

# South African Youth and the Labor Market

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**Abstract:** South Africa continues to be marked by high youth unemployment. This paper investigates youth labor market perspectives in northern South Africa in the light of data from the Livelihoods, Religion and Youth Survey. In addition to standard explanatory variables of labor market outcomes, it explores whether the ‘soft’ factors of social capital and religion might contribute to youth’s labor market success. Methodologically, the study draws on descriptive statistics and the estimation of linear probability models. The results indicate that religious social capital goes along with improved labor market success, while there is no indication in the data that (non-religious) social capital or religiosity are positively correlated with labor market performance among the youth in the sample. The social capital created in religious communities seems to contribute to youth labor market success. Further research should investigate how these structures can serve as models for the improvement of government interventions aiming at improving youth labor market outcomes. Moreover, the results are in line with the findings of previous research on spatial mismatches in the labor market and highlight the need for job creation, particularly in rural areas.

**Keywords:** youth; labor market; unemployment; South Africa; religion; social capital



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## 1. Introduction

Youth labor market perspectives remain a crucial concern in South Africa. Statistics South Africa’s most recent labor force survey shows a rate of young people between the ages of 15 and 34 who are not in education, employment, or training (NEET) of 43% (In the South African policy context, youth is defined as the age group from 15 to 34 years [1]. Hence, this age group is used in this paper). When including discouraged work-seekers, unemployment is at 74.1% in the age group of 15 to 24 and 49.8% in the age group of 25 to 34 [2] (p. 48). Particularly in rural and historically disadvantaged former homeland areas, the figures are even higher. There is also a stark contrast between previously advantaged and previously disadvantaged population groups: while the expanded unemployment rate of ‘White’ persons is at 13.0%, for the ‘Black’ population majority, the rate is at 47.4% [2] (pp. 46–47).

Various policy initiatives have been launched to increase youth employment, such as tax incentives for the employment of young people, financial support to youth business and small business initiatives, internships in the public sector, and the increased inclusion of youth in public work programs [1]. However, the policies implemented so far have not decreased youth unemployment substantially [3]. Unemployment in South Africa seems to have structural causes [4,5], which the policies have not addressed.

Various studies have investigated the causes of youth unemployment. There is a lively discussion in the literature on the role of the social grant system, particularly the effect of child and old-age grants on young people’s labor market supply [6]. Two further key issues are spatial mismatches [7] and mismatches between young people’s qualifications and the skills demanded in the labor market [8].

This paper contributes to the literature by investigating youth labor market performance in the predominantly Setswana- and Sepedi-speaking regions of the Limpopo, Northwest, Gauteng, and Mpumalanga provinces of South Africa. I use a novel dataset, the Livelihoods, Religion and Youth Survey, a comprehensive household survey led by the author in 2016 for the purposes of this and other studies. The survey covers rural, urban, and semi-urban (township) areas. Due to its focus on areas with a high percentage of Sepedi and Setswana speakers, various former homeland areas are covered, and the majority of the sample is from previously disadvantaged population groups. The data shows only 34% of out-of-school youth aged 15 to 34 to be active in the formal sector, either through formal employment or tertiary education or training. Only 18% are engaged in informal labor market activity. This leaves nearly half of the youth unemployed or economically inactive.

In this context, the aim of this paper is to explore what factors and strategies available to youth contribute to success in the labor market in economically weak regions of South Africa. In addition to standard explanatory variables of labor market performance, such as educational and sociodemographic factors, the article focuses on the receipt of social grants in the household, rural-urban migration and the 'soft' factors of social capital and religion. While there is some evidence on the effects of social grants on youth labor supply and migration decisions [6,9], the roles of social capital and religion have, to the best of my knowledge, thus far not been taken into account in economic research on youth labor market performance in South Africa.

The concept of social capital employed in this paper relies on Portes [10], who—relying on Bourdieu and Coleman—defines it as follows: “Social capital stands for the ability of actors to secure benefits by virtue of membership in social networks or other social structures.” As Maselko et al. [11] point out, “religious communities, which are based on longstanding social relationships within a context of shared beliefs, represent a social space that may be particularly salient as repositories of social capital.” Hence, this article takes into account a specific form of social capital, religious social capital, which by extension of Portes’ aforementioned definition, is here conceptualized as the ability of actors to secure benefits by virtue of membership in religious networks or other religious structures. In addition to religious social capital, religion is furthermore operationalized as individual religiosity using Huber’s Centrality of Religion Scale [12].

The empirical approach is the estimation of probit models of different labor market outcomes, such as being in formal employment and being in informal (self) employment. I control for a range of covariates relating to sociodemographic factors, such as education, migration, rural or urban residence, social grant receipt, social capital, and religion.

The results substantiate the findings of the literature both on skills mismatches and spatial mismatches. Tertiary education qualifications are not found to be correlated with better labor market outcomes, while urban residence is a strong predictor of working, both in the formal and the informal sector. The receipt of old-age grants in a household goes along with a lower probability of youth engagement in formal and informal labor market activity. Moreover, religious social capital seems to have a positive effect on youth labor market outcomes.

The remainder of this paper is organized as follows. Section 2 outlines key choices faced by out-of-school youth and the literature on the determinants of youth labor market success in South Africa. Section 3 introduces the Livelihoods, Religion and Youth Survey and provides a descriptive analysis. Section 4 presents the econometric analysis. The results are discussed in Section 5.

## 2. Literature Review

Upon leaving secondary school, young adults are faced with numerous choices that have implications for their success in the labor market. Whether to look for employment in the formal labor market or to rather focus on informal income-generating activities is a first key choice. The South African labor market has a dual nature [13], in the words of

South Africa's former president Thabo Mbeki, divided into a 'first world economy' and a 'third world economy' [14]. The upper 10% of the working population earns wages at the levels of high-income countries from relatively secure formal employment. While the formal sector provides stable and comparatively high income, it is unable to absorb large parts of the population. Wages at the lower end of the distribution are at the levels of the poorest countries in the world, and employment is informal and insecure [15]. In the literature on the South African informal sector, it is, hence, generally accepted that informal economic activity, consisting mostly of microbusinesses, is only a second-best option to formal-sector economic activity [16,17]. This is unsurprising considering that half of the informal businesses had a turnover of about USD 108 per month, and only about 10% made monthly profits of over USD 430 [18].

