ORIGINAL ARTICLE
QUALITY OF LIFE AMONG BRAZILIAN ADOLESCENT APPRENTICES: A QUANTITATIVE AND QUALITATIVE STUDY
QUALIDADE DE VIDA DE ADOLESCENTES APRENDIZES BRASILEIROS: UM ESTUDO QUANTITATIVO E QUALITATIVO
LA CALIDAD DE VIDA DE LOS APRENDICES ADOLESCENTES BRASILEÑOS: UN ESTUDIO CUANTITATIVO Y CUALITATIVO

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ABSTRACT
Objective: to investigate the relationship between the work and the quality of life of adolescent learners in Brazil.
Method: transversal study on all male adolescents assisted by a Brazilian NGO (N = 348). Data were collected through the questionnaire WHOQoL-bref. The comparison between the working time of adolescents and scores WHOQoL-bref was performed using the U Mann-Whitney test with significance level of 0.05. In the second phase, we conducted a focus group to get the best possible understanding of the relationship between work and quality of life of this population. Results: significant differences were observed between the time working with the environment (p = 0.048). For teens, study and work are not easy tasks, but they were satisfied with the social support offered by NGOs. Conclusion: we concluded that the work was not a negative factor in assessing the quality of life of this population.

RESUMO
Objetivo: investigar a relação entre o trabalho e a qualidade de vida dos adolescentes aprendizes no Brasil.
Método: estudo transversal realizado com todos os adolescentes do sexo masculino assistidos por uma ONG brasileira (N=348). Os dados foram coletados através do questionário WHOQoL-bref. A comparação entre o tempo de trabalho do adolescente e os escores do WHOQoL-bref foi realizada por meio do teste U de Mann-Whitney com nível de significância de 0,05. No segundo momento, foi realizado um grupo focal para obter o melhor entendimento possível da relação entre trabalho e qualidade de vida dessa população. Resultados: foram observadas diferenças significativas entre o tempo de trabalho com domínio do ambiente (p = 0,048). Para os adolescentes, estudar e trabalhar não são tarefas fáceis, mas eles estavam satisfeitos com o apoio social oferecido pela ONG. Conclusão: conclui-se que o trabalho não se mostrou um fator negativo na avaliação da qualidade de vida nesta população.

RESUMEN
Objetivo: investigar la relación entre el trabajo y la calidad de vida de los alumnos adolescentes en Brasil.
Método: estudio transversal en todos los adolescentes de sexo masculino con la asistencia de una ONG brasileña (N = 348). Los datos fueron recogidos a través del cuestionario WHOQoL-BREF. La comparación entre el tiempo de trabajo de los adolescentes puntajes WHOQoL-BREF y se realizó con la prueba de Mann-Whitney con un nivel de significación de 0,05. En la segunda fase, se realizó un grupo focal para obtener el mejor entendimiento de la relación entre el trabajo y la calidad de vida de esta población. Resultados: se observaron diferencias significativas entre el tiempo de trabajo con el medio ambiente (p = 0,048). Para los adolescentes, el estudio y el trabajo no son tareas fáciles, pero que estaban satisfechos con el apoyo social ofrecido por las ONG. Conclusión: Se concluye que el trabajo no era un factor negativo en la evaluación de la calidad de vida de esta población.

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Adolescence is a stage marked by intense biopsychosocial transformations, bearing in mind that some aspects, such as state of health, quality of life, and access to education and work, should be constantly assessed in this population. Work during adolescence is a complex theme, which can be associated with poverty, inequality, and social exclusion. For some authors, working early in life can serve to take away the right to education, family living, health, and leisure, in turn harming the adolescent’s upbringing, both physically and intellectually. These authors consider that, even with the obligation of supervision and follow-up, the rate of accidents in the workplace involving adolescents may well be high. For other authors, this experience can be positive in the character formation of a future adult, as well as in acquiring new abilities, responsibility, and knowledge, and may even become a disciplinary and preventive element in combating crime. These authors point to the importance of work as an essential source of education geared not toward the production of goods and services, but rather toward professional learning, training, and qualification of adolescents.

