Patriarchal Ideology and Violence Against Women: A Theoretical Contribution Using Longitudinal, Individual-Level Analyses

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Feminist researchers have recently highlighted the need to revive patriarchy as a theoretical tool in regards to violence against women. Patriarchy is typically considered to be a structural concept, but a theory of patriarchy for violence against women must also include an individual-level component of patriarchal ideology. Patriarchal ideology has not been clearly conceptualized and is rarely operationalized. Very little research has assessed patriarchal ideology as a dependent variable and almost none has done this longitudinally. This research aims to fills these gaps. The current study also seeks to identify significant predictors of change in patriarchal ideology, an issue of tremendous importance for a theory of violence against women. Stronger theories that can appropriately incorporate patriarchy may lead to more effective proactive policies rather than the existing reactive policies based on poor theoretical understanding.

The data used for this dissertation comes from the Longitudinal Study of Violence against Women: Victimization and Perpetration among College Students in a State-Supported University in the United States, 1990-1995 (White, Smith, and Humphrey 2001). Since the data was from a sample of college men, the first wave of data is just before individuals transitioned into college. This was followed by three subsequent waves of data assessing patriarchal ideology after the first, second, and third years of college. Because of the various challenges posed by longitudinal data and specific
challenges posed by this data, two major analyses were performed. The main goals of these analyses were to: come up with reliable operational measures of patriarchal ideology, determine their measurement invariance over time, assess predictors of patriarchal ideology, evaluate the change/stability in patriarchal ideology, and account for the predictors of change/stability. The first major analysis operationalized individual patriarchal ideology using attitudinal measures over two waves of data in a traditional test/re-test panel design. The second major analysis operationalized patriarchal ideology using vignettes that were proxy measures of patriarchal ideology over three waves of data. Latent growth-curve modeling was used in order to assess the intra-individual and inter-individual changes in patriarchal ideology over time.

The analyses were the first of their kind to assess patriarchal ideology as an outcome variable overtime. Overall, findings suggest patriarchal ideology is a multidimensional concept that can be measured using attitudinal measures and vignettes, with some support suggesting vignettes may be preferred. During the transition from pre-college to the end of one’s freshman year, patriarchal ideology was stable. After this time period, over the next three years of college patriarchal ideology declined for the sample as a whole. Interestingly, there was inter-individual change but no intra-individual change in patriarchal ideology. The means that regardless of one’s initial levels of patriarchal ideology, everyone’s levels declined over these three years. These results are discussed further regarding their theoretical, methodological, and policy implications. Suggestions for future research assessing the role patriarchal ideology plays in theories of violence against women are discussed.
This dissertation is dedicated to my mom and dad who have allowed me to live my dream, I love you guys.
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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I: INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>PATRIARCHY AND VIOLENCE AGAINST WOMEN</td>
<td>8</td>
</tr>
<tr>
<td>&quot;RESURRECTING PATRIARCHY&quot;</td>
<td>11</td>
</tr>
<tr>
<td>DEFINITIONS</td>
<td>23</td>
</tr>
<tr>
<td>PURPOSE OF DISSERTATION</td>
<td>24</td>
</tr>
<tr>
<td>DISSERTATION OUTLINE</td>
<td>25</td>
</tr>
<tr>
<td>II: INSTITUTIONAL PATRIARCHY AND INSTITUTIONAL PATRIARCHAL IDEOLOGY</td>
<td>26</td>
</tr>
<tr>
<td>PATRIARCHY AS A THEORY</td>
<td>30</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>46</td>
</tr>
<tr>
<td>III: INDIVIDUAL PATRIARCHAL IDEOLOGY</td>
<td>48</td>
</tr>
<tr>
<td>SEX/GENDER ROLE IDEOLOGY</td>
<td>59</td>
</tr>
<tr>
<td>HEGEMONIC MASCULINITIES</td>
<td>69</td>
</tr>
<tr>
<td>PATRIARCHAL IDEOLOGY</td>
<td>102</td>
</tr>
<tr>
<td>IV: METHODS: ASSESSING INDIVIDUAL PATRIARCHAL IDEOLOGY OVER TIME USING ATTITUDINAL MEASURES FROM A TEST/RETEST PANEL DESIGN</td>
<td>104</td>
</tr>
<tr>
<td>DATA AND SAMPLE</td>
<td>105</td>
</tr>
<tr>
<td>ANALYSES</td>
<td>122</td>
</tr>
<tr>
<td>RESEARCH QUESTIONS ADDRESSED IN DATA ANALYSES</td>
<td>123</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>135</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>V: RESULTS: ASSESSING INDIVIDUAL PATRIARCHAL IDEOLOGY OVER TIME USING ATTITUDINAL MEASURES FROM A TEST/RETEST PANEL DESIGN</td>
<td>136</td>
</tr>
<tr>
<td>MEASUREMENT RELIABILITY</td>
<td>136</td>
</tr>
<tr>
<td>MEASUREMENT RELIABILITY OVER TIME</td>
<td>147</td>
</tr>
<tr>
<td>PREDICTORS OF PATRIARCHAL ATTITUDES BEFORE AND AFTER ONE YEAR OF COLLEGE</td>
<td>152</td>
</tr>
<tr>
<td>MEAN DIFFERENCES IN PATRIARCHAL ATTITUDES</td>
<td>155</td>
</tr>
<tr>
<td>PATRIARCHAL ATTITUDES AND STABILITY</td>
<td>159</td>
</tr>
<tr>
<td>RECIPROCAL EFFECTS OF RELATIONSHIP VIOLENCE AND PATRIARCHAL ATTITUDES</td>
<td>163</td>
</tr>
<tr>
<td>LIMITATIONS</td>
<td>165</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>168</td>
</tr>
<tr>
<td>VI: METHODS: ASSESSING INDIVIDUAL PATRIARCHAL IDEOLOGY OVER TIME USING LATENT GROWTH CURVE MODELING</td>
<td>171</td>
</tr>
<tr>
<td>DATA AND SAMPLE</td>
<td>172</td>
</tr>
<tr>
<td>OPERATIONALIZING PATRIARCHAL IDEOLOGY WITH VIGNETTES</td>
<td>176</td>
</tr>
<tr>
<td>OUTCOME VARIABLES AND RELIABILITY</td>
<td>178</td>
</tr>
<tr>
<td>BIVARIATE STATISTICS</td>
<td>192</td>
</tr>
<tr>
<td>ANALYTIC STRATEGY: USING LATENT GROWTH CURVE MODELING TO ASSESS PATRIARCHAL IDEOLOGY OVER TIME</td>
<td>194</td>
</tr>
<tr>
<td>LIMITATIONS</td>
<td>202</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>204</td>
</tr>
<tr>
<td>VII: RESULTS: INDIVIDUAL PATRIARCHAL IDEOLOGY OVER TIME, A LATENT GROWTH CURVE MODELING APPROACH</td>
<td>206</td>
</tr>
<tr>
<td>SINGLE-DOMAIN GROWTH CURVES</td>
<td>206</td>
</tr>
<tr>
<td>MULTIPLE-DOMAIN GROWTH MODELS</td>
<td>213</td>
</tr>
<tr>
<td>UNDERSTANDING THE DIRECTIONALITY OF THE RELATIONSHIP BETWEEN PATRIARCHAL IDEOLOGY AND RELATIONSHIP VIOLENCE</td>
<td>224</td>
</tr>
<tr>
<td>LIMITATIONS</td>
<td>227</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>231</td>
</tr>
<tr>
<td>VIII: IMPLICATIONS AND CONCLUSIONS</td>
<td>234</td>
</tr>
<tr>
<td>METHODOLOGICAL IMPLICATIONS</td>
<td>234</td>
</tr>
<tr>
<td>THEORETICAL IMPLICATIONS: UNDERSTANDING PATRIARCHAL IDEOLOGY IN A THEORY OF VIOLENCE AGAINST WOMEN</td>
<td>238</td>
</tr>
<tr>
<td>PATRIARCHAL IDEOLOGY: CHANGE OVER TIME AND FEEDBACK EFFECTS</td>
<td>249</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>253</td>
</tr>
</tbody>
</table>
REFERENCES ....................................................................................................................256
VITA .....................................................................................................................................290
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.</td>
<td>Aggregate Results of 4 Major Systematic Reviews Assessing the Relationship between Men’s “Patriarchal Ideology” and Violence against Women</td>
<td>77</td>
</tr>
<tr>
<td>3.2.</td>
<td>Research Studies from Four Major Systematic Reviews Looking at Patriarchal Ideology as a Predictor of Violence against Women</td>
<td>85</td>
</tr>
<tr>
<td>4.1.</td>
<td>Sample Size for Valid Responses for each Data Point for Cohorts 1 and 2</td>
<td>107</td>
</tr>
<tr>
<td>4.2.</td>
<td>Descriptive Statistics for Patriarchal Attitudes</td>
<td>112</td>
</tr>
<tr>
<td>4.3.</td>
<td>Frequency Distributions of Independent Variables</td>
<td>116</td>
</tr>
<tr>
<td>5.1.</td>
<td>Inter-Item Correlations, Descriptive Statistics, and Cronbach’s α for Patriarchal Attitudes</td>
<td>138</td>
</tr>
<tr>
<td>5.2.</td>
<td>Descriptive Statistics for Patriarchal Attitudes, Cohort 2 Deleted</td>
<td>142</td>
</tr>
<tr>
<td>5.3.</td>
<td>Frequency Distributions of Independent Variables, Cohort 2 Deleted</td>
<td>143</td>
</tr>
<tr>
<td>5.4.</td>
<td>Confirmatory Factor Analysis (CFA) Results of Independent Measurement Models</td>
<td>146</td>
</tr>
<tr>
<td>5.5.</td>
<td>Goodness-of-Fit Statistics for Auto-Regressive Structural Equation Models for Longitudinal Confirmatory Factor Analyses</td>
<td>148</td>
</tr>
<tr>
<td>5.6.</td>
<td>Pearson’s r Correlation Matrix, Cohort 2 Deleted</td>
<td>153</td>
</tr>
<tr>
<td>5.7.</td>
<td>Goodness-of-Fit Statistics for Multi-Group Structural Equation Models</td>
<td>160</td>
</tr>
<tr>
<td>6.1.</td>
<td>Sample Size for Valid Responses for each Data Point for Cohorts 1, 2, and 3</td>
<td>175</td>
</tr>
<tr>
<td>6.2.</td>
<td>Descriptive Statistics of Key Outcome Variables</td>
<td>187</td>
</tr>
<tr>
<td>6.3.</td>
<td>Descriptive Statistics of Time-Variant Measures</td>
<td>188</td>
</tr>
<tr>
<td>6.4.</td>
<td>Descriptive Statistics of Predictors</td>
<td>189</td>
</tr>
<tr>
<td>Table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.5.</td>
<td>Results of Paired Samples T-Tests for Mean Differences in Repeated Measures</td>
<td>193</td>
</tr>
<tr>
<td>6.6.</td>
<td>Pearson’s $r$ Correlations for All Variables</td>
<td>195</td>
</tr>
<tr>
<td>7.1.</td>
<td>One-Way ANOVA Assessing Cohort Differences in Patriarchal Ideology and Relationship Violence Perpetration (RVP)</td>
<td>230</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Hypothesized Two-Factor Operationalization of Patriarchal Attitudes</td>
<td>126</td>
</tr>
<tr>
<td>4.2</td>
<td>Hypothesized Longitudinal Confirmatory Factor Analysis (LCFA)</td>
<td>127</td>
</tr>
<tr>
<td>4.3</td>
<td>General MIMIC Model used for Wave 1 and Wave 2</td>
<td>129</td>
</tr>
<tr>
<td>4.4</td>
<td>Hypothesized Nonrecursive SEM of Key Outcome Variables</td>
<td>134</td>
</tr>
<tr>
<td>5.1</td>
<td>Results of Longitudinal Confirmatory Factor Analysis (LCFA) (Model 1B)</td>
<td>151</td>
</tr>
<tr>
<td>5.2</td>
<td>MIMIC Model for Wave 1</td>
<td>156</td>
</tr>
<tr>
<td>5.3</td>
<td>MIMIC Model for Wave 2</td>
<td>157</td>
</tr>
<tr>
<td>5.4</td>
<td>Autoregressive SEM Assessing Predictors of Change/Stability in Patriarchal</td>
<td>164</td>
</tr>
<tr>
<td></td>
<td>Attitudes</td>
<td></td>
</tr>
<tr>
<td>6.1</td>
<td>Hypothesized LGM for Patriarchal Ideology</td>
<td>199</td>
</tr>
<tr>
<td>6.2</td>
<td>Multiple-Domain Latent Growth Curve Model</td>
<td>200</td>
</tr>
<tr>
<td>7.1</td>
<td>Results of Single Domain LGM for Patriarchal Ideology</td>
<td>207</td>
</tr>
<tr>
<td>7.2</td>
<td>Results of Single Domain LGM for Relationship Violence Perpetration</td>
<td>210</td>
</tr>
<tr>
<td>7.3</td>
<td>Results of Single Domain LGM for Relationship Violence Victimization</td>
<td>212</td>
</tr>
<tr>
<td>7.4</td>
<td>Results of Trimmed Multiple-Domain Latent Growth Curve Model</td>
<td>215</td>
</tr>
<tr>
<td>7.5</td>
<td>Conditional LGM with Domains: Patriarchal Ideology and Relationship</td>
<td>219</td>
</tr>
<tr>
<td></td>
<td>Violence Perpetration</td>
<td></td>
</tr>
<tr>
<td>7.6</td>
<td>Fully Unconstrained Autoregressive SEM for Patriarchal Ideology and</td>
<td>225</td>
</tr>
<tr>
<td></td>
<td>Relationship Violence Perpetration across 3 Waves</td>
<td></td>
</tr>
<tr>
<td>7.7</td>
<td>Autoregressive SEM for Patriarchal Ideology and Relationship Violence</td>
<td>226</td>
</tr>
<tr>
<td></td>
<td>Perpetration across 3 Waves (Constrained Autocorrelations)</td>
<td></td>
</tr>
<tr>
<td>8.1</td>
<td>Dimensions of Patriarchal Ideology</td>
<td>230</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

PATRIARCHY AND VIOLENCE AGAINST WOMEN

Although a variety of perspectives attempt to explain violence against women and intimate partner violence, there are two specific perspectives that have gained popularity over recent decades. The first perspective claims that violence between intimate partners is committed equally amongst men and women (for a recent review of this literature see Straus 2011), while the second perspective argues that intimate partner violence is largely the product of patriarchy, with most serious forms of violence being male perpetrated (Brownmiller 1975; DeKeseredy 2011a; DeKeseredy and Dragiewicz 2007; Dobash and Dobash 1977, 1979; Ferraro 1988; Johnson 2008, 2011; Koss et al. 1994; Kurz 1989; Tjaden and Thoennes 2000; Websdale 1998; Yllo 1990, 1993).

Those perspectives based on the assumption of “gender symmetry” include the “family violence school” (e.g. Straus and Gelles 1990) as well as the psychological perspective (e.g. Dutton 2006). There are several differences between these two perspectives, however, one major point of congruence is that both see violence between intimate partners as gender neutral. In the same sense that there are multiple schools of thought regarding a psychological approach to studying intimate partner violence (see note 1), there are numerous feminist theories of intimate partner violence, or the more
appropriate term- violence against women\textsuperscript{1}. Prior to discussing the specifics of this current research, it is important to note the mounting evidence showing that "intimate partner violence" is indeed a gendered phenomenon. While this may seem redundant to anyone familiar with the field of violence against women, it is necessary since a large number of researchers and anti-feminists in general continue to ignore, minimize, or purposefully misrepresent this research (DeKeseredy 1999, 2011a; Dragiewicz 2011).

Current research clearly shows that intimate partner violence is a gendered phenomenon. The National Crime Victimization Survey (NCVS) found that roughly 85% of all intimate partner violence involves female victims (Rennison and Welchans 2000). When women use violence against male partners, it is often in self-defense against male-initiated violence or threats of violence (Allen, Swan, and Raghavan 2009; Daly and Wilson 1988; Dasgupta 2002; Dobash and Dobash 2004; Hamberger and Potente 1994; Saunders 1986; Swan et al. 2008; Walby and Allen 2004). Self-defense also applies in some extreme cases where a woman may kill an intimate partner. In these cases, women have killed after suffering years of abuse or in response to immediate lethal threats (Browne 1987; Websdale 1999). Within intimate relationships, women are also

\textsuperscript{1} Terms like this or "wife abuse/assault", "woman abuse/assault", "woman battering", or similar concepts are preferred in this dissertation. Generic, gender-neutral terms such as "partner abuse", "family violence", or "spouse abuse" are inconsistent with reality and fail to contextualize men's use of violence against former or current partners (Bograd 1990). The actual term "domestic violence", is used at times when referring to specific phrases like the "domestic violence movement" or "domestic violence policing."
significantly more likely to be victims of more severe forms of violence including rape and homicide (Dobash and Dobash 1990; Dobash, Dobash, and Cavanagh 2009; Dobash et al. 2007; Russell 1990; Stark 2007; Yllo 1990; Websdale 1999) as well as violence likely to result in serious injuries (Feder and Henning 2005; Stark and Flitcraft 1991; Walker 1979). The violence extends beyond adult relationships. Adolescent girls in dating relationships are more likely to experience severe violence both physically and emotionally than married or cohabitating adults (Molidor and Tolman 1998).

“Gender symmetry” proponents also utilize narrow definitions of violence that fail to capture the various ways that men control, or attempt to control, their partners through nonviolent means. This can include threats, intimidation, manipulation, or financial control (Johnson 2008; Miller and Smolter 2011; Pence and Paymar 1993; Stark 2007). These nonviolent control measures can affect a victim’s physical and mental health (White et al. 2000). In short, a substantial body of empirical research produced over the past 40 years shows that “partner violence” is overwhelmingly men’s violence against women.

The domestic violence movement of the 1970s is well known for shifting the dominant ideology of domestic violence from a private matter to a social problem affecting many that requires significant societal attention (Sherman 1992). Yet the most substantive outcome of the domestic violence movement over the past four decades is arguably this ideological shift producing more public awareness (Nixon and Humphreys 2010). Public awareness, however, has not necessarily translated into the safety and empowerment of women in regards to their intimate relationships. The main reason for this has been a myopic focus on criminal justice interventions regarding violence against
women. Similar to the largely ineffective criminal justice policies regarding crimes in general over the past four decades (see Chambliss 2001; Pratt 2009; Senjoy 2010; Tonry 1995), domestic violence policies have failed to lead to widespread reductions in men’s use of violence and control of their intimate partners. This failure can be linked to weak theoretical explanations of violence against women.

*Domestic Violence Policy*

Prior to the domestic violence movement in the 1970s, domestic violence policy could be described as what Lutze and Symons (2003:320) have called, “male privilege and the right to discipline.” The violence directed against women during this time period was not significantly different from current types of victimization, but law did little to protect victims from the abuse suffered at the hands of their male partners. This was the era when domestic violence was viewed as a private, non-criminal matter, requiring almost no formal interventions (Raphael 2004; Sherman 1992). As support for the domestic violence movement grew, pressure from women’s advocates was placed on the state to do something to assist the millions of women victimized by male intimate partners. Pressure was also placed on social scientists to develop theoretical and empirical studies regarding domestic violence. Eventually, policy makers responded to the increased attention given to domestic violence by relying on empirical research and political rhetoric.

The major contributing empirical research was the Minneapolis Domestic Violence Experiments (MDVE) by Sherman and Berk (1984). Using a quasi-experimental research design, these researchers found support for the notion that arresting
domestic batterers significantly reduced the chances of re-offending, more than separation or mediation\(^2\). The subsequent policies adopted by lawmakers were mandatory and pro-arrest policies where officer discretion was largely removed. In most cases, police officers were told that they must arrest the primary aggressor when responding to domestic violence calls. The goals of these policies were to provide safety for women, deter abusers, and reduce victim intimidation by shifting responsibility for the arrest decision to the police (Dasgupta 2002; Phillips and Sobol 2010).

Some victim advocates and feminists have been receptive to criminal justice policies that hold perpetrators accountable and take domestic violence seriously (see Humphries 2002; Stark 2007). After all, one way to empower marginalized groups is through formal institutions such as the criminal justice system. However, others argue that mandatory arrest and pro-arrest policies are ineffective and should not be considered the primary policy for combating violence against women. Specifically, empirical research regarding the effectiveness of these policies find that: 1) officers do not always make arrests even when they are required to (Avakame and Fyfe 2001; Buzawa and Austin 1993; Chesney-Lind 2002; Websdale 1998), 2) they are often ineffective for

\(^2\) Despite significant changes in the original research design, subsequent studies were still considered “replications” as part of the Spouse Assault Replication Program (SARP) (Maxwell, Garner, and Fagan 2002). These replication studies produced mixed results from the original Sherman and Berk research (see Garner, Fagan, and Maxwell 1995), calling into question the original findings regarding the universal effectiveness of arrest for cases of wife assault.
marginalized men who have minimal stakes in conformity (Chesney-Lind 2002; Klein et al. 1997; Sherman 1992), 3) they can result in the arrest of the victim or “dual arrests” (DeLeon-Granados, Wells, and Binsbacher 2006; Martin 1997; Miller 2001; Simpson et al. 2006), 4) they can lead to further victimization, or “backlash”, if the man’s job suffers from the arrest (Buzawa and Buzawa 2003) and 5) they likely will not work without an effective court system (Fleury-Steiner et al. 2006; Mills 1998; Ptacek 1999; Stark 1993).

Despite the research suggesting policies adopting a one-size-fits-all approach of mandatory or pro-arrest policies are weak at best, they remain the most significant policy response to domestic violence since the movement began in the 1970s (Paterson 2009; Dobash and Dobash 2011) as well as the most researched (Belknap et al. 2001; Ptacek 1999).

It may be ironic to some that the most profound policy since the domestic violence movement has been one that relies so heavily on state interventions. After all, women and feminists have had legitimate reasons to distrust the state. Thus, for ideological reasons regarding the relationship between women and the state and/or the continual, widespread amount of violence against women, many researchers have reassessed domestic violence policies, especially policies based on mandatory arrest or pro-arrest (e.g. Ferraro and Pope 1993; Lutze and Symons 2003; Mills 2003; Peterson 2008). These policies may merely displace rather than alleviate the problem. This displacement of the problem is a reactive approach to domestic violence, an inherent weakness of any social policy based on deterrence theory.

Other reactive policies that have been given much less attention than policing policies (and are focused on change and reform, rather than deterrence) include: batterer
intervention programs (e.g. Pence and Paymar 1993; Saunders 2008), domestic violence fatality reviews (e.g. Wensdale 2003), restorative justice (e.g. Gaarder and Presser 2006; Presser, Gaarder, and Hesselton 2007; Miller 2011; Ptacek 2010), safety planning (e.g. Goodkind, Sullivan, and Bybee 2004) and domestic violence shelters\(^3\) (e.g. Lyon, Lane, and Menard 2008). These policies and programs, used holistically, offer much more in terms of providing safety and empowerment for women than policing strategies alone. Yet, no matter how well-intentioned these reactionary policies may be, they do not provide proactive solutions that specifically target the incipient factors that are present before men use violence against their female partners.

Reactionary policies have been criticized for ignoring the etiology of men’s violence against women, yet research noting the exact etiological factors involved has been inconclusive. Despite this, the work of many feminist researchers and activists has been instrumental in providing a safer world for millions of women today. The exact degree to which these policies have been effective, however, is debatable. Recent reports of a decline in intimate violence against women have also been challenged. Whether or not one attributes these declines to the women’s movement or shifting demographics (see Stark 2007), the amount of violence that remains is still extensive (Belknap and Potter 2005; Chancer 2004). The policies developed since the domestic violence movement

\(^3\) Both safety planning and domestic violence shelters are not entirely reactive. That is, they can also be conceptualized as proactive in preventing future abuse. Nonetheless, they are still reactive in the sense that they are not utilized until \textit{after} one has been a victim.
have not led to a widespread or drastic decrease in women's victimization for various reasons. Chief among these is the fact that most feminist researchers and activists have operated under a platform that is largely atheoretical (Hunnicutt 2009; Yllo 1993). Widespread pro-arrest policies are based on the simplistic theory of deterrence. The major problem with these and other "silver bullet solutions" (Mears 2007) to social problems is that they are often based on weak theoretical understanding (Barlow 1995; Mears 2007; Simon 2007). Blalock (1994) made note of how simplistic theories can be used to motivate policy-oriented research, but that they will fail to have strong explanatory power across the board. A likely reason for this lies in the fact that the key concept in all feminist theories, patriarchy, is often underdeveloped, ignored, simplistic, essentialist, or reified in theories of violence against women (Hunnicutt 2009; Messerschmidt 1995; Ogle and Batton 2009).

"RESURRECTING PATRIARCHY"

Hunnicutt (2009) challenges feminists to "resurrect" patriarchy in theories of violence against women. She notes that past feminists (specifically radical feminists) have failed to understand the complex role patriarchy plays in violence against women. She is also critical of simplistic applications of patriarchy as an explanatory concept for violence against women. These simplistic explanations assume that all men are powerful due to the gender hierarchy and men that engage in violence towards women do so in order to maintain their patriarchal positions. Such explanations obviously do not explain why all (and in fact, most) men are not violent towards women. They incorrectly assume that all men are powerful, ignoring other intersecting inequalities such as race, class, or
sexual orientation. In short, the simplistic and essentialist explanations of patriarchy in the past have led some researchers to challenge feminist explanations of what they claim is a non-gendered phenomena (see Dutton 1994, 2006, 2010; Mills 2003, 2005). These critics have attacked feminist perspectives for being based on a "single-causal factor" (Straus 2006:1086) in that feminists' answer to why violence against women exists and persists is simply "patriarchy." These critics are either reducing feminist theories of violence against women because of their own biased agendas or they have incorrectly interpreted the feminist perspective. Either way, a brief review of feminist theory should dispel these weak interpretations.

In reality, there are a multitude of feminist theories (Chafetz 1997, 2004; Daly and Chesney-Lind 1988; Jaggar 1983; Martin 1990; Meyer and Post 2006; Ogle and Batton 2009; Tong 2009). There are also many feminist theories of violence against women (DeKeseredy 2011a; O’Neill 1998), including many with stark disagreements. The commonality amongst the feminist theories lies in the centrality placed on hierarchal gender relations (i.e. patriarchy). Thus, patriarchy remains at the forefront of feminist discussions, albeit in different ways depending on the specific feminist theory. For example, despite psychological researchers' critiques of feminist explanations of violence against women (e.g. Dutton 2006; 2010) very few feminist researchers assume that individual men engaging in violent behavior do so to maintain their patriarchal privilege. This type of logic makes the false assumption that all men are benefactors of patriarchy and all women are subordinate victims of patriarchy, thus, what is called the myth of patriarchy's "false universalism" (see Schwartz 1988). The reality is, many men and women face subordination both within and outside their familial or intimate settings,
particularly lower class individuals and racial minorities (Connell and Messerschmidt 2005). This type of false universalism may have been applied by early feminist theorists since the relative exclusion of racial minorities and lower-class women from the women’s movement was an issue (hooks 2003). Yet feminist scholarship eventually has come to understand the “matrix of domination” (Collins 2000) in which race, class, and gender can intersect with one another (Danner 1991). Basically, men who hold a considerable amount of power in their familial settings often lack any power in other institutions such as their places of employment. For example, Websdale’s (1998) ethnography showed that although white men in rural Kentucky had almost no power in their daily jobs (in the economy), they clearly dominated the lives of the female partners they abused (in the family).

In contrast, some men may use violence because they do not dominate in their familial settings (Fox 1993; Websdale 2010). In this way, violence is used as an attempt to gain power and control over a partner— not as a way of maintaining power and control (Websdale 2010). These examples highlight the complexities involved in explaining the specific role patriarchy plays in violence against women. The key here is to recognize that many feminist perspectives may use patriarchy as an explanatory concept, but not all do so as part of a formal theory of violence against women.

Hunnicutt states that her work is not a formal theory of violence against women, nor is it a formal feminist theory. Instead, her work intends to “lay some foundations for a more fully developed theory of violence against women” (2009:554). She does this by providing five essential components to a theory of violence against women. These are summarized as: 1) accounting for the fact that patriarchy is variable across different
cultures, 2) understanding that men’s violence is structural and accounting for the fact that different men are marginalized in different ways, 3) accounting for the potential divergence between structural conditions and ideological components of patriarchy, 4) understanding other structural forms of oppression in relation to patriarchy (i.e. matrix of domination), and 5) understanding that there are “labyrinths of power dynamics in patriarchal systems” [emphasis in original], in which power is variable for women and men (Hunnicutt 2009:554-555).

It is not the intent of this dissertation to develop a formal theory of violence against women. The purpose of this dissertation is to provide a much-needed understanding of the ideological components of patriarchy (number 3 above) in relation to violence against women. While the goal is not to discourage the development of all five of Hunnicutt’s theoretical components, this is a daunting task for one research project. Focusing on one of these five components will provide an in-depth understanding of this underdeveloped component regarding a theory of violence against women. Furthermore, as the following chapters will show, perhaps the least developed theoretical component of patriarchy is the ideological one. Before moving on to an outline of the whole dissertation, conceptual clarity is needed.

DEFINITIONS

*Violence against Women*

It is important to clarify the types of “violence against women” addressed in this research. The global concept “violence against women” can include many types of
violence against women such as genocidal rape. However, "violence against women" is used throughout this dissertation to refer to various types of relationship violence. Most of the previously reviewed literature has focused on domestic violence rather than dating violence, but these two concepts overlap. Typically, "dating violence" is conceptualized as violence during high school or college, whereas domestic violence is thought to occur between married or cohabitating couples. While relationship violence can occur between cohabitating couples (married or not), "dating violence" is usually used in the research literature to define violence in relationships between young adolescents in high school or young adults in college. "Domestic violence" is violence that occurs in more serious relationships (e.g. cohabitating, married). These definitions are distinguished largely by the seriousness of the relationships involved. This does not mean the most serious relationships that have violence always involve the most serious forms of violence. Overall the two concepts fit within the same general theoretical framework and can often be used interchangeably. However, important distinctions should not go unnoticed.