A second set of choices relates to tertiary education. Tertiary education substantially improves the chances of being in formal-sector employment. While the decision to engage in tertiary education is dichotomous, important subdecisions have to be made regarding the subject of study and the type of qualification to enroll for (learnership, certificate, diploma, or degree), as well as the specific educational institution to be attended. While tertiary education increases the chances of finding formal-sector employment, it is an expensive investment due to the high direct (tuition fees) and indirect costs involved. Moreover, there are opportunity costs due to the potential foregone income because of not being able to work during the time spent studying. Furthermore, having a tertiary qualification is no guarantee for finding a job. Particularly in rural areas, unemployment rates among graduates of tertiary educational institutions are high. Makhuduthamaga, one of the municipalities covered by the present dataset, has an unemployment rate of 28.5% among those that have graduated from a tertiary institution, as pointed out in a Sunday Times report on 24 April 2016. There is evidence of skills mismatches. Mncayi and Dunga [8] show that students' subjects of studies have a significant impact on the length of their unemployment after graduation. They find graduates the humanities, especially majors in public management, public administration, and politics, were found to be unemployed longer after graduation and more likely to be underemployed once finding labor than those graduating in the sciences, especially accounting, math, education, and health, which show the shortest waiting period for labor after graduation. In a similar vein, Yu [3] finds that the skills obtained by youths do not match industries' needs and that the quality of education, lack of experience, and expectations of the youths were the main causes of youth unemployment. Oluwajodu et al. [19] show that skills, educational institution, and the differences in expectations of employers and prospective employees to be major factors for unemployment among university graduates.

A third set of choices relates to migration. Particularly in rural areas where employment opportunities are relatively scarce, individuals are faced with the choice of whether to relocate elsewhere, to a regional urban center (such as the provincial capital) or to one of the large, metropolitan areas constituting the economic hubs of the country (Johannesburg/Pretoria, Durban, or Cape Town). Fintel and Fourie [20] additionally point to persistent institutional weaknesses of former homeland areas, causing people to out-migrate from these areas, particularly to urban centers. Migration, however, is costly, and household financial constraints play a role in this decision. Yu [7] finds evidence for spatial mismatches, which extenuate previously disadvantaged population groups. His study showed that poverty, lack of mobility, and high unemployment in the residing area, in addition to the high cost of a job search, are the major factors discouraging youth from actively looking for employment. The impact of social grants on labor supply is studied by Ardington et al. [9]. The authors find young men to be more likely to migrate for work opportunities when someone in their household receives an old-age pension. The article shows that a relaxation of the financial constraints of a household allows young men with a secondary school to engage in a relatively costly job search far away from home.

Moreover, discrimination seems to persist in the South African labor market. Baldry [21] points out that social factors such as 'race', socio-economic status, and year of graduation

had a major impact on graduates' unemployment, while factors such as field of study, career guidance, or marks obtained are found insignificant for employment. 'Race' is the strongest factor for employment after graduation. 'Black' students are five times less likely to be employed than students from 'White', 'Coloured', or 'Indian/Asian' backgrounds with similar educational characteristics ('Black', 'Coloured', 'Indian/Asian', and 'White' are racial categories introduced in South Africa during apartheid. They are still used in South Africa's official statistics). Anand et al. [22] find prior work experience and gender to be essential determinants of finding employment in the formal sector. High unemployment rates at large are found to be caused by skills mismatches, low educational levels, and the apartheid legacies.

Social capital has been shown to play an important role as an asset with economic returns, particularly in developing countries [23,24]. Various studies highlight the role of social capital for finding employment [25–27]. Moreover, religious communities play an important role for youth. Research indicates that religion not only constitutes an important source of identity and stability in early adolescence [28,29], but that religious communities also provide direct support to youth in economic terms [30,31]. Fruehwirth et al. [29] show that religion buffers against depression factors better than number of friends or school activities. Focusing on the South African context, Brittan et al. [32] find that adolescents from urban areas in South Africa report similar experiences of being religious to those described in North American contexts. Religion is reported to provide a sense of purpose and meaning in life and to offer social and emotional support, fostering the healthy development of adolescents, even in particularly stressful and high-risk environments. Brittan et al.'s [32] paper also points out that most youth are well-aware of the conflicts that could possibly arise between cultural and religious practices and beliefs, but that most of them find ways to combine both.

### 3. Materials and Methods

#### 3.1. Core Concepts: Social Capital and Religious Social Capital

Bourdieu [33] describes social capital as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition—or in other words, to membership in a group—which provides each of its members with the backing of the collectively-owned capital.” He further notes that “these relationships may [ . . . ] be socially instituted and guaranteed by the application of a common name (the name of a family, a class, or a tribe or of a school, a party, etc.) and by a whole set of instituting acts designed simultaneously to form and inform those who undergo them; in this case, they are more or less really enacted and so maintained and reinforced, in exchanges.” Coleman [34] highlights that social capital enables us to better understand economic actions and locates social capital within “a theory of rational action, in which each actor has control over certain resources and interest in certain resources and events, then social capital constitutes a particular kind of resource available to an actor.” He points out that “social capital is defined by its function. It is not a single entity but a variety of different entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors—whether persons or corporate actors—within the structure. [ . . . ] Unlike other forms of capital, social capital inheres in the structure of relations between actors and among actors.” Drawing on Bourdieu and Coleman, Portes encapsulates this in a more general definition of social capital: “Social capital stands for the ability of actors to secure benefits by virtue of membership in social networks or other social structures” [10].

