Jean Piaget as a Pioneer of Modern Psychology: Critical Review ID No.4004

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Abstract

There is increased interest in Jean Piaget contributions in modern psychology because his works focused on one of the most significant fields in human's life. However, Piaget's theory has been criticized due to shortcoming in methodology, ambiguity in his style, and characterizing human abilities negatively. This paper aimed to review some reasons that led researchers to criticize Piaget's theory. Also, presenting some of his contributions in child development, which have led his theories to be considered as effective ones in modern psychology. This review suggested that majority of criticisms could be regarded to misunderstand of Piaget's contributions, language barriers and his new methods in search. In addition, some of his contribution such as his theory of cognitive development and his contribution to characterize thinking of child with adult still regarded as an effective in modern psychology. Future research of Piaget is recommended to understand his purposes, subjects, and concepts from within.

Keywords: Child development, Human abilities, Cognitive development.

1. Introduction

In recent years, there has been an increasing interest in Jean Piaget theories (1896–1980) because his works focused on one of the most significant fields in human's life. His perspective relates to the way that children may use to build their knowledge and the effects of time in changing constructions (Kail and Cavanaugh, 2010, p.13). Although Piaget's theory of child development has been heavily criticized because of shortcomings in some of the main aspects, his contribution could represent the most effective achievement and provide a new vision of child development (Lourenco and Machado, 1996, p.143; Miller, 2011, p.28). In the same way, Flavell (1996, p.200) highlights the fact that Piaget could be regarded as a main figure of developmental perspective. This paper will analyse some possible reasons that led researchers to criticize Piaget's theory and it will also present some of his contributions in child development, which have led his theories to be considered as effective ones in modern psychology.

2. Issues in Piaget's theory of child development

A new ground has been broken into child development by Piaget's theory. However, some limitations in its usage make it an easy target for many criticisms in more than one aspect because of an underestimation of human abilities, methodological and stylistic barriers.

2.1 Underestimated the human abilities

An underestimation of human abilities could be considered as a main shortcoming of Piaget's





theory. This perspective was reflected in his theory of cognitive development, especially with infants and post-adolescence. One example of this is thinking ability which human abilities in infants that has been ignored by Piaget. This is because he assumes that infants are unable to think like adults. However, in his research, Wynn (2002, p.202) observed that infants who looked at the incorrect items looked longer than those who looked at the correct items. Another issue of Piaget's perspective could be related to his idea of new cognitive formation. He assumes that the new cognitive formation could help infants to find hidden objects but "recent research suggests that infants have the ability to conceptualize much earlier than we thought" (Mandler, 1990, p.236). In the same way, Kagan (1984, p. 73) points out, that the growth in the memory could help infants to search for hidden objects.

In addition, another illustration of the disregard of human abilities by Piaget may be related to his perspective of social and cultural aspects of cognitive development which might be considered as clear neglect of developmental factors. Nevertheless, this topic can be considered as a controversial issue in this perspective because "the human being is immersed right from birth in a social environment which affects him as much as his physical environment" (Piaget, 1950, p.156). It seems that the possible difference between Piaget and other scientists in this area could be related to individuality because his perspective considers individuals as a main unit of analysis while it considers social effects on cognitive development a minor point in his theory (Tudge and Winterhoff, 1993, p.62). Conversely, there is a misunderstanding of Piaget's perspective about the effects of social factors on cognitive development and this could be the result of his emphasis on sequence and development of cognitive stages (Lourenco and Machado, 1996, p.150).

2.2 Methodological and stylistic barriers

Although Piaget relied on some scientific methods for his works such as observation, interview and assessment situation, shortcomings lie in the content of the methods that he built. For example, interviews as one of the techniques that he used, was built from the responses that he obtained (Braine, 1962, p.46). Another illustration of the problems in his research can be linked with the exaggeration on controlling the samples and his interferences in experimental procedures which in some cases led to the abnormal environment of experimental process (Miller, 2011, pp.27-28). It seems that his methodology is inscrutable. As Braine (1962, p.61) confirms the main barrier of un-clarity of Piaget's theory formulation can be related with his methodology. In addition, it is also possible to regard his ways of reporting results as another example of his weaknesses point. Therefore, it is argued that Piaget used description more than explanation for his results. Similarly, Braine (1962, p.42) confirms that Piaget often used illustration and he never showed data completely. Additionally, his statistical analysis is unclear, which could make comparisons between children impossible.