There are two important distinctions between dating violence and domestic violence. First, dating violence occurs frequently enough and can produce many negative outcomes that although there is evidence to suggest it serves as a precursor to domestic violence, it still warrants attention as a significant social problem by itself. Second, there is evidence to suggest that relationship violence against women occurs on a continuum where many cases of domestic violence are preceded by dating violence that occurs earlier in one's life. In short, dating violence and domestic violence can both be researched as unique social problems, but both occur within the broader context of
violence against women, with dating violence often acting as a precursor to domestic violence.

It should be noted that researchers that focus primarily on “dating violence” are much more likely to adopt “gender symmetry” arguments, framing the issue as a problem with young people rather than a problem perpetrated by boys and young men (Reed et al. 2010). Amongst non-cohabitating dating partners, the National Violence against Women Survey (NVAW) found women were more likely than men to be victims of physical aggression, forced sex, and stalking (Slashinski, Coker, and Davis 2003). Research from Molidor and Tolman (1998) found frequencies of violence between male and female dating partners to be similar, yet they discovered consistencies with the NVAW in that women’s victimization was much more severe. Not all research in this area supports the “gender symmetry” frame, but many focus on specific psychological correlates of young boys’ violence (e.g. Boivin et al. 2012; Foshee, Reyes, and Ennett 2010), in a way that decontextualizes the violence. This is because the psychological factors are often not contextualized within a system of gender stratification.

A plethora of studies have found that dating violence, like domestic violence, is gendered (for a review see Jackson 1999), and those that claim “gender symmetry” in dating violence are using the same de-contextualized measures of violent acts as the family violence school (Slashinski et al. 2003). In a study from Bethke and Dejoy (1993), a sample of college students viewed men’s use of violence as much more consequential than women’s use of violence. Thus, the individuals that are likely to be in dating relationships do recognize the different degrees of seriousness when it comes to male perpetrated vs. female perpetrated dating violence.
There are many negative consequences girls and women face as a result of their victimization in dating relationships. Some researchers have found negative psychological outcomes (i.e. post-traumatic stress, dissociation) for young girls (13-19) as they experienced increased levels of dating violence (Callahan, Tolman, and Saunders 2003). Others have discovered links between dating violence victimization and post-traumatic stress disorder and depression (Wolitzky-Taylor et al. 2008). Many similarities between dating and domestic violence are found regarding types of intimate partner abuse used by violent male adolescents (Crooks et al. 2011). One extreme (although atypical) difference is that serious dating relationships are often at a greater risk of intimate partner homicide than married couples (Dobash et al. 2009). Overall, dating violence shares many similarities with domestic violence regarding the frequency and seriousness of the violence.

Many studies have found that adulthood domestic violence is often preceded by adolescent dating violence (for a review see Shorey, Cornelius, and Bell 2008; see also Slashinski et al. 2003). Data collected from a college sample found women that experienced dating violence in high school were more likely to be victimized in college than women that did not experience high school dating violence (Smith, White, and Holland 2003). Also, adolescent dating violence can occur within the context of ongoing child abuse for both victims and perpetrators. More specifically, Laporte et al. (2011) found that young women victimized in adolescent dating relationships often have had abusive parents and some young men that perpetrated violence experienced violent discipline from their fathers.
In short, "violence against women" is used throughout this dissertation to refer to relationship violence against women. Compared to domestic violence, dating violence often involves less serious forms of relationship violence between less serious couples (usually adolescents or young adults). Although dating violence is a social problem in and of itself, theories of violence against women should note that dating violence is often a precursor to domestic violence. The data used in this research comes from a sample of college students, whose experiences are most likely limited to dating violence. However, their patriarchal ideology is measured from items related to domestic violence.

Patriarchy

Literal definitions of patriarchy state that it is a system where the father is the head of the household. However, patriarchy as a social concept has been defined by social scientists in far different ways. These definitions are much more descriptive than the literal translation but there remains a large amount of variation in the literature in regards to patriarchy's meaning (Barrett 1988; Fox 1988; Gonzalez et al. 2010; Hunnicutt 2009; Stacey 1993). This lack of a clear definition has limited theoretical developments related to patriarchy (especially in criminology, see Ogle and Batton 2009). When defined, patriarchy is sometimes defined too simplistically (Barrett 1988). In order to develop patriarchy as a theory at any level, it is important to use a holistic definition that is explicit and meticulous.

There is no doubt that patriarchy is a system in the same way that capitalism and racism are systems. A system where men dominate and control women has never had an equal counterpart in history where women dominated and controlled men (Crane-Seeber
and Crane 2010; Eller 2000). Even anthropological research that notes a pre-history of matriarchal societies (what Cynthia Eller, 2000, calls a “myth”) appears to really be describing matrilineal societies. These societies are ordered around female kinship and female decision-making but female dominance over men is lacking (Figes 1986).

Uncertainty concerning the history and definition of patriarchy has led to many that use the term in such a general sense “it is redolent of a universal and trans-historical oppression” (Barrett 1988:14). Chafetz (1994) notes that unclear constructs and concepts have further complicated sociologists’ use of the term patriarchy.

Various feminist theorists use the term ‘patriarchy’ to refer to ideology (secular and/or religious), to properties of the family, economy or polity, or to some combination thereof. Because the term has entered the popular feminist idiom, it has been rendered even more broad and vague than might otherwise have been the case. Clearly, it is heavily laden with ideological and pejorative meaning. To the extent that it refers to more than one of the several institutions listed above, it is truth-asserting. [...] ‘Patriarchy’ refers to an abstract property distilled from human behaviors and utterances. It is therefore reification to use any active verb with it. Yet throughout the gender literature one finds patriarchy ‘requiring,’ ‘producing,’ ‘creating,’ ‘causing,’ ‘needing,’ ‘encouraging,’ and so on. In this way, it sounds like a profound explanation is being offered when in fact nothing concrete is being uttered. (Chafetz 1994:144)

Often, it appears, social scientists have used the term patriarchy in such a general, vague, and undefined manner that it is presented as a system that is omnipresent, influencing anything and everything. If this is the case, then patriarchy is an invariant concept that explains nothing. Many problems arise when viewing patriarchy as only a system.

Failing to see that patriarchy is not just social or structural, but that it also has ideological components has been the shortcoming of many feminist conceptualizations in the past (Fox 1988).

There are, however, feminist researchers that have found patriarchy to vary in a variety of ways and they have contributed to a clearer understanding both conceptually
and theoretically. A useful conceptualization will provide a term that accurately describes the domination of women by men (Stacey 1993). Specific to a theory of violence against women, an accurate conceptualization will help explain the origins and persistence of violence against women.

Hunnicutt (2009) provides one of the more inclusive and precise (as well as current) definitions of patriarchy, which will be used for this dissertation. She states that, "[...] it means social arrangements that privilege males, where men as a group dominate women as a group, both structurally and ideologically-hierarchical arrangements that manifest in varieties across history and social space" (557). This definition is similar to others that have noted that patriarchy is not static (Beechey 1979; Chafetz 2004; Fox 1988; Pateman 1988, 1989; Walby 1990; Zajicek and Calasanti 1998). Hunnicutt goes on to note that there are variants to patriarchy that exist at the structural level, called social patriarchy, and the private domain, called familial patriarchy (discussed below). Perhaps the most crucial component of Hunnicutt’s definition for future theoretical developments is that it acknowledges male privilege and male domination exist institutionally and ideologically (see also Dobash and Dobash 1979; Fox 1988; Grana 2010). In this dissertation, I argue that the ideological component of patriarchy is one of the least understood and least developed components of patriarchy in regards to a theory of violence against women.

Dichotomies of Patriarchy. Patriarchy is often conceptualized to have two major components. The first is usually called either public patriarchy or social patriarchy. The second is usually referred to as private patriarchy or familial patriarchy. Some have used all of these terms as four distinct concepts (Dobash and Dobash 1979), but Hearn
(1992) considers public patriarchy and social patriarchy to be similar concepts as well as private patriarchy and familial patriarchy. In the literature, public patriarchy/social patriarchy is typically conceptualized to mean patriarchy within organizations or institutions whereas private patriarchy and familial patriarchy exist within domestic settings (see Dobash and Dobash 1979; Hearn 1992; Walby 1990). At times it is acceptable to substitute these terms with one another, but there is some confusion when researchers use them. The major confusion lies in the fact that public/social patriarchies exist in “institutions”, yet the family is a social institution. Specificity is needed. For the current project, public patriarchy/social patriarchy refers to patriarchy within institutions outside of the family. However, these terms are avoided. The broader issue with these four concepts is that they create distinct divisions between the family and other social institutions. While this may be useful at times, it contributes to the false perception of the family as an autonomous unit outside of other social institutions. While Chapter 2 discusses this in more depth, for now, it should be noted that the family is a social institution and conceptualizations of private and public forms of patriarchy should be used having an understanding that they cannot be easily separated from one another. Moreover, these varieties of patriarchy are mutually reinforcing (Chowdhury 2009; DeKeseredy 2011a; DeKeseredy and Schwartz 2009; Hearn 1992; Smith 1990).

Institutional Patriarchy. The concept institutional patriarchy is used throughout and is broader than the terms social patriarchy or public patriarchy. It refers to the macro-level forms of organized patriarchy in all social institutions, including the family. Hence, familial patriarchy is also present under this broader rubric of institutional patriarchy. This conceptualization of institutional patriarchy does not negate the
importance of distinguishing between familial and social patriarchy. However, dichotomized terms like public patriarchy/private patriarchy and social patriarchy/familial patriarchy can be perceived as supporting the bifurcated view of "separate spheres" (Ferree 1990). The current concept of institutional patriarchy notes macro-level forms of male domination regarding the five major social institutions, including the family. The idea behind separate spheres is that the family is separate from broader social institutions, free from their influence. Instead, institutional patriarchy acknowledges that structural patriarchy operates within and between social institutions, reinforcing wide-scale male domination (Epstein 2007). Chapter 2 notes the varying ways in which male dominated social institutions reinforce patriarchy through various practices (e.g. criminal justice laws, subjective equal employment legislation). Outside of these institutional actions, there is an ideological component of patriarchy that exists structurally and individually.

Institutional and Individual Patriarchal Ideology

Patriarchal ideology was first introduced by Kate Millett (1970). Millet saw patriarchal ideology as the justification for societal-wide male domination. She believed that the etiology of patriarchal ideology was rooted in the family. She argued that these ideologies were important to the overall sustainability of societal patriarchy. Most importantly, Millett and others have discussed how changes in societal patriarchy can occur with little to no change in the ideological component of patriarchy or other micro-level variables concerning gender equality (Ferraro 1988; Hunnicutt 2009; Meyer and Post 2006; York 2011). Clarity in the use of the term "patriarchal ideology" in this
dissertation, from this point forward, is needed. The first point of clarification is that patriarchal ideology used throughout refers to individual-level ideology. Second, specification is needed in that patriarchal ideology is a specific to patriarchal ideology about violence against women.

Regarding the use of patriarchal ideology as an individual-level concept, it is important to note that this can include individual attitudes, beliefs, and values. This is not to suggest that social institutions do not or are unable to have ideologies, let alone patriarchal ones. For example, Belcher (1997:62-63) discusses “The Maleness of Organizational Life” in which companies as well as the law operate a male value system. Similarly, Acker (1990, 1992) shows how “gendered organizations” create symbolic images regarding ideal types of men and women and these male-dominated organizations work to reproduce these images over time. But it is also important to note that these “images” can be preexisting and their exact origins could come from sources outside of singular organizations (Acker 1990, 1992; Britton 2003).

Despite the fact that various institutions themselves can hold certain ideologies, patriarchal ideology and the micro/macro distinction is best understood through an understanding of Gramsci’s (1971) concept of hegemony. Hegemony can help explain institutional patriarchy, which often contextualizes individual-level patriarchal ideology. Moreover, an explanation of hegemony will help in understanding how patriarchy is maintained at the institutional level.

The term hegemony was used by Gramsci when analyzing the historical contingencies of the state (i.e. “political society”). Gramsci (1971:14) notes that the state comes into power and maintains its power over social groups (i.e. “civil society”) in two
ways: direct coercion (i.e. "direct domination") and through hegemony. Put simply, through hard power and soft power. Hegemony involves, "internal control" and this:

[...] refers to an order in which a common social moral language is spoken, in which one concept of reality is dominant, informing with its spirit all modes of thought and behaviour. It follows that hegemony is the predominance obtained by consent rather than force of one class or group over other classes. And whereas 'domination' is realized, essentially, through the coercive machinery of the state, 'intellectual and moral leadership is objectified in, and mainly exercised through 'civil society', the ensemble of educational, religious and associational institutions. Hegemony is attained through the myriad ways in which the institutions of civil society operate to shape, directly or indirectly, the cognitive and affective structures whereby men perceive and evaluate the problematic social reality. [emphasis in original] (Femia 1981:24)

Hegemony can comprise ideologies, norms, or different modes of socialization. It should not be reduced to just ideology (Buci-Glucksmann 1982). The point is that patriarchal ideology should not be thought of strictly in terms of some sort of patriarchal hegemony or hegemonic patriarchy that is entirely structural. While Gramsci uses the term hegemony primarily to discuss dominant ideologies, he does this by focusing primarily on how social institutions play a role in developing, legitimizing, and maintaining these ideologies. Thus, Chapter 2 discusses patriarchy and social institutions but more importantly, it discusses the hegemonic nature of these social institutions when it comes to their patriarchal character. The macro-level patriarchal ideology is embedded into multiple social institutions and is called institutional patriarchal ideology. These ideologies operate to maintain the dominance of these institutions.

It is also important to discuss various concepts that refer to male cultural values and beliefs (also called cultural scripts). In Heise’s (1998) ecological theory, she conceptualizes cultural values related to men’s violence against women (e.g. male supremacy, dominance, male honor) as “macrosystem factors.” It is important to note
that these cultural values or cultural scripts are embedded into social institutions. This does not mean, however, that every man will adopt these scripts at the individual-level.

A focus on ideologies solely at the institutional level might lead to simplistic understandings of micro-level ideologies. The focus on individual ideology and not culturally-based or institutionally-based patriarchal ideology avoids conceptualizations of the concept in a top-down, structurally deterministic way.

The specification of patriarchal ideology regarding violence against women is necessary. Referring to patriarchal ideology in the manner Millett (1970) did may be useful if one were interested in individual’s rationalizations of male dominance in general, which clearly relates to violence against women. However, the connections between this broader concept of patriarchal ideology and violence against women are very indirect and may be difficult for one empirical study to uncover. In Chapter 3, Smith’s (1990) definition of patriarchal ideology is used. He distinguished between patriarchal beliefs and patriarchal attitudes. Essentially, both center on male dominance in the family with the latter supportive of the use of violence against women that violate/challenge an individual man’s ideal authority. In short, patriarchal ideology may be explored in future research studies interested in male dominance in general and not specifically male violence. My focus on violence against women means that from this point forward, patriarchal ideology is used to refer to patriarchal ideology about violence against women.

*Men's Individual Patriarchal Ideology.* The current research focuses solely on the patriarchal ideology of men. This does not imply that women do not or cannot have a patriarchal ideology, nor does this suggest that their ideologies are unimportant.
However, for a theory of violence against women, understanding men’s patriarchal ideologies separately is crucial. Since men comprise the dominant group in society, focusing on their ideologies should hopefully help in understanding ways these ideologies change. Additionally, most of the early research on violence against women has focused almost exclusively on victims (Dobash and Dobash 2011). While the insights gained from women as advocates and victims have been extremely beneficial, the dearth of research focusing on men’s actions and ideologies give further evidence for the narrowness of past research and theories of violence against women.

PURPOSE OF DISSERTATION

This dissertation addresses Hunnicutt’s (2009) call for feminist theories of violence against women to bring back the concept of patriarchy and use it as a theoretical tool. It also responds to challenges presented by Ogle and Batton (2009) to show the utility of patriarchy as a useful concept for criminologists. Research on patriarchal ideology has often been plagued with poor conceptualizations and operationalizations and/or has taken the concept for granted as a static independent variable. This study uses feminist conceptualizations of patriarchal ideology with consistent operationalizations of this concept. It also treats patriarchal ideology as a dependent variable in order to assess the micro-level origins and changes related to it. The careful attention given to patriarchal ideology will expand our understanding of its place in a larger theory of violence against women. The goals of this dissertation are summarized as follows:

1) To accurately conceptualize patriarchal ideology.

2) To explore the reliability of operational measures of patriarchal ideology.
3) To investigate potential etiological variables related to patriarchal ideology.

4) To better understand how patriarchal ideology changes over time.

5) To uncover how patriarchal ideology fits in feminist theories of violence against women.

6) To consider potential social policies that might effectively target patriarchal ideologies.

Although Chafetz (2004:964) states, “The goal of the social and behavioral sciences is to develop explanations (theories) [...]” this should not be the primary focus of research. Responding to this quote from Chafetz, Baber (2004:979) more accurately noted that social scientists should use theory to guide scholarly work, but from that point, the goal should be, “improving the opportunities and well-being of women and other silenced groups.”

DISSERTATION OUTLINE

Chapter 2 focuses on institutional patriarchy. Specifically, it shows how patriarchy is widespread in the major social institutions of society, so much that they can be described as patriarchal institutions. This helps show how violence against women is part of the broader gender hierarchy while also helping to show the various actions regarding the maintenance and reinforcement of institutional patriarchy. Chapter 3 begins with a review of some social science concepts that relate to patriarchal ideology. A brief discussion of the “gender symmetry” researchers that claim patriarchal ideology is irrelevant in explaining domestic violence is discussed. These perspectives are easily discredited and dismissed. The argument is then made that patriarchal ideology is
important in explaining violence against women, especially when conceptualized in ways these critics have failed to consider. Moreover, the argument is made that their direct predictive power in explaining individual men’s violence is less important than their overall presence as a reflection of male culture. There are two major analyses performed. Chapter 4 provides the methodology for the first major analyses (results in Chapter 5) assessing attitudinal measures of patriarchal ideology with two-wave panel data. Chapter 6 describes the methodology for analyses that use the same original data source described in Chapter 4, but uses latent growth curve modeling over three waves of data, while operationalizing patriarchal ideology with vignettes (with results in Chapter 7). The final chapter, Chapter 8, includes a discussion of the findings from the two major analyses using a holistic approach.

CONCLUSION

This chapter has provided a broad overview of the gendered nature of violence against women that is rooted in patriarchy. The increased attention placed on violence against women since the domestic violence movement has been remarkable, but current levels of violence against women likely indicate a stalled revolution (Stark 2007). For too long researchers have accepted simplistic theoretical explanations for violence against women. Hunnicutt (2009) argues that feminist theories of violence against women can be reinvigorated through a better understanding of patriarchy. Specifically, individual patriarchal ideology is one of the most underutilized and least understood aspects of patriarchy in a theory of violence against women.
CHAPTER II

INSTITUTIONAL PATRIARCHY AND INSTITUTIONAL PATRIARCHAL IDEOLOGY

"A theory of violence against women has to account for varieties in patriarchal structures." [emphasis in original] (Hunnicutt 2009:554)

PATRIARCHY AS A THEORY

While this dissertation follows Hunnicutt’s lead and uses patriarchy as a “theoretical tool” or as a “theoretical concept”, this current work is not a formal theory of patriarchy or a formal theory of violence against women. Theories of patriarchy are fairly rare. Instead, it is feminist theories that prioritize patriarchy. A discussion of the work of Walby (1990) shows some of the ways patriarchy has been used as a theoretical concept.

One of the earliest attempts to theorize patriarchy came from Walby’s (1990) book, Theorizing Patriarchy. Walby claimed that patriarchy is composed of six main structures: women’s unpaid household work, women’s paid work, the patriarchal state, male violence, sexuality, and cultural institutions. Most notably, she made the distinction between private and public forms of patriarchy.

Private patriarchy is based upon household production, with a patriarch controlling women individually and directly in the relatively private sphere of the home. Public patriarchy is based on structures other than the household, although this may still be a significant patriarchal site. Rather, institutions conventionally regarded as part of the public domain are central in the maintenance of patriarchy. (Walby 1990:178)
Walby provided excellent historical and current, for its time, accounts of patriarchy's many manifestations. Unfortunately, her work falls short as a practical, formal theory of patriarchy that could be used in explaining violence against women for two main reasons. First, Walby failed to pose theoretical questions. She also failed to provide clearly defined concepts related to social institutions. These two central problems with formal theory construction exist within all of "gender sociology" (Chafetz 1994).

Walby's research question is unclear in her work¹. She merely provided a rich context of useful examples of patriarchal practices throughout her six structures of patriarchy, yet often relied on existing feminist theories for explanations. For example, she did pose questions at the beginning of her chapter on paid employment regarding why women earn less than men, why women are excluded from certain jobs, and why women are excluded from paid work more than men. Her answer to all of these questions in regards to the economy is that after first-wave feminism gave women the right to work, the historical years of patriarchy at the hands of their husbands (private patriarchy) was replaced by a new form of oppression (public patriarchy) in economic institutions. The private/public shift explanation is confusing when applied to other "structures", especially violence against women. Walby described how first-wave feminists were

¹ While not all research requires formally stated research questions (e.g. this dissertation does not), they should at least state what it is they are trying to better understand (e.g. the goals laid-out in Chapter 1 of this dissertation). Because of this, the chapters in which Walby does not pose questions or goals are unclear regarding what theoretical propositions/assumptions she is attempting to address.
influential in bringing violence against women to the forefront of the state where it could no longer be seen as a private matter (see also Sherman 1992). The explanation, again, is that patriarchy shifts from private patriarchy produced by violent men to public patriarchy where the state (which is patriarchal) is called on to protect women. When Walby’s work first came out in 1990, it was not clear whether or not this shift was going to be a positive change for women (Walby frames it as negative). Even after Walby’s work, it is unclear how the public to private shift in patriarchy should be viewed. Some have argued state intervention in domestic violence is beneficial for victims (Mirchandani 2006; Sherman and Berk 1984; Stark 1993, 2007) while others disagree (Presser et al. 2007). The question Walby’s theory is fit to answer is unclear regarding her “structure” of patriarchy—violence. Is it, “what causes violence against women?” If so, her answer appears to be her thesis throughout the book: the shift from private forms of patriarchy in the family to public forms of patriarchy in the economy. The problem is violence within intimate settings is inherently a form of private patriarchy, in the same way male partners and fathers that control a family’s finances is. Because of this, it is confusing to explain violence against women as a social problem that results from the shift from private to public patriarchy.

Another shortcoming of Walby’s work lies in the obscurity and confusion surrounding her definition of the structures of patriarchy. Three of her six structures, or what one reviewer of her book calls “practices” of patriarchy (Maynard 1992:311) are directly related to social institutions: the economy (“paid work”), polity (“the state”), and the family (“house work”). She then attempted to explain the other components of patriarchy (i.e. “violence against women”, “culture”, “sexuality”). If she developed her
“theory” as an explanation for the existence or persistence of patriarchy at the macro-level as well as those at the interactional level, her theory might suffice. Unfortunately, her work reads as examples of how some institutions are patriarchal, followed by examples of patriarchal practices. This is related to critiques from Jaggar (1983) about radical feminists’ inability to differentiate between “description and explanation” (Sprague and Zimmerman 1989:79).

The unclear nature of Walby’s six main concepts, however, should not distract from the significance of her book for future theoretical developments of patriarchy. Her discussion of the historical shift from private to public patriarchy is extremely important in noting the various levels of patriarchy and how these shifts have shaped (and continue to shape) social institutions. A formal theory of patriarchy can build on Walby’s work in developing structural concepts of patriarchy and historical shifts within them, which can also lead to a better understanding of ideological changes (see Stacey 1993 for similar criticisms).

Walby’s public patriarchy and private patriarchy overlap considerably with the terms social patriarchy and familial patriarchy. To better understand both social and familial patriarchy, we must consider how each variety of patriarchy operates separately but keep in mind that they are mutually reinforcing (Chowdhury 2009; DeKeseredy 2011a; DeKeseredy and Schwartz 2009; Ferree 1990; Hearn 1992; Smith 1990). Because of this, the concept institutional patriarchy was introduced in Chapter 1 to describe institutional forms of patriarchy within and between social institutions. The “varieties of patriarchal structures” that Hunnicutt (2009) mentioned can be further explored in future formal theories of patriarchy at the macro-level. What follows is not an exhaustive
description of each form of institutional patriarchy, but is used to demonstrate some
eamples of their variations and their interactions. Such examples should help
ontextualize the individual-level concepts of patriarchal ideology.

INSTITUTIONAL PATRIARCHY

_Dominant and Subordinate Institutions: Contextualizing Patriarchies_

Since patriarchy presents itself in all social institutions (Acker 1992; Britton
2003; Danner 1991; Johnson 1997), institutional patriarchy is best understood using the
stitutional taxonomies of C. Wright Mills. Wozniak (2009) summarized the major
orks of Mills (1956, 1959) to describe Mills' societal institutions. These are the
"dominant institutions" (i.e. the economy, political order, and the military order) as well
s the "subordinate institutions" of society (i.e. the family, education, religion, and mass
edia). A review of the literature will show the many manifestations of institutional
archy, but first the classifications used by Mills must be abbreviated and clarified.

Although the military has been shown to be a patriarchal institution (Hopton
2003; Howard and Prividera 2004), researchers have made convincing arguments to not
lude it as one of the dominant institutions in sociology. Domhoff (2006) shows how
arge corporations have taken over the role of defense contractors and the military should
sidered subordinate to the corporate community (i.e. the economy). Similarly,
imecca (1995) argues that the military is also a subsidiary social institution but that it is
compassed under the government (i.e. polity). Regardless of which dominant
stitution claims the military or how patriarchal it may be, it is no longer a dominant
stitution in the way Mills considered it during his time.
Mass media is also not considered a social institution in this current work. The media has been shown to be patriarchal (e.g. Carmody 1998; Meloy and Miller 2009; Websdale 1996), but its close relationship to dominant institutions (i.e. economics and polity) make it more a manifestation of these two institutions (Cushion and Lewis 2009; Esser 2008; Hickey 1998). It appears that the primary, dominant institutions to focus on for understanding institutional patriarchy and institutional patriarchal ideologies are the economy and politics.

Mills' "subordinate institutions" for this dissertation are reduced to the family, religion, and education with the utmost attention given to the family. Although education and religion may indeed operate as independent institutions, the evidence related to patriarchy shows them to have tremendous overlap with the primary institutions of the economy and politics. Keep in mind that such a conceptualization does not treat familial patriarchy as "separate" from other social institutions. Lastly, clarification on the naming of one institution is needed. Throughout this research, the dominant institution Mills referred to as the "political order" and others as "politics" will be referred to as polity. Polity usually implies the organizational structure, whereas politics involves the social interactions related to polity. With that, it should also be mentioned that the duality of socialist feminism is used in primarily focusing on the economy and the family, but does not imply these are the only societal institutions that relate to patriarchy.

In short, the two dominant institutions discussed in relation to institutional patriarchy are the economy and polity. Understanding how patriarchy operates through social institutions helps in understanding individual patriarchal ideology (see Chapter 3). The following sections focus primarily on past socialist feminist theories that have given
the utmost attention to the economy and the family. These two social institutions fit
ts NICELY with previous conceptualizations of patriarchy that emphasize connections
between public and private patriarchy. The importance of education and religion are
briefly discussed. The former is discussed primarily in relation to the economy and the
latter, primarily in relation to the family. The discussion on institutional patriarchal
ideology is provided to highlight the fact that ideology can be embedded into social
institutions. These examples will show how institutional patriarchal ideology is
important to study further, but they often manifest themselves as descriptions of these
institutions. That is, they are embedded into the culture of the institutions, making them
difficult to conceptualize and operationalize. Related to this, it is often difficult to
conceive of structures as having ideological components. This closely falls into the trap
of reifying the term “institutional patriarchal ideology.” Nonetheless, they are briefly
mentioned in acknowledging that individual patriarchal ideology might be contextualized
within larger structural ideologies but individual agency is assumed to have the greatest
influence on individual ideologies.

*Institutional Patriarchy and the Economy*

Institutional patriarchy operates within the economy at various levels. Tilly
(1998) and later Massey (2007) explained how stratification is generated and maintained
through exploitation and opportunity hoarding. The aforementioned definition of
patriarchy references male domination of women. When referring to this domination in
regards to the economy, one can substitute male domination with male exploitation, a
term that implies material interests (Wright 1984).
Exploitation. The exploitation of women in the economy is clearly reflected in wage differentials between men and women. Even after the first wave of feminism, women were almost entirely excluded from the paid workforce. However, with the progressive second wave of feminism, women gained some ground in regards to their employment status and income relative to men. Despite these changes, disparities still remain. Wage differentials exist for women that work the same jobs as men, even in the instances that women hold prestigious positions (Shin 2012). What is more alarming is the little ground that women appear to have gained since the second wave of feminism may actually be the result of men’s wages decreasing during this time period (Massey 2007). Although access into the economy has been difficult to say the least, wage differentials have been a staple of gender stratification in the economy.

Other institutions (i.e. polity) have been used to address women’s exploitation in the economy. The Equal Pay Act of 1963 set out to eliminate the exploitation of women’s work by making it a requirement, by law, for employers to pay women the same wages as men for the same exact work. This legislation has failed to combat patriarchal exploitation in the economy due in large part to large-scale ideologies on the relative value of men and women as workers. Thus, the legislation allows for discrimination against women in regards to wages based on “seniority, merit, differences in quantity or quality of production, and ‘a differential based on any other factor other than sex’” (Bacchi 1999:78). The first three variables allow for discrimination since men have far more opportunities to accumulate seniority, merit, and higher amounts of work at higher qualities. Other “differentials” outside of sex is such vague terminology that it makes legal cases involving discrimination difficult to win (Burstein 1979). Blau and
Ferber (1992) along with Blau and Kahn (2004) have shown compelling evidence to suggest gender wage disparities are the result of discrimination (not the lack of qualified women) since wage differentials remain after controlling for important variables such as education, experience, and job location. Related to this, Coleman (2003) noted that blatant racial wage discrimination is a stronger predictor of wage differentials than job-skill disparities. It is reasonable to assume that gender and racial discrimination continue to be strong determinants of wage differentials and that this is widespread, rather than the result of just a few prejudiced individuals. Case in point, as recently as March 2011, women in the United States still earn around 75% of what men do (Jansen 2011).