As Maselko et al. [11] point out, “religious communities, which are based on long-standing social relationships within a context of shared beliefs, represent a social space that may be particularly salient as repositories of social capital”—or in the words of Swart [35] (p. 221), religion can constitute “as a special repository of social capital”. Religious social capital can be considered unique because of the high level of trust prevalent in religious social structures: “Given the quality and extent of its networks as well as the general trust

that it commands, the religious sector could be presented as a special agent and generator of social capital" [36] (p. 28). Cilliers and Wepener [37], as well as Swart [35], have emphasize the crucial role of religious rituals in the generation of religious social capital. Religious rituals promote and foster mutual trust; mutual trust is constantly created and affirmed through religious rituals. Moreover, religious rituals transport and shape values [38], which "contribute to and sustain social capital" (ibid., 11), and might well constitute a very intense form of social capital specific to religious communities. Hence, this article takes into account a specific form of social capital, religious social capital, characterized by a specific density of (religious) social ties and the trust created in social structures inter alia through rituals. By extension of Portes' definition of social capital, religious social capital is here conceptualized as the ability of actors to secure benefits by virtue of membership in religious networks or other religious structures.

### 3.2. Data: The Livelihoods, Religion and Youth Survey

The Livelihoods, Religion and Youth Survey was a cross-sectional household and individual survey conducted in northern South Africa from June to August 2016. It was conceptualized and led by the author for the purposes of this and other studies [39]. The survey focuses on predominantly Sepedi-and Setswana-speaking populations in four South African provinces: Limpopo, Northwest, Gauteng, and Mpumalanga. In total, 1039 households were interviewed across 15 sampling clusters (in most cases, equivalent to electoral wards). The total number of persons listed as members of these households is 4978. In each household, all persons from the age of 15 were interviewed individually, yielding 1863 individuals in the dataset. Here, the focus is on the subsample of youth aged 15 to 34, the definition of youth employed in the South African policy context and used in research on youth in South Africa [1,6]. In total, there are 831 observations in this age group. When subtracting those still attending secondary school, the number is 578. Due to missing values in some of the variables, 497 cases constitute the basis for most of the analyses. All data presented in the following comes from the Livelihoods, Religion and Youth Survey. See Table 1 for an overview of the variables and their descriptive statistics.

**Table 1.** Descriptive statistics.

Variable	Mean	SD
Sociodemographics		
Age	25.79	4.73
Female	0.61	0.49
Household head	0.15	0.36
Disability grant recipient	0.02	0.13
Number of child grants received	0.70	1.18
Sepedi mother tongue	0.44	0.50
Setswana mother tongue	0.41	0.49
Education		
Secondary school completed	0.62	0.49
Vocational training completed	0.03	0.16
College certificate completed	0.13	0.34
College or university diploma completed	0.09	0.29
University degree completed	0.03	0.18
Skills training received	0.21	0.41
Business training received	0.09	0.29
Career counseling received	0.53	0.50
Awareness of after-school career options (1 to 5)	2.39	1.35
Migration and residence		
Migrated in the past five years	0.17	0.38
Residing in urban or semi-urban area	0.40	0.49



**Table 1.** *Cont.*

Variable	Mean	SD
Household composition		
Household size	5.91	3.23
Share of children under 15	0.28	0.22
Share of pension grant recipients	0.05	0.11
Social capital and religion		
Social capital index (0 to 5)	0.58	0.93
Religiosity (1 to 5)	3.95	0.76
Religious social capital (0 to 4)	1.97	0.90
African traditional religion	0.51	0.50
Church membership	0.68	0.47
Labor market participation		
Working in formal sector	0.23	0.42
Working in informal sector	0.22	0.42

Note:  $N = 497$ .

As a unique feature, the Livelihoods, Religion and Youth Survey provides data on social capital, individual religiosity, and religious social capital. Table 2 depicts the questionnaire inventory of the social capital scale. The scale is computed as the sum of the memberships in the different types of social groups mentioned.

**Table 2.** Inventory used for the measurement of social capital.

Questionnaire Item	Response Codes
Do you have any of the following positions?/ Are you a member of any of the following?	Headman/ chief's councilor Sports club Farmers' union Local committee (e.g., ward committee, water committee) Political party

Note: Source: Author's elaboration and Livelihoods, Religion and Youth Survey questionnaire.

Individual religiosity is operationalized using the Centrality of Religion Scale, a state-of-the-art interreligious measurement tool for religious intensity [12,40]. Table 3 outlines the construction and the inventory of the scale employed, which was slightly adapted to the South African context. Religious social capital is measured along the central dimensions of social capital and its functions for economic action [34,41]. Table 4 shows the inventory of the religious social capital scale.

**Table 3.** Inventory of the Centrality of Religion Scale.

Religious Core Dimension	Questionnaire Item	Response Codes
Intellect	How often do you think about <i>religious and spiritual</i> issues? (original CRS: <i>religious</i> )	1 = Never 2 = Rarely 3 = Occasionally 4 = Often 5 = Very often
Ideology	To what extent do you believe that God or ancestors or <i>spirits</i> exist? (original CRS: <i>something divine</i> )	1 = Not at all 2 = Not very much 3 = Moderately 4 = Quite a bit 5 = Very much so

**Table 3.** *Cont.*

Religious Core Dimension	Questionnaire Item	Response Codes
Private practice	(a) How often do you pray? <i>Additional interreligious item for African traditional religion:</i> (b) How often do you praise the ancestors?	1 = Never 2 = A few times a year and less 3 = One to three times a month 4 = More than once a week 5 = Once a day or more often.
Public practice	(a) How often do you take part in church services? (original CRS: <i>religious</i> ) <i>Additional interreligious item for African traditional religion:</i> (b) How often do you take part in African Traditional Religious activities?	1 = Never 2 = A few times a year and less 3 = One to three times a month 4 = More than once a week 5 = Once a day or more often
Experience	How often do you experience situations in which you have the feeling that God or <i>ancestors or spiritual forces intervene</i> in your life? (original CRS: <i>something divine intervenes</i> )	1 = Never 2 = Rarely 3 = Occasionally 4 = Often 5 = Very often

Note: Source: Huber and Huber [12]. Italics indicate modifications to the original CRS applied for the purposes of the Livelihoods, Religion and South Survey. The original wording used in the CRS is included in parentheses. In those dimensions in which additional interreligious versions of the questions are available, the higher value is used to compute the value of the Centrality of Religion Scale. See also Öhlmann, P (2021). Religion and Labor Market Performance: Is It What You Believe or How Much? The author thanks Stefan Huber for this helpful advice. The Centrality of Religion Scale was designed as a measure of intrinsic religiosity [12].