Piaget's perspective of stage concept has been attacked widely because of an inadequate support for this idea. This fact has been confirmed by Piaget himself when he mentioned that cognitive development was spiral rather than in stages (Miller, 2011, p.86). It can be noted that cognitive development depends on individual difference principles that have been ignored by Piaget. Although Piaget's ideas of stage might be considered less coherent, in fact, many psychologists use the same classification of age boundaries in their theories of development periods. This also can be suitable to organise types of behaviour ((Miller, 2011, p.78).

In terms of logic, Piaget has been heavily criticised because he used illogical models (Ennis, 1982, p. 128). It is argued that using logical samples may count as healthy support for scientific theories. However, this principle is different from Piaget's perspective of cognitive development because he used logic excessively, which made his thinking appear abnormally (Lourenco & Machado, 1996, p.156). It seems that this point makes Piaget's theory an easy



target of criticism by logicians more than psychologists. For example, Lourenco and Machado (1996) allege that some logicians accuse Piaget of violating the familiar norms of logic because he "used too much logic for psychologists and too much psychology for logicians" (p.156).

3. Piaget's contributions

Despite the fact that there is a decline in the supportive research of Piaget's theory, it is possible to regard his theory as a main subject of research in child and cognitive development because his theories represent a rich source of research, and it has controlled a developmental literature.

There is a large number of contributions that Piaget's perspective made to provide child psychology. According to Flavell (1996, p.200), founding cognitive field might be regarded as one of the most important contributions of Piaget and his works in this field which has led to the new vision of childhood. Furthermore, another contribution of Piaget could be linked with the way of children thinking because his role in this area is clear and it is possible to consider him as a discoverer of children thinking at different ages. A good illustration of this is his ideas about infants because he assumes that infants think that objects are not permanent (Miller, 2011, p.75). Moreover, nowadays there are focuses on some models of cognitive development that have been created by Piaget such as assimilation-accommodation model because through this model it is possible to observe cognitive growth as a sequence process (Flavell, 1996, p.200). All these facts indicate that Piaget theories have played vital roles in modern psychology.

It is possible to consider Piaget as a pioneer in psychology because he took a different way to explain cognitive development processes. A clear example of this is reflected to his contribution to identify the motivation of cognitive behavior in childhood. His theory helped to adopt the idea that motivation of this type of behavior is intrinsically (Flavell, 1996, p.200). Another good illustration of his role could be found from his explanation of cognitive development processes when he assumes that these processes are made through three main steps: cognitive balance at small developmental levels, cognitive disequilibrium, and cognitive balance at high developmental level (Flavell, 1996, p.201). Although, this way of describing cognitive development has been criticized due to its un-clarity by researchers (Siegler, 1996, p.20), it could be considered as an unparalleled step in this area.

4. Piaget's theories and modern psychology

Evaluating the effect of Piaget on developmental psychology is impossible such as the effect of Shakespeare on English and Aristotle on Philosophy (Lourenco and Machado, 1996, p.143). Although there are some aspects in Piaget's theories that have been criticized, he regarded himself as one of the main revisionists of his theories. His real revision appeared after 1970s (Miller, 2011, p.86). It is argued that there are some possible reasons for criticizing Piaget's theories. One possible reason could be related with his productive contributions in developmental fields. For example, he has an enormous number of books and articles. According to Smith (2009, p.26), Piaget has 100 books and 600 published papers.

Another possible reason could be linked with his methodology because he used different methods for his research such as non-experimental method non-statistical style. The third possible reason is language. For example, He published 88 articles and books in France, still about 43% are unavailable in English (Smith, 2009, p.29). It is also possible to add Piaget's perspective of childhood such a reason of misunderstanding of Piaget's theories because he assumes that logically there are differences between children and adult. However, this hypothesis was against the common ideas at that time in psychology.



5. Conclusion

This paper analyzed the main reasons that led some to criticize Piaget's theory and it presented some of his contributions in child development with stating the role of Piaget's theories in modern psychology. His theory has been criticized because of shortcoming in methodology, ambiguity in his style, and characterizing human abilities negatively. However, it is confirmed that, the majority of these criticisms could be regarded to misunderstand of his contributions, language barriers and his new methods in search. In addition, some of Piaget's contribution such as his theory of cognitive development and his contribution to characterize thinking of child with adult still regarded as an effective in modern psychology. It seems that Piaget's contributions provided the new vision of cognitive and child development, and he has had a large influence on psychology, education, and philosophy. Future research of Piaget is recommended to understand his purposes, subjects, and concepts from within.

