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Environmental Action as Asset and Contribution of Positive Youth Development

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ABSTRACT

Positive Youth Development theory (PYD) presents a strength-based conception of transition to adulthood in which positive outcomes appear as consequence of the alignment of youth individual skills and contextual developmental assets. PYD may emerge from environmental action because it allows for developing reasoning skills, decision-making skills, self-efficacy, optimism, good relationships and civic engagement, among other thriving outcomes. Moreover, because values, attitudes and behaviors formed in

RESUMEN

La teoría del desarrollo positivo juvenil (DPJ) presenta una concepción de la transición a la adultez basada en las fortalezas, en la que los resultados positivos aparecen como consecuencia de la conjunción de las competencias individuales de los jóvenes y los activos de los contextos de desarrollo. El DPJ puede surgir de la acción medioambiental porque permite desarrollar competencias de razonamiento, de toma de decisiones, autoeficacia, optimismo, buenas relaciones y compromiso cívico, entre

this life stage influences those in later life stages, youth environmental education deserves greater attention. Developing youth as active citizens creates positive environmental and social change that provides the basis for more sustainable communities. Considering environmental action as a context for PYD, educators or program managers should consider young people as contributors, letting them participate in shared decision making, critical reflection and possibility to inquiry, as well as providing meaningful participation, sense of belongness and authentic care. Some experiences in youth environmental action are reviewed and some recommendations are provided in order to design and implement programs to jointly promote sustainable communities and PVD

resultados positivos. Además, debido a que los valores, las actitudes y los comportamientos formados en esta etapa de la vida influyen en los de etapas posteriores, la educación medioambiental de los jóvenes merece una mayor atención. Desarrollar a los jóvenes como ciudadanos activos permite crear un cambio social y medioambiental positivo que sienta las bases para construir comunidades más sostenibles. Al considerar la acción medioambiental como un contexto para el DPJ, los educadores o gestores de programas deben considerar a los jóvenes como agentes, permitiéndoles participar en la toma de decisiones, la reflexión crítica y la posibilidad de investigar, además de brindar una participación significativa, un sentido de pertenencia y una verdadera actitud de cuidado. En este trabajo se revisan algunas experiencias en acción medioambiental juvenil y se ofrecen algunas recomendaciones para el diseño e implementación de programas para promover a la vez comunidades más sostenibles y el DPJ.

Keywords

Positive youth development; environmental action; participation; engagement; sustainability.

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Palabras Clave

Desarrollo positivo juvenil; acción medioambiental; participación; compromiso; sostenibilidad.

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The transition from social childhood to adult life has experienced an increase in duration in the last decades, which has brought detrimental consequences for youth health and well-being (Sawyer, Azzopardi, Wickremarathne, & Patton, 2018). This extended life period has been coined as emerging adulthood, starting in late adolescence and continuing to the end of the third decade (Arnett, Zukauskiene, & Sugimura, 2014). This period is subjectively differentiated from adolescence and adulthood, as youth population does not feel represented by the characteristics of those stages. Moreover, identity exploration is a main attribute of emerging adults, with opportunities for exploring different conceptions concerning love, work and worldviews (Arnett, 2000). Arnett et al. (2014) described it as an unstable period, with more frequent changes, more self-focused attention and less social roles, what may provide increased mental health problems. However, emerging adulthood is also a period of increased competence and opportunities for a healthy development. Psychological research has complemented its focus on suffering, illnesses and distress with the examination of the complete human experience, by including fulfilment and well-being as well as human potentials and capabilities (Seligman & Csikszentmihalyi, 2000). In this line, development may be conceived as a process of growth and enhanced skills (Larson, 2000).