**Table 4.** Inventory of the religious social capital scale.

Dimension of Social Capital	Questionnaire Item	Response Codes
Bridging	How far away is the furthest person with whom you have come in contact through the church?	1 = Other place in the municipality 2 = Other municipality in the district 3 = Other district in the province 4 = Other province 5 = Other country
Bonding/trust	How often do services take place?	1 = Never 2 = A few times a year or less often 3 = One to four times a month 4 = More than once a week 5 = More than three times a week
Bonding/trust	To what extent are most of your friends members of your church?	1 = Not at all 2 = Not very much 3 = Moderately 4 = Quite a bit 5 = Very much so
Social-capital-related resources	How many of the following groups or activities at your church do you participate in?	Savings group Scholarships Burial society Insurance Business workshops Skills training Career guidance
Provision of information	To what extent does your church or members of the church provide each other with information about things outside the church?	1 = Not at all 2 = Not very much 3 = Moderately 4 = Quite a bit 5 = Very much so
Mutual support	To what extent does your church or members of your church support each other?	1 = Not at all 2 = Not very much 3 = Moderately 4 = Quite a bit 5 = Very much so

Note: Source: Author’s elaboration and Livelihoods, Religion and Youth Survey questionnaire.

### 3.3. Methods

The analysis progresses in two steps. First, a descriptive analysis is presented to provide an overview of youth labor market status in the data, as well as correlations of labor market status with religion, social capital, and religious social capital (Section 4.1). To study the factors determining the labor market outcomes of South African youth, the second part of the analysis (Section 4.2) uses probit regressions of labor market status. Labor market outcomes were denoted  $L$ . Four different labor market statuses are used as outcome variables: (1) being active in the formal labor market, (2) being active in the formal or informal labor market, (3) formal labor market activity or enrollment in tertiary education, and (4) formal or informal labor market activity or enrollment in tertiary education (the following description follows Wooldridge [42]).

In the probit approach taken here, a latent continuous variable  $L^*$  is defined as follows:

$$L_i^* = x_i\beta + e_i \tag{1}$$

In (1),  $x_i$  is a vector of the explanatory variables ( $1 \times K$ ), and  $\beta$  ( $K \times 1$ ) is the vector of the estimation coefficients. The error term  $e_i$  is assumed to be normally distributed ( $e_i \sim N(0, 1)$ ). The subscript  $i$  denotes the individual. The explanatory variables include sociodemographic characteristics at the individual and household levels, educational qualifications, social grant receipt, an indicator of residence in an urban area, and an indicator of migration within the past five years, as well as measures of social capital, individual religiosity, religious social capital, and religious affiliation.

$L$  assumes the values of 0 or 1 according to the value of  $L^*$ :

$$L_i = \begin{cases} 0 & \text{if } L_i^* \leq 0 \\ 1 & \text{if } L_i^* > 0 \end{cases} \tag{2}$$

The response probability of each outcome of  $L$  was the probability that the value of the latent variable  $L^*$  is below or above zero. The probabilities are:

$$\begin{aligned} \Pr(L_i = 0|x_i) &= 1 - \Phi(x_i\beta) \\ \Pr(L_i = 1 |x_i) &= \Phi(x_i\beta) \end{aligned} \tag{3}$$

In (2),  $\Phi(\cdot)$  is the standard normal cumulative distribution function. The model is estimated with maximum likelihood estimation in Stata 15.

## 4. Results

### 4.1. Descriptive Analysis: Data on Youth Labor Market Outcomes in the Livelihoods, Religion and Youth Survey

Of those individuals in the dataset that are in the age group between 15 and 34 years and are out of school, only about 23% are in formal employment. While 11% are currently enrolled in a tertiary educational institution, about two-thirds are neither studying nor working in the formal sector. Half of those not working and not studying report to be actively looking for work, while nearly 16% are not looking for work (cf. Table 5).

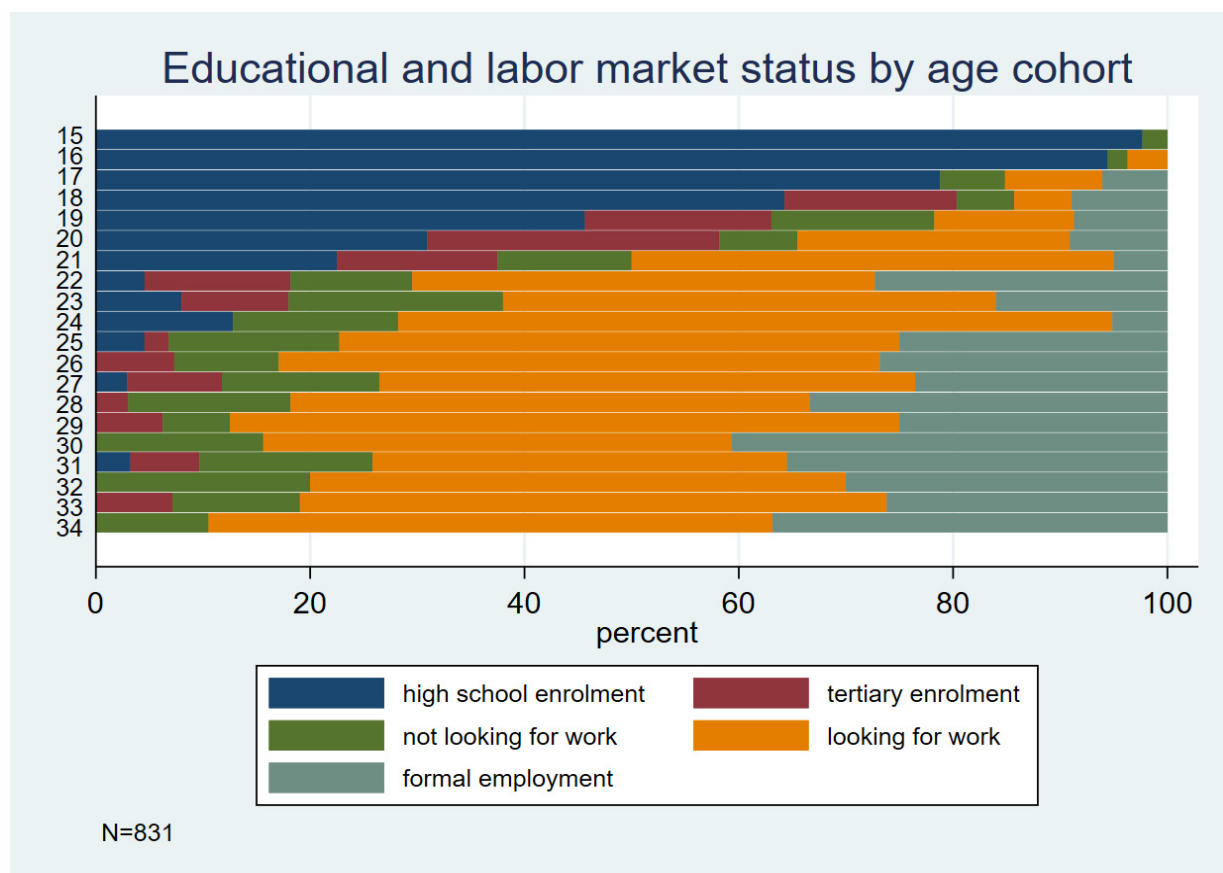
**Table 5.** Educational and labor market status of youth out of secondary school.

