at risk, there has been no empirical psychological exploration of these youths' self-identity aspects. Studies have investigated mostly the racial identity of African-American students at risk (Caldwell et al. 2004; Hughes et al. 2009). These lacunae are worrisome considering that other works have argued that "student motivation may have a stronger impact on at-risk students' achievement than on the achievement of high school students in general" (Anderson and Keith 1997, p. 259), and that "much of a student's success or failure in school […] centers on questions related to identity" (Meier 2008; p. 3).

Previous works have suggested that self-determination theory (SDT) (Vierling et al. 2007; Wilson et al. 2017) and authentic identity formation (Abrams 2002) are valuable in explaining the academic success of youths at risk. Therefore, the present study sought to explore the effect of autonomy-supportive climate on students' dropout risk and the mediating role of students' authenticity on that effect, in a second chance programme. SDT is based on a humanist approach to motivation, which suggests that internal drive for activity is boosted when psychological needs for autonomy, competence, and relatedness are met (Ryan and Deci 2017). Authenticity is defined as behaviour according to one's inner self, which reflects one's opinions, thoughts, goals, and inclinations (Harter 2002), and is expressed in positive self-esteem, self-awareness, and high self-regulation (Leroy et al. 2015). Previous research suggested that satisfaction of psychological needs leads to a sense of authenticity in students, and increases their wellbeing (Thomaes et al. 2017). Thus, we argue that satisfying psychological needs of students at risk contributes to their sense of authenticity and reduces their risk of dropping out of second chance programmes (Fig. 1).

Theoretical background

Autonomy-supportive climate and at-risk students' authenticity

According to SDT, satisfying the following three needs enhances one's intrinsic motivation and self-direction (Olafsen et al. 2015; Ryan and Deci 2017): (a) the need for autonomy, which

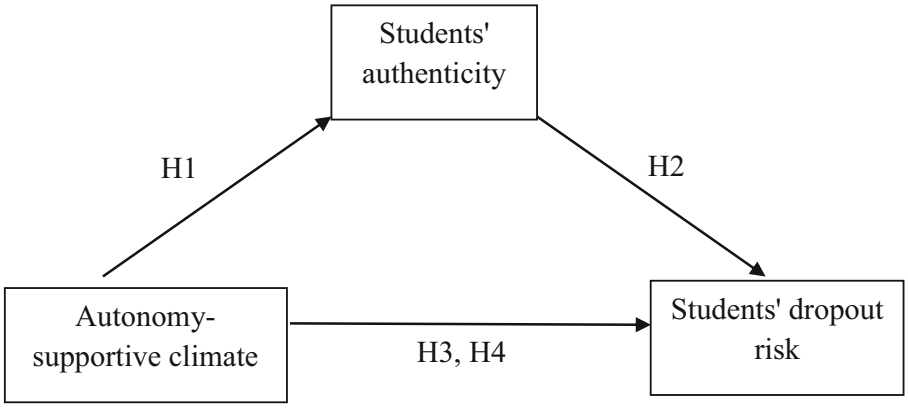

Fig. 1 Hypothesised model

is the human need to feel that one has freedom to choose; (b) the need for competence, which is the feeling that one is capable of carrying out tasks and achieving goals that may be difficult to achieve; and (c) the need for relatedness, which is a person's need to love and be loved, and the sense that one belongs to a larger community and is part of it. People whose psychological needs are met communicate openly with their environment and process information in a balanced and patient manner (Deci and Ryan 2000). According to Leroy et al. (2015), the characteristics of such people are similar to those of authentic people in their awareness of their strengths and weaknesses, in their ability to process information in a balanced and open manner, in honest communication with their environment, and more.

