Using Material Exchange to Index Types of Relationships: Union Formation, Vulnerability and Health in Rural Malawi

Sarah Garver, PhD¹; Jenny Trinitapoli, PhD¹ ¹ Department of Sociology, University of Chicago, Chicago, IL USA

INTRODUCTION

Exchange, whether monetary or nonmonetary, solidifies social ties by denoting trust and commitment, and by establishing an expectation of reciprocity. In sub-Saharan Africa, exchange remains central to defining romantic relationships as well as solidifying kinship and community networks. However, when monetary and nonmonetary exchange occurs in the context of romantic relationships, our most common language for describing this is that it is transactional – women receive support from their partners in exchange for sex – and this framing has been tied to women's disempowerment and risks of HIV infection, among others. Given that exchange is widespread across romantic relationships as well as family and community networks, it's untenable to assume that all exchange in romantic relationships is risky or denotes vulnerability. In fact, exchange helps partners to evaluate each other as viable suitors, including the expectation of marriage (or dissolution).

In this paper, we draw on novel, longitudinal data to ask: how do patterns of exchange in romantic relationships (1) help us to understand union formation and maintenance, and (2) the characteristics of unions themselves – are there distinct patterns of economic disadvantage or sexual behavior within relationships characterized by particular patterns of exchange? First, we briefly situate young women's exchange with their romantic partners within a larger context of exchange from alters, especially parent, siblings, peers, and other kin. We then focus in on the romantic realm using latent trajectory growth modeling to identify patterns of exchange across the 3,000 relationships reported to us over a two year time period by 1,505 women. This is done as a means of indexing types of committed (and less committed) relationships, including the probability of a young woman's membership into each type. We unpack these trajectories to consider (i) correlates of union formation and continuance, especially transitions from casual to more serious relationships (i.e. marriage and steady partners), and (ii) characteristics of these relationships and the women within them as they relate to expectations of marriage, economic disadvantage, and sexual behavior. Ultimately, this work speaks to a potentially important driver of union formation (and dissolution), and helps us understand the role of romantic relationships in patterns of women's vulnerability and health.

BACKGROUND

A longstanding literature engages with the norm of reciprocity and its role in solidifying social ties and social structures (Hobhouse 1906; Mauss 1950). Social interactions are dependent on the schema of exchange and often assume a degree of equivalence in response (Simmel 1950). Reciprocity can be the exchange of the material and nonmaterial, and Caplow (1984) argues that this exchange of the material acts as a lexical tool, a language to communicate meaning and symbols. Swidler and Watkins (2007) argue the exchange of material resources are emblematic of a longstanding history of broader social relations on the African continent in which social embeddedness and social ties created through exchange carry with them expectations of belonging and protection, with intimate relations being just one form of meaningful material dependence.

Marriage remains nearly universal in African settings. However, unions are also highly unstable resulting from household crises (e.g. mortality, migration), relationship dissolution and repartnering (Rachel E. Goldberg 2013; De Walque and Kline 2012, Clark and Brauner-Otto 2015). Though limited, existing research finds that these relationship patterns in sub-Saharan Africa are associated with similarly negative consequences as in the West (Clark and Brauner-Otto 2015, Clark and Hamplová 2013, Grant and Yeatman 2014). Unlike more developed settings, on the African continent few statistical studies exist to understand what shapes expectations and experiences of intimate relationships (Frye and Trinitapoli 2015), with exchange as a potentially important influence on future expectations and union formation.

Within this environment of union formation, some argue that the transfer of monetary or nonmonetary resources for sex represents a commodification of the intimate and therefore is exploitative, resulting in the disempowering of women (Hasday, 2005, Luke, 2003). If so, we can observe this in relation to patterns of disadvantage and economic dependence as well as sexual behavior. However, if exchange solidifies social ties and intimate relations are an appropriate appropriate realm of reciprocity, it may not be the case that exchange is emblematic of a larger social structure that defines and shapes patterns of union formation (and dissolution), including transitions from less committed to more committed relationships (Poulin 2007).

DATA & METHODS

For this analysis, we draw on data from the Tsogolo la Thanzi (TLT) study which is an intensive longitudinal data collection effort to understand how young adults navigate a generalized HIV epidemic. A population-based sample of young people (aged 15 to 25), drawn from an initial census listing, were randomly sampled at baseline including 1,505 women living within seven kilometers of Balaka, a trading center in the southern region of Malawi. Interviews occurred at four-month intervals between 2009 and 2011. They were conducted at a local research center by trained research assistants. The TLT data also includes a sample of male partners who were invited to participate through the female respondent, and a random sample of men. For the present analysis we exclude either the male partners or those randomly sampled.

Key Measures

At each wave, TLT captured in-depth information about a woman's three most recent partnerships, whether current or ended. This includes the value of support they've received from their partners as well as a plethora of additional partner and relationship characteristics. We draw on the value of support to think about exchange in relationships. We capture exchange from other alters when asking about economic conditions. We asked the respondent whether she gained any new goods in the past month, and if so whether she received them from someone else, including partners, siblings, friends, boyfriends and other relatives. We denote these as gifts, althouth they are not necessarily an indicator of a special occasion as would be the case in Western settings. These data situate romantic relationships within a wider array of exchange.