The wage differences have been even greater for black women compared to white women. This is partially due to the exclusion of black women from the early women’s movement (Collins 2000; Stark 2007). The early women’s movement was myopic in regards to women in the paid workforce and incorrectly assumed the social status of all women was the same (hooks 2000). When this middle-class, white women’s movement urged women to “get to work”, many black women were excluded. This was due to the fact that black women had been historically exploited for cheap labor and were already working, albeit for low wages. After the civil rights and women’s rights movements, however, little ground may have been gained for black women’s wages. This is reflected in recent research reporting that since the 1980s, the gap between black women’s wages compared to white women’s wages has widened significantly (Pettit and Ewert 2009).

*Opportunity Hoarding.* Institutional patriarchy in the economy also occurs through opportunity hoarding (Massey 2007; Tilly 1998). The wage differentials mentioned should be alarming, but it cannot be emphasized enough that this form of
exploitation occurs *when* women do the same jobs as men—something that rarely takes place (Acker 2006; Hesse-Biber, Nagy, and Carter 2000; Petersen and Morgan 1995). Prior to the Civil Rights Act of 1964 and subsequent executive orders in 1965 and 1967 (Albelda, Drago, and Shulman 2004), women had been discriminated against in the economy since industrialization through outright exclusion (Fox and Fox 1986; Hartmann 1979). Since the second-wave of feminism, exclusion has remained regarding prestigious positions.

Denying women access to jobs, especially prestigious ones, is a common practice of economic institutions. Some researchers have argued that women's denied access to power and decision-making within the family transfers to the paid workforce (Kanter 1977; Messerschmidt 1986) a point emphasized further in the section regarding familial patriarchy\(^2\). Thus, women are almost entirely excluded from positions of worth, and this is especially the case for women of color (Wilensky 1968; Zweigenhaft and Domhoff 1998) as well as for mothers (Benard and Correll 2010). Prestigious positions are redefined as ubiquitously male in that they *require* masculine characteristics. Successful companies are defined by how male they are. Even if women do somehow gain entrance into positions of power within these companies, they are still expected to act in a manner

\(^{2}\) This relationship has also been hypothesized reciprocally in that as women's entrance into the paid workforce increased along with the entrance into higher paying jobs, this would translate into more decision making within the family. However, Tichenor (2005) has found through her qualitative research that even women making significantly higher wages are less likely to make decisions within the family or control familial finances.
consistent with being male or masculine (Cockburn 1991; Kanter 1977; Wajcman 1998). In the rare exception that women do obtain membership on corporate boards, they are usually placed on committees dealing with “soft governance issues” whereas men are typically dealing with “hard governance issues” (Bilimoria and Piderit 1994:1465). These patriarchal institutions resist promoting or hiring females, with the exception of a few token individuals, and they justify their discriminatory actions by claiming they are in the best interests of their shareholders³ (Belcher 1997). Equal opportunity legislation has failed to level the playing field regarding opportunities since the practices by men involve adaptively devaluing women’s work (Hartmann 1979; Reskin 1988).

Previously it was noted that polity can be used to institutionally combat economic exclusion and discrimination (e.g. Equal Pay Act). Education is seen by some as another institutional equalizer (Codd 1988). One can see the obvious issue, however, with encouraging women into education if this institution itself is patriarchal. Despite decades of harsh patriarchal practices in education (e.g. outright exclusion, curriculums aimed at helping them be “better wives”), the passage of Title IX in 1972 helped women tremendously (Grana 2010). As the previous section showed, however, education has not been the great equalizer. One reason for this lies in the areas of study women typically “choose.” Thus, women are typically discouraged from joining “male fields” of study such as engineering, medicine, or law. This is reflected in data showing that although women’s enrollments in college have increased, during the academic year 1996-1997

³ As a result, challenges to these practices are seen as impeding with the free-market of capitalism.
women's percentages in the following traditionally male fields were: law (44%), medicine (41%), dentistry (37%), physical science (37%), computer science (27%), and engineering (17%) (United States General Accounting Office 2000:11). More direct forms of patriarchy in education are seen in the research on violence against college women.

Koss, Gidycz, and Wisniewski (1987:166) discovered through a nationally representative survey of more than 3,000 U.S. college women that more than half (53.7%) had experienced some form of sexual victimization. DeKeseredy and Kelly (1993a:148) found that among female Canadian college students, almost half (45.1%) had been victimized since high school. There is no doubt that the prevalence of male violence towards women in such large numbers is evidence enough of direct patriarchal practices by individual men, but the response to the violence from educational institutions demonstrates how macro-level institutions sustain the violence (Humphrey and Kahn 2000; DeKeseredy and Schwartz 1998; Sanday 2007; Schwartz and DeKeseredy 1997). In other words, enrolling in college does not simply produce violent men (Chapter 3 discusses how patriarchal ideology may be present in some college men prior to college enrollment). Although the institutions may not breed violent men, they do very little to deter this violence through inaction or extremely weak punishments levied against individual males and college-based organizations that encourage violence against women.

For illustrative purposes, Sanday’s (2007) work on fraternity gang rape on college campuses (originally published in 1990) highlighted the patriarchal nature of college institutions. Her in-depth case studies painted a portrait of horrific and coercive sexual assaults against women perpetrated by members of college fraternities. In what is called
fraternity gang rape, several fraternity brothers “bond” with one another through the rape and humiliation of young college women (see also Boswell and Spade 1996; Martin and Hummer 1989). Sanday showed how some fraternities support and operate within a culture that reinforces and even encourages such criminal behaviors. In this sense, they are arguably the most explicitly patriarchal organization within the confines of college. Sanday made note that colleges and universities do little to condemn, deter, or punish such violent crimes. She presents cases where very lenient sentences are handed out to the fraternities as well as to the individual men that are involved in the rapes. She notes that fraternity members are usually privileged males that are well-off financially and their fraternities receive large endowments from past alumni. This translates into economic resources that can be used to defend the rapists in these cases. Thus, according to Sanday, the educational institution works in unison with a very lax legal system along an economic system of privileged men to create a haven for sexual predators to act with almost complete impunity. Here the institutional overlap is overt between education, polity, and the economy.

Individual patriarchal ideology is used by individual men in these fraternities. The individual men within these organizations collectively engage in tactics that discredit the female victims in these cases. They do this through the reaffirmation of the ideology of what an “ideal victim” is (i.e. reproducing and accepting rape myths). While the legal system may have changed since Sanday’s original research in 1990 to where fraternities and individual members are more likely to face criminal and institutional sanctions for involvement in sexual assaults, not enough research has been done on the institutional response to these crimes. One recent case suggests that while the institutional response
may have progressively changed, individual ideologies trivializing rape persist. In December 2011 at the University of Vermont, a survey handed out to fraternity pledge members included the question, "If I could rape someone, who would it be?" The fraternity was suspended by the university as well as by its national chapter. Also, a rally of 200 students and an on-line petition were formed calling for the removal of the fraternity entirely from the university (Dorell and DiBlasio 2011). This example shows the potential shifts in the institutional ideologies surrounding rape, but it also suggests that individual men's ideologies may lag in their progressive shifts. Unfortunately, few academic studies have researched fraternities and gang rape in recent years to where we would have a reliable understanding of the exact institutional and individual patriarchal ideology divergences.

These few examples should be seen as illustrations of how patriarchy operates in the dominant social institution of the economy through the subordinate institution of education. While institutional patriarchy exists in the economy in various ways besides the connections with education, these examples are used since the subsequent data analyses are drawn from a sample of college students. Both the economy and education reaffirm patriarchy through exploitation and opportunity hoarding. Thus, institutional patriarchy in the economy operates in a manner that maintains women's subordinate positions in less prestigious positions and ensures that they earn less in jobs where they do the equivalent amount of work as men. Opportunity hoarding is seen when women are excluded from prestigious positions in the economy and also when they are excluded from prestigious fields of study that are traditionally male dominated. This occurs despite the attempts through polity to gain equal access to education and jobs (e.g. Equal
Pay Act, Title IX) because many of these policies are written in such a way that they create more symbolic change rather than any real, systemic change.

Institutional Patriarchal Ideology. Gramsci’s (1971) concept of hegemony has great applicability here, but hegemony should not be reduced entirely to an ideology. Historically, men dominated economic institutions through outright exclusion and opportunity hoarding (i.e. direct control). But these tactics were eventually challenged through legal reforms that were due in large part to feminist activism. Women’s exclusion remains because the legal “equalizer” fails to acknowledge gender differentials in the ability to obtain seniority or merit, which are accumulated over time. Women are not likely to obtain seniority or merit if their work during that time is devalued since “acting male” is considered an indicator of success. This devaluation is consistent with the hegemony of male-dominated economic institutions that actively redefine the ideals surrounding the characteristics of a worthy worker. Similarly, educational exclusion that was at one point coercive in its exclusion has shifted as polity has become more hegemonic. Specifics of hegemony might include the ideological production and reproduction of “male” fields of study as those most functional in the economy. In sum, and in a very broad overview of patriarchal ideology in the economy, gender inequality is legitimated (and sustained) through large-scale ideologies imbedded into economic organizations. These ideologies are centered on the premise that stratification is not the result of exploitation or opportunity hoarding, but instead the result of unforgiving economic systems and/or individual deficiencies (Acker 2006).
Familial Patriarchy/Private Patriarchy

Familial patriarchy or private patriarchy is found within the family. The family is defined here as either a heterosexual couple that lives together (Vaughan 2002) (married or not, with or without children) as well as estranged couples that remain in contact because they have children together. Homosexual couples can certainly form familial institutions as well as have children, but are not included in this definition because the current research focuses on men's use of violence against former or current female intimate partners. Patriarchy within the family is much more explicit in nature than patriarchy within other social institutions. Whereas economic organizations may commonly exclude women from jobs that they deem to be masculine, male patriarchs are much more likely to have direct control over women and children through the means of physical force or the threat of force.

Socialist feminists have contributed greatly to helping understand the interactions between the economy (production) and the family (reproduction) (polity too has considerable overlap at the macro-level, but the economy plays a much larger role for socialist feminists). Socialist feminists use traditional Marxian analysis to critique the exploitive nature of capitalist economies but they fill the gaps left by Marxism's neglect of gender to include an analysis of reproduction in families (see Barrett 1988). Socialist feminists see both institutions as mutually reinforcing, giving equal weight to both in helping describe patriarchal capitalism (Andermahr, Lovell, and Wolkowitz 1997; Danner 1991; Hartmann 1979; Messerschmidt 1986). Perhaps the overlap between the dominant institutions and the family is best exemplified by Danner (1991:53), "The well-known feminist phrase 'the personal is political' can be extended to better reflect socialist
feminist analysis as: the personal is political and economic and the political and economic is personal.”

The sexual division of labor in the economy that excludes women from positions of power and worth contributes to their economic dependence on men in the family. For example, the aforementioned practice of devaluing women’s work while praising men’s leaves few financial alternatives for women outside of marriage. This, of course, remains even after the second wave of feminism (illustrated earlier by the gender-gap in earnings, exploitation, and opportunity hoarding). Women often have to sacrifice in one avenue over the other regarding work and the family, much more than men (Britton 2003; Hesse-Biber et al. 2000). This is reflected by the many women that work the “double shift” of full-time employment (for less wages than men in equal positions) and full-time work in the family (e.g. childrearing, housework, cooking). As previously mentioned, some women do, on rare occasion, earn more than their male partners. Women in this situation are still less likely to be involved in decision making within the family while also having little control over familial finances (Tichenor 2005). The lack of autonomy in both the family and the economy limits the autonomy of women, especially those in violent relationships. In extreme cases, the constraining interactions of the family and the economy create difficult choices regarding leaving these relationships because such actions increase the likelihood of lethal violence (Campbell et al. 2003; DeKeseredy and Schwartz 2009).

Polity also plays an important role regarding women’s marginalization in the family. This is perhaps best highlighted through a discussion of the relationship between the law and the criminal justice system’s response to violence against women. In Chapter
1, the issues surrounding mandatory arrest, pro-arrest, and no-drop prosecution policies were discussed. These policies look good on the surface but can neglect the fact that many women have legitimate reasons for not pursuing prosecution\(^4\) (Ford 2003). Ptacek (1999) has also revealed that women may experience a form of revictimization in the courtroom, leading many to avoid using the courts in response to any subsequent violence\(^5\). The failure by many to understand the complex realities of women’s victimization can lead to victim blaming regarding what is perceived as “irrational” behavior like refusing to pursue charges against one’s male partner. Hence, polity has been largely unsuccessful at social justice with both the liberal and welfare reforms of the law regarding domestic violence policies. Sorial (2011:30) summarizes these two models of the law adequately in that:

[T]hey place the onus on women to assimilate to existing institutions that have traditionally served the interests of men, but do little to challenge the nature of the institutions themselves. By treating men and women as the same, the liberal view ignored genuine physical and social differences in a way that disadvantaged the majority of women. By treating women as different, the welfare view risked perpetuating the traditional stereotype of women as biologically domestic and dependent. (Sorial 2011:30)

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\(^4\) Reasons for not wanting to pursue prosecution can include fear of backlash from the perpetrator, loss of wages if the perpetrator is the primary breadwinner of the family, and facing the embarrassment of reliving the violent experiences.

\(^5\) Fortunately, some research has found that state courts (i.e. domestic violence courts) are not always patriarchal when they are progressively organized to benefit female victims of domestic violence (Mirchandani 2006).
Essentially Sorial is saying "equality" treatments of gender with liberal ideologies of the law fail to see structural gender inequalities, thus women's shortcomings or failures are explained as the failures of these individual women since the opportunities for their success are assumed to be "equal" with those of men. Welfare views merely reinforce the widespread ideology that women are dependent. In the area of violence against women, many legal reforms that strive for "equal protection" (i.e. mandatory/pro-arrest policies, no drop prosecution) ignore that broader institutions are gendered. Laws based on mandatory arrest produce an overreliance on a gendered institution for "protection."

More specifically, the criminal justice system does not define violence in gendered terms and fails to relate to victims by ignoring their subordinated statuses in the family and the economy (Ferraro 1993; Hearn and McKie 2010). Polity, in relation to the family, reproduces power-dependent relationships with gender-blind policies aimed at "equality" (Britton 2003; Vaughan 2002).

Many gender-blind domestic violence policies are rooted in philosophical traditions regarding the public/private dichotomy. Kelly (2002) discusses the inherent contradictions of many liberal theorists (mainly John Locke) that idealize the family (see Acker 1992) as a source of individualism (and peace), free from public infiltration. At the same time, the primary function of the family is developing connections to the public sphere (see also Fineman 2005). Kelly notes that domestic violence policy appears to impede on women's individualism/autonomy by requiring public infiltration from the state. This occurs despite the fact that the state, she feels, is better suited to resolve conflicts between people in the public (although informal social sanctions can also be effective at resolving public crimes as well as domestic violence, see Sampson 2008;
Carmody and Williams 1987). Additionally, state intervention that relies so heavily on the criminal justice system gives women only one real option for resisting the violence-leaving (Crocker 2010; Hearn and McKie 2008; Paterson 2009, 2010). Yet, some women may receive harsh criticisms for leaving because they are framed as failed wives for not willing to “work it out” for the good of the family (see also Elshtain 1981). Furthermore, gender norms typically frame individualism as a male characteristic and women that leave these relationships are violating these norms. This is highly problematic for women since notions of individualism have grown tremendously over the last few decades. Women’s identities are far less autonomous than men’s, being linked much more closely to the family than men’s (see also Nicholson 1986; Pateman 1986; Raskin 2006).

Institutional Patriarchal Ideology and the Family. It was previously noted that many institutional patriarchal ideologies of the family contribute to violence against women. One such institutional ideology is found in the construction of the family as private. Thus, the overall cultural ideal that the family is autonomous from state intervention is a patriarchal ideal when such ideologies create the opportunity for violence and the illusion of immunity for perpetrators of violence. Macro-level analysis is needed to further expand on the connections between the family and the economy (see the work of Vaughan 2002), but they are discussed here to briefly show how patriarchal ideology is not solely the product of individuals.

Another common institutional patriarchal ideology related to the family is reflected in ideologies about male patriarchs. The major ideology is that men are entitled to be the “head of the household” or head of the family. This authority can involve the disciplining of children, decision-making, and the accepted use of violence when threats
to such authority are challenged. Because the family is conceptualized as a subordinate institution, the structural sources of institutional ideology often have tremendous overlap with individual patriarchal ideology. It is important when trying to distinguish between the two that one is aware of the overlap of the family with dominant social institutions. The institutional overlap makes the embedded institutional patriarchal ideologies within the family difficult to comprehend if one conceptualizes the family as isolated from other institutions. For example, patriarchal ideologies about the family at the macro-level, such as the ideology about women's dependence, exist through a reciprocal relationship with polity that serves to "support" women when they act in ways consistent with the ideology.

CONCLUSION

This chapter provides clarification on two important macro-level concepts, institutional patriarchy and institutional patriarchal ideology. The dominant social institution of the economy is where the exploitation of women and the opportunity hoarding by men has had a tremendous impact on the autonomy of women. The subordinate institution of education also exploits women and limits their opportunities in a way that directly impacts the broader institution of the economy. The family is where additional constraints on women's autonomy are seen through idealized characteristics of womanhood and manhood. These are similar to those idealized notions of women and men embedded within the economy. Polity, in theory, has the ability to act as a great equalizer regarding women's subordination. Yet many policies have failed to create equality because they seek equality through gender-blind policies, thus failing to
recognize the patriarchal nature of social institutions. Institutional patriarchal ideology differs from the next chapter's discussion on individual-level ideology in that it largely centers on the ideologies of institutions embedded, produced (sometimes), and maintained within these institutions. The next chapter examines patriarchal ideology at the micro-level, and discusses its origins, manifestations, and changes.
CHAPTER III
INDIVIDUAL PATRIARCHAL IDEOLOGY

The discussion of patriarchy, thus far, has largely focused on institutional manifestations of patriarchy and institutional patriarchal ideology. Individual patriarchal ideology exists at the micro-level, within individuals. Before discussing the conceptualization of individual patriarchal ideology, this chapter reviews two areas of research regarding similar concepts: sex/gender role ideology and hegemonic masculinities. Next, patriarchal ideology is conceptualized and past operationalizations are discussed. Research that has empirically assessed patriarchal ideology in relation to violence against women is then reviewed and critiqued. This leads to a final discussion of the need for more research concerning the etiological factors of individual patriarchal ideology.

Two of the main areas of focus for this chapter revolve around sex/gender roles and hegemonic masculinities. Much of the research regarding these two concepts has been empirically valid and reliable in a general sense. However, when explaining violence against women, or ideologies regarding violence against women, these two perspectives are fairly weak. The criticisms should not be seen as attacks on the concepts in their totality but as critiques of their relevance for a theory of patriarchy. Conceptual clarity is needed since these terms overlap with individual patriarchal ideology.

SEX/GENDER ROLE IDEOLOGY

Sex is typically thought of as the biological differences between men and women. Sex roles are viewed as biologically-driven behaviors that are natural, fixed, and
unchanging (Pleck 1987; Udry 2000). Common examples of biological sex roles are that women are predetermined to be emotional, irrational, and nurturing whereas men are predetermined to be rational, reasonable, and aggressive. Recognizing the non-explanatory nature of this biological essentialism, feminist sociologists used the term “gender roles” to help identify the social construction of gender between men and women in an effort to address structural gender inequality (Messerschmidt 2009; Messner 1998). Sex roles and gender roles often get classified under the title “role-theory.” Sociologists may use both terms interchangeably even if they describe the way roles are learned, whereas psychologists are less likely to rule out biological factors that they believe may determine roles (Lisak 2000). Therefore, psychological researchers may use “sex-role” terminology more frequently than sociologists. Distinctions in the terms sex and gender do not always translate into conceptual clarity regarding the terms sex roles and gender roles. These distinctions are confounding, as Judith Lorber (1993) notes:

Neither sex nor gender are pure categories. Combinations of incongruous genes, genitalia, and hormonal input are ignored in sex categorization, just as combinations of incongruous physiology, identity, sexuality, appearance, and behavior are ignored in the social construction of gender statuses. (Lorber 1993:569-570)

Although sex role and gender role concepts may not always be distinct, within the sociological research both describe the way in which males and females, men and women, are socialized into accepting a given set of traits in the creation of their respective identities. This review of the literature will use the term “role analysis” in the way that Komarovsky (1973) does, rather than “role theory” which implies a manifestation within a formal theory regarding social roles. Keep in mind, prior researchers and theorists have incorrectly used the terms sex and gender as if they were
interchangeable (DeKeseredy and Schwartz 2010). Since role analysts are guilty of doing this, this section reviewing their research uses the terms interchangeably, albeit incorrectly, since the distinctions are often not drawn by many of these theorists.

Early role analysis on gender was heavily influenced by Talcott Parsons (Carrigan, Connell, and Lee 1985; Kimmel 2000). Prior to this, gender differences and gender inequality were largely accepted and justified as natural. Parsons (1947; see also Parsons and Bales 1953) saw society divided into two major spheres: the economic (i.e. “production”) and the family (i.e. “kinship”). In order for society to function properly, people needed to be socialized into one of two roles: instrumental roles and expressive roles. He saw that these roles were socialized within the family and passed down through generations. Thus, males fulfilled instrumental roles since economic functions were assumed to require, “rationality, autonomy, and competitiveness” (Kimmel 2000:82). Female roles were regarded as expressive, “which required tenderness and nurturing” (Kimmel 2000:82). Parsons assumed that although these roles were learned in the family, their etiology was natural. Role analysis eventually gave way to the androgyny movement. Here, theorists acknowledged gender roles as learned and not biologically determined. However, gender was conceptualized as an individual-level construct (i.e. not socially constructed) and like Parson’s theory it was essentialist (Smiler 2004).

Nonetheless, role analysis dominated the historic sociological literature and later psychological literature on sex and gender role ideology.

A slight divergence within the sex/gender roles framework emerged in the 1950s, a byproduct of the early Parsonian sex role theory. With the early developments of feminism, the 1950s brought about a time when men’s behaviors and attitudes were first
critically assessed. This research highlighted “male role strain”\(^1\)- mainly the difficulties men faced in trying to live up to cultural ideals of being a male (Pleck 1981; 1995). Also, “masculinity” was conceptualized by many under this framework as something inherent and natural\(^2\). Many researchers, politicians, and activists at this time claimed that feminism created a “crisis of masculinity” (for a review, see Whitehead 2002). These men claimed to support the empowerment of women while simultaneously arguing that women’s liberation was detrimental to men. They speculated that women’s new roles created many depressed, solitary men who found it difficult to cope with their newly established roles (Whitehead 2002). Stephen Whitehead sums up this “crisis”:

> That is, across many societies, most notably but not only in the Western world, the idea that men are facing some nihilistic future, degraded, threatened and marginalized by a combination of women’s ‘successful’ liberation and wider social and economic transformations has become a highly potent, almost common-sense, if at times contested, understanding of men at this point in history. (Whitehead 2002:50-51)

Those that acknowledged the “crisis” use it as an explanation, if not justification, for the backlash against feminism, a manifestation of the “men’s movement” (Beal 1997; Dragiewicz 2008).

\(^1\) Similar concepts are still used in psychology such as: “gender role conflict” (Galligan et al. 2010; O’Neil, Good, and Holmes 1995) and “masculine gender role stress” (Jakupcak, Lisak, and Roemer 2002).

\(^2\) As recent as 2002 researchers still see this as physiological in explaining men’s violence with their intimate partners as the result of “higher levels of internal arousal” or increased “heart reactivity” (Jakupcak, Lisak, and Roemer 2002).
The major difference between sex/gender role-strain and sex/gender role-identity is that strain theorists believe men's behaviors are the result of structured socialization (i.e. naturalistic responses to real or perceived social change created by the feminist movement), whereas identity theorists believe men's behaviors are in their "masculine" nature, irrespective to changing social conditions. Essentially, both explanations allow men to neutralize their negative behaviors towards women by blaming women, biology, or both.

*Operationalizations of Sex/Gender Role Ideology*

Empirical measurements of sex/gender role ideologies are often highly variable based on sex/gender role analysts' differing conceptualizations of the term. As a result, sex and gender roles are assessed in a variety of ways. One of the most common measurements, at the individual level, is through questions regarding attitudes or beliefs about appropriate roles for women and men. This is not to imply that any researcher using a scale regarding sex or gender roles should be classified a role analyst or role theorist in line with Parsons. However, as will be made clearer in the section regarding individual patriarchal ideology, some of these measurements share many of the same theoretical assumptions regarding gender as role theorists. The main measurement issue that is detrimental to a theory of patriarchy emerges when dynamics of *power*, *domination*, or *inequality* are not the primary measures (e.g. items from the General Social Survey, see Ciabattari 2001; Mason and Lu 1988). Although some scales do have useful indicators of patriarchal ideology, the totality of the scales often includes measures inconsistent with the concept.
A plethora of scales have been used or developed to measure ideologies of or attitudes about sex/gender roles. These scales include: “Attitudes Toward Gender Roles” (Baxter and Kane 1995; Cassidy and Warren 1996), “Attitudes Toward Women” (Spence, Helmreich, and Stapp 1973), “Attitudes Toward Women’s Roles” (Ciabattari 2001; Mason and Lu 1988; Wilkie 1993), “Conformity to Masculine Norms Inventory” (Mahalik et al. 2003), “Gender-Role Attitudes” (Carter, Corra, and Carter 2009; Dugger 1988; Rice and Coates 1995), “Gender Ideology” (Vespa 2009), “Hypermascullinity Inventory” (Mosher and Sirkin 1984), “Liberal Attitudes Towards the Role of Women” (Gibbins, Ponting, and Symons 1978), “Male Attitude Norms Inventory” (Luyt 2005), “Sex-Role Egalitarianism” (Beere et al. 1984), “Sex Role Attitudes” (Ross 1987), “Sex-Role Inventory” (Bem 1974), “Sex-Role Ideology” (Kalin and Tilby, 1978), “Traditional Male Ideology” (Wu et al. 2011) and “Traditionalism” (Atkinson, Greenstein, and Lang 2005). It should be noted that some of these scales share common names yet they can have completely different measures from one another. For example, Carter et al. (2009) and Rice and Coates (1995) each measure “Gender-Role Attitudes” but different measures can be found in each scale. This list is provided to merely show the multitude of scales attempting to measure attitudes or an ideology of “sex/gender roles”. This list is not exhaustive as any search through the peer-reviewed social science literature will return hundreds of different measurement scales of sex/gender role behaviors as well as attitudes/ideologies.

For illustrative purposes, Spence et al.’s (1973) “Attitudes toward Women Scale (AWS)” is detailed since it is one of the more common measurement tools of patriarchy
ideology when assessing its relation to domestic violence. Many indicators on this 25-
item scale could be used as reliable measures of patriarchal ideology. A few of these are:

Both husband and wife should be allowed the same grounds for divorce.
Under modern economic conditions with women being active outside the home, 
men should share in household tasks such as washing dishes and doing the 
laundry.
It is insulting to women to have the "obey" clause remain in the marriage service. 
There should be a strict merit system in job appointment and promotion without 
regard to sex.
A woman should be as free as a man to propose marriage.
Sons in a family should be given more encouragement to go to college than daughters. (Spence et al. 1973:219)

These are all indicators that could be used in a measurement of patriarchal ideology 
because they are all consistent with the current conceptualization of individual patriarchal 
ideology (see later in this chapter). Each indicator above either relates to power and 
control and/or has a direct relationship to a social institution of power (i.e. the family, the 
economy). However, other indicators within this scale include:

Telling dirty jokes should be mostly a masculine prerogative.
Intoxication among women is worse than intoxication among men.
A woman should not expect to go to exactly the same places or to have the same 
freedom of action as a man.
Women should be encouraged not to become sexually intimate with anyone 
before marriage, even their fiancés. (Spence et al. 1973:219-220)

The first indicator listed here this is not an appropriate indicator of patriarchal ideology 
because it is not clear whether or not "masculine prerogative" is referring to a biological 
condition of being male or a socialized property of men. If an individual defines 
"masculine" in a way that is similar with many sex/gender role analysts as a biological 
characteristic, then this is problematic. That is, the very use of the word "masculine" as a 
biological characteristic is essentialist, since behaviors that men overwhelmingly engage 
in (i.e. telling dirty jokes) are seen as indicators of "maleness" or "masculinity." Thus,
masculinity is conceived as a biological trait but operationalized with socially constructed indicators (e.g. being aggressive, being independent, telling dirty jokes). Does disagreeing with this statement mean one holds a negative attitude toward women or does agreeing with this mean one considers this is an appropriate indicator of masculinity? Additionally, the next statement about women’s intoxication is also inconsistent with patriarchal ideology. It is unclear what this statement is trying to measure. One might hold very pro-feminist views and think intoxication is worse for women because socially-constructed norms about drinking put women in difficult situations when they violate these norms. Thus, it is unclear what is meant by the word “worse”. Worse in what regard? The confusion concerning wording could also hold true for the third statement. A pro-feminist individual may recognize that women should not expect the same freedoms of men in social settings because they are aware of public patriarchy. Recognizing public patriarchy one would probably agree with this statement since they recognize that women do not enjoy the same freedoms as men because of gender discrimination, not because they are not entitled to the same freedoms of men. Finally, the last statement may not provide an appropriate measure of patriarchal ideology even when the institution of the family is noted. This is because many people may feel strongly against sexual activity before marriage for both men and women. Whether it is for religious reasons or concern over sexually transmitted diseases, there are many reasons why people may support abstinence from sex before marriage for women, but also for men. Not including a measure of men’s pre-marital sexual activity makes it unclear whether or not supporting this statement is related to a misogynistic identity. Yet despite potential issues with the Spence et al. (1973) scale, this scale is still considered to
be a measure of "patriarchal attitudes" by some (see Obeid, Chang, and Ginges 2010\(^3\)), when its measures are more consistent with a more global concept of gender role attitudes.