It has been suggested that the process of authentic identity formation of young females at risk is a means for countering stereotypes and enhancing self-esteem (Abrams 2002). A developed sense of authenticity is composed of four main categories (Bradley-Cole 2017; Walumbwa et al. 2008): (a) self-awareness, which is one's alertness to one's values and conduct, recognition of one's strengths and weaknesses, identification of one's influence on others, and understanding of how one is perceived by others; (b) internalised moral perspective, which refers to behaving according to one's internal moral values and doing the right thing out of desire for fairness and justice; (c) balanced processing of information, which is the ability to listen and attentively analyse different points of view and opinions before making any decision; and (d) relational transparency, which includes sincerity, honesty, and the absence of ulterior motives in one's conduct within the environment

In a given environment, the psychological climate is instrumental in satisfying psychological needs (Karanika-Murray et al. 2017). Encouragement of individuals to experience freedom of action (i.e. autonomy supportive climate) in educational and learning settings is vital for prompting students' wellbeing and success (Black and Deci 2000; Reeve and Jang 2006; Ruzek et al. 2016). Teachers play a central role in allowing students to choose whether and how to engage in learning activities and meet schooling demands (Dincer et al. 2012; Leroy et al. 2007; Reeve and Jang 2006).

Although authenticity of students at risk has been rarely studied empirically, if at all, there are studies on students' identity formation processes, which include characteristics similar to those of authenticity, such as self-awareness of strengths and weaknesses, truth telling, true ego expression, and loyalty to internal values (Harter et al. 1997; Luyckx and Robitschek 2014). Luyckx et al. (2006) described the positive connection between satisfaction of psychological needs and the process of identity formation, which includes authentic characteristics. The researchers argued that meeting psychological needs provides students with the energy

needed for personal inquiry and identity formation, and explains how each of the three needs contributes to this process. In an empirical study, Thomaes et al. (2017) found positive relations between satisfying students' psychological needs and their sense of authenticity. The researchers provided a more reserved explanation of the association than that of Luyckx et al. (2006), and contended that students whose psychological needs are satisfied behave in a way that expresses their inner self, based on their values and thoughts. Thus, we hypothesise:

Hypothesis 1: Autonomy-supportive climate is positively related to the sense of authenticity of students at risk.

Authenticity and dropout risk of students at risk

Dropping out is a complex phenomenon, with social and economic implications both for the students themselves and for society as a whole (Cebu Lal 2017; Goldie et al. 2016). The consequences may be reflected in low income in the future, employment difficulties, health problems, and low self-esteem, among others. Students who dropped out of school are at a greater risk of drug use, crime, violence, extramarital pregnancies, suicides, etc. (Fitzpatrick et al. 2015; Gase et al. 2014). Magen-Nagar and Shachar (2017) considered the dropout risk to include such components as irregular school attendance, low academic achievements, discipline problems, anti-social orientations, and more. Discipline problems were found to have the strongest correlation with interest in schooling compared to the other three factors (− .51 vs. the average of − .22 of other three components) (Magen-Nagar and Shachar 2017).

As noted above, empirical research on authenticity of students at risk is scarce, and to best of our knowledge, previously, no work explored the link between the authenticity of students at risk and their dropout risk. The organisational and psychological literature indicates a positive association between people's sense of authenticity and their positive and adapting performance (Rivera et al. 2019). Gardner et al. (2005), for example, claimed that employees with authentic feelings experience greater trust in their employers, which contributes to their performance. Similarly, in an empirical study, Leroy et al. (2015) found a positive link between authentic feelings and work role performance. In education research, Shapira-Lishchinsky and Tsemach (2014) found that teachers with authentic feelings exhibit low negative organisational behaviours (delays, absences, and departures). Thomaes et al. (2017) found that students who experience a sense of authenticity feel greater emotional wellbeing, and argued that this effect contributes to their success in school. Based on the above literature, it appears that students' sense of authenticity can reduce their risk of dropping out from school.

Hypothesis 2: The sense of authenticity of students at risk is negatively related to their dropout risk.

The authenticity of students at risk as a mediator of the relations between autonomy-supportive climate and their dropout risk

Based on previous scholarly works, we suggest that a negative correlation exists between satisfying students' psychological needs and dropping out of school, and argue that this effect is mediated by their sense of authenticity. Various studies on reducing school dropout

proposed that satisfying students' psychological needs (i.e. autonomy, competence, relatedness) may prevent them from dropping out of school (Poulou and Norwich 2019). For example, Milyavskaya et al. (2009) found negative relationships between satisfying the psychological needs of adolescents in school and their intentions to drop out of school. In this study, adolescents who reported that their psychological needs were met at school were happier, and were at a lower risk of dropping out. Complementing this study, research conducted on adaptive functioning in schools, indicated that that satisfying students' psychological needs increased their internal motivation and the likelihood of their academic success (Deci and Ryan 2016; Niemiec and Ryan 2009; Tessier et al. 2010). Furthermore, a study by Diseth et al. (2012), which included 240 students aged 13–16, also found a link between satisfying students' psychological needs by their teachers, and their level of achievement and satisfaction with the school.