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ژان پیاژی وهک رِێبهری سایکوٚلوّژیای هاوچهرخ: پێداچونهوهیهکی رهخنهیی

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يوخته

له سایکۆلۆژیای هاوچەرخ دا، به چاویکی پر بایهخ داپوانریته کار و بهرههمهکانی ژان پیاژی، بههۆی جهخت کردنهوهی لهسهر یهکیک له گرنگترین بوارهکانی ژان پیاژی بههۆی کهم و کورتی له میتۆدۆلۆژی، و ناپوونی له شیوازهکهی، به نهریّنی وهسف کردنی توانستهکانی مرۆڤ. لیرهوه ئامانجی ئهم ئارتیکه له بریتی بوو له پیداچونهوهیه کی پهخنهیانهیه بۆ ئهو هۆکارانهی که بوونه پالنهری به نهریّنی وهسف کردنی توانستهکانی مرۆڤ. لیرهوه ئامانجی ئهم ئارتیکه له بریتی بوو له پیداچونهوهیه کی پهخنهیانهیه بۆ ئهو هۆکارانهی که بوونه پالنهری تویژهران بۆ پهخنه گرتن له تیورهکهی پیاژی. و دواتر، خستنه پووی ههندی له بهرههمهکانی له بواری گهشهی هزری مندال، که دواتر بوون به ههویّنی دهولهمهند کردنی سایکولوژیای هاوچهرخ. دهرئهنجامهکانی ئهم پیداچوونهوهیه گهیشته ئهو دهرئهنجامهی که هوکاری زورینهی پهخنهکان دهکری بگهیندریّتهوه بو ههله تیکهیشتن له کار و بهرههمهکانی پیاژی، بههوی ئالنگکاری زمانهوانی و مودیّرنی میتودهکهی له بواری تویژینهوهی زانستی. جیا لهوهی که زوریکی له بهرههمهکانی وهک تیورهکهی له بواری گهشهی بیرکردنهوهی مندال و پیگهیشتوان هیّشتا کاریگه و جالاکه له سایکولوژیای هاوچهرخ دا. له کوّتایی دا، ئهم پیداچونهوه پهخنهیه پیشنیاری تویژینهوهی زیاتری کرد سهبارهت به بهرههم و داهیّنانهکانی پیاژی له داهاتوو دا، بو تیگهیشتن له ناوهروّکی مهبهست و بابهت و چهمکهکانی.

ووشه گرنگهکان: گەشەي منداڵ، توانستە مرۆڤابەتبەكان، گەشەي مەعرىفى.

جان بياجيه كرائد لعلم النفس الحديث: مراجعة نقدية

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ملخص

هناك اهتمام متزايد بمساهمات جان بياجيه في علم النفس الحديث، لأن أعماله ركزت على واحد من أهم المجالات في حياة الإنسان. ومع ذلك، فقد انتقدت نظرية بياجيه بسبب القصور في المنهجية، والغموض في أسلوبه، ووصف القدرات البشرية سلبا. هدفت هذه الورقة إلى مراجعة بعض الأسباب التي دفعت الباحثين إلى انتقاد نظرية بياجيه. أيضا، عرض بعض من مساهماته في تنمية الطفل، والتي أدت نظرياته لتكون فعالة منها في علم النفس الحديث. اقترحت هذه المراجعة إلى أن غالبية الانتقادات يمكن اعتبارها سوء فهم لإسهامات بياجيه والحواجز اللغوية وأساليبه الجديدة في البحث. بالإضافة إلى أن بعض مساهمته مثل نظريته في التطور المعرفي ومساهمته في توصيف تفكير الطفل مع البالغين لا تزال تعتبر فعالة في علم النفس الحديث. توصي هذه الورقة الى المزيد من الدراسات حول بياجيه في المستقبل، لفهم أغراضه ومواضيعه ومفاهيمه من الداخل.

الكلمات المفتاحية: تنمية الطفل ، القدرات البشرية ، النمو المعرفي.