In Brazil, work for adolescents is set forth in Law 10.097 from December 19, 2000, entitled the “Apprentice Law”, which prohibits dangerous nightshift or unhealthy work for those under 18 years of age and any work whatsoever for those under 16 years of age, except in special conditions of apprentices between 14 and 16 years of age. The adolescent “apprentice worker” must sign a special work contract for the technical-professional training (2 years) in which the employer is committed to ensuring the professional skills and activities according to one’s physical, moral, and psychological development.

In this manner, work during adolescence presents particularities that define it as a complex question, which can bring about risk or protection factors for the development of young workers, and may well interfere in their quality of life. According to the World Health Organization (WHO), the quality of life can be understood as a perception of individuals of their position in life, within their social, economic, and cultural contexts, with regard to their goals, expectations, standards, and concerns.

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To care for one’s quality of life during one’s childhood and adolescence is a commitment that has been legitimated in international documents, as well as national documents, such as the Brazilian Child and Adolescent Statute - ECA. The latter emphasizes that the child and the adolescent have the right to protection to life and health, by means of the implementation of public social policies that allow for one’s healthy and harmonious birth and development within respectable conditions of existence.

The focus of research with adolescent workers is still almost exclusively related to the presence and intensity of the work itself, together with the commitment to beneficial development. As such, a line of investigation that can serve to identify the mechanisms and under what circumstances work can bring about benefits to the adolescent worker calls for further study. Therefore, the present study aimed to investigate the relationship between work and quality of life of adolescent apprentices.

METHOD

An analytical cross-sectional study was carried out on a population of adolescent apprentices aided by a philanthropic non-governmental organization (NGO) located in a mid-sized city in Brazil. The city where the present study was carried out contains a geographic area of 541.1 km², a population of 225,358 inhabitants, and a Human Development Index (HDI) of 0.809.  

♦ Participants and Procedure

The adolescents self-refer to the services of the NGO (N=363), which maintains the following admission criteria: a) the adolescents must be aged between 16 years to 17 years and 11 months, b) study in a public school, c) they must come from economically vulnerable family backgrounds, d) they must take and complete the admission course provided by the NGO.

Neither race nor religious backgrounds are taken into consideration at admission. During the admission course, the youth have an opportunity to learn about the NGO statute and its bylaws, to attend Portuguese and reading classes, and to be prepared to fit in the companies that will hire them. By the end of the course, all the adolescents receive a qualification certificate on human relations, work team and professional behaviors. Upon having completed the qualification course for work, the adolescent is then placed in a job (20 hours/week) and will maintain ties with
Quality of life among Brazilian adolescent apprentices computed together, within a scale which varies from four to twenty points, understanding that the higher the score, the more positive the view of one’s own life.

In this study, the dependent variable was the time in which the adolescent maintained ties with the NGO (maximum time of two years), with two categories: up to one year and more than one year.

Statistical analysis

The construction of the databank was performed using the Statistical Package for Social Sciences for Windows, version 17.

First, the scores of all WHOQoL domains were calculated. The comparison between the working time of the adolescent and the scores of physical, psychological, social relations, environmental, and global domains from the WHOQoL-Brief were carried out by means of the Mann-Whitney U test. The significance level was set at p<0.05.

Focus group

In second moment, we conducted a focus group to gain the best possible understanding of the work and quality of life. The selection was random, and 12 boys asked and accepted participate this phase.

A focus group is an interview held in a dynamic fashion that promotes the simultaneous action among the components of the group investigated as well as interaction between the participants and researcher. A focus group is used to generate or formulate theories that will subsequently be tested in quantitative studies and to indentify the concepts, beliefs, perceptions, expectations, motivations and needs of a specific group of interest to the researcher. This group can also be used to test educational material, characterize vocabulary and assess policies, programs or actions.

Two meetings were held to stimulate the subjects to reflect on the issue. Each meeting lasted approximately an hour and a half and was recorded in MP3 for a subsequent faithful transcription. Codes were used for the subjects to maintain anonymity, with a capital A followed by a number to differentiate the participants: A1 (Adolescent 1), A2 Adolescent 2), etc.