The literature proposes that satisfying individuals' psychological needs contributes to their sense of authenticity and self-fulfillment (Vansteenkiste and Ryan 2013; Reeve 2012; Osterman 2000). We therefore contend that a sense of authenticity serves as a mediator of the effect of an autonomy-supportive climate, and this climate is positively related to the sense authenticity of students at risk. Some empirical support to a somewhat parallel mediating relation exists. Thomaes et al. (2017) recently demonstrated how adolescents' sense of authenticity mediates the relationship between satisfying their psychological needs and their wellbeing. Students' wellbeing is known to contribute to their academic success and reduce dropout (Gutiérrez et al. 2018; Korhonen et al. 2014).

Based on the literature presented above, it is reasonable to assume that there is a connection between autonomy-supportive climate in school and the dropout rate of students at risk, and that this effect operates through the students' sense of authenticity. This enables us to identify the role of authenticity as a key operational psychological mechanism behind the relation between autonomy-supportive climate and dropout risk, which can provide insights for managing effective second chance programmes. Thus:

Hypothesis 3: An autonomy-supportive climate is negatively correlated with students' risk of dropout from school.

Hypothesis 4: A sense of authenticity of students at risk plays a mediating role in the relation between autonomy-supportive climate and dropout risk of students at risk.

Method

The purpose of this study was to examine the relationship between the effect of an autonomy-supportive climate in a second chance programme on the students' dropout risk, and the mediating role of the students' sense of authenticity in this relation. The study is based on a quantitative field survey focusing on the HILA programme, in Israel, a "second chance" state programme designed to provide education and to reduce the educational deficits of youths at risk. The programme is offered by the Department of Education of Children and Youths at Risk in the Pedagogic Administration of the Ministry of Education. It is operated countrywide by local authorities and youth protection institutions. The programme includes 196 units (151 units operated by local authorities, and 45 at youth protection institutions, prisons, and detention centres), and it serves over 7000 youths at risk. This is the only state programme for youths who dropped out from formal education, and that aims to assist them in completing

their education. Past students' classification to grade level or year before dropout from formal education is less relevant to the programme given the students' severe academic difficulties. A personal and flexible curriculum is designed for each student, and students are assigned a certain number of learning hours taught in individual or group classes. The programme has two main study tracks: (a) for completing 8th, 9th, or 10th grade studies (mostly for youths in early adolescence, aged 13–15); and (b) for completing 12th grade level studies and when possible take the matriculation exams (mostly for youths in late adolescence, aged 16–18).

Participants and procedure

The study was approved by an institutional review board (IRB) and the Office of the Chief Scientist in the Ministry of Education. The participation of HILA units in the study required the agreement of the unit manager. Unit managers were assured that the students and the unit would remain anonymous, and that all details would be reported in a way that would prevent any identification. The students were informed of the various objectives and aspects of the research. It was made clear to potential participants that non-participation would have no effect, that they would be able to discontinue their participation at any stage, without consequences, that the data would be used for research purposes only, and that identifying data would remain confidential and would not be available to anyone other than the research team. The data were collected from the students with their full consent, using questionnaires.