Clarity between ideologies about femininity and ideologies about feminism are also important to discuss. Wilkinson (2004) measures "masculine gender-role beliefs" and has an anti-femininity subscale. The anti-femininity scale has an item that states, "I might find it a little silly or embarrassing if a male friend of mine cried over a sad love scene in a movie" (Wilkinson 2004:124). In contrast to this, an item from a different scale, the "attitudes toward feminism and the women’s movement" contained a measure regarding survey participant’s response to, “The women’s movement is too radical and extreme in its views” (Fassinger 1994:395). Notice the difference between an anti-femininity measure and an anti-feminist measure. The former is often associated as a role or trait and the latter is measuring attitudes about the political movement regarding women’s equality, much more consistent with an individual patriarchal ideology scale. The feminist movement itself is a political movement, therefore, attitudes about it are

\(^3\) These authors did include a dependent variable of “Beliefs about wife beating”, which included measures consistent with how patriarchal ideology should be measured. However, the fact that these researchers considered patriarchal attitudes as a predictor of beliefs about wife beating is problematic since patriarchal attitudes and ideology are operationalized with measures of attitudes about violence against wives/partners (see Smith 1990; later in this chapter).
more appropriate than attitudes about femininity, which is more conceived as a biological trait.

Before moving on, a brief mention of the potential relationship between one’s gender-role identity and their attitudes towards women should be discussed. In other words, if one agrees with the assumption that gender roles produce masculine or feminine traits (which is best to think of as a continuum rather than a dichotomy) then it is possible that one’s level of femininity or masculinity could predict their patriarchal ideology. Suter and Toller (2006) found more feminine men and more masculine women were more likely to self-identify as feminists and more likely to support the feminist movement. This research demonstrates how self-identification with specific gender roles can influence one’s attitudes towards women or the women’s movement (see also Gallagher and Parrott 2011; Renzetti 1987). Rather than using a psychometric measure of gender role attitudes (which would need to include separate measures from patriarchal attitudes), individual’s self-identification with a particular gender role may have relevance in explaining individual patriarchal ideology.

The validity and reliability of many sex/gender role attitudinal scales such as those used by Spence et al. (1973) appears to be strong. However, as the examples above show, many sex/gender role attitudinal measures are invalid and unreliable as a measure of patriarchal ideology. This is due to inconsistencies between the concepts sex/gender role ideology and patriarchal ideology. A discussion of the major criticisms of sex/gender role analysis will further help make the case for the salience of patriarchal ideology.
Critiques of Sex/Gender Role Ideologies

There are many obvious problems with the simplistic explanations of gender differences that come from role analysis. Such explanations: 1) ignore macro-level power differentials by focusing too much on individuals, 2) normalize male roles in a way that any male that is not middle-class, white, and heterosexual is considered deviant, (i.e. ignoring multiple inequalities) and 3) assume these roles are static (Carrigan et al. 1985; Connell and Messerschmidt 2005; Kennelly and Lorber 2001; Kimmel 2000; Komarovsky 1973; Messner 1998; Risman 2001).

The first and perhaps most important criticism is that role analysis fails to acknowledge power differentials that exist outside of individual men and women (Stacey and Thorne 1985). The micro-level dynamics involved with the construction of male identities (Pleck 1995) are meaningless without proper contextualization. Role analysis ignores larger patriarchal institutions of power that could perpetuate gender inequalities and gender differences. Thus, role analysis blindly accepts the socialization process that occurs in the primary group of the family, while failing to critique the social institutions that can structure the socialization processes. Families, after all, do not exist in a vacuum separate from other social institutions. Along these same lines, role analysts fail to discuss how individual agency can influence social structures (see Garfinkel 1967).

The second major criticism of role analysis is that it takes for granted "multiple inequalities" (Daly 1993; 1997). This is the acknowledgement that class-race-gender, or "intersectionality", are three interacting statuses related to stratification. Thus, role analysis that classifies certain "traits" of being masculine or feminine ignore the "matrix of domination" (Collins 2000) where gender roles intersect with other oppressive statuses
(see also hooks 2000). Outside of race, role analysts also neglect the fact that inequalities exist regarding class and sexual orientation.

The third important criticism of role analysis is that it assumes individual’s sex roles are static, or downplay potential change in them (Komarovsky 1973; Schilt and Westbrook 2009). Even the more sociological gender socialization theories assume that after around age five these roles are invariable to change (West and Zimmerman 1987). Role analysts that refuse to acknowledge change in individual’s sex/gender roles are assuming that these roles are identities for individuals. Towards the end of this chapter, empirical research is cited that has shown how variations of the concept patriarchal ideology or gender role ideologies have not remained static.

HEGEMONIC MASCULINITIES

One perspective that has been especially critical of sex/gender role analysis is the area known as hegemonic masculinities. Hegemonic masculinity theorists fill many of the gaps left by sex/gender role analysts in explaining gender inequalities. This concept also notes the complex nature of patriarchy as being more than just structural male domination. It acknowledges the complexities of gender regarding masculinities and femininities (Demetriou 2001).

The concept hegemonic masculinity emerged in response to role analysis in an attempt to more accurately explain gender inequality. Raewyn Connell is the most notable scholar that contributed to the development of this concept. She and her colleagues state that hegemonic masculinity is, “a question of how particular groups of men inhabit positions of power and wealth, and how they legitimate and reproduce the
social relationships that generate their dominance” (Carrigan et al. 1985:592).

Additionally, “culturally constructed relations are presented to appear natural to justify present social positions” (Lusher and Robins 2009:388). Lastly, DeKeseredy and Schwartz (2010) provide a solid overview of the main components of hegemonic masculinity as:

- living up to the culturally defined role of ‘breadwinner’ in heterosexual marriage/cohabitation;
- avoiding things societally defined as feminine;
- severely restricting emotions;
- showing toughness and aggression;
- exhibiting self-reliance;
- striving for achievement and status;
- exhibiting non-relational attitudes toward sexuality;
- and actively engaging in homophobia. (DeKeseredy and Schwartz 2010:159-160)

Hegemonic masculinities encourage and justify male dominance over women and operate at individual and institutional levels (Connell 1995, 2002, 2008). This concept also acknowledges that some men dominate not only women, but other men (e.g. homosexual men, lower-class men, racial minorities). Hegemonic masculinity perspectives recognize social institutions as settings for various masculinities. These perspectives note that hierarchies of masculinities exist within different social institutions (see Carrigan et al. 1985; Connell 1995, 2008; Connell and Messerschmidt 2005; Donaldson 1993; Hearn and Collinson 1994; Messerschmidt 2008).

An important emphasis made by Connell and colleagues is that hegemonic masculinities are not individual-level traits that remain static (Connell 1995; Connell and Messerschmidt 2005). The distinction is that hegemonic masculinities are *relational* rather than attributes or character types. This is clarified in the work of Lusher and Robins (2009:390), “For example, concepts such as power and independence are promoted as attributes of hegemonic masculinity that reside within the individual, when both terms are better understood as relating to social relations between individuals.”
They are seen as behaviors that are produced through structured social interaction “associated with membership in particular social categories” (Daly 1997:37; see also Connell and Messerschmidt 2005; Messerschmidt 1997).

Hegemonic masculinities are contextualized historically and institutionally, which are both important components of an adequate theory of patriarchy (Hunnicutt 2009; Walby 1990). They are also important for an adequate conceptualization of patriarchy. They are historically contextualized with an emphasis on individual-level change as well as various macro-level historical shifts. Institutionally, hegemonic masculinities operate primarily in most social institutions through “gender regimes” (Connell 2008).

Demetriou (2001) elaborates:

Within this framework, hegemonic masculinity is understood as a configuration of practice but it is also seen as being institutionalized in large-scale gender regimes, that is, as a process that involves both social structure and personal life. Demetriou (2001:341)

Theoretical explanations for gender stratification in social institutions help explain how micro-level relations contribute to the continued subordination of women within dominant institutions. In this regard, hegemonic masculinity is based on “[...] actual social practices rather than discussion of rhetoric and attitudes” (Carrigan et al. 1985:553). Similarly, West and Zimmerman (1987) developed the concept of “doing gender” to explain how gender is not based on rigid sex categories but is performed through structured interaction. Using this same framework, researchers have argued that when “doing masculinity”, the components of hegemony related to masculinities involves persuasion (mostly through gender stereotypes), the sexual division of labor, and the state (Carrigan et al. 1985). To re-emphasize, role analysts completely ignore the fact that actions can be structured or that individuals can shape larger institutions. In addition,
some feminists have been so focused on structure that they reify patriarchy. Hegemonic masculinity perspectives are instrumental in going beyond the dualistic agency/structure dichotomy.

Operationalizations of Hegemonic Masculinities

Hegemonic masculinities are often measured using qualitative methodologies. Connell (1995) specifies ethnographies and ethnomethodologies as appropriate research tools in the study of hegemonic masculinities. Also employing qualitative research methods, Bird (1996) used in-depth interviews and field observations to examine how hegemonic masculinities are sustained through the suppression of non-hegemonic masculinities and femininities. While Connell (1995) never explicitly says “quantitative methods”, she takes a strict stance against positivism. While Connell’s critiques of positivism are noteworthy, it is a mistake to interpret this to mean hegemonic masculinity (or individual patriarchal ideology) cannot be researched using quantitative methods, which are not automatically “positivist” (see “Quantitative Analysis and Patriarchal Ideology”). Few studies have measured hegemonic masculinities through quantitative research designs (for exceptions see Lusher and Robins 2009; Wilkinson 2004).

Hegemonic masculinities are thought to be less essentialist than macro-level patriarchal theories in that they specifically focus on the power of individual interaction. The focus is not so much on patriarchal structures influencing behavior as it is on how hegemonic masculinities are reproduced and legitimated through social interaction. While behaviors may be influenced by ideologies and may sustain and reproduce ideologies, it is unclear the exact importance of ideologies in the concept. Thus,
empirical research regarding hegemonic masculinity focuses almost exclusively on behaviors.

Critiques of Hegemonic Masculinity

Various aspects of hegemonic masculinity aid in developing patriarchal ideology, but the entirety of the concept may not always be useful in explaining violence against women. This lies in the fact that hegemonic masculinity was developed to explain men's dominance over women and not strictly men's violence against them (Connell and Messerschmidt 2005). Thus, substituting hegemonic masculinities for patriarchal ideology is problematic. The overlying theoretical perspectives have different postulations and assumptions (see Gouldner 1970). There are four main reasons why hegemonic masculinity cannot be incorporated directly in a theory of violence against women: 1) the lack of conceptual clarity regarding behaviors and attitudes, 2) the fact that hegemonic masculinity was originally conceived to explain broader forms of women's subordination rather than specific forms of oppression like violence against women, 3) the failure to elaborate on the psycho-dynamics of hegemonic masculinity, and 4) weak discussions concerning the appropriate operationalization of the term.

Perhaps the greatest criticism of hegemonic masculinities is the conceptual confusion between whether or not hegemonic masculinity is based on men's behaviors ("actual social practices", Carrigan et al. 1985) or cultural ideals ("hegemonic principles") (Coles 2009; Hearn 2004; Howson 2008). As previously mentioned, the original hegemonic masculinity theorists take a realist approach when they assert hegemonic masculinities are based, "[...] on actual social practices rather than discussion
of rhetoric and attitudes” (Carrigan et al. 1985). Here, the theorists are trying to
differentiate the term from role analysts’ non-contextualized accounts of gender
identities. These identities largely involve men who hold attitudes about appropriate
gender roles. Yet the focus on agency was also used to avoid structural determinism in
showing the reciprocal relationship between structures and individuals. This is the notion
that structures constrain behaviors while at the same time behaviors serve to reproduce
structures (see Giddens 1984). While this reciprocal relationship is important for
understanding hegemonic masculinity, it does not make clear the role of ideals.

The “hegemonic model” appears to “express widespread ideals, fantasies, and
desires” (Connell and Messerschmidt 2005:838), or what can simply be called cultural
ideals of what it means to be a man. With these ideas and beliefs, Connell and colleagues
do acknowledge that cultural constructions are an important factor in hegemonic
masculinities, particularly in addressing Collier’s (1998) critiques of the concept. Collier
suggests that hegemonic masculinities are really cultural ideals and that the construction
of hegemonic masculinities cannot be solely relational. Responding to these criticisms,
Connell and Messerschmidt (2005) note that research (although none is cited) has found
discrepancies between cultural ideals and actual practices in the daily lives of men and
boys. The authors argue that hegemonic masculinities can be constructed that are rarely
practiced by any real men, what they call complicit masculinities (Carrigan et al. 1985;
Connell and Messerschmidt 2005). Confusion lies in whether or not the (in)action of
men is a form of hegemonic masculinity since the authors insist hegemonic masculinity
must be based on men’s actual actions. The argument is also tautological in that the
authors are basically saying: hegemonic masculinities are sustained by complicit
masculinities, which sustain hegemonic masculinities. The theorists, themselves, note the overlap between the two can be expected, especially in social environments where hegemony is effective (Connell and Messerschmidt 2005). The failure of the theorists to make explicit cultural ideals in the theory is perhaps the reason why the authors believe their apparent tautology is really just an "overlap" of two key concepts. Demetriou (2001) concludes that complicit masculinities are cultural ideals since they are not based on "actual social practices" that Connell and colleagues believe define hegemonic masculinities. Overall, the lack of conceptual clarity and the contradictions regarding ideals and practice show why hegemonic masculinity is inappropriate to use as a theory of violence against women in general or as a premise for patriarchal ideology specifically.

Connell and colleagues make a valid point in that common cultural scripts of what it means to "be a man" can produce a variety of different actions. There are problems, however, in looking at cultural scripts as predictors of men's behaviors. Such an approach assumes that the cultural regimes are known by the men performing masculinity. While social scientists have often noted that behaviors do not always coincide with "cultural ideals", perhaps these theorists should distinguish between aggregate-level ideals and individual-level ideals. Chapter 2 discussed many different institutional patriarchal ideologies, what hegemonic masculinity theorists would call "gender regimes." Whether or not social actions (which define hegemonic masculinities) are determined by these gender regimes, or what I call institutional patriarchal ideology, is never made explicit. At one point the gender regimes (e.g. cultural scripts, institutional patriarchal ideology) are part of hegemonic masculinity and at another they are not, since
they are not based on actual social practices. Perhaps individual patriarchal ideology
explains social actions (or inaction) better than the links between aggregate gender
regimes and individual behaviors. The individual ideological components to hegemonic
masculinity, however, are not made explicit and at times the whole cultural scripts-to-
social actions link is contradictory. Additionally, the authors’ claim that masculinities
take on different meanings based on varying social structures have led some to claim the
concept is structurally deterministic (Whitehead 2002). Such conceptualization allows
any and all forms of men’s behaviors to be hegemonic masculinity, with institutions
determining what behaviors are or are not consistent with the concept.

The second major reason why hegemonic masculinity is not compatible with
patriarchal ideology is related to the first criticism in that hegemonic masculinities was
conceived in an attempt to explain men and masculinities and not specifically violence
against women (Connell and Messerschmidt 2005). When attempting to explain violence
against women, hegemonic masculinities appear essentialist. For example, men’s
violence towards intimate partners is explained as men “doing” masculinity. Yet most
men do not engage in violence or control tactics against their intimate partners.
Hegemonic masculinities are at play here for these non-violent men since they benefit
from other men’s use of violence in the broader patriarchal order. Essentially, violence
against women is a form of one type of masculinity that is maintained by a different type
of masculinity- thus masculinity is used to explain all varieties of violence and non-
violence against women. The issues here fall back on the theorists’ inability to
effectively establish the role of ideologies in relation to behaviors in their
conceptualization of hegemonic masculinities. This is essentialist in the same way many
conceptualizations of masculinity are essentialist. All male behavior is seen as masculine when masculinity (hegemonic or not) is supposed to “distinguish being masculine from being a man” (Clatterbaugh 1998:39). If hegemonic masculinity differentiated between ideals and actions (as well as between institutional ideals and individual ideals) it would be a more viable concept for a theory of violence against women.

The two components of hegemonic masculinity that may counter the claim that hegemonic masculinity is not deterministic are individual psychologies and history. This implies that individual psychologies are not fixed character types in the way role analysts propose. To elaborate, examinations of individual ideologies regarding hegemonic masculinity or what it means for an individual to agree with broader cultural scripts about “being a real man” do not assume that the men who hold these ideals are defined by them- especially when analyzed over time. What is most problematic with hegemonic masculinity theorists is that they assume men’s social actions that differentiate from cultural scripts that define how they “should” act are not important to their theory. That is, by focusing too much on social actions, cultural scripts (e.g. gender regimes, institutional ideologies) and individual attitudes (i.e. individual patriarchal ideology) become trivialized. This is perhaps the most reasonable explanation for why individual-level empirical research showing specific attitudes regarding hegemonic masculinities (even contextualized within institutions) is scarce (see Lusher and Robins 2009). Even Connell (2002) discussed the importance of psychic dimensions of hegemonic masculinity but she quickly reduced their importance by limiting the ways in which these psychic dimensions can be operationalized. Connell notes that psycho-analytic positions
should only be assessed with case-study methods. This leads into the overall myopic
treatment of research methodologies by Connell.

Connell (1995, 2002) limits the tools of any social scientist with her strict
adherence to qualitative methods. The main argument Connell makes is that positivistic
conceptualizations of gender assume that individuals do not change regarding their
masculinity. Basically, Connell believes positivism fails to see how “culture and context
actively shape how masculinity is performed and experienced” (Moller 2007:267). To
Connell, positivists that seek to describe different patterns of men’s behaviors in a
particular setting and then go out and find these pre-defined patterns are reductionistic.
At the same time, these theorists are assuming, inaccurately, that these patterns they have
defined, and then found, are stable. They are assuming stability because they fail to
recognize that those behaviors are particular to that point in time and that particular
context. Additionally, like many post-structuralists (Hood-Williams and Harrison 1998;
Kessler and McKenna 1978; West and Zimmerman 1987; Whitehead 2002), Connell is at
odds with positivistic definitions of masculinity that claim objectivity yet use “common
sense typologies of gender [male/female dichotomies]” (1995: 69) when conceptualizing
gender.

Connell is right in that positivistic accounts of masculinity assume gender
relations are static when only looking at specific cultural contexts during specific time
periods. In a broader context, Connell might be right in that existing positivists do
assume traits and behaviors are static when they are conducting cross-sectional research.
However, Connell is wrong if she is closing the door on all quantitative methods because
she thinks they only focus on specific ideals at one point in time or that cross-sectional
research is the only type of research quantitative methodologists conduct. Connell is ignoring quantitative longitudinal research. Social scientists should use concepts that can be measured, explored, and explained through any of the scientific tools they have at their disposal as long as the methodology is appropriate in regards to conceptualization.

Connell also disagrees with positivists’ conceptualizations of masculinity. Moller (2007:267) summarizes this criticism, “Masculinity is understood as referring to a specific and already known set of qualities or attributes: for example, a greater access to power, an exaggerated competitive ethos, etc.” Connell then argues that such definitions lead to determinism since researchers define patterns of masculinity and then “find” these patterns in a deductive manner. Yet Connell’s theory has also been accused of determinism in that her theory also “sees” pre-defined patterns of masculinity (Moller 2007). The patterns that hegemonic masculinity theorists attempt to look for derive from past research (from specific historical and cultural contexts) (Moller 2007). This shows the contradictions in Connell’s own attacks against positivism since her operationalizations of hegemonic masculinity follow many of the same guidelines that “positivist”, or really any deductive methodology does. It appears that a rigid resistance towards non-qualitative methodologies makes hegemonic masculinities incompatible with a theory of patriarchy for violence against women. After all, a variety of reliable methodologies are used by feminist researchers (DeKeseredy 2011a, 2011b).

PATRIARCHAL IDEOLOGY

The focus on patriarchal ideology in this dissertation lies in the need to compile a better understanding of patriarchy so that this concept can be utilized in a theory of violence against women. The argument is not that ideologies are any more important
than behaviors in explaining violence against women or that individual patriarchal ideology holds more significance than institutional patriarchal ideology. The reality is many have failed to fully develop the concept patriarchal ideology. Researchers have been myopic in past discussions of the topic. That is, many have reduced patriarchal ideology’s importance to whether or not individual men that are violent towards female partners have a strong patriarchal ideology. This section of the dissertation presents the argument that individual patriarchal ideologies are important in explaining violence against women, beyond their significance for individual perpetrators of violence against women. The conceptualization and operationalization of the concept is discussed, as well as a brief review of past research examining patriarchal ideology in relation to violence against women.

*Ideologies, Attitudes, Values, Beliefs*

Before moving on, it is important to discuss four concepts related to ideals about patriarchy: ideologies, attitudes, values, and beliefs. Maio et al. (2003) compare and contrast these concepts using perspectives from psychology. They state that attitudes are “tendencies to evaluate an object positively or negatively” (2003:284). Values are “abstract ideals that function as important guiding principles” (284). And, “ideologies are systems of attitudes and values that are organized around an abstract theme” (284). While beliefs are not a specific area of focus, the researchers elude to beliefs the most when discussing values. Essentially, attitudes and values are subcomponents of ideologies. Using this framework, individual patriarchal ideology consists of patriarchal values like egalitarianism or misogyny. Patriarchal attitudes would be more specific and
tangible such as attitudes towards the feminist movement or attitudes about the use of violence against a female intimate partner. Thus, it is important to note that while patriarchal ideology is the broader concept of focus, the dimensions of this concept contain attitudes and values. Ultimately, researchers should obtain measures for both dimensions, but because these concepts overlap considerably, not all operationalizations need measures of both. Maio et al. (2003) summarize that all of these concepts are individual biases, they can exist without individuals being aware of them, and most importantly, none exist separate from the other.

One of the few attempts to conceptualize patriarchal ideology in a practical manner comes from Smith (1990). Smith conceptualizes patriarchal ideology in the same way that Millett (1970; see also Dobash and Dobash 1977) did:

(a) a set of beliefs that legitimizes male power and authority over women in marriage, or in a marriage-like arrangement, and (b) a set of attitudes or norms supportive of violence against wives who violate, or who are perceived as violating the ideals of familial patriarchy. (Smith 1990:263)

"Marriage-like arrangements" could include cohabitating couples. Smith’s definition should be expanded slightly. Ideologies about male power and authority over wives and/or women in similar arrangements (e.g. fiancés) should also include male power and authority over women in dating arrangements. This inclusion provides a conceptualization that is consistent with the conceptualization of violence against women in this dissertation that includes dating relationships. Not surprisingly then, “(b)” in Smith’s definition should include violence against not just wives, but girlfriends as well
as former partners. The inclusion of former partners is important since violent husbands/boyfriends may continue to stalk, harass, and/or physically assault former partners.

Unlike gender-role ideology/attitudes that focus on attitudes about “natural” ways of doing things, patriarchal ideology is explicit in attitudes or beliefs about power and control. Thus, it is assumed that many men hold fairly egalitarian attitudes about women’s roles in the family and the economy. But with the focus placed on power in a concept like patriarchal ideology, it is argued that this is far more important than simply looking at ideologies about certain “roles.” For example, Cockburn (1991:73) states, “Having more women in management, even women ‘doing things in womanly ways’ is not the same thing as having feminists in control.” Cockburn further notes how economic institutions are unlikely to change if women are placed in roles where they have very little power and are merely tokens. This is relevant for the current study since the argument being made is that institutional and individual power are what sustain

4 This creates a broader definition than Smith’s, meant to be inclusive of patriarchal ideologies about men’s control of any intimate female partner, whether married or not. Chapter 4 notes the methods in this study that use measures consistent with ideologies about husband’s control of wives and Chapter 5 notes the methods that use measures related to ideologies concerning rape of a dating partner. Keep in mind that an individual’s patriarchal ideology about male control in marriage, relationships, or both can exist regardless of one’s relationship status (although relationship status might influence these ideologies).
violence against women. If changing individual ideologies can indeed change the broader culture and broader social institutions that support violence against women, then they should hold far more relevance for a theory of violence against women than sex/gender roles that ignore power.

*Direct Tests of Individual Patriarchal Ideology*

Feminist researchers have been at odds with many “gender symmetry” proponents who claim empirical tests of the relationship between patriarchy and violence against women is weak at best. Many researchers that support a “gender neutral” approach to studying domestic violence frame the feminist perspective as: “patriarchy is a direct cause of domestic violence” (e.g. Bell and Naugle 2008; Dixon and Graham-Kevan 2011; Dutton 1994, 2006). The truth is, most feminist researchers did not and do not, say patriarchy directly causes violence against women. Most agree that patriarchy creates the environment that allows violence against women to occur and persist.

A handful of studies have looked at structural patriarchy (aggregate variables related to women’s status in dominant institutions) and rates of domestic violence. For example, Hunnicutt (2009:561-562) reviewed some 21 studies that analyzed the relationship between structural patriarchy and rates of violence against women and obtained mixed findings. Thus, as new research techniques and new theoretical insights emerge, hopefully the structural relationships can reach more definitive conclusions.

Researchers like Dutton (1994, 2006) suggest feminist researchers are committing the ecological fallacy since patriarchy is a structural variable that cannot predict individual behaviors. Although Dutton is right in his interpretation of the ecological
fallacy, he is wrong in his conceptualization of patriarchy, which makes his critique of feminist research unfounded. More recently, Corvo and Johnson (2010:304-305) discussed that many state-sponsored policies regarding domestic violence operate under the assumption that patriarchy causes domestic violence and they even cite “The State of New York Standards for Interventions with Men Who Batter” to support this. Yet they go on to read part of these state standards, “Domestic violence is rooted in a patriarchal and sexist society that structurally and systematically discriminates against women based on their gender, with the imbalance of power between women and men as its foundation.” Like Dutton, Corvo and Johnson are misinterpreting or misrepresenting the relationship between patriarchy and woman abuse. By saying this policy is based on the simplistic assumption- patriarchy causes domestic violence- these researchers are confusing causality with context. Thus, saying the structure of patriarchy allows for violence against women or that violence against women is “rooted” in patriarchy is not the same.

Dutton (1994) stood by this, even after reviewing Smith’s (1990) research, which he gives little value to since more than half of Smith’s sample of women reported that their husbands were not patriarchal. He also discredited Smith’s research since he “only” explained 20% of the variance in his regression model for his study, whereas Dutton’s own research (Dutton and Starzomski 1994) that included psychological variables explained 50% of the variance. Besides the fact that Dutton is placing far too much weight on variance explained (see Lieberson 1985), comparing the amount of variance different variables are capable of explaining holds little value when the research is from entirely different data.
as saying it directly causes it. Corvo and Johnson note that researchers are "often"
confused as to the exact definition of patriarchy. Ironically this is something that
confuses these researchers since they assume patriarchy as a contextual factor in domestic
violence is the same thing as a causal factor.

This dissertation has consistently referenced empirical research that
conceptualizes patriarchy as a multi-level concept, existing structurally, ideologically,
and individually. This conceptualization is consistent with numerous researchers'
conceptualizations used in the past (see DeKeseredy 2011a, 2011b; DeKeseredy and
Ogle and Batton 2009; Smith 1990). While patriarchy may be a contributing factor to
men's violence against women, feminist researchers do not assume patriarchy causes
violence against women. Even at the individual level, it is not assumed that individual
patriarchal ideology causes domestic violence, but instead they are seen as motivating
factors, risk factors, or correlates of men's violence. Causal relationships are often very
difficult (if not impossible) to determine in the social sciences. However, a criterion for
any causal analysis is that there must first be a correlation. Additionally, causal
relationships may hold true for less than half of all individuals from a sample. That is, a
causal relationship can exist when there are exceptional cases, even when the number of
exceptional cases (non-causal cases) makes them the norm. Because of these two
important requirements of causality, it is important to review past research that has used
both bivariate and multivariate statistical techniques assessing individual patriarchal
ideology as a predictor of men's violence.
There are four major systematic reviews that have assessed the empirical literature's findings regarding numerous variables as predictors of men's use of violence against a female partner. In chronological order, the reviews are: Hotaling and Sugarman (1986), Sugarman and Frankel (1996), Holtzworth-Munroe et al. (1997), and Stith et al. (2004). Each of these has a section regarding the significance of patriarchal ideology as a predictor of male-perpetrated partner violence. Table 3.1 provides a summary of the research reviewed within all four of these reviews. As the table shows, some of the research in these reviews overlaps and appears in multiple reviews. Overall, 29 studies have examined the relationship between patriarchal ideology and men's violence. Table 3.1 shows each of the 4 systematic reviews' overall findings regarding the key concepts related to patriarchal ideology and men's use of violence. These numbers are explained more fully when discussing each individual review below.

