

独生子女的工作记忆和学业成就优势

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摘要 随着全面开放二胎政策的落地, 生育数量是否影响孩子的智力和成就逐渐受到关注。先前研究表明, 独生子女的工作记忆强于非独生子女, 并有更高水平的学业成就。有研究者认为, 独生子女有着先天的生育优势, 带来更高的智力和成就; 也有研究者认为, 独生子女得益于父母倾注了更多的情感和物质资源。也有研究发现, 独生子女并没有智力和成就上的优势, 反而会表现出更多“小皇帝”的行为特征, 诸如不可信, 自私等。本研究探索了独生子女的工作记忆及其与学业成就的关系。研究一采用活动记忆任务测察了 1965 名 14-18 岁青少年 (其中独生子女 537 人) 的工作记忆。结果显示, 独生子女的工作记忆显著强于非独生子女。在控制性别和年龄的情况下, 独生子女可以显著预测工作记忆 ($\beta=0.126, T=5.617, p<0.001$)。研究二收集了参与研究一的 475 名同学 (其中独生子女 127 人) 最近一次考试的学业成绩。结果显示独生子女的语文、数学和英语成绩显著高于非独生子女。此外, 男孩的语文成绩 ($T=-4.472, p<0.001$) 和英语成绩 ($T=-5.576, p<0.001$) 显著低于女孩。工作记忆与学业成就没有显著相关。控制了年龄, 性别和工作记忆之后, 独生子女显著预测学业成绩。这提示了独生子女的学业成就优势受一系列复杂因素的影响, 工作记忆并未发挥重要的作用。后天充足的物质和情感资源可能是影响独生子女学业成就的重要因素。今后的研究可以进一步探索独生子女工作记忆和学业成就优势的形成原因。

关键词 独生子女, 学业成就, 工作记忆, 性别差异。

Working Memory and Academic Achievement Advantages of Only Child

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Abstract : With the full implementation of the two-child policy, more and more attention has been paid to whether the number of births affects children's intelligence and achievement. Previous studies have shown that only child has stronger working memory and academic achievements than non-only child. Some researchers believe that the only child has a congenital fertility advantage, which brings higher intelligence and achievement. Others believe that the only child benefits from the parents' devotion of more emotional and material resources. Some studies have found that the only child does not have an advantage in intelligence and achievement, and will show more "little emperor" behavior characteristics, such as unreliable, selfish, and competitive. This study explored the relationship between working memory and academic achievement of only child. In study 1, the working memory of 1,965 adolescents aged 14-18 years (537 only child) was examined using the active memory task. The results showed that the working memory of only child was significantly stronger than that of non-only child. When controlling for gender and age, only child could significantly predict working memory ($\beta =0.126, T=5.617, p<0.001$). Study 2 collected the exam scores of 475 students (127 only child) who participated in Study 1. The results showed that the only-child's Chinese, math and English scores were significantly higher than those

of the non-only-child. In addition, boys' Chinese achievement ($T=-4.472$, $p < 0.001$) and English achievement ($T=-5.576$, $p < 0.001$) were significantly lower than girls'. Working memory has no significant correlation with academic achievement. After controlling the age, sex and working memory, only children positively predicted academic performance. This suggests that the only child's academic achievement advantage is affected by a series of complex factors, and working memory does not play an important role. Adequate material and emotional resources acquired may be an important factor affecting only child's academic achievement. Future research can further explore the reasons for the formation of working memory and academic achievement advantages of only-child.

Keywords : Only child, Working memory, Academic achievements, Gender differences