Status	Percentage		
	All	Rural	Urban
tertiary enrollment	11.07	7.83	15.88
not looking for work	15.92	15.65	16.31
looking for work	50.17	59.42	36.48
formal employment	22.84	17.1	31.33

Note:  $N = 578$ .



Figure 1 displays the shares of persons in each of these categories by age cohort (including those still attending secondary school). The figures display a low rate of school dropout before finishing grade 12. At the same time, a large proportion of youth was neither absorbed into the formal labor market nor into the tertiary education sector. The majority of youth falls into the gap between tertiary education and the formal labor market. The proportion of NEETs increases as the proportion of secondary school attendees decreases until about age 24 and stays at around 65% from there onward.



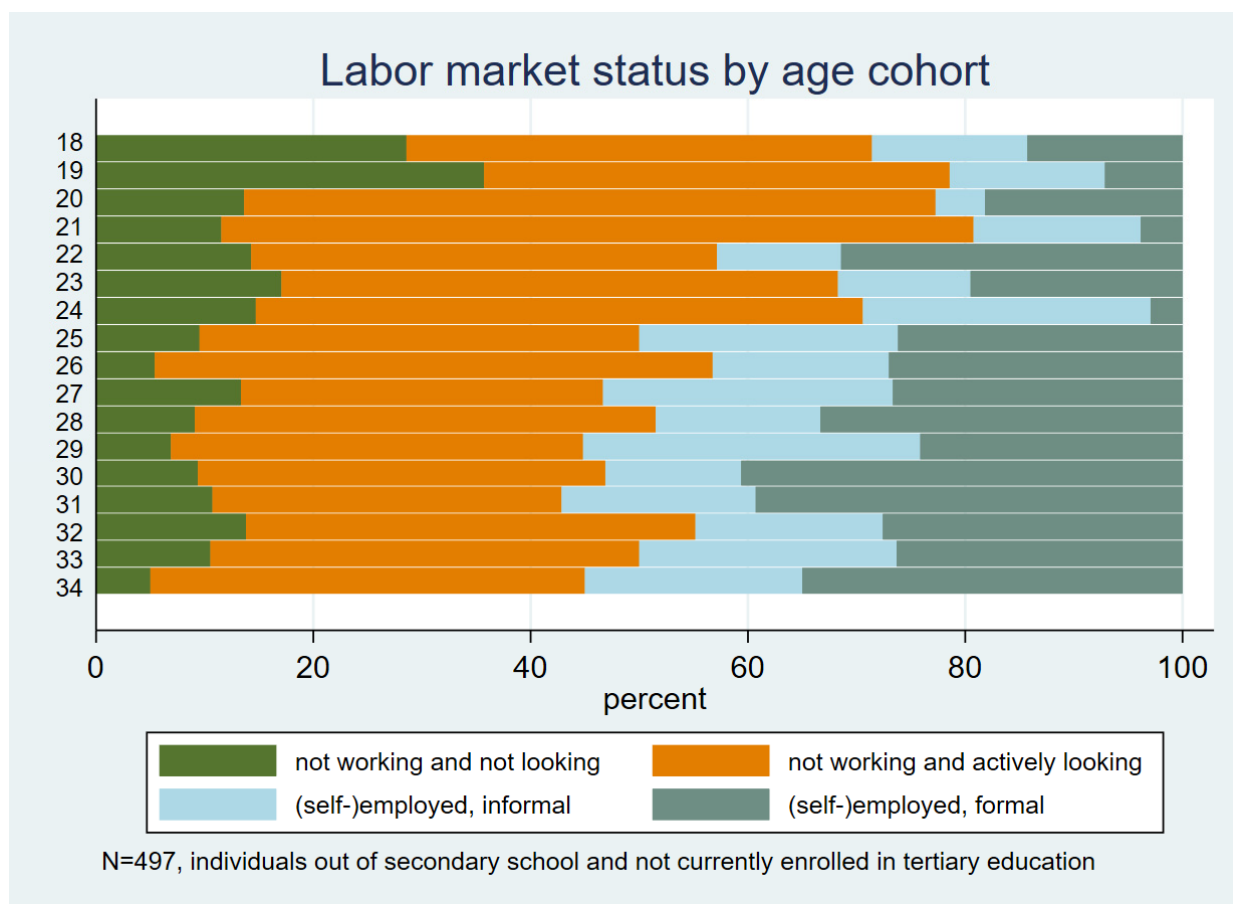
**Figure 1.** Educational and labor market status by age cohort.