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Each review is different but often the concept "patriarchal ideology" is used interchangeably with concepts like "gender-role attitudes." In the ensuing paragraphs discussing each individual review, the exact concept used by the reviewers is noted.
Table 3.1. Aggregate Results of 4 Major Systematic Reviews Assessing the Relationship between Men’s “Patriarchal Ideology” and Violence against Women

<table>
<thead>
<tr>
<th>Review</th>
<th>Concept Reviewed (Number of Studies)</th>
<th>Studies finding Significant Relationship with VAW&lt;sup&gt;e&lt;/sup&gt;</th>
<th>Author's Conclusion</th>
<th>Peer-Reviewed Studies Actually Measuring Patriarchal Ideology</th>
<th>Peer-Reviewed, Measuring Patriarchal Ideology and Significant with VAW&lt;sup&gt;e&lt;/sup&gt;?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotaling and Sugarman</td>
<td>Traditional Sex-Role Expectations (8)</td>
<td>2/8 = 25%</td>
<td>The only consistent non-risk marker</td>
<td>3/8</td>
<td>0/3</td>
</tr>
<tr>
<td></td>
<td>Acceptance of Violence Toward Women (2)</td>
<td>1/2 = 50%</td>
<td>Insufficient data</td>
<td>1/2</td>
<td>0/1</td>
</tr>
<tr>
<td>Sugarman and Frankel</td>
<td>Violence Attitudes (5)</td>
<td>3/5 = 60%</td>
<td>Abusive men more likely to have violent attitudes</td>
<td>3/5</td>
<td>3/3</td>
</tr>
<tr>
<td></td>
<td>Gender Attitudes (10)</td>
<td>3/10 = 30%</td>
<td>Mixed findings</td>
<td>7/10</td>
<td>1/7&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Holtzworth-Munroe</td>
<td>Attitude Toward Women/Sex-Role Attitudes (8)</td>
<td>5/8 = 63%</td>
<td>Mixed findings</td>
<td>8/8</td>
<td>2/8&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Attitudes Toward Violence (5)</td>
<td>5/5 = 100%</td>
<td>Significant relationship with VAW&lt;sup&gt;e&lt;/sup&gt;</td>
<td>5/5</td>
<td>2/5</td>
</tr>
<tr>
<td>Stith et al. (2004)</td>
<td>Attitudes Condoning Violence (5)</td>
<td>4/5 = 80%</td>
<td>Strong effect sizes</td>
<td>5/5</td>
<td>4/5</td>
</tr>
<tr>
<td></td>
<td>Traditional Sex Role Ideology (7)</td>
<td>5/7 = 71%</td>
<td>Moderate effect sizes</td>
<td>7/7</td>
<td>1/7&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Notes: <sup>a</sup>There were 5 studies that included consistent items with patriarchal ideology but combined these with items inconsistent with patriarchal ideology. <sup>b</sup>There were 2 studies that had patriarchal ideology items but combined these with items inconsistent with patriarchal ideology. <sup>c</sup>There was 1 study that had patriarchal ideology items combined with other items inconsistent with patriarchal ideology. <sup>d</sup>Four studies had patriarchal ideology items combined with other items inconsistent with patriarchal ideology and 1 study had behavioral items that could be considered patriarchal, but not consistent with patriarchal ideology. <sup>e</sup>VAW = violence against women.
Hotaling and Sugarman (1986) provided the first study that systematically reviewed the research on bivariate associations related to domestic violence. This study assessed a wide-variety of variables related to domestic violence, which was feasible since empirical research on domestic violence was still in its infancy during the time this study was published. The two most relevant predictors for the current research are "traditional sex-role expectations" and "acceptance of violence toward women." Overall, 2 out of 8 studies found "traditional sex role expectations" were predictive of wife assault. Hotaling and Sugarman concluded that this was, "the only consistent nonrisk marker among male characteristics" (114). In other words, 75% of the reviewed studies found "traditional sex role expectations" were not predictive of men's use of violence. Hotaling and Sugarman's research is actually the weakest of the 3 reviews. Taking out the non-peer reviewed research, just three studies assessed the correlation of "traditional sex role expectations" with men's partner violence perpetration. Of these, one showed a measure entirely consistent with sex-roles (Coleman, Weinman, and Hsi 1980). Another study combined measures of patriarchal ideology and gender roles into the same dimension (Rosenbaum and O'Leary 1981). The last of the three used original measures to form their "Sex-Role-Stereotype Scale", but never disclosed the individual items that make up the scale. Since not one of the three peer-reviewed studies actually looked at a concept of patriarchal ideology, it is not possible to determine whether or not this is significantly related to men's use of violence.

There were just two studies in the Hotaling and Sugarman (1986) review that assessed "acceptance of violence toward women" as a significant variable related to men's use of violence. This concept might appear to represent patriarchal
attitudes/beliefs better than "traditional sex-role expectations", but it too is undefined. One of the two studies, by Browning (1983), was not from published research. The second study that assessed the acceptance of violence toward women (Dibble and Straus 1980:73) had an item that referred "to respondent's attitude towards couples slapping each other." This measure, however, was not consistent with patriarchal ideology.

The biggest inconsistency with these measures is the lack of identification as to who in the relationship is the primary aggressor. It is of the utmost importance in measuring patriarchal ideology one’s agreement or disagreement with men’s violence against a partner is present. While one’s acceptance of other forms of violence may also be important including female perpetrated violence, an approach that is non-gendered is likely to have weak or null findings with gendered concepts (i.e. domestic violence). On a lesser note, it is important that measures that ask about the approval of violence note situations where it may or may not be acceptable. If the violence was in response to a woman violating her “traditional role”, then this would be consistent with patriarchal ideology. If it was more vague, such as Kantor, Jasinski, and Aldarondo’s measure (1994:212), “Are there situations that you can imagine in which you would approve of a husband slapping his wife?” then it would not be less-consistent with patriarchal ideology due to a lack in precision (i.e. context). Hence, one could justify violence for any situation against any person. Specificity is needed to assess the context for the assault of an intimate partner.

In short, this systematic review of “52-case comparison studies” (Hotaling and Sugarman 1986:101), when examined closely, only contained three studies that assessed “traditional sex role expectations” in relation to men’s use of intimate partner violence.
Of these, none included measures consistent with patriarchal ideology/attitudes. Regarding “acceptance of violence toward women”, only one of two studies were from published research and it included measures inconsistent with patriarchal ideology. In fairness to Hotaling and Sugarman (1986), the inclusion of fairly weak or unreliable research was most likely a reflection of the year the review was conducted, since domestic violence research was really just starting to get underway in the early to mid-1980s. However, these researchers failed to acknowledge the weakness of using non-peer-reviewed research in their review and failed to differentiate conceptual discrepancies between their concepts and between each reviewed study. In short, not a single study reviewed by Hotaling and Sugarman (1986) could conclude anything about the relationship between patriarchal ideology and men’s use of violence. The basic criteria of a study that should be included in such a review is that it should be: 1) peer-reviewed and 2) it should include items actually consistent with patriarchal ideology. Related to the second criterion, these studies need to not combine measures of patriarchal ideology with concepts containing clear distinctions (i.e. Rosenbaum and O’Leary 1981).

Hotaling and Sugarman (1986:119) equated “sex role inequality” with “patriarchal beliefs” as well as the desire for “power and control.” While they reviewed research that lacked measures of attitudes or beliefs specific to patriarchy, the researchers still used these terms interchangeably. The equal status given to patriarchy beliefs and sex roles is problematic. For example, Bell and Naugle (2008) failed to critically assess this review when they cited Hotaling and Sugarman as empirical evidence against feminist theories of domestic violence. The failure to acknowledge that Hotaling and Sugarman’s research was dated, used a majority of non-published research, and failed to
include any studies that even measured patriarchal ideology, are points that are clearly overlooked by Bell and Naugle. Epistemological progression for the domestic violence field is likely to fall to the wayside if researchers blindly accept the current state of knowledge in this field.

A decade after the Hotaling and Sugarman (1986) review was published, a more rigorous review (i.e. meta-analysis) was conducted by Sugarman and Frankel (1996). This review was directly related to the current topic as evidenced in its title, “Patriarchal Ideology and Wife-Assault: A Meta-Analytic Review.” These researchers noted, “Three distinct sets of measures are used to assess patriarchy ideology: attitudes toward violence, gender attitudes, and measures of gender schema” (15). Overall, they found that men’s attitudes toward violence were strongly and significantly related to men’s violence in 3 out of 5 studies. However, if one were to look at just the peer-reviewed studies (3), 3 out of 3 peer-reviewed studies had measures consistent with patriarchal ideology and all 3 of these found patriarchal ideology to be significantly related to VAW. The significant relationships were found in: Eisikovitz et al. (1991), Saunders et al. (1987), and Smith (1990)7.

Regarding what they called “gender attitudes”, only 1 of 10 studies measured a concept with items strictly related to patriarchal attitudes, which was the research from Smith (1990)8. Seven studies that were reviewed under the rubric “gender attitudes” used broader measures of gender-role attitudes that had some specific items consistent with

7 Smith’s patriarchal beliefs dimension.

8 Smith’s patriarchal attitudes dimension.
patriarchal ideology, but these items were combined other items that were not consistent with patriarchal ideology. A study that contained items entirely inconsistent with patriarchal ideology was from Crossman, Stith, and Bender (1990). The review, overall, had the same issue as Hotaling and Sugarman (1986) in that it included non-peer reviewed research (i.e. conference presentations, doctoral dissertations). This made it difficult to know the exact measures and/or specific findings from each. The last concept, gender schema, was focused on individuals' gender identities, something that has been shown to be inconsistent with the current conceptualization of patriarchy (because of this, the studies they reviewed specific to this concept are excluded from Table 3.1 and are not discussed).

Regarding attitudes towards violence, three studies (Eisikovits et al. 1991; Saunders et al. 1987; Smith 1990) included measures consistent with patriarchal ideology and all three showed these were predictive of violence against one's female partner. Thus, the most direct and consistent measure of patriarchal ideology appears to be a significant predictor of men's use of violence against a female partner. It appears Sugarman and Frankel's research, during the time of its publication, was able to determine that research up until that point had shown little support for gender attitudes as a predictor of men's violence. However, the research these authors reviewed was not appropriate for making determinations about patriarchal ideology. Of the few studies that

9 Two other studies were included that assessed "violence attitudes", however, these two studies (Browning 1983, had two separate dimensions of violence attitudes) are from unpublished sources so the specific measures and outcomes are unknown.
did reflect patriarchal ideology, all suggested that patriarchal ideology was a significant predictor of men’s use of violence.

A third major review of the literature comes from Holtzworth-Munroe et al. (1997), who summarized the “empirical correlates of marital violence.” Although they did not conduct a meta-analysis like Sugarman and Frankel (1996), they did benefit from the strength of only including published research. Specific to the current study, Table 3.1 summarizes the two major concepts they reviewed—attitudes toward women/sex-role attitudes and attitudes toward violence. The first of these, attitudes toward women/sex-role attitudes, contained many studies already reviewed by Sugarman and Frankel as part of their concept “gender attitudes.” The findings on this first concept reviewed were mixed as well (as were their measures’ consistency with patriarchal ideology). Additionally, attitudes toward violence were also mixed and contradictory.

Holtzworth-Munroe share many similarities with other studies reviewed in this section. For starters, the attitudes toward women/sex-role attitudes are, in general, not a conceptual term that should be equated with patriarchal ideology. Indeed, after reviewing these studies, the authors labeled this concept “conservative sex role belief” (where some studies measured entirely sex-role attitudes, others patriarchal attitudes, and others included a combination of each). Unlike some studies that measured “sex-role attitudes”, yet called them “patriarchal beliefs” (e.g. Hotaling and Sugarman 1986), Holtzworth-Munroe et al. did not make this mistake. They did, however, fail to acknowledge that many different concepts were being measured in their category of “conservative sex role belief.” Attitudes toward violence were also highly variable throughout this review. Although all five studies that included this concept were predictive of attitudes toward
violence, in fairness, only two (Saunders et al. 1987; Stith 1990) were consistent with patriarchal attitudes.

In a more recent and more rigorous meta-analysis, Stith et al. (2004) discovered that attitudes condoning violence and traditional sex-role ideology were both significant predictors of violence against a female partner. Table 3.2 shows, how, much like the previous reviews discussed, the “sex-role ideology” concept had a wide-variety of operational definitions and was not as robust of a predictor as attitudes condoning violence.

Despite the more rigorous and more recent review from Stith et al. (2004), some “gender symmetry” proponents (e.g. Bell and Naugle 2008; Dutton 1994, 2006; Scott 2004), cite these systematic reviews as evidence that patriarchal attitudes, and patriarchy in general, does not adequately explain domestic violence. Others suggest that because the evidence is mixed and because patriarchal attitudes are not the most salient predictor of men’s violence, the feminist approach to researching “partner abuse” has little basis (Dixon and Graham-Kevan 2011). These conclusions are also drawn because these researchers are misrepresenting correlation analyses with causal analyses. Discounting feminist arguments because empirical research shows patriarchy does not cause violence against women is misleading since feminists do not argue causality and data assessing associations/correlations cannot determine causality. These inaccurate conclusions are drawn because these researchers have also uncritically accepted measures of sex/gender role attitudes as indicators of patriarchal ideology.
Table 3.2. Research Studies from Four Major Systematic Reviews Looking at Patriarchal Ideology as a Predictor of Violence against Women

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Nob</td>
<td>C. Holtzworth-Munroe et al. (1997)</td>
<td>Approval of Violence Scale (Burt 1980)</td>
<td>Yes</td>
<td>Unknown</td>
</tr>
<tr>
<td></td>
<td>Nob</td>
<td>D. Stith et al. (2004)</td>
<td>Sex-Role Stereotyping Scale (Burt 1980)</td>
<td>Mixed</td>
<td>Unknown</td>
</tr>
<tr>
<td>Caesar (1985)</td>
<td>No*</td>
<td>B. Original Measures</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Yes</td>
</tr>
<tr>
<td>Carrillo (1984)</td>
<td>No*</td>
<td>B. Approval of Violence (Saunders 1979)</td>
<td>Mixed</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Coleman, Weinman, and Hsi (1980)</td>
<td>Yes</td>
<td>C. Original Measures</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Crossman et al. (1990)</td>
<td>Yes</td>
<td>C. Original Measures</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Dewhurst et al. (1992)</td>
<td>Yes</td>
<td>D. Original Measures</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Dibble and Straus (1980)</td>
<td>Yes</td>
<td>Original Measures</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Dutton (1995)</td>
<td>Yes</td>
<td>Original Measures</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td>Reviewed by</td>
<td>Measures</td>
<td>Measures Consistent with Patriarchal Ideology?</td>
<td>Predictor of VAW?</td>
<td></td>
</tr>
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<td>-----------------------------------</td>
<td>-------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td>Eisikovitz et al. (1991)</td>
<td>Yes</td>
<td>Inventory of Beliefs about Wife Beating (Saunders et al. 1987)</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Hampton and Gelles (1994)</td>
<td>Yes</td>
<td>Original Measures</td>
<td>Mixed</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Hanson et al. (1997)</td>
<td>Yes</td>
<td>Original Measures</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Hurlbert et al. (1991)</td>
<td>Yes</td>
<td>Attitude Toward Women Scale (Spence et al. 1973)</td>
<td>Mixed</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Johnston (1984)</td>
<td>No*</td>
<td>Unknown</td>
<td>Unknown</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Johnston (1988)</td>
<td>Yes</td>
<td>Attitude Toward Women Scale (Spence et al. 1973)</td>
<td>Mixed</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Kantor et al. (1994)</td>
<td>Yes</td>
<td>President's Commission on the Causes and Prevention of Violence (Owens and Straus 1975)</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>La Violette et al. (1985)</td>
<td>No*</td>
<td>Attitude Toward Women Scale (Spence et al. 1973)</td>
<td>Unknown</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Margolin (1988)</td>
<td>Yes</td>
<td>Sex-Role Attitudes</td>
<td>(Mason 1975)*</td>
<td>Mixed</td>
<td>No</td>
</tr>
<tr>
<td>Neff et al. (1995)</td>
<td>Yes</td>
<td>Traditional Sex-Role Orientation (Markides and Vemon 1984)</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Neidig et al. (1984)</td>
<td>No*</td>
<td>Unknown</td>
<td>Unknown</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td>Peer-Reviewed Publication?</td>
<td>Reviewed by:</td>
<td>Measures</td>
<td>Measures Consistent with Patriarchal Ideology?</td>
<td>Predictor of VAW&lt;sup&gt;d&lt;/sup&gt;?</td>
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<td>-----------------------------</td>
</tr>
<tr>
<td>Neidig et al. (1986)</td>
<td>Yes</td>
<td>B, C</td>
<td>Attitude Toward Women Scale (Spence et al. 1973)</td>
<td>Mixed</td>
<td>Mixed</td>
</tr>
<tr>
<td>Rosenbaum and O'Leary (1981)</td>
<td>Yes</td>
<td>B, C, D</td>
<td>Attitude Toward Women Scale (Spence et al. 1973)</td>
<td>Mixed</td>
<td>No</td>
</tr>
<tr>
<td>Rouse (1984)</td>
<td>No&lt;sup&gt;a&lt;/sup&gt;</td>
<td>A</td>
<td>Unknown</td>
<td>Unknown</td>
<td>No</td>
</tr>
<tr>
<td>Saunders et al. (1987)</td>
<td>Yes</td>
<td>B, C</td>
<td>Inventory of Beliefs about Wife Beating (Saunders et al. 1987)</td>
<td>Yes</td>
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</tr>
<tr>
<td>Smith (1990)</td>
<td>Yes</td>
<td>B, C, D</td>
<td>Original Measures</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td></td>
<td>Yes</td>
<td>C</td>
<td>Sex-Role Egalitarianism Scale (Beere et al. 1984)</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Stith and Farley (1993)</td>
<td>Yes</td>
<td>C, D</td>
<td>Inventory of Beliefs about Wife Beating (Saunders et al. 1987)</td>
<td>Yes</td>
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<td></td>
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<td>C, D</td>
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<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Telch and Lindquist (1984)</td>
<td>Yes</td>
<td>A, C</td>
<td>Original Measures</td>
<td>Unknown</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Notes: Studies in bold reflect research that was published in a peer-reviewed publication and had measures consistent with patriarchal ideology. <sup>a</sup>conference presentation (as cited in Sugarman and Frankel 1996), <sup>b</sup>doctoral dissertation, <sup>c</sup>behavioral measure of emotional abuse and the only behavioral measure among the studies in this table. <sup>d</sup>VAW = violence against women.
These conclusions stem in large part from a poor understanding of patriarchy. "Gender-neutral" approaches, such as these, often fail to understand that patriarchy is conceptualized as having micro and macro components. Additionally, these researchers have a poor understanding of feminist theories of violence against women. Feminist researchers in the domestic violence field do not hold on to this mythic notion that patriarchy is the only viable explanation for men's use of violence against current or former intimate partners. For example, DeKeseredy and Dragiewicz (2007:877-878), note that, "unemployment, globalization, deindustrialization, life events stress, intimate relationship status, familial and societal patriarchy, substance use, male peer support, and other factors" [emphasis added] contribute to violence against women.

Besides ignoring the micro and macro components of patriarchy, past research has also made the mistake of equating patriarchal ideology with many concepts that have far different definitions. The conceptual murkiness exists in past research trying to differentiate between a plethora of closely related (but different) concepts such as: gender attitudes, sexist attitudes, traditional sex-role attitudes, conformity towards masculinity roles, etc. Separating out the different dimensions of global concepts like gender ideology is an important task (Murnen, Wright, and Kaluzny 2002). The reviews that combine all of these concepts together to get a broad overview of "gender ideology" are losing the complexities of more specific concepts like patriarchal ideology. This is an important point that has been completely ignored by gender-neutral approaches, such as Straus (2009:257) who states, "evidence linking sexism (i.e., holding traditional attitudes toward women) to partner violence in general is weak (Moore and Stuart 2005; Sugarman and Frankel 1996)." The work Straus is citing from Moore and Stuart (2005) reviews
research measuring “masculine gender roles” (2005:56) (not consistent with patriarchal ideology). The second citation is from the aforementioned Sugarman and Frankel (1996) review that includes far more studies measuring “gender attitudes” with very few studies that measured patriarchal attitudes. Straus, however, is not the only researcher that has accepted the Sugarman and Frankel (1996) study as evidence against treating domestic violence as a gendered phenomenon.

Scott (2004:267) notes, “Despite the strong influence of feminist ideas on batterer programs, cross-sectional and longitudinal research has provided, at best, mixed evidence for the importance of men’s patriarchal attitudes for predicting abusiveness.” She goes on to cite some research showing a relationship between patriarchal attitudes and violence perpetration. But, she quickly attempts to discredit them. She states, “[...]

Sugarman and Frankel (1996) concluded that adult batterers could not be differentiated from nonabusive men on the basis of traditional gender attitudes (i.e., sexism) or gender schemas (i.e., masculinity).” Like many uncritical researchers, Scott blindly accepts the meta-analysis from Sugarman and Frankel (1996). A critical or feminist framework shows what Table 3.1 does in that of the ten studies assessing this relationship; just one actually includes a consistent measure of patriarchal ideology (i.e. Smith 1990, which does show a significant relationship). Her poor understanding of patriarchy is shown in how quickly she goes from “traditional gender attitudes” (largely consistent with patriarchal ideology) to equate this to “sexism”, “gender schemas”, and “masculinity” (which are conceptualized differently from patriarchal ideology). Sexism involves negative attitudes about women, but not always in relation to power and control. Also, masculinity and gender schemas are often conceptualized as biological traits. Perhaps
Scott is unaware about the differences between sex and gender and especially gender as it relates to power and control (i.e. patriarchy).

In short, the research looking at patriarchal ideology as a predictor of violence against women has rarely measured patriarchal ideology in an appropriate way. It is important to use operationalizations of patriarchal ideology consistent with this term. Examination of the relationship between these ideologies and men’s use of violence is important since so few studies in the past have done this in a way that properly measures individual patriarchal ideology. It is important to note, however, that while some of the later data analyses do include violence as an outcome variable, others treat patriarchal ideology as the dependent variable. The argument here, as made earlier, is that in research concerning violence against women, patriarchal ideology is important because its presence alone can create an environment that conducive to violence against women. The etiology of individual patriarchal ideology is essential in order to take proactive approaches that seek to change the cultural environment that condones, promotes, and encourages men’s patriarchal control of women.

*Operationalization of Individual Patriarchal Ideology: Relevant Measures from Past Research*

Murnen et al. (2002) conducted a meta-analysis reviewing research that examined “masculine ideology” in relation to sexual aggression. Although this concept sounds consistent with conceptualizations of masculinity that are usually centered on biological roles, they discussed specific, key concepts consistent with patriarchal ideology. While the outcome variable in the research in this meta-analysis was not necessarily domestic or
relationship violence against women, the 39 studies reviewed included more relevant measures for patriarchal ideology than those coming from past research looking at gender/sex roles as predictors of domestic violence. The measures most relevant are: dominance/power over women, hostile masculinity, rape myth acceptance, and acceptance of violence against women. Overall, these four concepts from past research include items consistent with the current conceptualization of patriarchal ideology.

*Dominance/Power over Women.* This first component of patriarchal ideology in Murnen et al.’s (2002) review includes two measurement scales from past research. Malamuth (1986) conceptualized “dominance as sexual motive” to include items given to a male sample regarding, “the degree feelings of control over one’s partner motivate sexuality” (956). Also, Lisak and Roth’s (1988) scale measured “underlying power” or “the need to assert” (797) one’s self on a woman. Similar items can be used when operationalizing patriarchal ideology since these measures include items that make either dominance or power over women explicit.

*Hostile Masculinity.* Murnen et al. (2002) define the term hostile masculinity as similar to “hostility toward women” (Check et al. 1985; Malamuth et al. 1991)\(^\text{10}\). More

\(^{10}\) Murnen et al. (2002) also mention the term “hypermasculinity” (see Mosher and Sirkin 1984; Mosher and Tomkins 1988) but unfortunately this concept is too inclusive. It has three major dimensions: calloused sex attitudes towards women, violence being seen as “manly”, and danger as exciting. The first of these is relevant, but the second is not in regards to violence towards women and the last measure, in general, is consistent with psychological constructions of masculinity.
specifically, this concept is defined by Malamuth et al. (1995) as containing, “a) an insecure, defensive, hypersensitive, and hostile-distrustful orientation, particularly toward women, and b) gratification from controlling or dominating women” [emphasis added] (354). The second part of this obviously overlaps with the previous concept of dominance/power over women, but the first has tremendous use in measuring patriarchal ideology because it notes specific hostility towards women. A role theorist might look at one’s “attitudes towards women” (e.g. Spence et al. 1973), but the “hostility” or anger that is specifically aimed at women in this sense is consistent with patriarchal ideology. It makes explicit the gendered dynamic of the attitude (i.e. the respondent does not just possess a personality trait that makes them have negative or positive attitudes about people in general).

_**Rape Myth Acceptance**._ The acceptance of rape myths has tremendous overlap with power and control, as rape itself is an extreme, direct form of power and control. Rape myths typically involve the following: women lie about being raped, women that are raped deserve it (e.g. appearance, actions), men that do rape are acting on biological drives, and/or men that do rape suffer from mental deficiencies (Allison and Wrightsman 1993). There is also considerable overlap between rape myths and “attitudes about violence against women” since rape is a form of violence (at times called “sexual violence”). Numerous studies have used reliable measures of “attitudes toward rape and sexual coercion” (Patton and Mannison 1995), such as the “Rape Myth Acceptance Scale” (Burt 1980), or “Acceptance of Modern Myths about Sexual Aggression Scale” (Eyssel and Bohner 2008). An example of an item in these measures consistent with
patriarchal ideology would be "If a girl consents to making out and she lets things get out of hand, it is her own fault if her partner forces sex on her" (Burt 1980: 223).

Acceptance of Violence against Women. This concept is not explicit in the Murnen et al. (2002) review, but is a major component to the current operationalization of patriarchal ideology borrowed from Smith (1990). As discussed earlier, this term has considerable overlap with rape myth acceptance since rape is a type of violence against women. The argument is not being made that these two types of violence must be operationalized as separate dimensions of patriarchal ideology. One of the first "Acceptance of Interpersonal Violence Scales" (AIV) used a one-factor solution (Burt 1980; see also Koss and Dinero 1988). However, Ogle, Noel, and Maisto (2009) found that a two-factor solution with one factor related to intimate partner violence and another about attitudes of sexual violence were more reliable than the single-factor operationalization (see also Saunders et al. 1987). Unfortunately, this current research is limited because it does not have enough indicators to operationalize acceptance of violence and rape acceptance/rape myth acceptance separately. Future operationalizations of patriarchal ideology should consider multi-factor latent variables for these and the other two potential dimensions of patriarchal ideology. As Chapter 4 will show, they are currently considered as part of the same dimension.

Power and Control. Before moving on, it is wise to provide more conceptual clarity regarding power and control in relation to patriarchal ideology. Thus, while the definition of patriarchy emphasizes men's control over women in the family, among other institutions, this does not mean that every abusive man is powerful and dominant in his intimate relationships. Contrarily, violent men are often responding to a lack of power
in the family or other institutions (Websdale 2010). Whether or not power and control are obtained does not negate the importance of these concepts if they are motivating factors for violence. Thus, supporting the use of violence against a female intimate partner is consistent with patriarchal ideology because the violence is used as an attempt to gain or reinforce power or control. The current conceptualization of patriarchal ideology is therefore appropriate since it rests on ideals that support the patriarchal system and on ideals that support the use of violence against women, regardless of whether or not the violence reflects the perpetrator’s success at obtaining power or control.

**Potential Sources of Individual Patriarchal Ideology**

Past research has found that male peer support approving violence against intimate partners is related to individual patriarchal ideology (DeKeseredy and Schwartz 1993; Schwartz and DeKeseredy 1997; Smith 1991), while also relating to sexual aggression (Malamuth et al. 1991). More specifically, this means men that have strong patriarchal ideologies influence their male friends’ ideologies by condoning physical and sexual abuse of women. DeKeseredy’s (1988) original model of male peer-support suggested that men in dating relationships would seek out male peers for relationship advice. While the male peer-support model has been elaborated to include other predictors of violence against women (see DeKeseredy and Schwartz 1993), the salience of male peers remains (see also Schwartz and DeKeseredy 2000). Thus, any theoretical assessment of individual patriarchal ideology should include measures of male peer support for violence against women.
Discussions concerning the influence of peers on attitudes and behaviors in the criminological literature reveal considerable disagreement about the appropriate causal order for an appropriate predictive model. In general, there have been debates within criminology about the direction of peer influence on attitudes and/or behaviors. One side of the debate centers heavily on social learning perspectives in that individuals with "normal" ideals obtain negative definitions/attitudes from associating with peer groups that hold negative ideals (Akers 2009). Others believe individuals with negative definitions are first drawn to other individuals with negative definitions and they then form groups that hold similar views with themselves (Costello and Vowell 1999; Matsueda and Anderson 1998). Specifically focusing on male peer's support for negative definitions about women, past research has found that men that have negative definitions or have engaged in violence against women are more likely to seek out peer groups that support these actions, which subsequently would lead to a stronger male peer group reinforcement of these attitudes (Kanin 1967; Schwartz and DeKeseredy 1997). Thus, there is more support suggesting negative attitudes about women are present before one forms a male peer group that reinforces these negative beliefs about women. This suggests that development of reliable measures of patriarchal ideology must include an adequate theoretical model that reflects the appropriate causal order of male peers and patriarchal ideology.

Individual patriarchal ideology is believed to develop primarily in the family, what was previously referred to as familial patriarchy (DeKeseredy and Kelly 1993b; Dobash and Dobash 1979; Millet 1970). The family is the primary location where many male children learn to legitimize male power. They may learn that domestic work is for
women, husbands should dominate wives, fathers should dominate children, and women should serve men (Johnson 1997; Messerschmidt 2000; Pateman 1988). The previously discussed conceptualization of patriarchal ideology by Smith (1990) focused on familial patriarchal ideology. Smith’s research found that lower income men, men with little education, and men in low-status jobs were more likely than males that scored higher in these three areas to have strong ideologies regarding familial patriarchy. It is likely that children that witness domestic violence or are themselves victims of child abuse develop strong patriarchal ideologies. That is, since most children that witness domestic violence or are abused themselves do not become abusive, they may, alternatively, develop strong patriarchal ideologies associated with the family.

DeKeseredy and Kelly (1993b) found that men with strong ideologies of familial patriarchy were more likely to be abusive of their female dating partners when these ideologies were supported by male peers. These findings highlight the importance of male peer support, but they also suggest that the direct effect of familial patriarchal ideology on violence is mediated by supportive male peer groups. Thus, a theoretical model of these relationships might start with early childhood experiences with familial patriarchy directly influencing patriarchal ideology, which influences male peer support, which then predicts adulthood relationship violence (then feeding back to patriarchal ideology).

Past research has also found familial patriarchy may be influenced by religion. Reviewing research looking at individual identification of Christian denominations, Davis and Greenstein (2009) found that conservative Protestants are the least supportive of gender egalitarianism, with Catholics and moderate Protestants in-between, followed
by Jewish individuals as the most egalitarian. Although this research was reviewing the use of more global measures of "gender ideology", rather than patriarchal ideology, the overlap of both concepts (as previously discussed) suggests that religiosity may be an important variable to consider when assessing the etiology of patriarchal ideology. As a social institution, many religious institutions are based on patriarchal doctrines (Holland 2006). Since the current focus is on individual patriarchal ideology, the focus will remain on individual-religiosity rather than specific individual's religious denominations.