Derived from developmental systems theory, in which the plasticity of youth development comes from the reciprocal interactions between biological, individual and contextual levels, Positive Youth Development (PYD) perspective has been formulated (Lerner, Almerigi, Theokas, & Lerner, 2005). PYD perspective presents a strength-based conception of transition to adulthood in which positive outcomes appear as consequence of the alignment of youth individual skills and contextual developmental assets (Lewin-Bizan, Bowers, & Lerner, 2010). Lerner and his colleagues (2005) operationalized PYD in five interactive strengths which were related to positive health and well-being outcomes in intervention programs (Bowers et al., 2010). This 5Cs model is composed of competence (a positive perceived self-efficacy in different domains), confidence (an overall positive self-worth), connection (positive social relationships), character (respect for the society rules and a positive sense of integrity), and caring (skill to show both sympathy and empathy for others).

Developmental assets as nutrients of PYD: The role of environmental education

Developmental Assets (DA) framework has described the nutrients for PYD (Scales, 2011), following empirical evidence which shows: a preventive effect on risk behaviours (such as, school absenteeism, substance abuse and aggressiveness) and resilience promotion; a generalization across social locations; a balanced distribution between factors at an individual and at ecological level, and an possibility to be satisfied by the community and to be actively reachable by youth (Benson et al., 2006). Benson, Scales and Syvertsen (2011) separated these resources into internal and external ones, so that the internal assets comprised commitment to learning, positive values, social competencies, and positive identity, while external assets are composed of support, empowerment, expectancies and boundaries, and constructive use of time. Research by Theokas et al. (2005) provided factorial validity and a positive interrelation between these two factors. But, as well as the social resources already pointed out, environmental nutriments should also be considered. Since environmental problems have emerged as a result of human behavior, changes in human behavior are needed to mitigate and reverse them. Thus, education for sustainable development has a key role for increasing awareness and learning, breaking the gap between attitudes and behaviors (Buttigieg & Pace, 2013. The participation of youths in decision making at this regard seems crucial to build their own future in a healthy environmental context. Following the New Ecological Paradigm (Dunlap, Van Liere, Mertig, & Jones, 2000), people may value the natural environment because of egoistic (i.e., self-interest) or altruistic concerns (i.e., selfless protection of the environment). Byrka, Hartig and Kaiser (2010) concluded that personally gratifying experiences influenced ecological behavior through its impact on environmental attitudes. Thus, opportunities for restorative experiences in the environment should be promoted as a developmental nutriment. When examining trends in the last decades among adolescents (Wray-Lake, Flanagan, & Osgood, 2010), results showed a decline in personal responsibility for the environment, in conservation behaviors and in the beliefs that resources are scarce. Moreover, results suggested that youth did not accept personal responsibility, but they assign that to the government and adults.

APA (2019) have recommended the need to encourage green behaviors, improve communication concerning climate change, indicating more practical initiatives and preparing for change adaptation. Consequently, intervention programs may be oriented towards actively engaging youth in the identification of community resources and taking the opportunity to work for environmental change, at the same time that they gain resilience to risk and reach positive health outcomes (Atkiss, Moyer, Desai, & Roland, 2011). Because values, attitudes and behaviors formed in adolescence influence those in later life stages (Alwin

& McCammon, 2003) and younger generations will become future leaders for environmental sustainability (Wray-Lake et al., 2010), youth environmental education deserves greater attention. Activity involvement is thus considered as an ecological asset. Early life experiences are strongly connected with future environmental attitudes, by creating a life-long orientation toward nature (Arnold, Cohen, & Warner, 2009).

Agans et al. (2014) concluded that extracurricular programs are key ecological resources related to positive developmental outcomes, providing opportunities for gaining life skills, establishing beneficial intergenerational relationships and engaging in valued activities. The breadth of participation in out-of-school activities was related to more PYD, more contribution and less risk behaviors. Recently, Branquinho and Gaspar de Matos (2018) have presented the assessment of a youth participatory action-research project, called Dream Teens, in a sample of Portuguese adolescents and youth. Results showed that the participation was considered by youth as a person asset and was associated with more integration in volunteer activities, tutoring and mentoring, better leadership skills and more active citizenship. Frasquilho et al. (2016) concluded that these adolescents-led participatory projects were effective to promote PYD. Participants were empowered to design projects in their own contexts and to create ways to improve youth civic participation, and they felt that their voices were heard, being considered as experts in their own living contexts and well-being. Christens and Peterson (2012) analyzed the role of empowerment in youth development in a sample of American high school students. They concluded that the effect by ecological support (i.e., family cohesion and social support) on developmental outcomes (i.e., self-esteem, school importance, risk behaviors, and psychological symptoms) was partially mediated by the psychological empowerment.