Analysis

We use latent growth curve (LGC) modeling which assumes there are meaningful patterns of growth followed by subsets of the population. Our analytic sample includes all ongoing relationships reported to us at baseline by women, as well as any new relationships that began over the course of the two-year study period (N=1,927). LGC allows us to also model

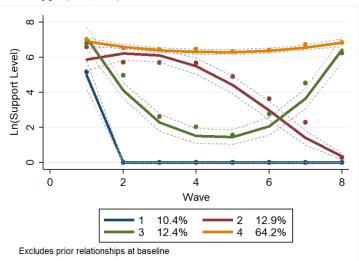
membership into the revealed patterns of growth, as well as examine the woman-level characteristics associated with each group including the number and type of unions formed. Prior to PAA, we will finalize the modeled trajectories and further test and refine a set of fixed and time-varying covariates as predictors of membership into a given relationship type, including:

Demographics	Sexual Health	Economic Vulnerability			
Education, Years	Sexually Activity	Household Assets			
Marital Status	Modern Contraceptive-Use	Support from Other Partners			
Age	Condom-Use	Food Insecurity Household Size			
Parity	HIV Uncertainty				
	HIV Status				

RESULTS

At baseline, respondents were on average 21 years old, 82% reported ever being in a relationship and 66% were currently in a relationship. Representative of the number of life transitions these women undergo during this time period, at baseline 42% were currently married, 39% were currently enrolled in school, and 49% had any living children. By wave 8, roughly two years later, these numbers were 60%, 20%, and 68%, respectively. Not shown, but elaborated in the full paper, the majority of women are receiving support from several actors, in the form of gifts in the past month. For those in school and never-married, parents represent the majority of this support. For similar women not in school, support is more divided between parents and romantic partners. For married women, spouses play the dominant role. However, siblings and other

Figure 1. Predicted Trajectories of Support, incl. % within each type (N=1,927)



relatives also play a non-trivial role and represent roughly 10% of all recent gifts received.

The LGC model follows all relationships that were ongoing at baseline as well as any new relationships that began over the two year study period. As a preliminary model, there are four predicted trends in support (Figure 1). The benefit of LGC is that we can then observe how commitment level of these relationships transitioned over the course of the relationship, and also observe characteristics of the women who enter various relationship types, the latter of which will be shown in

future versions. At wave 1, all relationships were ongoing and on average, all relationship types exhibited some level of gifting – in other words, exchange is largely synonymous with romantic partnerships. Over the study period, the trends predicted are (1) 10% that drop off and fail to provide any significant linear trend, (2) 13% that remain relatively high but then taper off, (3) 12% that exhibit a U-shaped trend but not falling to zero, and finally, (4) the modal relationship type (64%) which exhibit a slight quadratic but are generally a relatively high and linear trend.

Of interest are the union transitions that occur across these types of relationships (Table 1), with particular attention to those groups characterized by transitions to more committed relationship types (shown in grey). For those who began the relationship at low levels of commitment, groups 2 (high and declining) and 3 (U-shape) showed evidenced a sizeable minority that moved towards moderately committed relationships – although still with high levels of dissolution in these groups. Group 4 (high/stable), was the only group to show more than 10% moving towards marriage. For those beginning at moderate levels of commitment, groups 2 (high/decline) showed roughly equal movement in both directions – less commitment and greater commitment (i.e. marriage). Conversely, groups 1 and 4 show opposite patterns. Nearly 1 in 4 relationships moved to low commitment within group 1 while just over 1 in 4 moved towards marriage in group 4. Among those married, the majority stayed married over the study but group 3 showed a somewhat larger percentage decreased in commitment levels.

Table 1. Final Observed Relationship Type and Relationship Status by Group Trajectory

					Last Relationship Type			Last Relationship Status In		
		Traj	N	%	Low	Medium	High	Union	Dissolved	Uncertain
N=442 23%	Low New,Infreq,	1	112	25%	81%	19%	0%	47%	52%	1%
		2	29	7%	52%	45%	3%	38%	62%	0%
	Nosex, One-	3	43	10%	47%	49%	5%	33%	67%	0%
	Night Stand	4	258	58%	66%	22%	12%	81%	17%	2%
N=674	Medium Steady Partner, Live- In Partner	1	101	15%	23%	75%	2%	47%	50%	4%
35%		2	69	10%	22%	55%	23%	33%	61%	6%
		3	71	11%	30%	55%	15%	42%	55%	3%
		4	433	64%	7%	64%	28%	89%	10%	1%
N=811	High Spouse	1	32	4%	3%	0%	97%	28%	63%	9%
42%		2	86	11%	0%	0%	100%	58%	37%	5%
		3	72	9%	3%	3%	94%	63%	33%	4%
		4	621	77%	0%	1%	99%	95%	4%	1%

Notably, across all group trajectories and levels of commitment, dissolution was a commonly observed pattern across groups 1 through 3, especially for those not currently married. Group 4 (high/steady) represented relationships in which at least 80% (across all levels of commitment) remained together by the end of the study period.

DISCUSSION

Moving forward, we can conduct further sensitivity tests to establish the number of trajectories and the model form. We will also use these trajectories to understand woman-level characteristics in terms of who enters various relationship types – are these explained by baseline characteristics such as being ever-married or enrolled in school? And within these relationships, are certain types more or less likely to exhibit particular patterns of economic disadvantage or sexual risk behaviors. This work pushes forward important questions about how social ties (and unions) are formed and maintained through time, and the extent to which patterns of exchange – as indexing particular kinds of relationships – helps us to better understand relationship histories and individual wellbeing.