Inclusion criteria for the sample were (a) adolescent's age (13–18 years); (b) being formally considered a student in the HILA programme during the time of data collection; (c) expressing willingness to participate in the study; and (d) giving informed consent. The exclusion criterion was failure to provide complete data on the survey. The final sample includes 181 students at risk, aged 13–18, from different units of the HILA programme, of whom 53.59% were boys and 46.41% girls; 11.05% were aged 13–15, and 88.95% were aged 16–18; 35.36% were secular, 37.02% came from traditional backgrounds, 27.07% were religious, and 0.55% were ultra-Orthodox. Of the students, 23.2% reported that their mother's education level was less than high school, and 42% reported that their mother completed high school education; 19.9% of the students participating in the study were raised in single-parent families by their mothers; 71% were from large families of 3 children or more, and about half of the students from large families (i.e. 37.6% of all students) reported that they belonged to families with 5 children or more. Because of ethical considerations having to do with the privacy of the youths, and not to cause discomfort, we did not collect sensitive background data. We can learn about these aspects; however, from existing research on the HILA programme, which reported that 42% of the students were known to law enforcement system, 6% of them were removed from their homes by the court, and 3% tried to commit suicide (Cohen-Strawczynski and Budowski 2002). The students who agreed to participate in the study completed a psychological need satisfaction questionnaire, an authenticity questionnaire, and a dropout risk questionnaire.

Measures

Autonomy-supportive climate The study used the psychological needs questionnaire by Kunter et al. (2007). Leroy et al. (2007) argued that "the concept of 'autonomy support'

refers to cases when the teacher promotes satisfaction of students' needs for autonomy" (p. 535); therefore we used the autonomy and competence subscales (6 items each). According to Kunter et al. (2007), combining autonomy and competence items into a single factor is valid (p. 498). A sample item for satisfaction of need for autonomy was "In this lesson, we are taught to work independently". A sample item for satisfaction of need for competence was: "In this lesson I am considered capable of accomplishing difficult tasks. "Students were asked to specify their level of agreement with statements on a 5-point Likert-type response scale. Before conducting a factor analysis, we investigated the correlation between the two original subscales and found a correlation of .84, which further supported our intention to treat the two as one construct. As suggested, exploratory factor analysis confirmed the existence of one factor with eigenvalue above 1, which accounted for 54.84% of the variance (α = .92). Intra-class correlation (ICC) was calculated, to investigate whether the scores may be aggregated from the individual level to the group level and thus represent the autonomy-supportive climate (Bliese 1998). ICC results showed substantial group-related variance (23.7%), which justified aggregation.

Students' authenticity The study used the short adaption by Leroy et al. (2015) of the authenticity inventory, developed by Kernis and Goldman (2006). The short version contains only 16 items (instead of 44), which reduces the burden for the participants. The 16 items are divided into four subscales (4 items each): (a) self-awareness (e.g. "I am aware of why I do the things I do"), (b) internalised moral perspective (e.g. "I stay true to my personal values"), (c) relational transparency (e.g. "I often behave in a way that does not reflect my true feelings or thoughts" reverse item), and (d) balanced information processing (e.g. "I try to block out unpleasant feelings about myself" reverse item). Students were asked to mark their level of agreement on a 5-point Likert-type response scale. To the best of our knowledge, this was the first use of the instrument, originally designed for adults, with youths who are still in the process of identity formation. Therefore, we exercised extra caution and explored the interrelations between the four subscales. Self-awareness and internalised moral perspective showed high inter-correlation with each other (r = .72) and very low correlations with the relational transparency and balanced information processing subscales (average r = .11). Therefore, we focused exclusively on the self-awareness and internalised moral perspective factors in our analysis. Exploratory factor analysis indicated one factor with eigenvalue above 1, which represented 61% of the variance (α = .90).

Dropout risk The study uses the problems with discipline subscale of the questionnaire developed by Magen-Nagar and Shachar (2017). The discipline problem subscale contains 4 items, for example, "I try to follow the educational centre's procedures" (reverse item). Participants were asked to indicate their level of agreement with the statements on a 6-point Likert-type response scale. An exploratory factor analysis showed one factor with eigenvalue above 1, capturing 58.59% of the variance (α = .80).

Controls Previous research suggested that students' personal demographic attributes, such as gender and socioeconomic status affect their dropout risk (Magen-Nagar and Shachar 2017). Therefore, we controlled for the effect of student's gender (1 = male, 2 = female) and SES-related variables such as the education level of the students mothers (1 = elementary, 2 = high school, 3 = higher education).