Discourse analysis of the material was performed. Following the transcription of each meeting, an analysis was carried out of the speech of each individual, following the sequence and coherence of the statistical results. Emphasis was given to discourse related to the perceptions of the adolescents regarding the subject addressed.
RESULTS AND DISCUSSION

Of the total number of adolescents in this study (N=348), 50.6% were 16 years of age, 88.8% had ≥ 8 years of schooling, and 13.8% reported being white. Concerning living conditions and basic sanitation, the majority of the adolescents had in-door plumbing (98.6%), bathrooms inside their homes (99.2%), sewage (97.8%), and garbage collection (95.9%).

The requirements for adolescents to be admitted to the NGO (age, income, and education level) illustrated the homogeneity of the sample.

Data from the national Research by Home Samples (PNAD) show that of the 17 million Brazilian adolescents, approximately 22% of the adolescents between 15 and 18 years of age are male, study, and work. These students study in public schools, come from lower-income social classes, and tend to work to increase their family income.

The adolescents from the present study presented similar characteristics:

1. I even helped out at home […] paying a water bill […] (A8)
2. It's not a lot, but […] I would give some money to help out at home […] (A9)
3. I help with the rent, water bill. I wouldn’t like not contributing anything […] (A10)
4. A previous study identified poverty and the high demand for housekeepers as aggravating factors to the use of adolescents for domestic services in the majority of urban centers in Nigeria. However, the adolescents in this study receive a specific follow-up service, which makes them differential workers. They work 20 hours per week, in such a way as to conciliate formal study with work, in addition to extra-curricular activities, such as sports and recreational activities. These activities are welcomed by the adolescents:

- I like the extra activities that occur in the NGO a lot […] (A5)
- Sports? Who doesn’t like practicing sports? But not everybody comes […]. They don’t know what they are missing. (A4)

The practice of sport activities in adolescence contributes toward a significant improvement in quality of life as well as the practice of physical recreational activities in adulthood. The benefits are all the more visible when these activities are practiced in group, such as networks of friends at school.

This intimacy and connection created between the adolescents and the NGO may well be making the difference in the role that the work actually plays in the adolescents’ lives. Entering the NGO has changed the lives of many of the adolescents. As demonstrated in the following statements:

- Even going to school used to be complicated. The NGO changed my day-to-day life and my routine of activities […] (A1)
- I used to spend the day on the street, hanging out with friends […]. I didn’t do anything and my mother was on my case every day. Then she took me to the NGO and I never lazed about again. (A6)
- It’s good to work […] I feel more independent. (A7)
- Working changed my life and […] the life of my family […] (A1)

This follow up may be favoring an early socialization of these adolescents. This is a process of knowledge building regarding work that should begin in early childhood and continue until entering the workplace full time. At the NGO, the adolescents have classes in Portuguese literature and public speaking. They are prepared for public relations and working in partnership firms and institutions. However, there are also rules that need to be learned and followed. The adolescents offer a critical reflection regarding these rules:

- […] It's always good to have rules. There has to be even greater limitations set for teenagers. (A12)
- Some of the rules learned at the NGO can be used at home […] (A3)
- I never used to think much about the future, but at the NGO, we start to see everything differently (A10)
- I never understood when my mother used to say that teenagers need rules. Today, I agree […] I learned this at the NGO. (A1)

Social programs are capable of transforming the living, family and social conditions of the participants by enabling the acquisition of skills and knowledge and a greater opportunity to be happy.

Even if the adolescents who study have less favorable socioeconomic conditions, they do in fact have a good quality of life in all domains. Half of the adolescents from the sample presented WHOQoL scores in the Physical, Psychological, and Social Relations domains of greater than 75.0 and of 53.1 in the Environmental domain. The Global domain presented an average score of 15.6 (± 2.6) and an amplitude of between 8.0 and 20.0 (Table 1).
A411
A228
A320
A521
A623
A724
A825
A926
A1027
A1128
A1229
A1330
A1431
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I used to think that working was enough …, but it’s important to have someone to raise your self-esteem. No one is happy alone. (A2)

In general, studies indicate that adolescents think of themselves as good friends, with no difficulty in making friendships, and show a good self-image concerning this type of relationship. In the end, it appears that it is in adolescence that true friendships arise, which become determining factors in the construction of one’s adolescent identity and in the definition of values, feelings of belonging, and self-esteem.