*Operationalizations of Individual Patriarchal Ideology over Time*

Many studies assess some broader form of "gender ideologies", "attitudes toward the family provider role" or "gender role attitudes"\(^{11}\) over time using the General Social Survey (GSS) (e.g. Bolzendahl and Myers 2004; Carter et al. 2009; Ciabattari 2001; Liao and Cai 1995; Mason and Lu 1988; Rice and Coates 1995; Wilkie 1993). These studies are primarily concerned with comparing change in gender role attitudes among men and women or among specific birth cohorts. Unfortunately, these studies use measures from the GSS that do not emphasize power regarding gender attitudes (e.g. Mason and Lu 1988; Ciabattari 2001). In other words, the measures are largely inconsistent with the previously conceptualized patriarchal ideology. Another problem with the research using

\(^{11}\) These studies typically assess changing attitudes about both women's roles in the economy and women's roles in the family. Fan and Marini's review (2000) notes that over time, there have been more accepting attitudes towards women regarding their roles in the economy than in the family.
the GSS to assess the changes in these attitudes over time is that these studies are not able to assess individual-level change longitudinally because each year the GSS samples different respondents. Also known as a trend study, these research designs are often considered cross-sectional since they cannot account for individual-level change, just aggregate trends over time.

Past research assessing individual patriarchal ideology over time often includes measures inconsistent with patriarchal ideology. Fan and Marini (2000), Vespa (2009), and Davis (2007) each used measures from the National Longitudinal Survey of Youth (NLSY), which were consistent with gender role-attitudes, not patriarchal ideology/attitudes (e.g. power not made explicit, no measures regarding the acceptance of violence against women). Similarly, Cunningham et al. (2005) used data from the Intergenerational Panel Study of Parents and Children (IPSPC), which included 8 items assessing “gendered roles” that were inconsistent with patriarchal ideology.

Almost no research exists that has used longitudinal research designs treating individual patriarchal ideology as a dependent variable. Malamuth et al. (1995) did look at the direct effects of attitudes supporting violence against women (a proxy measure of patriarchal ideology) on hostile masculinity. The former, however, is much more consistent with the current conceptualization of patriarchal ideology, than the items that compose hostile masculinity. Thus, whether it is longitudinal or not, many researchers have failed to explore the etiology of patriarchal ideology (e.g. Malamuth et al. 1991; Wu et al. 2011). This appears to be true for broader measures of gender ideology as well (Davis and Greenstein 2009), suggesting ideologies about gender, in general, are often taken for granted.
Quantitative Analysis and Patriarchal Ideology

This study utilizes quantitative measurements and analyses of individual patriarchal ideology. Barkan (2009) called out critical criminologists for doing the field a disservice in discrediting the value of quantitative research. This same criticism applies to feminist researchers that try to discredit quantitative methodologies about gender and more specifically about violence against women (e.g. Dobash and Dobash 1979) because they feel qualitative methods are "more feminist" (DeVault 1996:35). The reality is feminist theory and feminist inquiries do not require a distinct methodological orientation (Hughes and Cohen 2010; Risman 1993). Many feminist researchers do employ quantitative methodologies (e.g. Chafetz 2004; DeKeseredy and Schwartz 1998; Hester, Donovan, and Fahmy 2010; Katz 2000; Saunders 1990; Smith 1990; Yllo 1990) and qualitative methodologies (Campbell and Wasco 2000; DeKeseredy 2011a; Hughes and Cohen 2010). One of the mainstays of domestic violence research, the "gender symmetry" argument, has been exposed using quantitative methods (e.g. DeKeseredy and Schwartz 1998; Rennison and Welchans 2000; Russell 1990; Tjaden and Thoennes 2000) as well as qualitative methods (e.g. Browne 1987; Dobash and Dobash 1979; Kelly 1990). The current research is quantitative and feminist in three major ways: 1) it does not conform to unrealistic notions from many positivists, 2) the variables and theoretical models are obtained and constructed from past feminist research, and 3) feminist insights are used to interpret the data analyses.

Doing quantitative research is not synonymous with "doing positivism." In fact, reducing quantitative methods to positivism is simplistic (see Undurraga 2010). Whereas a positivist believes a causal model should reflect reality or "truth" with zero
measurement error, quantitative methodologists are often aware that models are not truth, but are “specified” and parameters are “observed” (see Ulmer and Spencer 1999). For a quantitative researcher, measurement error is acknowledged and considered to be one of the difficulties in trying to quantify social realities, whereas a positivist sees measurement error as a shortcoming of the researcher’s methodological techniques. Quantitative methodologists attempt to obtain and analyze data in an objective manner while recognizing that they have their own worldview that may influence how they do this. Positivists, on the other hand, believe “real-science” is completely value-free, largely ignoring the human element to data collection and data analysis. These assumptions are shown to be myopic below, but it is important to repeat that quantitative methods should not be reduced to positivism.

The quantitative methods and analyses that follow this chapter use variables obtained largely from feminist research. For example, the proxy measures of male peers are based on the empirical findings of feminist researchers Schwartz and DeKeseredy (1997) (see also DeKeseredy and Kelly 1993b; DeKeseredy and Schwartz 1993). Another example is seen in the fact that the operationalization of patriarchal ideology is based on the quantitative work of another feminist (Smith 1990).

The quantitative analyses avoid what Mills (1959) called “abstracted empiricism.” That is, feminist insights are used to interpret the findings in a way that contextualizes the research historically (through an understanding of the time periods in which the data were collected) and structurally (through an understanding of the social structure in which the individual data were obtained). The current research is not trying to present itself as “value-free” simply because it is quantitative. Risman (2001:610) claimed, “Feminist
scholarship expresses a commitment to science with and from a value position.” Despite some researcher’s claims, no research is “value-free” (see Becker 1967; Griffin and Phoenix 1994). An example of how a feminist standpoint is being utilized is seen when drawing on the previously reviewed research looking at the relationship between individual men’s patriarchal ideology and its relationship with woman abuse. Researchers with non-feminist, non-critical standpoints that try to assess these relationships come the conclusion that there either is or is not a relationship between the two and leave it at that. Most feminist-oriented researchers, however, would recognize that the direct relationship of patriarchal ideology with violence is probably not very strong in samples derived from the general population considering violence is not typical of most men. Feminist positions would recognize that the ideologies play a bigger role in violence against women. They would recognize that there are variations in these ideologies, along a continuum, and that the ideologies are probably normalized. To borrow from Connell and Messerschmidt (2005), most men have a complicit masculinity. The dismissal of individual patriarchal ideology by many psychologists is a reflection of both their non-feminist standpoint and their own value positions. In relation to the latter of these two, one might find it regressive for different researchers’ value positions to debate the appropriate way of interpreting empirical realities. However, pretending to be “value free” and “gender-blind” when assessing intimate partner violence is a bias in and of itself, which values the status quo and is blind to inequality. While one may understand that those that come from the establishment want to preserve their positions of power with their worldviews, I choose to take the side of the subordinate in the way Howard Becker (1967) proposed. The subsequent data analyses stick to the tenets of
unbiased statistical data techniques. However, the interpretations of this data through a feminist lens, most certainly is biased. This “bias” is far more likely to see the empirical realities regarding concepts related to patriarchy, since mainstream (i.e. gender-neutral) approaches have historically failed to.

CONCLUSION

This chapter has provided a clear conceptualization of individual patriarchal ideology by differentiating it from the similar concepts: sex/gender role ideology and hegemonic masculinities. Individual patriarchal ideology differs from role analysts’ accounts of gender/sex role ideology in three major ways: prioritizing power, acknowledging change, and getting away from identity and personality traits that define individuals. Patriarchal ideology is centered on power, whereas gender ideologies are centered on gender identities or roles. The emphasis on power was the strength of the hegemonic masculinities research and is extremely useful in defining individual patriarchal ideology. The conceptual uncertainty regarding hegemonic masculinity as either an ideological or behavioral mechanism makes it difficult to use in a theory of violence against women that gives so much importance to patriarchal ideology (Hunnicutt 2009). The operationalization of patriarchal ideology in past research using this term, or closely related concepts, are discussed to show the necessary measures when researching patriarchal ideology. Few researchers have assessed the predictive variables of patriarchal ideology and have only considered the ideology as important in assessing its own direct influence on men’s use of violence. The few research studies that have considered the predictive variables of patriarchal ideology (or similar concepts) have
helped in building the theoretical model of individual patriarchal ideology used in the next chapter.
CHAPTER IV
METHODS: ASSESSING INDIVIDUAL PATRIARCHAL IDEOLOGY OVER TIME
USING ATTITUDINAL MEASURES FROM A TEST/RETEST PANEL DESIGN

Before describing the methods used for the first major data analysis, it is important to discuss the overall framework regarding the data analyses in this dissertation. The current chapter, Chapter 4, presents the methodology regarding the use of a two-wave panel design assessing relationship violence and patriarchal ideology. This is followed immediately by Chapter 5, which includes the results of these analyses. Chapter 6 presents the methodology regarding the use of latent growth-curve modeling assessing relationship violence and patriarchal ideology over time. This is followed immediately by Chapter 7, which includes the results of the methods discussed in Chapter 6. Because this dissertation fills gaps in the research regarding the assessment of patriarchal ideology in fairly unique ways, the results of each chapter are discussed inclusively in Chapter 8. This is done primarily for two reasons: 1) some of the methodological/data shortcomings in one analysis are accounted for in the other and 2) both analyses provide an empirical and holistic understanding of patriarchal ideology in ways that can further develop this concept as a theoretical tool in understanding violence against women.

As discussed below, both analyses come from the same larger longitudinal dataset, but because the key variables of interest were not present at each wave of data collection, the analyses had to be mutually exclusive. The current chapter describes the data used as a test/retest panel design. The key variable of interest, patriarchal ideology, was measured using attitudinal measures and because this differs from the analyses in
Chapter 6, patriarchal ideology will be referred to in this chapter and Chapter 5 as patriarchal attitudes as a way to distinguish these measures from later analyses.

DATA AND SAMPLE

The data comes from the Longitudinal Study of Violence against Women: Victimization and Perpetration among College Students in a State-Supported University in the United States, 1990-1995 (White, Smith, and Humphrey 2001; for a full Technical Report see White and Smith 2001). The research was funded by a National Institute of Health (NIH) grant to study the risk of sexual and physical assault among college students. Incoming college students were surveyed during student orientations and were integrated into student orientation activities so that almost every student that attended orientation (about 50% of incoming freshmen) would participate. Phone surveys were administered to the remaining students that did not attend orientation. This led to roughly 83% of the population of incoming students being included.

Respondents were told of the study's purpose and consent forms were completed prior to survey distribution. Identifying information was obtained for each respondent so that they could be contacted for each follow-up survey. In order to ensure confidentiality, each of the sheets that contained identifiers were assigned a random number. This number appeared on each answer sheet rather than the individual contact information in order to maintain confidentiality.

After the initial wave of data were collected prior to starting the first year of college, subsequent waves of data were obtained around the end of each spring semester. Thus, from Wave 1 (pre-college) to Wave 2 (end of the first year of college) is sometimes
referred to as a "year" follow-up point, but is technically referring to academic school year as the appropriate time metric. Various methods of contact were used to remind students about their voluntary participation in the study. Students that were no longer attending the university were contacted and invited to complete the survey through the mail. Students were paid $15 for their participation in the survey for each follow-up.

Although both males and females were surveyed, this current study is only concerned with the sample of males regarding their individual patriarchal ideology. Overall, three cohorts of college men were surveyed over five waves of data using an accelerated/cohort-sequential longitudinal design. The cohorts were all combined into one data set (as the original researchers did, see White et al. 2002; White and Smith 2009). For reasons discussed below, just Waves 1 and 2 were used for this chapter and Chapter 5. Overall, Cohort 1 (1990 incoming year) had a sample size of 336, Cohort 2 (1991 incoming year) had a sample size of 311, and Cohort 3 (1992 incoming year) had a sample size of 204. Thus, the total sample size at Wave 1 was initially 851. These were the full numbers from each cohort, prior to sifting through cases that had useable data (discussed below) and this is why Table 4.1 differs from these values. Combining cohorts allowed the primary metric of time for assessing change to be years in college (pre-college, end of freshman year). It was hypothesized that no cohort interactions would exist due to the closeness in years between each (i.e. drawn from the same sample of incoming college students), however, sensitivity analyses did check for potential interactions.
Table 4.1. Sample Size for Valid Responses for each Data Point for Cohorts 1 and 2

<table>
<thead>
<tr>
<th></th>
<th>Wave 1</th>
<th>Wave 2</th>
<th>Retention Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-College</td>
<td>End of 1st Year</td>
<td></td>
</tr>
<tr>
<td>Cohort 1</td>
<td>332 (1990)</td>
<td>245 (1991)</td>
<td>74%</td>
</tr>
<tr>
<td>Cohort 2</td>
<td>304 (1991)</td>
<td>241 (1992)</td>
<td>79%</td>
</tr>
<tr>
<td>Combined Cohorts 1 &amp; 2</td>
<td>636</td>
<td>486</td>
<td>76%</td>
</tr>
</tbody>
</table>
**Missing Data**

Like most longitudinal research, attrition occurred. For the entire study, the yearly retention average was 71% (White and Smith 2001:40). There were missing responses that presented some confounding issues. Mainly, they centered on the removal of the key dependent variable from the surveys after the third year, not the third wave\(^1\). In other words, in 1992, these items appeared for the last time. So, three waves of data were collected, but Cohort 1 (1990, 1991, 1992) was the only one that had data points for all three waves, with Cohort 2 having two data points (1991 and 1992), and Cohort 3 with only 1 data point (1992). Due to the fact that change values would have been either completely estimated or imputed, Cohort 3 was not included in the panel design analyses. Also, because of the large amount of "missing" (i.e. missing by design) cases at Wave 3, this data point was deleted. While change could be analyzed for at least one cohort, this is difficult for two major reasons: a small sample size at Wave 3 for Cohort 1 due to attrition (n = 178) and unreliable measures of patriarchal ideology\(^2\). Additionally, 10

\(^1\) In the original study, the items used to assess patriarchal ideology were dropped because "current research" (current during the time of data collection) had found that patriarchal ideology was not a significant predictor of sexual coercion, the main outcome variable for the original researchers. (Jackie White, email correspondence, November 11, 2011).

\(^2\) The items that made up the patriarchal ideology attitudinal measures had unreliable \(\alpha\) values at Wave 3 (\(\alpha = .301\)). Various checks were assessed (e.g. coding of items, inter-
cases had item non-response for the key dependent variable at both waves and were deleted. Thus, the total sample at Wave 1 was 636 and at Wave 2 it was 486. Of the total number of cases, less than 5% of respondents provided just 1 response to the dependent variable at either wave (operationalized with 4 items per wave). These cases remained since it was assumed that they were missing completely at random (MCAR) (see Little and Rubin 1989). The remaining cases that were lost due to attrition were assumed to be MCAR as well, thus not related to the outcome variable.

MEASURES

All of the variables used in various analyses are described in this section. Every variable name is the same for Wave 1 and Wave 2, with the number 1 or 2 after the label to indicate the data point. When referring to the variables in general (or in hypothesized figures) they are presented without the 1 or 2 at the end of the label.

Patriarchal Ideology

The operational definition of patriarchal ideology was similar to Smith’s (1990) in that it included attitudinal items regarding an agreement or disagreement with a set of item correlations, looking at just the 178 cases) to determine the nature of this, but no reasonable explanation could be determined.

3 To support this assumption, an independent samples t-test was performed comparing mean differences in the key outcome variable (i.e. patriarchal attitudes) between those that dropped out of the study and those that were present for both waves. Results indicated there were no significant differences between the two.
items that legitimate male power and authority over women and/or a set of attitudes or norms supportive of violence against women. The items were four questions measuring "Acceptance of Male Heterosexual Violence", a subscale of a broader "gender attitude inventory" (26 total items) from unpublished research (Ashmore and DelBoca 1987, as cited in White and Smith 2001). Because these items were drawn from an unpublished study and the original researchers collecting the data did not address the specific questions for this subscale, these measures were not directly known. Thus, the descriptive statistics in Table 4.2 include the 4 questions that were most consistent with patriarchal ideology. The second item listed in the table, "A man is sometimes justified in hitting his wife," was discussed in Chapter 3 regarding these types of items as being fairly inconsistent with the operational definition of patriarchal ideology. This measure did not make the mistake of using gender symmetry and wording the violence as "a partner" hitting the other (see Chapter 3 for more). However, it did not provide the context for the violence. Despite this, because gender was made explicit, the decision was made to keep this item as an indicator of patriarchal ideology, although it was less

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4 There were 5 items, but one was not reliable when combined with the others (Wave 1 $\alpha = .601$, Wave 2 $\alpha = .573$) and was excluded. This item was "In forcible rape, the victim never causes the crime." The unreliability of this item was found after it was reverse coded to remain consistent with the other responses in the scale. It was unclear why this specific measure reduced the scale's reliability.
specific than preferred. The variable labels for these at Wave 1 were: *hitwife*, *askforit*, *herfault*, and *crywolf*. At Wave 2 they were: *hitwife2*, *ask4it2*, *herfaul2*, and *crywolf2*.

Regarding normality, two of the indicators at Wave 1 had a positive skew and one of the indicators at Wave 2 had a positive skew. These items were not transformed whenever patriarchal attitudes was modeled as a latent variable. This was because the two indicators with normal distributions at Wave 1 were thought to “even out”, in a sense, as indicators of a latent construct, because half (Wave 1) and more than half (Wave 2) of the other items were normally distributed. At times, due to the complexity of some analyses, a composite measure of patriarchal attitudes was used. The composite measure was non-normal for each data point, so the decision was made to take the *ln* function of this variable to induce normality. The composite measure is presented in all figures and tables as “Patriarchal Attitudes” (“Pattitudes” when space limitations are present). All analyses involving the composite measure are the normalized *ln* version of this scale. The latent variable for patriarchal attitudes uses the same label, and in all relevant structural equation models where it is a latent construct, it is clearly modeled with an ellipse, indicating it as such.
### Table 4.2. Descriptive Statistics for Patriarchal Attitudes

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Wave 1 (Pre-College)</th>
<th>Wave 2 (End of Freshman Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Variable</td>
<td>$n$</td>
</tr>
<tr>
<td>In most cases, when a woman gets raped she was asking for it.</td>
<td>askforit</td>
<td>613</td>
</tr>
<tr>
<td>A man is sometimes justified in hitting his wife.</td>
<td>hitwife</td>
<td>610</td>
</tr>
<tr>
<td>If a woman is making out and she lets things get out of hand, it's her own fault if the man forces sex on her.</td>
<td>herfault</td>
<td>615</td>
</tr>
<tr>
<td>Most charges of &quot;wife beating&quot; are made up by the woman to get back at her husband.</td>
<td>crywolf</td>
<td>614</td>
</tr>
<tr>
<td>Composite of all 4 items$^b$</td>
<td>Patriarchal Attitudes1</td>
<td>608</td>
</tr>
</tbody>
</table>

*** Paired Samples t-test indicates statistically significant difference in means from Wave 1 to Wave 2 $p < .001$.

Notes: $^a$ Responses were reverse coded from their original codes so higher scores would reflect more patriarchal responses. Recoded responses ranged from “1- Disagree Strongly” to “5- Agree Strongly”. Composite scales ranged from 4- lowest level of patriarchal ideology (i.e. more egalitarian) to 20- highest level of patriarchal ideology (i.e. more patriarchal). $^b$ Listwise deletion was used for the creation of each composite scale, however, full sample size is shown since later analyses used maximum-likelihood (ML) estimation for missing values.
Constant Variables/Time-Invariant Measures

Three dichotomous variables were treated as constants or time-invariant measures: race, witnessing domestic violence as a child, and religiosity. Frequencies for these items can be found in Table 4.3.

White. Race was obviously a constant variable. As seen in Table 4.3, the majority of the sample was white. Although there were other racial groups identified in the original research, so few respondents identified as being non-white that these individuals were grouped together⁵. Because whites were coded 1, the variable label for race was “White.”

WitnessDV. Whether or not the respondent ever witnessed domestic violence between their parents while growing up was included, called Witness Domestic Violence (or WitnessDV when space limitations are present). This measure was assessed at Wave 1 with the item, “For an average month, indicate how often one of your parents or stepparents delivered physical blows to the other.” Response options were: 1- Never, 2- One to five times, 3- Six to ten times, 4- 11 to 20 times, 5- Over 20 times. Because of the ordinal nature of this variable and because so few respondents had witnessed domestic violence, this variable was dichotomized (0- No, 1- Yes witnessed domestic violence growing up).

⁵ The available data had three race categories (i.e. white, black, other). Black was the second most frequent racial group (roughly 8% of the sample), but because this number was still too small in regards to statistical power, the decision was made to group black and other racial group (less than 6% of the total sample) together as “non-white.”
Religious. The last constant variable measured whether or not the respondent was religious. This was initially captured by asking, "How much of an influence would you say religion has on the way you choose to spend your time each day?" Response options were: 1- No influence, 2- Some Influence, 3- Fair amount of influence, 4- A great deal of influence. Because responses were skewed, the item was dichotomized into: 0- not religious, 1- religious. Admittedly, a single, dichotomous item to represent a concept like religiosity is not as robust as multiple indicators or ordinal responses. For these reasons, religiosity might best be thought of as a proxy measure. Although religiosity was measured at both waves of data, there was so little variation from Wave 1 to Wave 2 the decision was made to treat this as a time-invariant measure, using responses from Wave 1 only. This measure is presented simply as "Religious."

Time Variable Measures

In addition to the control variables listed above, Table 4.3 gives the frequencies for the other independent variables in the theoretical model(s). Below is a brief discussion of each.

Sexual Assault Program Attendance. A question was asked regarding whether or not the participant had ever attended a sexual assault awareness program. This variable was labeled SAP and was dichotomized (0- No, 1- Yes). This was the only item that could be considered both time variable and time invariable. That is, respondents that said yes at Wave 1 could not undo the fact that they attended a sexual assault program. Since later analyses will use maximum-likelihood (ML) estimation for missing values, it is not necessary to impute values for the 147 missing cases at Wave 2 due to attrition.
However, the wording of this question allowed values to be implemented for 19 of the 147 cases lost to attrition because these respondents said “1- Yes” to this question at Wave 1. Since a yes response is constant, these 19 values were manually changed since they were a much more reliable value at Wave 2 than later ML estimates. When space limitations are present, this variable is presented as “Sex Assault Program” or “SAP”.

Interestingly, 54 respondents said in Wave 1 that they had attended a sexual assault awareness program, but at Wave 2 they said they had not. Two potential options are presented here: (1) leave the Wave 2 responses alone or (2) re-code Wave 2 responses to a Yes. The first of these would assume that respondents had a better understanding of what a sexual assault awareness program was after their first year of college and realized that they were mistaken at Wave 1. The second option assumes that respondents at Wave 2 misunderstood the question to ask “during the past year...” whether or not they had attended a sexual assault program and re-coding no responses to a yes accurately reflects if they have ever (in a lifetime) attended a sexual assault program. The choice was made to go with the second option of re-coding Wave 2 “No” responses that were a “Yes” at Wave 1 to a “Yes” at Wave 2.
Table 4.3. Frequency Distributions of Independent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Wave 1 (Pre-College)</th>
<th>Wave2 (End of Freshman Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Percentage</td>
</tr>
<tr>
<td><strong>Constants (Time-Invariant)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0- Other</td>
<td>84</td>
<td>13.8</td>
</tr>
<tr>
<td>1- White</td>
<td>524</td>
<td>86.2</td>
</tr>
<tr>
<td>Witness Domestic Violence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0- Never</td>
<td>561</td>
<td>91.7</td>
</tr>
<tr>
<td>1- Yes</td>
<td>51</td>
<td>8.3</td>
</tr>
<tr>
<td>Religious</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0- Not Religious</td>
<td>242</td>
<td>38.2</td>
</tr>
<tr>
<td>1- Religious</td>
<td>392</td>
<td>61.8</td>
</tr>
<tr>
<td><strong>Time-Variant</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Assault Program Attendance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0- Never</td>
<td>480</td>
<td>81.4</td>
</tr>
<tr>
<td>1- Yes</td>
<td>110</td>
<td>18.6</td>
</tr>
<tr>
<td>Single</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0- No</td>
<td>88</td>
<td>13.8</td>
</tr>
<tr>
<td>1- Yes</td>
<td>548</td>
<td>86.2</td>
</tr>
<tr>
<td>Frequent Dater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0- Almost never/Occasionally dated</td>
<td>249</td>
<td>39.5</td>
</tr>
<tr>
<td>1- Frequent Dater</td>
<td>378</td>
<td>59.9</td>
</tr>
<tr>
<td>Patriarchal Peers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1- Never</td>
<td>59</td>
<td>9.3</td>
</tr>
<tr>
<td>2- A few times a year</td>
<td>101</td>
<td>15.7</td>
</tr>
<tr>
<td>3- Monthly</td>
<td>101</td>
<td>15.8</td>
</tr>
<tr>
<td>4- Weekly</td>
<td>219</td>
<td>34.9</td>
</tr>
<tr>
<td>5- Daily</td>
<td>154</td>
<td>24.2</td>
</tr>
</tbody>
</table>

Note: Percentages not equal to 100 are due to rounding.
Single. Regarding relationship status, this variable was originally nominal\(^6\). It was re-coded to a dichotomized variable since the majority of respondents were single. Thus, relationship status was reflected in the dichotomized variable called *Single* (0- Not-Single, 1- Single).

Frequent Dater. An ordinal variable measured how often the respondent dated in high school (Wave 1) and during the last school year (Wave 2). Both Wave 1 and Wave 2 items were followed by the statement, “By a date we mean a planned activity with a specific person.” Responses were: 1- Almost never dated (a few times a year), 2- Occasionally dated (about once a month), and 3- Dated frequently (more than once a month). This question remained for Cohort 2, but the response items differed: 0- No Response, 1- Less than once a month, 2- Once a month, 3- 2-3 times a month, 4- About once a week, 5- More than once a week. In order to appropriately combine these two items for all respondents, the second set of responses was re-coded to fit the original criteria (thus 3-5, was re-coded 3 and items 1 and 2 remained the same). So the answers: 1- Almost never dated (a few times a year), 2- Occasionally dated (about once a month), 3- Dated frequently (more than once a month) reflect the re-coded range in responses. The variable about dating behavior in the past year had one category added to it called “Never Dated.” This response was given by just 4% of the sample at Wave 2 so in order to have consistency with the original response categories, these respondents were combined with those that said “Almost never dated (a few times a year).” Although this

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\(^6\) Respondents were asked to: “Indicate your current relationship status.” Original response options were: Single, Engaged, Married, Divorced/Separated/Widowed.
decreased variation, it was preferred rather than choosing one of the questions over the other and having missing cases for almost half the sample or simply leaving out this potentially important variable. To imply the positive direction in coding for someone that was a frequent dater, this variable is labeled “Frequent Dater” or when space limitations are present, “FDater”

*Patriarchal Male Peer Support.* While there are multiple dimensions to male peer support (see DeKeseredy and Kelly 1993b), this data had no measures consistent with any of the previously cited research (e.g. DeKeseredy and Schwartz 1993). However, a proxy measure for male peer support was obtained from the question, “Currently, when you are with your friends, how often do you hear talk that speculates ‘How a particular woman would be in bed?’”. Response options were: 1- Never, 2- A few times a year, 3- Monthly, 4- Weekly, 5- Daily. This item was more inclusive than past research, which has focused more on the behaviors of male peers regarding their use of violence against female partners and their support of this violence in general. Thus, the weakness here was that this was most likely a measure of “male peers’ sexist behaviors/attitudes” rather than the more direct, “male peers’ support of violence against women.” This variable was ordinal, so the time points between each interval were not equal. Despite this, the variable was normally distributed and was treated as continuous since male peer’s level of sexist behaviors can be thought of as continuous in nature. Higher values indicated a greater degree of these behaviors from respondent’s male peers. This variable was called “Patriarchal Peers1” and “Patriarchal Peers2” for each respective time point or when space limitations were present, “Pat Peers1” and “Pat Peers2.”
In the previous chapter the causal ordering of male peer support was discussed. Recall that past research found that male peers that engaged in relationship violence increased the chance that an individual might perpetrate violence against a female. Some have found that negative attitudes about women in college are preceded by negative attitudes during high school (DeKeseredy and Kelly 1993a; DeKeseredy and Schwartz 1998). Due to the wording of these items and limitations in the amount of data points, male peers was treated as an independent, rather than a mediating variable. Treating this variable as a mediating cause of relationship violence or mediating cause of patriarchal ideology was not feasible with this data.

*Scaled Variables for Relationship Violence Experiences.* Borrowing from the Conflict Tactics Scale (CTS) (Straus and Gelles 1990), there were 9 total questions (5 measures of verbal aggression, 4 of physical aggression) assessing men’s experiences with relationship violence in high school (Wave 1) as well as during their first year of college (Wave 2). Participants responded to the question, “How often have these things happened during high school?” (same question substituting high school with “during the last year” for Wave 2), with these potential responses: 0- 0 times, 1- Once, 2- 2-5 times, 3- 6-10 times, 4- more than 10 times. 7

7 These responses reflect the current coding scheme. They were re-coded from the original responses of 0- No Response, 1- 0, 2- Once, 3- 2-5 times, 4- 6-10, 5- More than 10 times. They were re-coded for ease in interpretation so that 0 would reflect never, 1 would reflect 1, and then the subsequent numeric values would represent the respective categories.
Osgood, McMorris, and Potenza (2002) discuss the many issues in combining multiple indicators in self-reported delinquency items that are ordinal. For one, if the choice was made to ignore their ordinal nature and sum all the items into a composite score this would make the incorrect assumption of equality between each interval. A composite, scaled score also produces highly skewed variables. The authors further mention how self-report items tend to overemphasize less serious offenses. In the present case, if the subject stomped out of the room “1-time”, yelled at a partner “1-time”, and sulked “1-time” and never engaged in any other behaviors they would receive a score for domestic violence perpetration equal to 3. Yet this person would be considered “more serious” than someone that never engaged in any of the other 8 items but they hit their partner “1-time” (a score of 1). Not only would the first respondent be considered more serious, but they would be more serious by two whole units. Osgood et al. (2002) cite Hindelang, Hirschi, and Weis (1981) who tested multiple techniques for dealing with issues such as these with ordinal self-reported delinquency measures. Ultimately, Hindelang et al. found one technique to be the most reliable. This was to recode their self-reported delinquency items into dichotomous (0- Never, 1- Ever) variables. These items were then summed into a composite variable. This technique produced a significant decline in the summed item’s skew, produced a measure where higher values better
reflected the most serious cases, and it avoided the difficult task of assigning metric values to ordinal categories (see Osgood et al. 2002 for more)\(^8\).