Analytic strategy

First, we used Mplus software, version 6.12, for confirmatory factor analysis (CFA) (Muthén and Muthén 1998-2011). Second, we tested the hypothesised multilevel path model with Mplus software. Multilevel modelling enables testing direct and indirect effects in models (Preacher et al. 2010). Our approach allowed us to assess how the hypothesised measurement and structural models fit with the data. A fit is considered acceptable when χ^2/df is lower than 2, CFI is higher than .90, and RMSEA is lower than .08 (Kline 1998). The Appendix contains a full description of the model equations.

Results

Table 1 presents the means, standard deviations, and correlations between study variables. Examination of the correlations provides preliminary support for our hypotheses. We found a significant positive correlation between autonomy-supportive climate and the sense authenticity of students at risk (r = .42), and significant negative correlations between the sense of authenticity of students at risk and their dropout risk (r = − .47), as well as between autonomy-supportive climate and students' dropout risk (r = − .38).

Next, we conducted CFA to test the discriminant validity of the constructs (Table 2). We used Mplus software to model the latent factors with their respective items. Specifically, we tested the original theoretical three-factor model of the individual-level data collected. Results showed that the three-factor model displayed excellent fit.

Multilevel path model

Figure 2 displays the results of the multilevel path model evaluating the relations between autonomy-supportive climate (level 2 variable), students' authenticity, and students' dropout risk (level 1 variables). Because student gender emerged in the correlations as unrelated to dropout risk, only the education level of the students' mothers was included as a level 1 covariate. All variables were modelled as observed constructs. The fit indices for the path model were good, ^{2} (12) = 18.02, p < .05, ^{2}/df = 1.50, CFI = .92, RMSEA = .06. As suggested, autonomy supportive climate positively predicted the sense of authenticity of students at risk (B = .60, p < .001), the sense of authenticity of students at risk negatively predicted students' dropout risk (B = − .50, p < .001), and autonomy supportive climate negatively predicted students' dropout risk (B = − .41, p < .05). Hence, the effects found in the

Table 1 Descriptive statistics and correlations for study variables (N = 181)

	Mean	SD	1	2	3	4
1. Autonomy-supportive climate[a]	3.85	0.55				
2. Student's authenticity	4.13	0.79	.42**			
3. Student's dropout risk	2.38	1.09	− .38**	− .47**		
4. Student's gender (1 = male, 2 = female)	1.46	0.50	.13	.18*	− .03	
5. Student's mothers' education[b]	1.91	0.69	.35**	.38**	− .35**	.15

Note. [a] aggregated scores from students. [b] 1 = elementary, 2 = high school, 3 = higher education. *p < .05. **p < .01

Table 2 Results of confirmatory factor analysis

Measurement model	χ^2 (*df*)	CFI	RMSEA
Three-factor model (ASC, AU, DR)	220.95 (114)	.94	.07

Note. ASC, autonomy-supportive climate; *AU*, authenticity; *DR*, dropout risk

multilevel path model analysis supported hypotheses 1–3. Hypothesis 4 concerned the mediating role of students' authenticity in the association between autonomy-supportive climate and student's dropout risk was also tested. The mediation analysis indicated a significant indirect effect operating by way of the students' authenticity ($B = -.29$, 95% CI = − .44, − .12, $p < .01$). Thus, a partial mediation effect was found and hypothesis 4 was also supported.

Discussion

The present study sought to shed light on motivational and identity aspects of youths at risk in a second chance programme. In doing so, the study extended the limited scholarship on motivation and identity of youths at risk in schools. The findings support the proposed hypotheses. The analyses found positive correlations between autonomy-supportive climate and the sense of authenticity of students at risk, and negative correlations between the sense of authenticity of students at risk and their dropout risk, as well as between autonomy-supportive climate and students' dropout risk. As hypothesised, a partial mediation effect was also found, in which autonomy-supportive climate affected students' dropout risk by way of their authenticity.