The minimum values of the scores presented in Table 1 should be highlighted. There are adolescents who have 9.4 in the Environmental Domain and 8.0 in the Global Domain. These adolescents appear to have a negative opinion regarding their own quality of life in these aspects, which can point out individuals who are in need of even more specialized follow-up care on the part of the NGO.

When the WHOQoL domains were compared concerning working time, statistically significant differences could only be observed among the groups in the Environmental Domain (p=0.040). The group who had been working for more than one year, as compared to that of up to one year of work, presented the highest average scores in all domains (Table 2).

<table>
<thead>
<tr>
<th>Domains</th>
<th>Working times*</th>
<th>p-value**</th>
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<tbody>
<tr>
<td>Physical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤1 year</td>
<td>73.6</td>
<td>0.110</td>
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<tr>
<td>&gt; 1 year</td>
<td>75.4</td>
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<td>Psychological</td>
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<tr>
<td>≤1 year</td>
<td>74.8</td>
<td>0.943</td>
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<tr>
<td>&gt; 1 year</td>
<td>74.9</td>
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<tr>
<td>Social Relations</td>
<td></td>
<td>0.874</td>
</tr>
<tr>
<td>≤1 year</td>
<td>71.6</td>
<td></td>
</tr>
<tr>
<td>&gt; 1 year</td>
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<td></td>
<td>0.040</td>
</tr>
<tr>
<td>≤1 year</td>
<td>51.3</td>
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*Values presented in Averages (CI 95%).

From the results of the comparison between the quality of life and the working time, it appears that work does not in fact interfere in the quality of life, that is, the adolescents with the highest scores regarding quality of life had been in the NGO for a longer period of time.

The working time for this sample is linked to the age of the adolescents, since they can only stay in the NGO until they are 18. For same adolescents from this study, the fact that the adolescent worked in two jobs did not appear to interfere negatively in the life of these adolescents. However, studying and working is not easy for the adolescents:

Working and studying is not simple, but I don’t get bogged down with anything […] (A4)

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and more positive view of their lives, running in direct contrast with one Brazilian study which indicated that the psychological domain is in fact a vulnerable point in the quality of life of adolescents. This difference is most like due to the adolescent’s circle of friends, as well as the support received by the NGO.

The facets that encompass this physical domain include: pain and discomfort, energy and fatigue, sleepiness and rest, mobility, daily routine activities, dependency on medication or treatments, and the skills to work.

Overall, adolescents are generally healthy and do not present physical limitations. As such, regular physical activity during adolescence can bring about improvements in their quality of life, mainly in the physical domain.

The domain entitled Social Relations investigates the satisfaction of individuals in their personal relationships (friends, parents, acquaintances, classmates), in their sexual life, and in support received from friends. During adolescence, there is a common distancing between parents and their children that, to a certain extent, occur quite naturally, as their friends become their confidants and companions:

*With money, it’s better now, because I can always go out with my friends […]* (A5)

*It’s good to have fun with friends […], but I rarely go out with my parents […] The family hardly ever gets together to do something […]* (A11)

[…] It depends on what we’re doing. If you want to please a girl, it depends on the company […] (A12)

Table 2. Relation between working time of adolescents from the NGO and the WHOQoL-Brief Domains (N=348). Sete Lagoas, Minas Gerais. Brazil. 2011.