Consequently, complementing social and environmental action would be expected to support more positive outcomes in youth development. According to Emmons (1997), environmental action is a deliberate strategy composed of decisions, planning, implementation and reflection, carried out by an individual or a group aimed at achieving a concrete environmental result. This action can be directly conducted to solve the environmental problem or indirectly by influencing others to contribute (Jensen & Schnack, 1997). Schusler (2009, p.16) argued that environmental action is "process of co-creating environmental and social change that builds individuals' capabilities for further participation contributing to personal and community transformation". Thus, youth development should be considered as a central objective in environmental education by practitioners and researchers in program design, so paying further attention to youth as change agents whose understanding and action competences may address the roots of the problems.

Feelings of responsibility for the environment, as well as environmental knowledge and attitude, may be educated in order to increase ecological behaviour (Kaiser, Ranney, Hartig, & Bowler, 1999). Norm-activation models posits that the adscription of responsibility and the awareness of the consequences of own behaviour predict personal obligation to act in favour of the environment (Stern et al, 1993). In this line, a meta-analysis pointed out that youth reported positive attitudes towards environment and several levels of knowledge, while fewer concluding data was observed regarding bahavior (Mifsud, 2012). Young people indicated that the main environmental problems were air and water pollution, the loss of biological diversity, the increase of population in big cities and the hazardous waste. As indicated Schusler (2013), youth participation in environmental action requires taking part in making meaning of a particular problem, i.e., in the definition, the analysis of causes, and envisioning and providing possible solutions. Following this author: "Youth environmental action involves feedback loops by which youth contribute to environmental action, which in turn enables youth to develop civic skills and habits and a host of other PYD assets. As youth develop these assets, they become increasingly able to participate effectively in environmental or other community action. In this way, environmental action and PYD may reinforce each other" (p. 102).

Environmental literacy should develop skills for critical thinking and nurture the appreciation for the natural world in order to change behaviour and create a sustainable and environmentally friendly quality of life (Chepesiuk, 2007). Boevede Pauw and Van Petegem (2010) conducted a cross-national study on youth environmental attitudes, based on PISA 2006 data in 15-year-old adolescents from 56 countries. Girls showed more positive environmental attitudes and a positive effect was observed by socioeconomic background and cultural/education resources. Moreover, results were consistent with Environmental Deprivation Theory (Tremblay & Dunlap, 1977), so that pro-environmental attitudes arise from greater exposure to environmental degradation. Contextual variables were observed to strongly explain these attitudes, compared to demographics, so that those youth living in countries with polluted environments (e.g. water quality, air quality and environmental health) presented more pro-environmental attitudes. Furthermore, Kudryavtsev, Krasny and Stedman (2012) found that a greater sense of place was associated with more pro-environmental behaviours. Environmental education may create symbolic associations with places that define individual and cultural identity, in form of place attachment (a bond between people and places) and place meaning (symbolic meaning ascribed to places). Arnold, Cohen and Warner (2009) conducted a research by interviewing young environmental leaders aimed to discover past influences on their current involvement in environmental action. The most important influences they reported were parents, outdoor experiences in childhood, peers and role models, youth groups, teachers and conferences.