Informal economic activity seems to be an alternative only for a minority. Of those neither enrolled in tertiary education nor in formal employment or formal self-employment, only about 24% engage in informal employment or self-employment (see Table 6). Figure 2 zooms in on those out of school and includes informal labor market activity as an additional category. With respect to spatial considerations, Figure 3 depicts labor market status by rural and urban residence and by migration within the past five years. Urban residents and persons who migrated within the past five years are about twice as likely to be in formal employment than not-migrated rural residents (about 16% versus about 30%). The differences with respect to the informal sector are less pronounced. The percentage of persons engaged in informal labor market activity is about one-third higher among the urban or migrated than in the other categories. The percentage of youth not working is highest among the rural or not-migrated (64%), followed by rural or migrated (56%) and urban or not-migrated (51%), with the lowest value in the urban or migrated graph (43%). From the descriptive analysis, hence, it seems that urban residence is a labor market advantage and that migration into an urban area is a possible strategy for youth to increase their chances of informal- and formal-sector employment.

**Table 6.** Labor market status of youth out of school, not enrolled in tertiary education, and not active in the formal labor market.

Status	Percentage
not working and not looking for work	16.04
not working and looking for work	59.63
informal labor market activity	24.33

Note: N = 374.



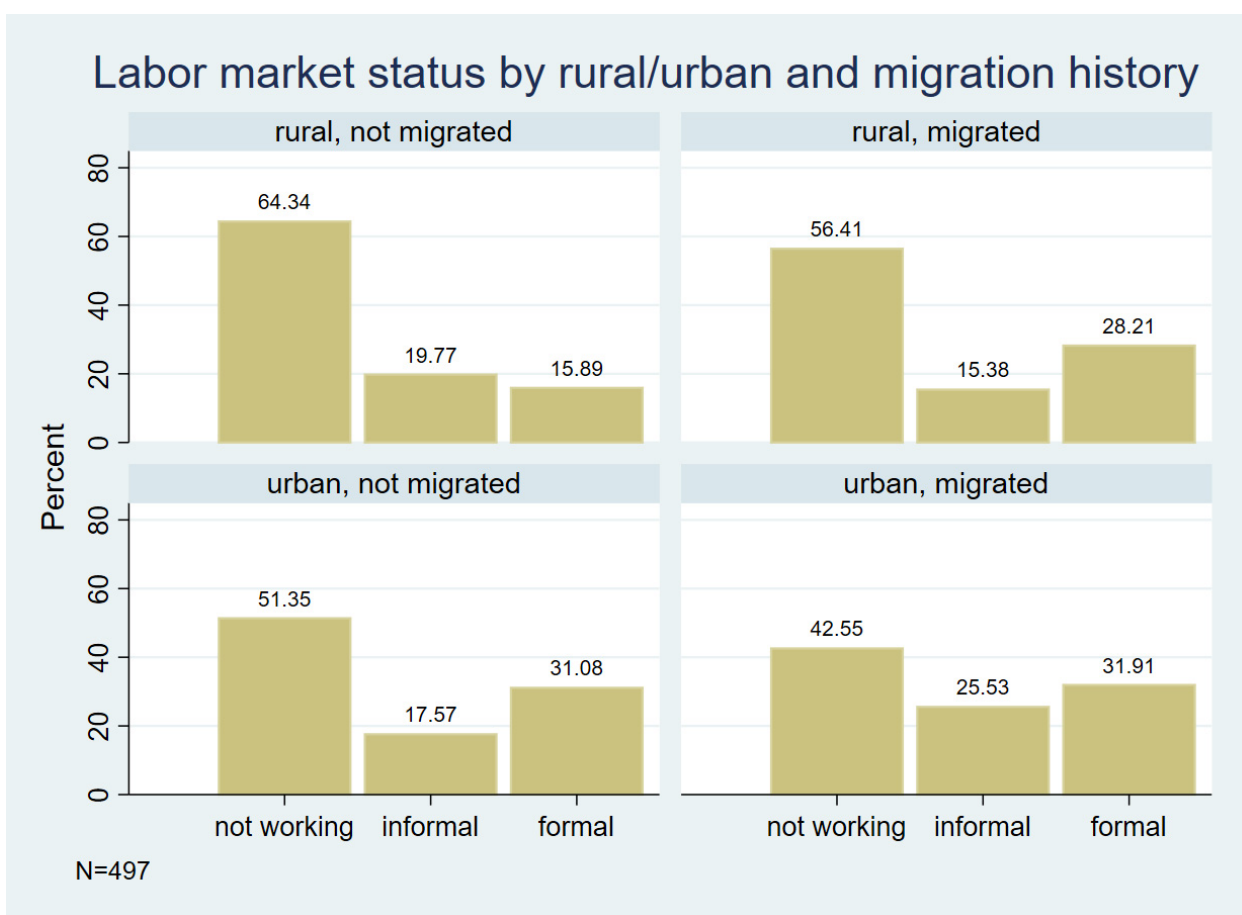
**Figure 2.** Labor market status by age cohort.

Figure 4 displays the deviation from the mean of social capital, individual religiosity, and religious social capital according to labor market status. On average, youth not working have lower values of all three variables. Values of social capital are highest among those in the informal labor market, potentially indicating that access to social networks is conducive to informal economic activity. The mean values of individual religiosity and religious social capital are highest among those in formal employment, deviating from the mean by 12% and 13% of the standard deviations, respectively.