These insights are extremely beneficial to the current study for the reasons mentioned above, but also because structural equation modeling (SEM) is designed to work best with continuous outcomes/mediators. Early exploratory models that modeled relationship violence measures as latent, ordinal variables created complex models with poor model fit. This was most likely because they were covarying with other control variables, which were manifest variables. In other words, SEM prefers that manifest measures covary with other manifest measures, not latent ones. Also, while dummy variables were an option, there was no theoretical cut-off point for each group that seemed to coincide with the data. For these reasons, they were combined using the aforementioned technique from Hindelang et al. (1981) into a manifest variable.

The 9 item scales for relationship violence perpetration that were dichotomized and then summed for each respective time point are called: "Relationship Violence Perpetration1" (shortened to RVP1 where space limitations occur) and "Relationship Violence Perpetration2" (shortened to RVP2 where space limitations occur). The range

\(^8\) Osgood et al. (2002) went on to discuss a more systematic approach than the Hindelang et al. (1981) technique by using item-response theory (IRT) with tobit regression. Since the items on relationship violence are used primarily as independent variables, these techniques are not employed. That is, tobit regression is not based on linear outcome variables, and is used when the outcome variable of interest is censored (i.e. rank-ordered).
for these two scales was 0-9. The 9-item scale at Wave 1 formed a reliable scale ($\alpha = .81$). The mean at Wave 1 was 2.35 (SD = 2.26, skew = .92). The 9-item scale was also reliable at Wave 2 ($\alpha = .79$). The mean at Wave 2 was 1.77 (SD = 2.02, skew = 1.34).

Two other variables were created in similar ways which measured the participants’ experiences as victims of verbal and physical relationship aggression. These were the same 9 items across Waves 1 and 2 for perpetration, but instead asked how often their “partner did this” to them. These variables were called: “Relationship Violence Victimization1” (shortened to RVV1 when necessary due to space limitations) and “Relationship Violence Victimization2” (shortened for the same reasons to RVV2). The 9-item scale at Wave 1 indicated a reliable construct ($\alpha = .85$). These Wave 1 measures had a mean of 2.71 (SD = 2.58, skew = .82). The 9-item scale at Wave 2 also had strong reliability ($\alpha = .85$). The Wave 2 scale also had a mean of 2.13 (SD = 2.40, skew = 1.16). A paired samples t-test (listwise deletion) indicated that there were statistically significant ($p < .001$) differences in mean scores for both relationship violence perpetration and victimization from Wave 1 to Wave 2.

ANALYSES

*Structural Equation Modeling*

Structural equation modeling (SEM) was the primary statistical technique used for all data analyses (for all analyses in this dissertation). AMOS 21 for Windows was used for all SEM models. SEM has several advantages over traditional linear regression. SEM allows researchers to control for measurement error (for reviews see Byrne 2010;
Kline 2011). Additionally SEM appropriately assesses structural models over time, even in pretest/posttest designs (Raykov 1992). SEM also allows one to hypothesize and model non-recursive relationships (Berry 1984; Kline 2011). Finally, due to sample attrition, the sample lost 150 cases at Wave 2. SEM uses the maximum-likelihood (ML) function for estimating missing cases (MCAR). While most researchers are likely aware of the various data imputation techniques for missing data (e.g. mean substitution), ML is not a form of data imputation and instead, “[...] searches over different possible population values, finally selecting parameter estimates that are most likely (have the ‘maximum likelihood’) to be true, given the sample observations,” (Lewis-Beck 1993: v). The ML function was preferred for handling missing cases because it did not bias the sample in ways that data imputation or data deletion techniques can in standard OLS regression (Arbuckle 1996, 2012; Wiggins and Sacker 2002). Descriptive statistics and bivariate statistics were assessed using SPSS 21 for Windows.

RESEARCH QUESTIONS ADDRESSED IN DATA ANALYSES

The current analysis addresses the following six questions:

Q1: Are the patriarchal attitudes measures reliable?

Q2: Are the patriarchal attitudes measures reliable over time (i.e. longitudinal measurement invariance)?

Q3: What are the predictors of patriarchal ideology before college and what are the predictors at the end of the first year of college?

Q4: Does patriarchal ideology change from pre-college to the end of one’s freshman year?
Q5: What accounts for the change or stability in patriarchal attitudes from pre-college to the end of one's freshman year?

Q6: What are the reciprocal effects of patriarchal attitudes and involvement in relationship violence?

Q1: Are the Attitudinal Measures of Patriarchal Ideology Reliable?

The first research question was addressed using confirmatory factor analysis (CFA) within the SEM framework. Unlike traditional exploratory factor analysis (EFA), the CFA controls for measurement error, can use ML to assess missing cases lost due to attrition, and these measurement models can later be expanded into full structural models that include manifest and latent variables. All of these strengths of the CFA approach make this a much more robust tool for assessing latent constructs than traditional EFA (Byrne 2010; Kline 2011).

First the dimensionality of the patriarchal attitudes measures was assessed. I discussed in the previous chapter the dimensionality of patriarchal ideology and it appears the four indicators might represent two of these dimensions. That is, two of these indicators represent the dimension of rape-myth acceptance (herfault, askforit) and the remaining two represent acceptance of violence against women (hitwife, crywolf). In order to test whether or not patriarchal attitudes was better operationalized with multiple dimensions (i.e. discriminant validity) or as a unitary construct (i.e. convergent validity), two different CFAs were conducted. The two-factor model can be found in Figure 4.1. The one-factor model is not pictured, but essentially it combined both latent variables in Figure 4.1 into one dimension labeled patriarchal attitudes (with all four indicators
loading on this latent variable, with $\sigma^2 = 1$, and reference indicator = 1 on arbitrary indicator *hitwife*). The dimensionality measurement models were assessed at Wave 1 and Wave 2, independent of one another. Since more indicators than just two per construct would have been ideal, it was expected that the two-factor approach would have less reliability than the one-factor approach. Because of this, subsequent models in this chapter discuss/model patriarchal attitudes as a unitary, four-item factor.

**Q2: Are the Patriarchal Attitudes Measures Reliable over Time (i.e. longitudinal measurement invariance)?**

In order to determine whether or not the measurement structure of patriarchal attitudes was invariant over time, which would allow for comparisons between data points, a longitudinal CFA (LCFA) was performed (see Brown 2006 for a review). LCFA can be assessed using one of two techniques: autoregressive structural equation modeling (ARSEM) or multiple group structural equation modeling (MGSEM). The ARSEM involved the latent factor patriarchal attitudes at Wave 1 as a covariate with the same latent construct at Wave 2 (e.g. LCFA, longitudinal measurement model). Figure 4.2 shows the hypothesized ARSEM used to assess the reliability of patriarchal attitudes over time, providing an answer to Q2. Models with and without covarying error terms were assessed.
Figure 4.1. Hypothesized Two-Factor Operationalization of Patriarchal Attitudes

Notes: Variance of each factor = 1 so that reference indicators would not be needed. Error parameters = 1 reflect manual constraints.
Figure 4.2. Hypothesized Longitudinal Confirmatory Factor Analysis (LCFA)

Notes: This figure does not include covarying error terms for repeated measures, although subsequent models in the next chapter did. Parameters = 1 reflect manual constraints for arbitrary reference indicator and error-term regression weights.
Q3: *What are the Predictors of Patriarchal Attitudes before College and after One Year of College?*

Once measurement reliability was established the next research question was addressed using multiple indicator multiple causes SEM, also known as MIMIC modeling (for a review, see Smith and Patterson 1984). Figure 4.3 shows the MIMIC model that was conducted for both data points, substituting the appropriate time, but same variables for each. MIMIC models are very similar to OLS regression with the exception that they control for measurement error and have a latent variable as an outcome. Looking at just the cross-sectional data from Wave 1 makes causality impossible, but it allowed me to assess significant relationships between the hypothesized independent variables and patriarchal ideology. These analyses assessed the significant predictors of patriarchal ideology at each respective time point.
Figure 4.3. General MIMIC Model used for Wave 1 and Wave 2

Notes: Covariates for independent variables are not drawn for clarity and space considerations. Parameter constraints = 1 are for model identification and for all error and residual parameters. Error and residual ellipses are not drawn for clarity purposes. Wave 1 variables in actual models are same names as pictured, but they have a 1 after and the same is true for Wave 2 measures, but with a 2 after them.
Q4: Do Patriarchal Attitudes Change from Pre-College to the end of One’s Freshman Year?

Earlier t-tests suggested significant change in patriarchal attitudes from Wave 1 to Wave 2. This approach was limited, however, in that it deleted missing values rather than taking advantage of all of the information by using ML estimation. Essentially, Q4 was addressed using CFA with structured means (see Arbuckle 2012: 229-240 for a review). Unlike the previous ARSEM model from Q2 (but similar), this analysis used multi-group structural equation modeling (MGSEM). Although described in more detail in Chapter 5, the MGSEM for assessing mean structures essentially treats each data point as a “group” and constrains one of the latent variable’s mean to 0, while freely estimating the other. The freely estimated latent mean reflected the number of units higher or lower from 0 (i.e. the other latent mean) that variable was. Significance in this value (p < .05) would indicate significant change from Wave 1 to Wave 2.

Q5: What Accounts for the Change or Stability in Patriarchal Attitudes from Pre-College to the end of one’s Freshman Year?

Q5 could only be addressed once the results of Q4 were known. If Q4 found significant differences in the mean of patriarchal attitudes from Wave 1 to Wave 2, Q5 would address significant variation using a MGSEM. Model fit difference tests and critical ratio differences (z-tests) for individual parameter estimates would help establish where the source of significant variation was.
Q6: What are the Reciprocal effects of Patriarchal Attitudes and Experiences with Relationship Violence?

The current study is one of the few to consider patriarchal ideology as a dependent variable, whereas past research has typically only included it, at best, as a mediating variable, predictive of domestic/relationship violence. Chapters 2 and 3 clearly laid-out an argument for patriarchal ideology as an important concept for understanding relationship violence against women outside of its direct predictive power. It should play a role (when conceptualized properly), however, for those few men that are violent or perceive themselves as “victims” of relationship violence. No known research has considered patriarchal ideology and relationship violence in a non-recursive manner. It is unclear what the potential feedback effects are between patriarchal ideology and experiences with relationship violence. Theoretically, it would be important to consider the indirect feedback loops, which would assess the reciprocity of these three variables (i.e. patriarchal attitudes, violence perpetration, violence victimization). I hypothesize that patriarchal attitudes would predict the use of violence and that victimization would then increase patriarchal attitudes. Keep in mind that the men’s “victimization” lacks the exact context of the female partner’s use of violence, but assuming a good amount of these episodes were consistent with past research findings (e.g. women’s violence as preemptive, in self-defense, or secondary to men’s initial aggression) (Allen et al. 2009; Daly and Wilson 1988) they should feedback to patriarchal ideology in a significant way that increases the ideology. However, this is just one potential direction these relationships could have with one another.
Kline (2011) notes that there are many different ways to assess non-recursive structural equation models using panel data (see Kline 2011:103-110 for a review; see also Brito and Pearl 2002). Any time researchers want to know the feedback effects of more than two variables, they must model the data in a way that has indirect feedback effects as shown in Figure 4.4. The dashed lines in Figure 4.4 represent the multiple feedback effects. Because this was the first study to consider the feedback effects of these variables, the dashed lines reflect the exploratory nature of the reciprocal analyses. The feedback effects come into play by assessing the correlated residuals of these variables (also dashed since the exact correlations vary depending on the direction of the feedback loops). Others might prefer cross-lagged parameters with no feedback effects. Cross-lagged SEMs could still be assessed but such models are quite complex and have been critiqued for what some see as an inherent tautology when only two-waves of data are present (Stoolmiller and Bank 1995). Also, the MGSEM approach does not work here since direct relationships from Wave 1 to Wave 2 need to be modeled with appropriate parameters when assessing feedback effects.

In Figure 4.4 the scaled variable for patriarchal attitudes was used rather than the latent variable in previous models. As seen in Figure 4.4, the decision was made to conduct a full structural model where all variables were manifest variables. This was done for two reasons. First, a very complex model assessing the feedback effects of a latent variable (i.e. patriarchal attitudes) with the two scaled manifest variables (domestic violence perpetration and victimization) would have produced poor model fit. This may not be as robust of an analysis as using just latent variables, but Sass and Smith (2006) found that whether one decides to use single scaled variables, item parcels, or individual
latent variables, all of these produce very similar coefficients regarding measurement error in SEM. Because the Cronbach’s $\alpha$ was at an acceptable level for these three composite measures ($\alpha > .70$), there was little reason to suggest that the complexities of these variables would be greatly diminished treating them as observed measures. Secondly, this was done because the sample size was too small for the amount of parameters needing to be assessed using the latent constructs of all three variables.

Once the initial reciprocal effects were assessed without any exogenous variables, exogenous predictors were added to the model from Figure 4.4. Because of the many autocorrelations of many time-variant independent variables the only independent variables added are the three constants: white, witnessing domestic violence, and religious. The key thing to take from these analyses in response to Q6 is that while such models cannot “prove” causality, they can help establish the temporal order (Biesanz 2012) regarding these three key variables. These non-recursive models, therefore, should provide insight not just for feedback effects regarding these variables in general, but also specifically in that Chapters 6 and 7 have much to gain in their models from these assessments.
Figure 4.4. Hypothesized Nonrecursive SEM of Key Outcome Variables

Notes: Dashed arrows represent feedback loops for separate models. Parameter constraints are lacking since these will vary depending on the temporal order of each model.
CONCLUSION

This chapter provides an overview of the analyses performed to assess attitudinal measures of patriarchal ideology over time using two-wave longitudinal data. The complex data are described regarding the different cohorts, waves, missing data, removal of items, and key variables are discussed. The data analyses that mainly revolve around the use of structural equation modeling are then discussed. A model that assesses reciprocal changes in patriarchal ideology is also presented. Overall, the data and analyses are used to provide answers to two general questions: 1) does patriarchal ideology change over time and 2) what accounts for this change/stability? The chapter concludes with the limitations of the data and the analyses performed. The next chapter presents the results from the methods described in this chapter.
CHAPTER V
RESULTS: ASSESSING INDIVIDUAL PATRIARCHAL IDEOLOGY OVER TIME
USING ATTITUDINAL MEASURES FROM A TEST/RETEST PANEL DESIGN

The previous chapter established six major research questions that will be addressed regarding attitudinal measures of patriarchal ideology using a test/retest panel design. The analyses below address these questions as far as whether or not patriarchal ideology is: 1) reliable, 2) invariant over time, 3) related to the key independent variables, 4) changing over time, 5) changing over time due to any of the key independent variables and 6) reciprocally related to experiences with relationship violence. The major sections below are titled appropriately with the specific research question they address.

MEASUREMENT RELIABILITY

Q1: Are the Attitudinal Measures of Patriarchal Ideology Reliable?

The measurement reliability of the four attitudinal indicators of patriarchal ideology were assessed using confirmatory factor analysis (CFA). Prior to running the CFA, bivariate inter-item correlations and alpha reliability analyses were assessed. Conducting these prior to the CFA allowed for an assessment of reliability that was not as robust as the CFA in and of itself, but these techniques allowed me to eliminate measures that were not reliable. That is, while the CFA is more robust technique for measurement reliability, the inter-item correlations and alphas needed to meet certain criterion before even being considered in a CFA.

*Inter-Item Correlations and Reliability Coefficients.* Table 5.1 presents the inter-item coefficients, descriptive statistics, and Cronbach’s $\alpha$ reliabilities for the indicators of
patriarchal attitudes at each data point. The top of Table 5.1 shows that all four measures at Wave 1 had significant (p < .01) and acceptable correlations with one another (Mean of 6 correlations = .42). For Wave 2, 5 of the 6 inter-item correlations were acceptable in size (Mean of 5 correlations = .45) with 1 fairly weak correlation (r = .12) and all 6 were statistically significant (p < .01). The change in the α for the full sample from .74 at Wave 1 to .70 at Wave 2 indicates that the scale of all four measures is right at the cut-off for Cronbach’s α reliability (typically α ≥ .70). Although it is still acceptable at Wave 2, the drop in the α value could have been due to numerous reasons (i.e. loss in sample size due to attrition, measurement error). Perhaps most important, was determining whether or not the lower reliability at Wave 2 was the result of true changes in these values or changes in the meaning of this construct from Wave 1 to Wave 2. While “true change” can be difficult to determine using panel data, it was important to minimize the chance that the decline in reliability was due to issues with the data rather than a decline in the meaning of these items.
Table 5.1. Inter-Item Correlations, Descriptive Statistics, and Cronbach’s α for Patriarchal Attitudes

<table>
<thead>
<tr>
<th></th>
<th>Wave 1</th>
<th>Wave 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full Sample (n = 608, α = .74)</td>
<td>Full Sample (n = 486, α = .70)</td>
</tr>
<tr>
<td></td>
<td>1. askforit 2. hitwife 3. herfault 4. crywolf</td>
<td>1. ask4it2 2. hitwife2 3. herfaul2 4. crywolf2</td>
</tr>
<tr>
<td>1. askforit</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>2. hitwife</td>
<td>.40</td>
<td>.30</td>
</tr>
<tr>
<td>3. herfault</td>
<td>.43 .38 1.00</td>
<td>.50 .38 1.00</td>
</tr>
<tr>
<td>4. crywolf</td>
<td>.42 .46 .38 1.00</td>
<td>.55 .12 .32 1.00</td>
</tr>
<tr>
<td>Mean</td>
<td>1.96 (1.0) 1.72 (1.05) 2.33 (1.02) 2.34 (.97)</td>
<td>2.62 (1.29) 1.91 (1.08) 2.64 (1.10) 3.08 (1.29)</td>
</tr>
<tr>
<td>skewness</td>
<td>1.08 1.41 .52 .46</td>
<td>.33 1.23 .21 .03</td>
</tr>
</tbody>
</table>

|                  | Cohort 1 (n = 315, α = .73) | Cohort 1 (n = 245, α = .79) |
|                  | 1. askforit 2. hitwife 3. herfault 4. crywolf | 1. ask4it2 2. hitwife2 3. herfaul2 4. crywolf2 |
| 1. askforit      | 1.00                    | 1.00                    |
| 2. hitwife       | .38                     | .45                     |
| 3. herfault      | .41 .31 1.00            | .50 .45 1.00            |
| 4. crywolf       | .44 .47 .39 1.00        | .55 .48 .49 1.00        |
| Mean (SD)        | 2.00 (1.03) 1.75 (1.09) 2.35 (1.03) 2.35 (.97) | 1.92 (1.08) 1.80 (1.21) 2.36 (1.11) 2.27 (.95) |
| skewness         | 1.10 1.42 .52 .45       | 1.39 1.47 .56 .63       |

|                  | Cohort 2 (n = 293, α = .75) | Cohort 2 (n = 241, α = .19) |
|                  | 1. askforit 2. hitwife 3. herfault 4. crywolf | 1. ask4it2 2. hitwife2 3. herfaul2 4. crywolf2 |
| 1. askforit      | 1.00                    | 1.00                    |
| 2. hitwife       | .43                     | .09ns .90               |
| 3. herfault      | .45 .46 1.00            | .39 .26 1.00            |
| 4. crywolf       | .40 .45 .37 1.00        | .06ns .26 -.07ns 1.00   |
| Mean (SD)        | 1.91 (.96) 1.69 (1.00) 2.30 (1.02) 2.33 (.96) | 3.34 (1.07) 2.02 (.92) 2.93 (1.02) 3.91 (1.03) |
| skewness         | 1.05 1.37 .52 .47       | -.27 .91 -.04 -.79      |

Notes: Sample sizes are based on listwise deletion for α reliabilities. Cohort 2 at Wave 2 highlighted due to poor reliability. All correlations are significant (p < .01) except where otherwise noted (i.e. NS = not significant, p > .05).
One way to eliminate a potential confounding source of the decreased reliability in the α level was to perform a sensitivity check on these items by assessing them for each cohort independently. While cohort effects were not anticipated because each cohort was thought to be homogenous, dividing the sample by cohorts was an easy way to rule out one potential source for inconsistency in these measures over time. The data was separated into: Cohort 1 (1990 incoming class) and Cohort 2 (1991 incoming class). The middle matrices in Table 5.1 show that for Cohort 1, patriarchal attitudes was reliable based on Chronbach’s α values at Wave 1 (α = .73, n = 315) and Wave 2 (α = .79, n = 245). Thus, Cohort 1 actually had an increase in reliability at Wave 2. The inter-item correlations were all significant (p < .01) and acceptable in strength (Mean of all 12 items > .40). The bottom part of Table 5.1 shows that Cohort 2 had reliable measures of patriarchal attitudes (α = .75) with acceptable and reliable inter-item correlations (Mean of all 6 items > .42, all p < .01) at Wave 1. At Wave 2, however, the α value was extremely poor (α = .186), as supported by the inter-item correlation matrix with variable degrees of significance with most correlation coefficients being fairly weak.

The lack of reliability for the attitudinal measures of patriarchal ideology at Wave 2 for Cohort 2 presented some confounding problems. After coding of the items was checked as well as potential outlying cases, the exact reason for the lack of longitudinal

---

1 Wave 1 α was even higher for Cohort 1 when cases lost due to attrition at Wave 2 were deleted from Wave 1 (α = .746). However, because later SEM analyses will estimate these values using maximum likelihood (ML), these cases remained.
measurement invariance for one cohort and not the other was not unclear. Previously it was discussed that cohort effects were not anticipated since both cohorts were homogenous regarding their sampling technique and among independent variables. However, based on the available information, cohort interactions might be a potential explanation for the lack of measurement invariance over time. That is, the meaning of patriarchal attitudes (as measured by these 4 indicators) very well could have changed for the incoming class of 1991 but not the 1990 incoming class. Since the conceptual domain of these measures was unstable for Cohort 2, it was not appropriate to proceed with further analyses regarding Cohort 2 (see Brown 2006). Thus, Cohort 2 was deleted from the dataset for the remainder of this chapter and analyses described from this point forward regarding the test/retest panel analyses involve just Cohort 1 (Wave 1 n = 332, Wave 2 n = 245)

Since cohort 2 was deleted it was important to look at the descriptive statistics for just Cohort 1. Table 5.2 includes the descriptive statistics for all of the indicators of patriarchal attitudes.

---

1 Sensitivity analyses were performed on the full sample as well as just Cohort 2 since unstable inter-item correlations and \( \alpha \) values are not the most rigorous techniques for establishing measurement invariance. Confirmatory Factor Analyses were performed on the full sample and Cohort 2. As expected, the Wave 2 measures for Cohort 2 (and thus the full sample) showed poor fitting models (i.e. non-equivalence in the meaning of the construct of patriarchal attitudes over time). This further justified the removal of Cohort 2 from the data.
patriarchal attitudes. Notice the statistically significant differences reported earlier are now gone for all items, suggesting stability in patriarchal attitudes from Wave 1 to Wave 2. Descriptives for all other variables can be found in Table 5.3.

Like the last chapter's descriptive statistics, relationship violence variables are not reported in the above tables. The 9 items for relationship violence perpetration at Wave 1 for just Cohort 1 formed a reliable scale (\(\alpha = .81\)) and had a mean of 2.33 (SD = 2.25, skew = .91). The same 9 items at Wave 2 formed a reliable scale (\(\alpha = .80\)) and had a mean of 1.89 (SD = 2.08, skew = 1.26). Because of the positive skew of the second scale, both variables were computed using the \(\ln\) function to induce normality. Thus, the Wave 1 scale had a mean of .96 (SD = .72, skew = -.07) and the Wave 2 perpetration measures had a mean of .82 (SD = .70, skew = .19). A paired samples t-test for the \(\ln\) variables showed significantly different values in relationship violence perpetration over time (\(t = 2.81, df = 238, p < .01\)). Because the original measures failed to meet the assumptions of normality, anytime from this point forward "relationship violence perpetration" or "RVP" are presented, these are the \(\ln\) versions of these variables.
Table 5.2. Descriptive Statistics for Patriarchal Attitudes, Cohort 2 Deleted

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Wave 1 (Pre-College)</th>
<th>Wave 2 (End of Freshman Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Variable  n  Mean  SD  skew  α</td>
<td>Variable  n  Mean  SD  skew  α</td>
</tr>
<tr>
<td>In most cases, when a woman gets raped, she was asking for it.</td>
<td>askforit  317  2.00  1.03  1.10</td>
<td>askforit2  248  1.92  1.08  1.39</td>
</tr>
<tr>
<td>A man is sometimes justified in hitting his wife.</td>
<td>hitwife  315  1.75  1.09  1.42</td>
<td>hitwife2  246  1.80  1.21  1.47</td>
</tr>
<tr>
<td>If a woman is making out and she lets things get out of hand, it's her own fault if the man forces sex on her.</td>
<td>herfault  316  2.35  1.03  0.52</td>
<td>herfault2  248  2.36  1.11  0.56</td>
</tr>
<tr>
<td>Most charges of “wife beating” are made up by the woman to get back at her husband.</td>
<td>crywolf  316  2.35  .97  0.45</td>
<td>crywolf2  247  2.27  .95  -0.63</td>
</tr>
<tr>
<td>Composite of all 4 items&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Patriarchal Attitudes1  315  8.45  3.04  0.85  0.73</td>
<td>Patriarchal Attitudes2  245  8.35  3.40  1.18  0.79</td>
</tr>
</tbody>
</table>

Notes: <sup>a</sup>Paired samples t-tests indicated no statistically significant differences in any of the means from Wave 1 to Wave 2, p > .05.
<sup>b</sup>Listwise deletion was used for the creation of each scale.
Table 5.3. Frequency Distributions of Independent Variables, Cohort 2 Deleted

<table>
<thead>
<tr>
<th>Variable</th>
<th>Wave 1 (Pre-College)</th>
<th>Wave2 (End of Freshman Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Percentage</td>
</tr>
<tr>
<td><strong>Constants (Time-Invariant)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0- Other</td>
<td>52</td>
<td>17.0</td>
</tr>
<tr>
<td>1- White</td>
<td>253</td>
<td>83.0</td>
</tr>
<tr>
<td>Witnessed Domestic Violence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0- Never</td>
<td>288</td>
<td>91.7</td>
</tr>
<tr>
<td>1- Yes</td>
<td>26</td>
<td>8.3</td>
</tr>
<tr>
<td>Religious</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0- Not Religious</td>
<td>107</td>
<td>43.3</td>
</tr>
<tr>
<td>1- Religious</td>
<td>140</td>
<td>56.7</td>
</tr>
<tr>
<td><strong>Time-Variant</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex Assault Program Attendance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0- Never</td>
<td>230</td>
<td>75.7</td>
</tr>
<tr>
<td>1- Yes</td>
<td>74</td>
<td>24.3</td>
</tr>
<tr>
<td>Single</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0- No</td>
<td>8</td>
<td>2.4</td>
</tr>
<tr>
<td>1- Yes</td>
<td>324</td>
<td>97.6</td>
</tr>
<tr>
<td>Frequent Dater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0- Almost never/Occasionally dated</td>
<td>155</td>
<td>46.7</td>
</tr>
<tr>
<td>1- Frequent Dater</td>
<td>173</td>
<td>52.1</td>
</tr>
<tr>
<td>Patriarchal Peers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1- Never</td>
<td>24</td>
<td>7.2</td>
</tr>
<tr>
<td>2- A few times a year</td>
<td>47</td>
<td>14.2</td>
</tr>
<tr>
<td>3- Monthly</td>
<td>62</td>
<td>18.7</td>
</tr>
<tr>
<td>4- Weekly</td>
<td>126</td>
<td>38.0</td>
</tr>
<tr>
<td>5- Daily</td>
<td>73</td>
<td>22.0</td>
</tr>
</tbody>
</table>

Note: Percentages not equal to 100 are due to rounding.
The 9 items at Wave 1 for relationship violence victimization for just Cohort 1 formed a reliable scale ($\alpha = .85$) and had a mean of 2.72 (SD = 2.59, skew = .84). The same 9 items at Wave 2 formed a reliable scale ($\alpha = .84$) and had a mean of 2.16 (SD = 2.40, skew = 1.03). Because of the positive skew of the second scale, both variables were computed using the $\ln$ function to induce normality. Thus, the Wave 1 victimization measures had a mean of 1.05 (SD = .76, skew = -.11) and at Wave 2 they had a mean of .87 (SD = .77, skew = .19). A paired samples t-test showed significantly different values in relationship violence victimization over time ($t = 3.26$, df = 241, p < .001).

**Confirmatory Factor Analyses**

*Discriminant Validity.* The previous chapter discussed the possibility of a two-factor solution in which two of the indicators for patriarchal attitudes represent rape-myth acceptance and two represent acceptance of violence against women (see previous chapter’s Figure 4.1). Both were thought to be underlying dimensions of patriarchal attitudes. Thus, the two-factor hypothesized model was assessed across both waves of data. The two-factor model had acceptable model fit, but had a large correlation coefficient between each factor ($r > .85$) indicating poor discriminant validity of the two-factor solution (i.e. high multicollinearity).

*Convergent Validity.* A four-indicator single-latent factor of patriarchal attitudes (results in Table 5.4) was more reliable than the two-factor (two indicators per factor)
model\(^3\). Patriarchal attitudes, modeled as a latent construct, was reliable at Wave 1 and Wave 2, when conducting two separate CFA models. Both had acceptable model fit and moderate to strong \((b \geq .54)\), statistically significant \((p < .001)\) factor loadings. These CFA models suggest that there were reliable measures of patriarchal ideology for each wave of data, independent of one another. In other words, the answer to Q1 is simply: yes, the attitudinal measures of patriarchal ideology are reliable. Since these CFAs were conducted independently, comparisons between the two waves (i.e. longitudinal measurement invariance) were not yet possible.