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Thriving as a result of PYD: Environmental action as a youth contribution

The development of the 5Cs are expected to promote thriving, what is defined as a life trajectory with contribution to self, family, community and civil society (Lerner, Dowling, & Anderson, 2003). This contribution has been conceptualized as the sixth C of the model and empirical studies have shown positive outcomes at individual level (e.g., psychological adjustment, self-regulation skills, resilience, academic adjustment and healthy lifestyles) and also greater prosocial behavior and social engagement with peers, family and community (Branquinho & Gaspar de Matos, 2018; Catalano et al., 2004; Durlak et al., 2007; Gaspar de Matos, Santos, Reis, & Marques, 2018; Olson & Goddard, 2015). Lewin-Bizan et al. (2010) described positive developmental cascades in the US, in which positive parenting was longitudinally related with better self-regulation skills, what was associated with more PYD and in turn predicted greater social engagement. Geldhof, Bowers and Lerner (2013) indicated that in the process of thriving, there are adaptive self-regulations between youth strengths and the assets presented in the ecologies, so underlining the relevance of examining thriving within the specific scenarios. In other work, youth participation was longitudinally related to intentional self-regulation, which in turn predicted PYD and contribution (Mueller et al., 2011). Thriving is defined as the basis of personhood and civil society and is a marker of healthy and successful developmental regulations (Lerner, Brentano, Dowling, and Anderson, 2002).

Sherrod (2007, p.63) argued that civic engagement overlaps the most with the sixth C of PYD model, i.e., contribution, emphasizing the active role of young people as "agents of change in building the assets-promoting qualities of communities and societies". Umholtz (2013) proposed engaging youth through environmental-based experiential education for sustainable development, as a context for alienated and low-income youth to find a positive meaning and purpose and reconnect with their communities and education. This author conceived this model within a social constructivist approach in which PYD emerges from environmental education because it provides the contextual and collaborative learning, relationships and knowledge building and also individual attention. Thus, there is a positive feedback loop between youth participation in environmental action and individual and community development. Developing youth as active citizens creates positive environmental and social change that provides the basis for more sustainable communities (Schusler, Krasny, Peters, & Deckers, 2009). Schusler and Krasny (2010) examined environmental action as context for youth development. These authors carried out narrative interviews with educators who facilitating youth environmental action and with youth participating in those programs. In addition to the impact on environmental attitudes and behaviors, other outcomes valued by society were also reached, such as decision-making and citizenship skills, and these programs influenced youth physical and psychosocial well-being.

Environmental action may be considered an adequate framework for acquiring developmental assets, which presents benefits for physical, intellectual, psychological, emotional and social development in youth (Eccles & Gootman, 2002). The conclusions of this qualitative study by Schusler and Krasny (2010) showed that the integration of both environmental and youth development goals is the purpose of most educators, however some tensions were reported when controlling the action diminish youth participation but giving too much control may difficult environmental benefits. Thus, a participatory reflective style of practice may try to integrate an equilibrium between environmental and PYD outcomes. Schusler, Krasny and Decker (2016) researched this autonomyauthority duality of shared decision-making by conducting interviews with adult educators who facilitated youth environmental action in formal and non-formal scenarios in the US. Educators argued that this duality is both contradictory and complementary, and addresses with this dynamic structuring youth participation, supporting youth, valuing mutual learning and building a transparent communication to foster an equitable relationship. The Environment and Schools Initiative conducted local environmental action projects in high school students. Teachers coached students in independent groups facilitating discussion and group reflection, so developing a teaching-learning process in order to address real-world problems (Kyburz-Graber, 1999).

In this line, Silbereisen and Eyferth (1986) argued that development should be considered as action in context, so that it is a result of intentional and proactive action with changes at both individual and contextual levels. Della and Krasny (2018) argued the importance of authentic care in environmental action, as an intimacy between mentors and youth within a culture of care and caring. In this culture, youth can re-story themselves at the same time they reinvent local socioecological places. Youth defined that experience of environmental action as a place to belong, to be pushed, to deal with complexity, to practice leadership and a context for becoming themselves, what was linked to greater PYD in those participants. In a recent work, Schusler, Krings and Hernandez (2019) have proposed new possibilities to integrate youth participation and ecosocial work by examining youth reflections concerning their roles in social and environmental justice movements, in the "Where I Stand Youth Summit", celebrated in Chicago. The authors concluded that youth are able to build agency and solidarity towards self-determination related to social and environmental justice, through redefining what knowledge matters, along with intention and self-restoration.