*4.2. Econometric Analysis: Probit Estimations of Four Labor Market Statuses*

Table 7 shows the estimation results of the four binary labor market outcomes specified. Most of the sociodemographic characteristics have the expected sign. Labor market success increases with age. Household heads are more likely to be engaged in both formal and informal labor market activity. Disability, measured by the receipt of a disability grant, reduces the probability of being in employment. Likewise, the probability decreases with an increasing number of children cared for (measured through the number of child grants received). A gender imbalance seems to exist only with respect to informal labor market activity; women are about 10 percentage points less likely to engage in labor market activity

when including informal labor market activity (models (2) and (4)), while in models (1) and (3) the female indicator is not significant. Whether the mother tongue of the youth is Sepedi, Setswana, or another language does not seem to make much of a difference. Interestingly, neither do most of the educational characteristics seem to play a role. The indicators for having completed twelve years of schooling or having obtained tertiary qualifications do not have significant coefficients. Current tertiary enrollment substantially decreases the probability of being in formal employment (by 16.3 percentage points). The fact that the indicator is not significant in model (2) is likely indicative of two opposite trends: while tertiary enrollment decreases the probability of formal employment, youth enrolled in tertiary institutions might be more likely to engage in informal labor market activities during their studies. Having received business training increases the likelihood of informal and formal labor market activity by nearly 15 percentage points, but there is no significant effect when including tertiary enrollment as a positive outcome.



**Figure 3.** Labor market status by rural or urban and migration history (past five years).

Having migrated in the past five years has no significant effect in any of the models. Residence in an urban or semi-urban area, on the contrary, increases the probability of being engaged in formal or informal labor market activity by almost 10 percentage points. It increases the probability of labor market activity and educational continuity by 16.3 and 14.8 percentage points for formal and informal labor market activity, respectively.

Household size and the share of children in the household only have weakly significant coefficients in some of the models. The share of pension grant recipients in the household was associated with a lower probability of being engaged in labor market activity, and a standard deviation increase in the share of pensioners in the household reduces the probability of both formal and informal labor market activity by around 5 percentage points.

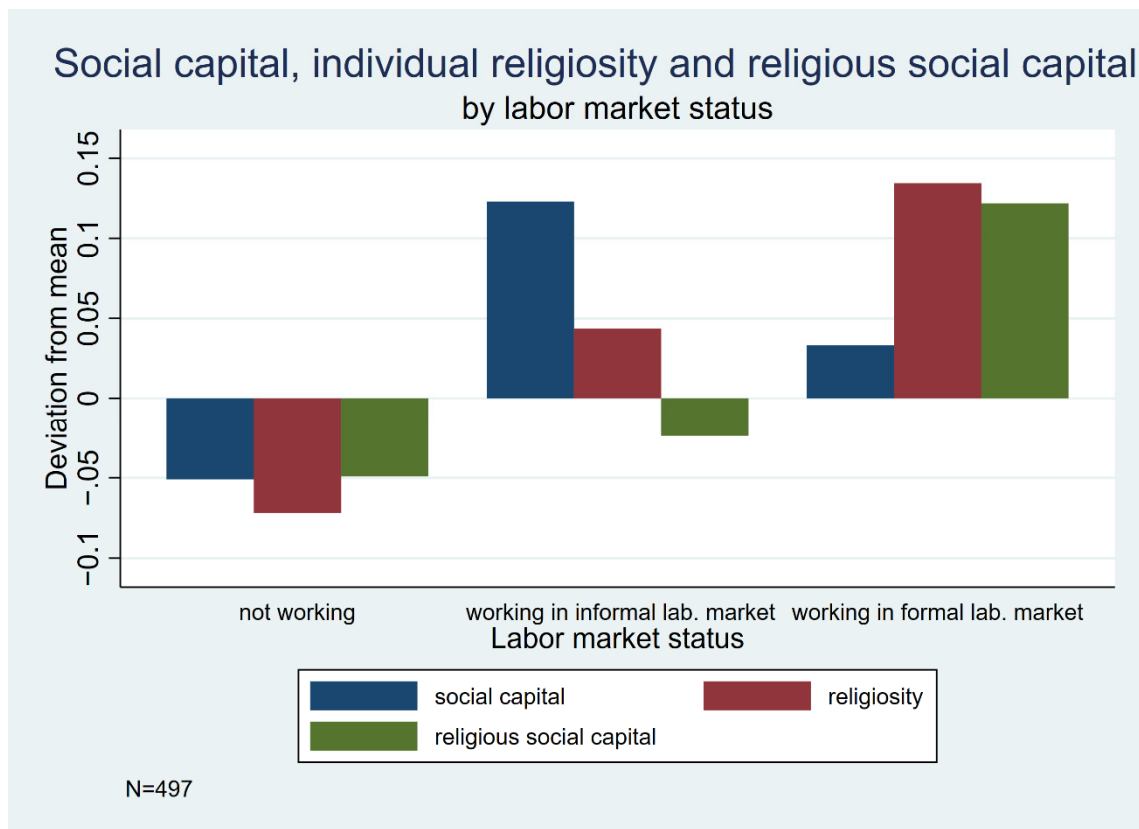


Figure 4. Social capital, individual religiosity, and religious social capital by labor market status.

Table 7. Estimation results.

Outcome:	(1) Formal Labor Market Activity	(2) Formal or Informal Labor Market Activity	(3) Formal Labor Market Activity or Tertiary Enrollment	(4) Formal or Informal Labor Market Activity or Tertiary Enrollment
Age	0.015 *** (0.004)	0.022 *** (0.005)	0.002 (0.005)	0.010 ** (0.005)
Female	0.025 (0.043)	-0.101 ** (0.047)	0.040 (0.049)	-0.106 ** (0.050)
Household head	0.103 ** (0.049)	0.143 ** (0.060)	0.154 ** (0.062)	0.195 *** (0.067)
Disability grant	-0.237 * (0.126)	-0.307 ** (0.146)	-0.317 * (0.163)	-0.370 ** (0.154)
Child grants	-0.049 ** (0.021)	-0.072 *** (0.023)	-0.076 *** (0.026)	-0.081 *** (0.024)
Sepedi	0.018 (0.052)	-0.087 (0.060)	0.108 * (0.059)	-0.020 (0.063)
Setswana	-0.018 (0.052)	-0.114 * (0.062)	0.026 (0.060)	-0.082 (0.066)
Secondary school	0.064 (0.043)	-0.006 (0.051)		
Vocational	-0.056 (0.104)	-0.039 (0.128)		
Certificate	-0.018 (0.049)	0.075 (0.059)		
Diploma	0.006 (0.063)	0.056 (0.079)		

Table 7. Cont.