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[... ] It's not easy to study and work. It’s tough. Some days I’m tired, but I have still to do my homework (A2)

[... ] We get used to it, because you have to make the effort in order to become somebody later in life [...] (A9)

Yeah, it's not easy. We used to not do anything at all. Now we have a schedule to keep and things from school to do [...] (A8)

An adolescent’s job should not affect his/her studies. However, a study carried out in Sao Paulo found a negative work-study association among adolescents who take evening classes.36 Another study reports that the intensity of the work can affect the relationship between scholastic performance and the influence of the family context.12

It is clear that the chance of success when working two jobs is directly related to the conditions of life and respectable work. These conditions can be achieved through organizations and programs of psychosocial follow-up that develop the critical positioning of these adolescents, as well as the formation of one’s own identity as a subject and a citizen.37

Same studies point out unfavorable aspects of adolescent work.36,38 Work represents a risk to schooling and increased truancy.29,40 The experience of this NGO, responsible for the insertion of these adolescents in the work market, seems to be quite positive. Clearly, the chance of success when working two jobs is directly related to conditions of life and access to respectable work.41

In this manner, the existence of this intermediation is important for these adolescents to enter the work market, in such a way as to follow-up on their studies and ensure leisure activities and sports, that is, basically assume responsibility for the adolescents.

For the adolescents of this study, the work may well represent a complementary source of income for the family and, in some cases, the only source of family income.

The experience of adolescent work and the meanings of these experiences are rather inconsistent.3 Although these adolescents may live in a negative physical, social, and/or cultural context, they may still have a relatively good quality of life, depending on how the adolescent reacts and creates strategies to confront a given context.32

In the present study, it was impossible to establish the true benefit of the adolescent-NGO relationship regarding the quality of life of the participants. However, some statements demonstrate a mature perception regarding the future:

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For the future, I think about working in order to pay for college [...] (A9)

Money alone doesn’t solve anything. I work to become somebody, to grow [...] I think about the future [...] (A1)

After all, you can’t stay here (in the NGO) forever [...] (A12)

Anything I think about while working today, I can obtain tomorrow [...] (A10)

We believe that the activities promoted by the NGO can bring about benefits for the lives of these adolescents and contribute to a more positive perception concerning their own life and the future.

♦ Limitations

Other variables should also be investigated to establish the true impact of work on health and quality of life of these adolescent apprentices, such as those: salary, status, learning, autonomy, stress factors, as well as compatibility of work with school.43

In addition to the limitations of a cross-sectional study, it also becomes important to emphasize that the evaluation of one’s quality of life presupposes the quantification of a construct that is sensibly marked by the subjectivity of experiences, beliefs, expectations, and perceptions of the individuals.24,44

In this sense, the results observed in the present study need to be analyzed with caution, bearing in mind that the quality of life was measured in an objective manner by means of a structured questionnaire on a homogeneous population with quite similar conditions of life and perceptions, even though a WHOQol instrument, which has presented reliable results, was applied.40

With this work, it is possible to suppose that the close follow-up of the adolescents on the part of the NGO, as well as and the daily contact with these adolescents, strengthens the bonds of friendship and companionship in such a way that the adolescents begin to see themselves as a group, a family.

No causality can be assumed through the cross-sectional design of this study, remaining unclear if the work lead to good quality of life or vice-versa. Sample homogeneity reduced the overgeneralization of the results due the requirements used to admit adolescents in the NGO (age group, income, and education attainment).

Faced with the lack of studies on the quality of life of this population, it is recommended that other studies be developed to pursue analyses on the differences in the quality of life, comparing adolescent apprentices and non-working students, so that
future follow-up and intervention programs can be set forth efficiently.

In this light, the quality of life of adolescent apprentices deserves special attention in scientific discussions geared toward undesirable factors related to the workplace, as well as protective factors regarding health and quality of life of adolescents. In this manner, it will be possible to discuss the advantages and disadvantages of work during adolescence and its challenges, as well as establish a greater dialog concerning public policies for this age range.

CONCLUSION

The adolescent apprentices tend to have a good quality of life in all evaluated domains, with only the environmental domain presenting an average of lower than 70.0. The working time proved not to be a negative factor in the evaluation of the quality of life in this population.

The statements demonstrate that the adolescents perceive issues related to work at the NGO differently, based on the life experiences of each individual. The focus group facilitated the study on the relationship between work and quality of life, deconstructing and reconstructing concepts in the search for new answers to issues linked to subject.

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