# Non-intact Families and Adolescents' Exposure to Risk Behaviors: An Analysis of Comparative Longitudinal Survey Data

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#### Introduction

It has been largely documented that children experiencing parental separation or living with a single parent suffer a penalty on different measures of well-being and higher risks of behavioral problems compared to children living with both parents (Amato 2000; Chapple 2009). Despite this, many gaps in knowledge and open questions remain. First, most empirical studies cover the United States and Northern European countries with an earlier and wider diffusion of new family forms, but the evidence for "latecomers" of the Second Demographic Transition is limited (Salvini and Vignoli 2011; Vignoli et al. 2018). Second, studies often adopt a binary (two-parent vs. single-parent) family typology, neglecting more "complex" family arrangements (e.g., stepfamilies). Third, whereas theoretical arguments suggest that parental separation should have fewer negative consequences for children's outcomes the more widespread and normatively accepted new family forms are in a society, empirical studies have often found the opposite result, i.e., larger divorce penalties when divorce is more common (Guetto et al. 2022; Kreidl et al. 2017; Pong et al. 2003) or no changes across cohorts (Kalmijn 2023). These studies often relied on a limited number of countries and/or covered a limited period.

We aim to contribute to all these issues by exploiting a unique dataset covering a 20-year time span for 30 European countries, including Southern and Eastern European countries. First, we investigate the association between different types of family structure and adolescents' exposure to risk behaviors, i.e., cigarettes, alcohol, and cannabis use. Second, we explore if and how the penalty for children in non-intact families changes as the process of marriage de-institutionalization evolves.

### **Data and Methods**

We use a repeated cross-sectional dataset from 6 waves (1999-2019) of the ESPAD survey which collects information on nationally representative samples of adolescents (16yo) (<a href="http://espad.org/">http://espad.org/</a>). We employ multinomial logit regressions with two-way clustering (at country and country-year level). The dependent variables are measures of cigarettes, alcohol, and cannabis use, distinguishing those who report no use at all, occasional use, and regular use in the last month. The main independent variable represents the family structure whose categories are: two-parent family (N=308,992), single-parent family (N=58,676), stepfamily (N=32,959), and no-parent family (N=12,916). In the first step of the analysis, we explore the gap in the likelihood of using cigarettes, alcohol, and cannabis among adolescents in different family structures, controlling for the survey year, country of residence, sex, presence of siblings and/or grandparents in the household, parental education, and perceived socioeconomic status. The models look as follows:

$$\ln\left(\frac{P(Y_{ijt}=k)}{P(Y_{ijt}=K)}\right) = Family_{ijt} + Country_j + Year_t + X_{ijt} + \varepsilon_{ijt}$$
 (1)

where k represents the category among "no user", "occasional user", and "regular user", K is the reference category, i indicates the individual, j refers to the country, and t represents the survey year. In the second step of our analysis, we construct a composite index representing the level of "marriage"

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de-institutionalization" (Cherlin 2004), or the diffusion of Second Demographic Transition (SDT)-related behaviors. This index is computed as the average of the following normalized indicators: the ratio between the number of divorces and the number of marriages, the percentage of births outside marriage on total births, and the total first marriage rate. We augment models with the *between* (country means,  $\overline{MD_j}$ ) and *within* (deviations from country means,  $demMD_{jt}$ ) components of the index, and their interactions with family structure (Fairbrother 2014). This methodology enables testing hypotheses on the consequences of both the *levels* and *changes* in the diffusion of marriage de-institutionalization at the country level. We also control for the yearly proportion of the national population attending religious events less than once per week (*European Social Survey* data), as presented in equation (2).

$$\ln\left(\frac{P(Y_{ijt}=k)}{P(Y_{ijt}=K)}\right) = Family_{ijt} + \overline{MD}_{j} + Family_{ijt} \times \overline{MD}_{j} + demMD_{jt} + Family_{ijt} \times demMD_{jt} + NoChurch_{jt} + Year_{t} + X_{ijt} + \varepsilon_{ijt}$$
 (2)

## **Preliminary results**

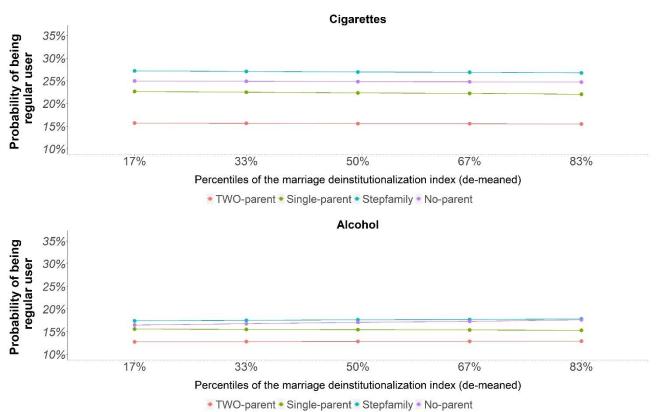
Preliminary findings (Figure 1) suggest that adolescents living in non-intact families, particularly those living without any parents and in a stepfamily, show higher risks of being regular users of cigarettes, alcohol, and cannabis than children living with both parents.

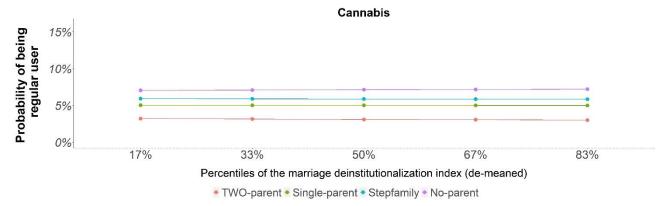




**Figure 1** Probability of being regular users of cigarettes (top panel), alcohol (middle panel), and cannabis (bottom panel) for adolescents in different family structures.

The between-country analysis suggests that the penalty for children in non-intact families is slightly larger in nations where the process of marriage de-institutionalization is more advanced, in line with existing empirical evidence. However, within-country findings (Figure 2) clearly show that the penalty for children in non-intact families is strikingly stable at different levels of diffusion of the process of marriage de-institutionalization. Similar conclusions can be drawn regarding the risk of being non-users and occasional users of cigarettes, alcohol, and cannabis.





**Figure 2** Probability of being regular users of cigarettes (top panel), alcohol (middle panel), and cannabis (bottom panel) for adolescents in different family structures at different stages of the marriage deinstitutionalization process within-country.

### **Conclusions**

The key takeaways drawn from this study can be summarized as follows. Adolescents in non-intact families are more likely to regularly use cannabis, tobacco, and alcohol. Cross-country analyses indicate that the disadvantage experienced by children in non-intact families is more prominent in societies with advanced marriage de-institutionalization, in line with recent findings in the literature. This result, however, is likely to be influenced by unobserved national characteristics. Within-country analyses reveal indeed that the non-intact penalty remains unchanged regardless of the level of diffusion of SDT-related behaviors.

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