First, the present findings promote a better understanding of the contribution of autonomy-supportive climate to schooling. According to Reeve and Jang (2006), "autonomy support revolves around finding ways to nurture, support and increase students' inner endorsement of their classroom activity" (p. 210). The present findings help explain earlier findings on the

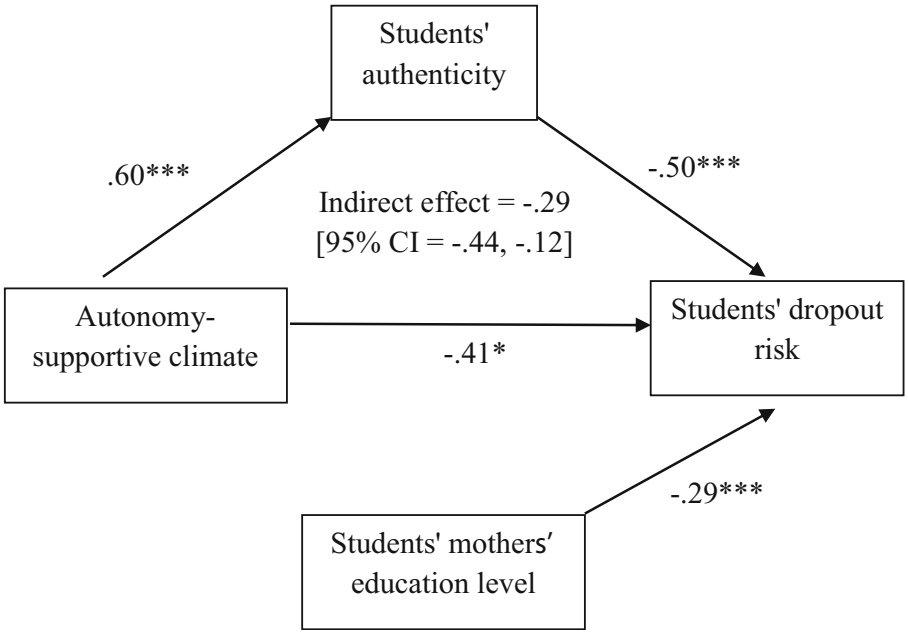

Fig. 2 Results of multilevel path model (unstandardised estimates)

differences in reports on levels of schooling responsibility between persisters and dropouts in second chance programmes (Lange and Lehr 1999), as they associate parallel differences with levels of autonomy-supportive climate in classroom. Research about normative youths in schools has focused on the contribution of autonomy-supportive climate to promoting students' intrinsic motivation, involvement, achievements, and academic success (Leroy et al. 2007; Reeve and Jang 2006; Wang et al. 2016). Researchers investigated mostly positive engagement in learning (Reeve 2012), whereas negative engagement in schooling (e.g. indiscipline and irregular attendance) was less explored, despite its importance (Finn and Zimmer 2012). The present study extends previous research, which explored only the link between the youths' need satisfaction and authenticity at the individual level (Thomaes et al. 2017). The current research explores cross-level relations between the need satisfaction environment (specifically, whether or not it is autonomy-supportive) and the youths' authenticity, which is more relevant than individual-level design for explaining processes in educational settings in which students are nested within classrooms (Raudenbush and Bryk 1986).

Second, the present study focused attention on the authenticity of youths at risk and shed light on its positive effect on the schooling of these youths by reducing their dropout risk. Authenticity is considered a key self-defining element in modern Western societies (Read et al. 2011; Wald and Harland 2017): "For many adolescents, the desire to be authentic is palpable and strong" (Thomaes et al. 2017, p. 1052). It is possible that the negative effect of youth authenticity on dropout risk was mediated by another factor. For example, previous research found that adolescents' authenticity enhances their subjective wellbeing (Thomaes et al. 2017), which may act as a key mechanism of the effect of authenticity in reducing dropout risk. Adolescence is a time when youths are mastering their ability for role differentiation, as they assume and discard social roles in different social contexts (Chen et al. 2006); therefore, a consistent sense of authenticity is vital for helping young people concentrate on their personal goals.

Third, the findings are consistent with recent research on youth authenticity mediating the association between need satisfaction and subjective wellbeing (Thomaes et al. 2017), and show that authenticity is an important component in the integration of youths at risk in schools. At the same time, the results of the current study suggest the presence of a direct effect of autonomy-supportive climate on students' dropout risk. Thus, although individual authenticity may be valuable, it may be less strongly related to dropout risk than autonomy-supportive climate is at classroom level.