Schusler and Krasny (2008) delimited six principles that may guide research about youth participation in local environmental action: a) Youth as contributors, because they have the right to participate in decisions and are able to provide valuable contributions; b) Genuine participation, so that it requires consultation and shared-decision making; c) Deliberate action, as the capability to involve

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yourself with other people in responsible actions, based on own decisions; d) Inquiry, because youth may be considered as active producers of scientific knowledge in collaboration with peers, educators and the community; e) Critical reflection, by an explicit reflective approach to draw meaning from the actions and consider the implications at a larger scale; f) Positive Youth Development, so that the participation in environmental action has positive implications for youth, as the development of reasoning skills, decision-making skills, self-efficacy, optimism, good relationships and civic engagement.

Programs to promote environmental action in youth

In China, some effective PYD programs were found to increase youth skills for understanding and acting upon their changing social and environmental context, and supporting the capacity to provide service to others and social responsibility, congruently with Chinese values (Johnson, Johnson-Pynn, and Pynn, 2007). The program "Roots & Shoot", formed by Jane Goodall Institute (2003), is a youth program aimed at fostering environmental action (by developing a deep understanding of problems, enhancing care and concerns for the environment, and allowing experiential learning), service learning (i.e., incorporating reflection and evaluation components in meeting project objectives) and youth development. Results concluded that this program enhanced bonding and self-efficacy, as well as promoting environmental and prosocial actions in Chinese youth.

In the US, some youth environmental action projects have been performed in New York State (Schusler, 2013). In the project "Growing Green", youth were responsible for building, planting and harvesting gardens, marketing the products and organizing outreach in the community. Other good example is the "Pine Bush Project", in which high school students conducted scientific inquiries and ecological restoration, by managing a butterfly house and gardens for native plants, and by conducting tours and camps for younger children. In the project called "East New York Farms", young people participated in a training of agriculture and leadership, growing food for the community, managing a market and educating others on healthy diet.

Other experience in the US is the "Camp 2 Grow Program" (Browne, Garst, & Bialeschki, 2011), in which youth were trained in a 20-lesson and nature-focused curriculum as environmental conscious leaders to promote sustainability in others. Results indicated that youth engagement in these efforts to promote environmental sustainability was associated with greater PYD, showing further independence, problem solving, affinity for nature and empowerment. In an experience in Hawaii (Volk & Cheak, 2003), students worked together to select, reflect and act in a local environmental issue and they showed an improvement in their skills for critical thinking, language and communication abilities, and self-efficacy. The program "Earth Force" incorporated a problem-solving process in

six parts to guide youth in assessing their local environment, selecting a problem, analysing public policy and community practices at this regard, identifying options for change, and designing and implementing the program (Melchior and Bailis, 2003). In long-duration programs, results identified more critical thinking, more genuine and deliberate action, greater learning from the experience and empowerment, and a more meaningful contribution.