Outcome:	(1) Formal Labor Market Activity	(2) Formal or Informal Labor Market Activity	(3) Formal Labor Market Activity or Tertiary Enrollment	(4) Formal or Informal Labor Market Activity or Tertiary Enrollment
Diploma	0.006 (0.063)	0.056 (0.079)		
Degree	0.137 (0.110)	0.019 (0.112)		
Tertiary enrollment	−0.163 *** (0.061)	−0.080 (0.068)		
Business training	0.067 (0.052)	0.149 ** (0.067)	0.025 (0.064)	0.087 (0.071)
Career counselling	0.034 (0.039)	−0.023 (0.045)	0.074 * (0.044)	−0.003 (0.045)
Career awareness	0.006 (0.013)	0.000 (0.016)	0.009 (0.016)	0.003 (0.017)
Migrated	0.021 (0.044)	0.005 (0.052)	0.059 (0.054)	0.049 (0.057)
Urban	0.096 *** (0.036)	0.099 ** (0.044)	0.163 *** (0.041)	0.148 *** (0.044)
Household size (std.ized)	−0.057 * (0.033)	−0.055 (0.037)	−0.016 (0.039)	−0.016 (0.039)
Share children (std.ized)	0.067 * (0.036)	0.069 * (0.040)	0.022 (0.041)	0.024 (0.041)
Share pensioners (std.ized)	−0.049 ** (0.025)	−0.069 ** (0.028)	−0.047 * (0.028)	−0.058 ** (0.028)
Social capital (std.ized)	−0.010 (0.017)	−0.006 (0.020)	−0.001 (0.021)	−0.003 (0.021)
Religiosity (std.ized)	−0.002 (0.022)	0.020 (0.026)	−0.005 (0.026)	0.014 (0.027)
Relig. social capital (std.ized)	0.056 * (0.033)	0.078 ** (0.038)	0.084 ** (0.038)	0.099 ** (0.040)
African traditional	0.062 * (0.035)	0.098 ** (0.040)	0.019 (0.041)	0.061 (0.042)
Church	−0.098 (0.072)	−0.126 (0.081)	−0.086 (0.083)	−0.118 (0.086)
Constant	−2.650 *** (0.535)	−1.467 *** (0.503)	−1.056 ** (0.483)	−0.396 (0.494)
Observations	497	497	497	497
p-value	0.000	0.000	0.000	0.000
chi2	80.604	109.357	63.175	84.084

Note: Average marginal effects from probit estimation. Robust standard errors in parentheses. Constant omitted.  
\*  $p < 0.1$ , \*\*  $p < 0.05$ , and \*\*\*  $p < 0.01$ .

The coefficients of social capital, measured by the number of memberships in social networks, and individual religiosity, measured by the Centrality of Religion Scale [12], are not near any levels of significance. There is, however, a robust association between religious social capital and labor market outcomes. A standard deviation increase in religious social capital increases the probability of formal labor market activity by 5.6 percentage points

and the probability of formal or informal activity by 7.8 percentage points. When including educational continuity as a positive outcome, the values are 8.4 and 9.9 percentage points, respectively. There is also a positive relationship between African traditional religious practice and labor market activity, particularly when including the informal sector: Youth practicing African traditional religion are 9.8 percentage points more likely to be engaged in labor market activity.

## 5. Discussion

This paper explores factors influencing labor market outcomes among youth in northern South Africa. The following main findings merit highlighting: First, the analysis conducted substantiates previous research arguing that skills mismatches are hindrances for youth in finding employment. Having completed secondary school or even tertiary education does not contribute to increased probabilities of finding employment.

Second, the literature highlights migration, particularly from rural to urban areas, as a strategy of increasing one's chances of finding employment. The analysis in this paper shows residence in an urban area to go along with substantially higher probabilities of being in formal or informal labor market activity (10 percentage points). It, hence, substantiates findings from the literature on spatial mismatches in the South African labor market: youth in rural areas seem to be worse off in the labor market.

Third, the receipt of government old-age pensions goes along with lower probabilities of working in the formal sector and in the informal sector. Whereas some scholars have argued this to be a causal effect due to decreased incentives to engage in labor market activity by younger household members and higher reservation wages, others have pointed to the possibility that the negative relationship is visible because only poor households, whose members tend to be disadvantaged in the labor market, receive old-age grants. As the data at hand does not allow the identification of causal effects, both explanations are possible from the perspective of the analysis presented here.

Fourth, this paper is the first to include social capital, individual religiosity, religious social capital, and religious affiliation as explanatory variables of youth labor market outcomes in the South African context. From the descriptive analysis, it emerges that the mean levels of social capital, religiosity, and religious social capital of youths working either in the informal sector or the formal sector are higher than among those not working. In the econometric analysis, however, only religious social capital displays a robust association with labor market performance, increasing the probability of working in the informal or formal sectors by between 6 and 10 percentage points, respectively. This confirms previous qualitative research findings from religious studies arguing that religious communities in South Africa are particularly important sources of social capital and, hence, contribute to their adherents' economic success [35,43]. Moreover, I find the practice of African traditional religion to be correlated with a higher probability of being engaged in informal or formal labor market activity, while I find no such relationship for church membership. This resonates with previous findings by Öhlmann and Hüttel [44], but it remains unclear what the specific transmission mechanisms of African traditional religion to labor market performance might be.

In summary, the analysis corroborates arguments on skills and spatial mismatches as important factors hindering youth labor market success. Economic development policies that prioritize creating jobs in rural areas could facilitate higher youth employment without burdening young people with the high cost of migration. Moreover, particular attention should be paid to the roles of the social networks provided by religious communities. The social capital created in these communities and the related resources members have access to, ranging from mutual support structures over networks of information and contacts to concrete structures and activities offered among the membership (savings groups, insurances, and scholarships) seems to impact youth labor market success. Further investigation into these structures is necessary in order to ascertain whether these structures



can serve as models for the improvement of government interventions aiming at improving youth labor market outcomes.

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