Implications

The findings of the study have important implications for policymakers, administrators, and teachers of second chance programmes for youths at risk. First, given that school dropout is a central concern of policymaking in education (Freeman and Simonsen 2015; Ross and Gray 2005), the results of the study may be instrumental for policymakers promoting the policies of second chance programmes. Policymakers can allocate funds for training teachers of second chance programmes to master applicative interventions that have proven effects on nurturing and satisfying students' autonomy needs (Su and Reeve 2011) and promote youths' authenticity (Whitehead 2009). Second, although the present work is based on psychological theory, it also reflects the theoretical literature on the design of second chance programmes for youths

at risk. For example, according to Inbar (1995) successful second chance programmes allow students to voice their opinions about the curriculum and to influence it. These design principles parallel to some degree an autonomy-supportive climate. Based on our findings, we recommend administrators of programmes supporting youths at risk to embed these principles into the schooling structure and culture of the programmes, and allow students to express their opinions and shape their learning environment. Finally, the findings emphasise the important role of the teacher, who is the actor closest to the students, in strengthening the students' sense of authenticity, especially for youths who struggle to classify themselves according to mainstream categories. Our findings may encourage teachers to adopt an approach that allows their students to learn through trial and error, without fearing failure, and in this way develop resilience and a personal identity (Inbar 1995).

Limitations and future research

The present study has several limitations. First, the study sample was Israeli. Israel is considered a country with low social power hierarchy by comparison with other Western countries, mainly English-speaking ones, therefore the distance between individuals located in various positions in the hierarchy in less marked (Hofstede 2001). The cultural aspect of low social power may better promote an autonomy-supportive climate compared with other cultures. Therefore, we recommend replicating the study in other countries. Moreover, it is unclear whether authenticity in youths is experienced similarly in individualist and collectivist cultures (Thomaes et al. 2017); thus, additional research is warranted on this topic as well. Second, the present study adopted a cross-sectional correlative design, which limits our ability to infer causality. Although, earlier studies have indicated a causal link between satisfaction of need for autonomy and authenticity of youths at the individual level (Thomaes et al. 2017), and support the rationale of the model we employed, longitudinal studies may help establish the casual relations between the variables. Finally, the present study was among the first to use a multi-dimensional measure to asses authenticity of youths at risk. As reported, some aspects of authenticity did not align with each other, and future exploration of the development of authentic identity of disconnected populations is needed.

Conclusions

A large percentage of the young population in Western countries is not in school or at work. These disconnected youths (Cebu Lal 2017; Goldie et al. 2016; Hair et al. 2009), often at risk, belong to socio-economically disadvantaged groups (Marchbanks III et al. 2015; Savelsberg et al. 2017). Designing and implementing successful second chance programmes is vital for helping reduce social inequality. Although many design and implementation issues have to do with instrumental resources, others concern psychological ones. The limited knowledge on the motivational and identity aspects of youths at risk in second chance programmes prevents effective design of second chance programmes. The present study is an important addition to this knowledge base and may help stimulate researchers, practitioners, and policymakers to engage with the psychological aspects of learning in second chance programmes.

Appendix. Equations of multilevel analysis

Level 1 model

$$\text{Student's dropout risk}_{ij} = \beta_{0j} + \beta_{1j}*\left(\text{Student's mother education}_{ij}\right) + \beta_{2j}*\left(\text{Student's authenticity}_{ij}\right) + r_{ij}$$

Level 2 model

$$\beta_{0j} = \gamma_{00} + \gamma_{01}*\left(\text{Autonomy−supportive climate}_{j}\right) + u_{0j}$$

$$\beta_{1j} = \gamma_{10}$$

$$\beta_{2j} = \gamma_{20}$$

Mixed model

$$\text{Student's dropout risk}ij = \gamma_{00} + \gamma_{01} * \text{Autonomy−supportive climate}_{j} + \gamma_{10} * \text{Student's mother's education}_{ij} + \gamma_{20} * \text{Student's authenticity}_{ij} + u_{0j} + r_{ij}$$

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Current Themes of Research:

At-risk youth. Identity. Authenticity. Motivation.

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Educational leadership. Ethics and social justice in school management. Motivation, identity and emotions in schools.

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