IMPLICATIONS FOR PRACTICE

Grothausen and Gaspar de Matos (2020) have underlined several stages, i.e., raise awareness, capacitation, design, motivation, implementation, evaluation, dissemination and replication, as recommendations for community-based youth participatory action programs. According to developmental systems theory, development is an interactive process between the individual and the environment, and PYD would be more likely in the case of an adequate fit between elements in both levels (Lerner, Anderson, Balsano, Dowling, & Bobek, 2003). Duerden and Witt (2010) presented some ecological systems theory-related best practices. Concerning microsystem, these authors recommended be aware of distinctive characteristics of youth, foster adults with positive attitude who may serve as mentors, allow opportunities for youth voice and choice, and stablish concrete outcomes. Eccles and Gootman (2003) indicated some guidelines to practitioners for successful programs, i.e., physical and psychological safety, adequate structure, support in social relationships, belonging feeling, prosocial norms, support for efficacy and mattering, opportunities for developing skills, and integration between the efforts from family, school and community. From mesosystem, collaborative relationships between contexts (such as family and high school) to make a synergetic effect on PYD, and increasing parental understanding of youth experiences through their participation in youth programs. Regarding exosystem, administrators should treat youth workers with the same quality they want the youth workers treat the youth in the programs, and they should develop positive links with their families. Finally, at a macrosystem level, a positive public image of youth needs to be strengthened, by using word youth instead of teen, showing in media youth involved in positive activities (e.g. structured extracurricular activities or sports) and altruistic actions, paying attention to good youth, and using trusted adults to publicly praise youth.

Furthermore, research on PYD programs has identified three core components, the Big Three: positive and sustainable youth-adult relationship, skill building and leadership opportunities (Lerner, 2004). Schusler (2013) identified practices of educators that facilitate youth environmental action which also fit with characteristics of PYD programs, i.e., creating safe spaces, providing structure, building respectful and trusting relationships, setting clear expectations, providing opportunities for meaningful contribution, supporting new challenges for youth,

providing opportunities to connect youth to their communities, and facilitating new experiences and ways of thinking.

Hickman, Riemer and YLEC Collaborative (2016) proposed a theory of engagement for fostering collective action in youth leading environmental change. According to these authors, adolescence and emerging adulthood are pertinent life stage for developing civic engagement and action competence, because of the moment of openness to experience and identity formation. They differentiated from environmental actions the attendance to community events and the individual ecological actions. Environmental actions specifically aim to solve the roots of the problems while influencing and engaging others. The theory argues that effective environmental actions in youth requires some active ingredients and facilitating factors to create long-term engagement. It is necessary to encourage personal reflection, foster system thinking (better comprehension of environmental issues), build action competence and provide role modelling and support, as active ingredients. After them, some facilitating factors need to be developed in youth, such as motivation, comprehension, self-efficacy, practical skills and the opportunity to engage in action.

Riemer, Lynes and Hickman (2013) described a model for developing and assessing youth-based environmental engagement programs. First, some characteristics may be described concerning the activity: a) objectives (e.g., physical environmental improvement, community education, inquiry, advocacy for policy change, or services for community development), b) structure (considering the density of the activity and the leadership), and c) quality (i.e., providing meaning participation, empowerment, relationships building and learning skills). Second, some engagement features were presented, i.e., the intensity (frequency of engaging in the activity), the breadth (the diversity of different activities in which the youth are involved) and the duration (the consistency over time and the amount of time spent). Third, some initiating and sustaining factors are added in the model, such as motivation to become engaged, perceived instrumentality, educational level, support from family, peers and teachers, positive experiences in nature, and tasks' enjoyment. Fourth, some mediators and moderators are also considered, such as emotionality, agreeableness, self-regulation and communication skills in youth. Finally, the model described some possible outcomes of engagement: a) at individual level, i.e., greater wellbeing, less risk behaviours, less school failure and more social commitment; b) at a social level, i.e., more social skills and better social relationships; c) at a system level, so that significant transformational experiences in adolescence and youth are predictors of civic engagement in environmental issues at later age, and d) at an environmental level, some positive effects are expected from educational actions, such as waste collected. Following this paradigm, Riemer et al. (2016) conducted a mixed-method longitudinal study in Bangladesh, Canada,

Germany, India, Uganda, and the United States, and proved the effectiveness of "Youth Leading Environmental Change Programs". After a 1-year-follow-up, most university students experienced a personal transformation in the way they interacted with the environment and perceive themselves as agents of change. Thus, these authors found supportive evidence for this model to engage young people as active citizens and environmental change agents, by facilitating youth learning through action and reflection.

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