\(^3\) This is not to suggest that multiple dimensions of patriarchal ideology will always have high multicollinearity. One reason for this finding could be that only two indicators per factor were available. Thus, more indicators might reduce the correlation between these two factors, but these were not available with this data.
Table 5.4. Confirmatory Factor Analysis (CFA) Results of Independent Measurement Models

<table>
<thead>
<tr>
<th>Parameter Estimates</th>
<th>Wave 1&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Wave 2&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$ (SE)</td>
<td>$b$</td>
</tr>
<tr>
<td>Patriarchal Attitudes $\rightarrow$ hitwife</td>
<td>1.00</td>
<td>0.62</td>
</tr>
<tr>
<td>Patriarchal Attitudes $\rightarrow$ askforit</td>
<td>0.96*** (.12)</td>
<td>0.63</td>
</tr>
<tr>
<td>Patriarchal Attitudes $\rightarrow$ herfault</td>
<td>0.82*** (.12)</td>
<td>0.54</td>
</tr>
<tr>
<td>Patriarchal Attitudes $\rightarrow$ crywolf</td>
<td>1.03*** (.13)</td>
<td>0.71</td>
</tr>
</tbody>
</table>

***p < .001

Notes: Beta = 1.0 reference indicator. <sup>a</sup>Wave 1 model fit: $\chi^2 = 3.84$, df = 2, p = .147; CFI = .992; RMSEA = .053. <sup>b</sup>Wave 2 model fit: $\chi^2 = 0.65$, df = 2, p = .721; CFI = 1.0; RMSEA = .000.
MEASUREMENT RELIABILITY OVER TIME

Q2: Are the Attitudinal Measures of Patriarchal Attitudes Invariant over Time?

In order to assess measurement invariance over time, the model fit for the initial hypothesized CFA (Figure 4.2 in previous chapter), with all factor loadings freely estimated (with the exception of the arbitrary reference indicators of hitwife and hitwife2, both = 1.0) was called Model 1A. The goodness of fit for Model 1A and all of the CFAs described in this section can be found in Table 5.5. As Table 5.5 shows, Model 1A fit the data well based on the comparative fit index (CFI) but not for the $\chi^2$ value and was only moderately supported by the root mean square error of approximation (RMSEA).

Since the factors of patriarchal attitudes at Wave 1 and Wave 2 were measured with identical items administered in an identical fashion, correlated error terms for each indicator were added to create a better fitting model (Model 1B) that accounted for these “method effects” (see Berry 1984 for a review; see also Brown 2006). That is, Model 1B added 4 covariances between each indicator’s error term at Wave 1 and the same indicator’s error term at Wave 2. Table 5.5 shows that goodness of fit indicators for Model 1B all suggested good model fit, which was much better than Model 1A (although significant difference tests were not possible since Model 1A was poor fitting from the onset). Results from Model 1B regarding individual regression weights/factor loadings are shown in Figure 5.2. As Figure 5.2 shows, factor loadings were all statistically
Table 5.5. Goodness-of-Fit Statistics for Auto-Regressive Structural Equation Models for Longitudinal Confirmatory Factor Analyses

<table>
<thead>
<tr>
<th>Model and Description</th>
<th>Comparative Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
<th>CFI</th>
<th>RMSEA</th>
<th>$\Delta \chi^2$</th>
<th>$\Delta df$</th>
<th>$\Delta \chi^2$ Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A. Unconstrained ARSEM Model</td>
<td></td>
<td>57.10</td>
<td>19</td>
<td>.000</td>
<td>.930</td>
<td>.078</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1B. Covariances between error terms added</td>
<td></td>
<td>16.78</td>
<td>15</td>
<td>.332</td>
<td>.997</td>
<td>.019</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1C. Equality constraints: factor loadings</td>
<td>1B vs 1C</td>
<td>19.47</td>
<td>18</td>
<td>.364</td>
<td>.997</td>
<td>.016</td>
<td>2.69</td>
<td>3</td>
<td>.442</td>
</tr>
<tr>
<td>1D. Equality constraints: factor loadings and factor intercepts</td>
<td>1C vs 1D</td>
<td>23.37</td>
<td>22</td>
<td>.381</td>
<td>.997</td>
<td>.014</td>
<td>3.90</td>
<td>4</td>
<td>.420</td>
</tr>
<tr>
<td>1E. Equality constraints: factor loadings, factor intercepts, and error variances</td>
<td>1D vs 1E</td>
<td>27.01</td>
<td>26</td>
<td>.409</td>
<td>.998</td>
<td>.011</td>
<td>3.64</td>
<td>4</td>
<td>.457</td>
</tr>
</tbody>
</table>

Notes: df = degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation.
significant (p < .001) and strong across both waves of data. Correlated error terms were all statistically significant except for the askforit error term\(^4\).

The covariance between the repeated latent variables (e.g. autocorrelation, serial correlation, stability coefficient) was statistically significant and suggested weak to moderate stability (\(r = .34, \text{SE} = .11, p < .001\)). While autoregressive coefficients that are very strong make it clear that a measure has high stability, moderate coefficient strength is not always as straightforward (Mroczek 2007). That is, it can be difficult to interpret with the \(r\) alone whether or not the measures are unstable or the measures lack continuity (i.e. significant mean differences). Keep in mind that one early test (paired samples t-test) indicated no significant differences over time while the \(\alpha\) reliability indicated measurement reliability. These early measures suggest reliable measures along with no change over time in the construct. To be sure, the section below regarding mean differentials within the confines of SEM allowed for more informed conclusions than the paired-samples t-test/\(\alpha\) reliability tests and the current LCFA. For now, keep in mind that this coefficient of .34 was positive in value, somewhat weak but close to moderate in strength, and was produced in a CFA that had model fit indicators all suggestive of acceptable reliability (thus far). Again, whether or not a low stability coefficient is the

\(^4\) Even though deleting this parameter showed slight improvements in the overall model fit, there was no theoretical reason as to why this measure’s error was different from the other indicators. Therefore, this correlated error term remained as the overall model fit was still reliable.
product of weak reliability over time or attitudinal discontinuity can be complicated but
the anticipation was that mean differentials were the likely culprit for why this coefficient
was not stronger in value. Prior to mean comparisons, further analyses were conducted to
ensure the measurement reliability over time.

The next step in testing for longitudinal measurement invariance involved
constraining factor loadings equal to one another across waves, which produced Model
1C. As seen in Table 5.5, Model 1C also had good model fit. Model fit comparisons
between Model 1C and Model 1B regarding the \( \Delta \chi^2 \), \( \Delta \text{CFI} \), and \( \Delta \text{RMSEA} \) indicated
Model 1B and Model 1C were not statistically different from one another (p > .05).
Next, indicator intercepts were constrained equal to one another, called Model 1D.
Model 1D was invariant from Model 1C, indicating the observed scores of the indicators
were not changing over time. Although some consider it a restrictive test (Byrne 2010;
Chan 1998) since previous models showed metric invariance from Wave 1 to Wave 2,
Model 1E was created in which indicator error variances for all 8 factors were
constrained equal (i.e. factor variance at Wave 1 constrained equal to repeated measure’s
variance at Wave 2), in addition to the existing factor loading and factor intercept
constraints. This “hypothesis of equal reliabilities” (Lance and Vandenberg 2000:34)
further supported the notion that these measures were equivalent at each data point as
seen in the model-fit difference tests between Models 1E and 1D.
Figure 5.1. Results of Longitudinal Confirmatory Factor Analysis (LCFA) (Model 1B)

Notes: All factor loadings and values in bold are significant (p < .001). All values are standardized estimates with SE in parentheses. Model fit indicators: $\chi^2 = 16.78$, df = 15, p = .332; CFI = .997; RMSEA = .02.
Since the conceptual domain showed consistency in the structural measures of patriarchal ideology across time, the final step in making sure that longitudinal measurement invariance was established was to compare factor loadings from Wave 1 to Wave 2. Parameter constraints were removed (with the exception of reference indicators) meaning individual factor weights were compared in Model 1B using z-tests (i.e. critical ratios of indifference). The z-scores for all factors showed no significant differences ($z < 1.96$) across data points, further supporting the notion that patriarchal ideology had longitudinal measurement invariance. In sum, the LCFA with equivalence tests answer Q2 by simply saying: *the measures for patriarchal attitudes were invariant over time.*

PREDICTORS OF PATRIARCHAL ATTITUDES BEFORE AND AFTER ONE YEAR OF COLLEGE

*Q3: What are the Predictors of Patriarchal Attitudes before College and after One Year of College?*

A correlation matrix containing bivariate Pearson’s $r$ correlations among all variables can be found in Table 5.6. Instead of including each individual indicator of patriarchal attitudes, the composite scales are provided (i.e shortened in name due to space to Pattitudes1 and Pattitudes2). Bivariate analyses were conducted to get a feel for what relationships would likely be significant in multivariate analyses.
Table 5.6. Pearson’s r Correlation Matrix, Cohort 2 Deleted

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***p < .001; **p < .01; *p < .05
SEM was used to assess the predictors of patriarchal attitudes for the pretest and the posttest, independent of one another, known as MIMIC models (see Figure 4.3 from previous chapter). Results from both of these MIMIC models can be found in Figure 5.2 (Wave 1) and Figure 5.3 (Wave 2). A few of these key relationships are discussed herein, but keep in mind that two models were assessed, independent of one another so as not to confuse auto-correlated effects. At Wave 1 the independent variables explained 11% of the variance in patriarchal attitudes, as evidenced by the squared multiple correlations (SMC) of the patriarchal attitudes predictors. At Wave 2, the independent variables explained 15% of the variance in patriarchal attitudes (SMC = .15).

As seen in Figure 5.2, witnessing domestic violence was significantly related to patriarchal attitudes at Wave 1 (b = .24, SE = .17, p < .001), but not at Wave 2 (b = .13, SE = .21, p = .07). This indicates that pre-college patriarchal attitudes were .22 units higher among individuals that witnessed domestic violence compared to those that did not witness domestic violence as a child while controlling for other key independent variables. However, the negative effects witnessing domestic violence had on patriarchal attitudes appeared to subside after the first year of college. White was significantly related to patriarchal attitudes at Wave 2 (b = -.14, SE = .15, p < .05), but not Wave 1 (b = .10, SE = .12, p > .05). That is, whites and non-whites had no significant differences in patriarchal attitudes before college, but after that first year whites' patriarchal attitudes were .14 units lower than non-whites. Frequency in dating was not significantly related to patriarchal attitudes at Wave 1 (b = -.04, SE = .10, p > .05) but at Wave 2 it did approach significance (b = -.14, SE = .11, p = .07). This indicates that frequency in dating did not have any effect on pre-college patriarchal attitudes. However, frequent
daters in college had levels of patriarchal attitudes that were -.14 units less than individuals that rarely dated.

Regarding relationship violence perpetration and victimization, neither one at Wave 1 or Wave 2 were significant predictors of patriarchal attitudes. Relationship violence perpetration at Wave 1 approached significance (b = .18, SE = .10, p = .07). Because this variable was computed using the \( \ln \) function, this implies that for every unit increase in relationship violence perpetration, we would expect a 19% increase in patriarchal attitudes while holding all other independent variables constant.

MEAN DIFFERENCES IN PATRIARCHAL ATTITUDES

Q4: Do Patriarchal Attitudes Change from Pre-College to the end of One's Freshman Year?

Recall that the earlier paired-samples t-test of the patriarchal attitudes scale originally showed significant differences (\( t = -9.90, \text{df} = 457, p < .001 \)) in mean values from Wave 1 (= 8.29) to Wave 2 (\( \bar{x} = 10.26 \)), but remember that this scale initially contained Cohort 2. The paired samples t-test also included just 458 of the original 636 respondents that were combined from cohorts 1 and 2 due to missing values (i.e. listwise deletion). Since Cohort 2 lacked measurement reliability and only Cohort 1 was being used, a similar comparison to this earlier t-test was to do the same paired-samples t-test of just Cohort 1, which Table 5.2 reported earlier in this chapter.
Figure 5.2. MIMIC Model for Wave 1

White
Witnessed Domestic Violence
Religious
Patriarchal Peers
Sex Assault Program
Frequent Dater
Single
Rel. Violence Perpetration
Rel. Violence Victimization

Patriarchal Attitudes Pre-College

askforit
hitwife
herfault
crywolf

$R^2 = .11$

***$p < .001$

Notes: *Approaches significance ($p = .07$); Model Fit Indicators: $\chi^2 = 41.39$, df = 29, $p = .06$; CFI = .980; RMSEA = .04. Significant estimates are in bold. Only significant ($p < .05$) covariates are drawn in the above diagram, but all independent variables covaried with one another. All error terms and residual variances were significant ($p < .001$). $R^2$ is actually squared multiple correlation. Regression parameters reflect unstandardized estimates, followed by SE in parentheses, with b estimates right below.
Figure 5.3. MIMIC Model for Wave 2

White
Witnessed Domestic Violence
Religious
Pat Peers2
Sex Assault Program2
Frequent Dater2
Single2
Rel. Violence Perpetration1
Rel. Violence Victimization2

Patriarchal Attitudes End of 1st Year

R² = .15

Notes: *Approaches significance (p = .07); Model Fit Indicators: χ² = 41.39, df = 29, p = .06; CFI = .980; RMSEA = .04. Significant estimates are in bold. Only significant (p < .05) covariates are drawn in the above diagram, but all independent variables covaried with one another. All error terms and residual variances were significant (p < .001). R² is actually squared multiple correlation. Regression parameters reflect unstandardized estimates, followed by SE in parentheses, with b estimates right below.

***p < .001
In short, the average level of patriarchal attitudes decreased from Wave 1 to Wave 2. However, this decrease was not statistically significant, indicating patriarchal ideology was stable from the initial, pre-college values to the end of one’s freshman year. However, the paired samples t-test was not as robust of a test for assessing mean difference scores as a CFA with structured means (see Arbuckle 2009: 229-240 for a review). The main reason the CFA with structured means is more reliable is its ability to model error-terms for each indicator/factor as well as the ability to include the full sample size for Cohort 1 (n = 332) by using maximum-likelihood (ML) estimation for missing values lost to attrition at Wave 2.

CFA with structured means comparisons were assessed using multi-group structural equation modeling (MGSEM). All models and their appropriate goodness-of-fit statistics are presented in Table 5.4. The first step in the MGSEM was establishing appropriate model fit for each wave separately, which was the CFA models from Q1 that already showed reliable measures for each independent wave. The next step involved the initial, baseline multi-group model (Model 1.1), which freely estimated all parameters (with the exception of one reference indicator for each data point). As expected, Model 1.1 had acceptable model fit with the data. The next model constrained all parameters equal to one another (Model 1.2). This model also had good model fit and showed no significant differences (p > .05) from it to Model 1.1. The next model (Model 1.3) constrained the intercepts of each factor equal to one another while keeping all of the previous parameter constraints from Model 1.2. Model 1.3 also produced good model fit. Next, Model 1.4 removed the Wave 1 latent variable (patriarchal attitudes) mean constraint, which defaults = 0. The Wave 2 mean constraint of 0 remained. Since SEM
is typically not used for mean difference comparisons, there is no procedure for computing a mean for each latent variable simultaneously (Arbuckle 2012). Thus, either Wave 1 or Wave 2 needed its mean constrained to 0 while the other was freely estimated (while keeping all previous constraints). The constraining of the Wave 2 mean to 0 was completely arbitrary. As seen in Table 5.4, Model 1.4 had good model fit. The mean in patriarchal attitudes at Wave 1 was .04 units higher than the mean at Wave 2. However, this difference was not statistically significant (p = .602), indicating the answer to Q3 is simply: patriarchal attitudes did not change from their pre-college levels to the end of the first year of college.

PATRIARCHAL ATTITUDES AND STABILITY

Q5: What Accounts for the Change or Stability in Patriarchal Attitudes from Pre-College to the End of One’s Freshman Year?

The earlier measurement model assessing longitudinal measurement invariance of patriarchal attitudes found that the correlation between the two latent factors was significant, but only moderate in strength ($r = .34, p < .001$). The value of this autocorrelation led to the assumption that patriarchal attitudes were stable over time (i.e. stability coefficients). This assumption was strengthened by the previous mean comparison tests.
Table 5.7. Goodness-of-Fit Statistics for Multi-Group Structural Equation Models

<table>
<thead>
<tr>
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<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
<th>CFI</th>
<th>RMSEA</th>
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<td>1.4. Constrained factor loadings, factor intercepts. $M$ of Patriarchal Attitudes</td>
<td>1.4 vs 1.3$^a$</td>
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</table>

Notes: df = degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation. $^a$The $\chi^2$ and df were both lower than the previous model because Model 1.3 had mean constraints = 0 for patriarchal attitudes at both waves (the default value in SEM) and Model 1.4 only constrained one of these.
Stoolmiller and Bank (1995) suggested that when repeated measures produce small levels of change, autoregressive (AR) SEM (i.e. residual change model) may be better than simple difference score (SDS) models at assessing predictors of change. Arbuckle (2012) provides an alternative to the popular ANCOVA technique when variance over time is of interest and is most closely in line with the autoregressive method. The first approach simply took the previous LCFA from Q2 and changes the model from a measurement model to a structural model by replacing the double-headed covariance between the two latent factors of patriarchal attitudes with a single-headed arrow from Wave 1 to Wave 2. The first step actually produced a regression weight that was exactly the same as the previous covariance value as well as model fit parameters that were the same as the LCFA (which were reliable). Thus, the previous LCFA showed reliable measurement and introducing manifest variables in an autoregressive SEM could continue. However, due to model complexity, patriarchal attitudes were included in these models as a composite scale (i.e. observed variable). Also, since the previous chapter noted the somewhat exploratory nature of these analyses, the goal was to create the most parsimonious model based on sound theory and empirical evidence from previous analyses. Therefore, the new model (seen in Figure 5.4, with results) includes the constant variables witnessed domestic violence and white (excluding religious due to non-significance in earlier analyses). The time-variant measures included: patriarchal peers, relationship violence perpetration1 and patriarchal attitudes1. Other time-variable measures were left out because of non-significance and frequent dater was included at first, but doing so produced poor-fitting models. The model was not fully-identified so as
to allow for some flexibility in degrees of freedom. The final model, pictured in Figure 5.4, had acceptable goodness-of-fit statistics ($\chi^2 = 2.33$, df = 5, p = .803).

A few things should be highlighted from Figure 5.4. First, the predictors of each time-variable measure are all fairly weak at explaining the variance in each (i.e. squared multiple correlations), presented as $R^2$. Regarding stability, or predictors for Wave 2 variables, the only significant cause parameter is the parameter from Patriarchal Peers 1 to patriarchal attitudes 2 ($b = .14$, SE = .02). The variance in the residuals for each repeated measure further suggested stability in that z-scores reflect no significant changes in each ($z < 1.96$).

Although it was known prior to this analysis that accounting for change in a two-wave panel design is inherently difficult, a tentative conclusion can be drawn for now. That is, the answer to Q5 is simply: accounting for the stability in patriarchal ideology is very difficult with the current dataset. Although this answer to Q5 may be entirely unsatisfying, it is the only valid answer considering the available data. Given the confounding issues with two-wave panel designs, any other conclusions might be erroneous. However, one area to discuss is in the area of male peer influence on patriarchal attitudes. Patriarchal peers might cause stability in patriarchal attitudes in college but the origin of patriarchal attitudes before college starts appears to be unrelated to patriarchal peers. Keep in mind, however, the effect of patriarchal peers in the cross-sectional analyses was non-significant when other controls were added to the model. This is a point further explored in the discussion chapter, Chapter 8.
RECIPROCAL EFFECTS OF RELATIONSHIP VIOLENCE AND PATRIARCHAL ATTITUDES

Q6: What are the Reciprocal Effects of Patriarchal Attitudes and Experiences with Relationship Violence?

The directionality of the patriarchal attitudes/relationship violence variables was going to be assessed using non-recursive SEM. Unfortunately, these were not possible. Cross-lagged, non-recursive models require at least three data points (Kenny 2012). An alternative was to at least conduct a cross-sectional, non-recursive model for each wave independently. This too was problematic. Essentially, non-recursive causal models suffer from inherent problems of under-identification (Berry 1984). One way around this is to include exogenous variables that covary, but predict different outcomes (i.e. instrumental variables). This was not possible with either Wave 1 or Wave 2. Simply adding non-significant variables to improve model fit (i.e. adding a variable = 0 was the same thing as not adding a variable) was inappropriate.
Figure 5.4. Autoregressive SEM Assessing Predictors of Change/Stability in Patriarchal Attitudes

***p < .001; **p < .01; *p < .05

Notes: * Approaches significance (p = .06). ** Approaches significance (p = .07). Values are standardized estimates (SE in parentheses). Dashed arrows p > .05. Values presented above ellipses are fixed weights for the mean of 0, followed by the variance. R² is technically the squared multiple correlations since AMOS computes an estimate of how much variance the predictors of each variable explain, rather than an R² for the whole model. Model Fit Indicators: χ² = 2.33 (df = 5, p = .80); CFI = 1.0; RMSEA = 0.0.
In short, *Q6 could not be answered because of limitations in the data that prevent logical theoretical tests of reciprocal relations between patriarchal attitudes and relationship violence.* Fortunately, the data in the next chapter had three data points and non-recursive models could be conducted that assessed the reciprocal relationship between relationship violence and patriarchal attitudes.

**LIMITATIONS**

Assessing change in two-wave panel designs can involve a number of statistical approaches (Kline 2011; Markus 1979). While the numerous analysis techniques are partially a reflection of how advanced statistical techniques have become, none of these can account for the fact that assessing change from just two waves of data is inherently difficult. However, two-wave panel models can provide preliminary insight into building more complex (or more parsimonious) theoretical models, which could aid in the analyses covered in the next two chapters.

One benefit of having fewer data points in a longitudinal analysis is that the threat to internal validity known as history is far less likely (see Campbell and Stanley 1963). While other threats to internal validity are also minimized in one group pre-test/post-test designs, history is particularly important to discuss when dealing with concepts like patriarchal ideology that may be influenced by macro-level factors. Although it was previously discussed that changes in the structure of patriarchy can occur without any change to the ideological components, this does not mean institutional sources can never influence patriarchal ideology. The limited data points here, and the relatively short time
period between them (9 months) is beneficial for reducing the likelihood that aggregate
and/or exogenous variables that are unaccounted for will influence the outcomes.

This limitation, however, seems contradictory to the longitudinal measurement
variability of patriarchal attitudes for Cohort 2. Also, keep in mind that Chapter 4 had a
footnote (Footnote 2) that showed these measures were unreliable for Wave 3 for Cohort
1. Admittedly, these findings were completely unexpected. It is possible that these
measures were just not reliable over time and perhaps it was mere coincidence that Wave
1 and Wave 2 were reliable for Cohort 1. Attitudinal measures, after all, are considered.
Despite this, some have measured ideological constructs reliably in the past (see Chapter
3). There may be something unique about patriarchal ideology that makes attitudinal
constructions of them variable over time and perhaps other methods of capturing this
construct are more reliable. Theoretically and methodologically these points, in general,
are definitely possibilities. However, I suspect that the actual data collection techniques
were the likely culprit for the lack of longitudinal measurement invariance.

At the beginning of this chapter, I gave the breakdown of the sample size
distributions at each data point for each cohort. In the next chapter I do the same
regarding the vignette-style items. Although more detailed in that section, briefly, I
should mention that Cohort 1 was not given those items at Wave 2, but Cohort 2 and
Cohort 3 were. Once Cohort 1 was given these items at Wave 3, the reliability of the
attitudinal items dropped considerably. Moreover, 175 respondents from Cohort 1 at
Wave 3 were missing from the attitudinal items, the same number of respondents that
had valid responses to the newly added vignette items. This seemed too odd of a
coincidence, but nowhere in the codebook was this mentioned. The principal investigator
was also unaware of any overlap in items that would create this issue\(^5\). This is one of the consequences of dealing with older datasets, unfortunately, and is one of the limitations in this data. Pointing out the confounding issues of these items actually helps solidify the analyses that were done, however. If the only times (with the exception of Wave 3, where it appears half the sample received the vignette-style items and half received the attitudinal items for Cohort 1) that the attitudinal measures were not reliable were when these new items were not included in the surveys, then most likely the survey construction is the real reason for the lack of longitudinal measurement reliability for Cohort 2 and for more than 2 data points.

The last limitation to discuss in this chapter is that this sample of college males was not generalizable to males in the general population. Additionally, the college students selected are not nationally representative of all college students since they are from one college. Also, the emphasis placed on intersectionality in previous chapters cannot account for the fact that the use of a homogenous sample of college students produces nothing more than a dichotomous measure of race and no indicators of SES. The use of a non-representative sample is somewhat problematic for theory building concerned with patriarchal ideology for men in general. However, insights can be gained from the current research since it is really the first of its kind to assess individual patriarchal ideology as the key outcome variable for \textit{any sample of males}. Future studies should analyze individual patriarchal ideology over time amongst samples of the general population, especially those with more variable race categories and some measure of

\(^5\) Jackie White, email correspondence, November 11, 2011.
SES. College men, however, do present some unique attributes that make them interesting to study. This is why many research studies involving violence against women have relied on samples of college men (e.g. DeKeseredy and Kelly 1993b; Koss et al. 1987; Porter and Williams 2011; Schwartz and DeKeseredy 1997).

CONCLUSION

This chapter provided the analyses that addressed 6 major research questions about attitudinal measures of patriarchal ideology. The panel data of college males from 1990-1991 was analyzed in a test/retest manner in order to assess: 1) the measurement structure of the attitudinal items of patriarchal ideology, 2) the reliability of these measures over time, 3) the predictors of patriarchal ideology, 4) the change/stability in patriarchal ideology, 5) the reasons for the change/stability, and 6) the reciprocal relationships between patriarchal ideology and relationship violence experiences.

The findings imply that attitudinal measures of patriarchal ideology are reliable, even over time with only minor reservations, most likely due to data collection techniques. In multivariate analyses, witnessing domestic violence between one's parents suggested a higher level of pre-college patriarchal ideology than those that did not witness domestic violence, while controlling for other key independent variables. These effects were not as significant at the end of the first year of college, although α levels did approach significance. This was the only significant predictor of pre-college patriarchal ideology, although relationship violence perpetration did approach the α level as those with higher levels of involvement were likely to have higher levels of patriarchal ideology. At Wave 2, the only significant predictor of patriarchal ideology was race,
suggesting non-whites had higher levels of patriarchal ideology than whites. One variable besides witnessing domestic violence approached the α level of significance at Wave 2, was dating frequency. That is, those that dated rarely or only occasionally in the first year of college appeared to have lower levels of patriarchal ideology than those that dated frequently.

Regarding change, individual patriarchal ideology appears to have been stable from wave to wave. The exact source of this stability was difficult to assess, although there was some evidence that patriarchal male peers prior to college significantly predicted higher levels of patriarchal ideology after the first year of college. Patriarchal male peers during college, however, were not indicative of a higher level of patriarchal ideology. In other words, it appears patriarchal male peers before college may have a delayed effect on patriarchal ideology, since they were not significant predictors until after the first year of college. No other explanations for stability could be drawn. The last research question could not be assessed. This was either due to non-reciprocity between patriarchal ideology and relationship violence experiences because these constructs/experiences are just not related (hence why none of the models were reliable) or limitations in the data.

Some of the limitations in the data and analyses from this chapter are addressed in the next two chapters. Those analyses ask very similar research questions in comparison to those addressed in this chapter. Although there are slight variations in these questions, overall, they, in combination with this chapter’s questions, address the overall question of: how does patriarchal ideology change over time and what accounts for these changes
(if any)? After the next two chapters is Chapter 8, the Discussions chapter in which many of the findings from this chapter and the next two will be put into context.
In this chapter, a major limitation of the previous analyses is addressed. Specifically, the difficulty in assessing "true change" in individual patriarchal ideology from two data points is addressed in this chapter. This chapter describes a more sophisticated method for modeling intra- and inter-individual change in patriarchal ideology through the use of latent growth curve modeling (LGM) over three waves of data. LGM accounts for some of the deficiencies found in the previous chapter's analyses, but is not without its own limitations. As Rogosa, Brandt, and Zimowski (1982) so eloquently put it, "To discard the logic of models for individual change because of the deficiencies of two-wave data is like 'throwing away the baby with the bathwater'" (735). The prior chapters' analyses, along with those described in this chapter (results in Chapter 7), complement one another in providing a holistic approach to understanding individual patriarchal ideology. Outside of the LGM approach, the other key distinction in the second major analysis is the key outcome, patriarchal ideology, is measured with vignette-based items instead of attitudinal measures. Five of the key research questions addressed with the LGM analyses (which closely parallel research questions from the previous two chapters) are:

Q1: Are the vignette-based items reliable measures of patriarchal ideology?
Q2: Does patriarchal ideology change over time?
Q3: If patriarchal ideology does change, in what direction does it change (i.e. what is the trajectory of patriarchal ideology over time)?
Q4: How does patriarchal ideology change over time (i.e. direction of trajectory) in conjunction with relationship violence involvement?

Q5: What predicts the variation in patriarchal ideology over time?

Q6: What is the reciprocal relationship between patriarchal ideology and relationship violence?

Unlike the previous chapter, where all research questions were addressed in the analysis chapter, Q1 and Q2 are addressed in this chapter, and the remaining questions are in Chapter 7. This was done so that Chapter 7 would focus entirely on multivariate growth and change in the key variables of interest.

This chapter begins with a description of the data and sample used in this chapter and Chapter 7. This is followed by a discussion of the key variables of interest, including their descriptive statistics and reliability analyses for key constructs. Then, bivariate analyses are performed to help get a basic understanding of some of the key relationships of interest in later multivariate models. Lastly, the growth curve models used to address many of the above research questions are explained. The next chapter (Chapter 7) presents the results of various models aimed at addressing Q3-Q6.

DATA AND SAMPLE

The methods described in this chapter rely on data from the same Longitudinal Study of Violence against Women (White et al. 2002) as the previous test/retest analyses. As part of the original research design, the items used to represent patriarchal ideology in this chapter were added to the survey after the initial wave of data collection. Thus, Wave 2 (end of first year of college; end of freshman year), Wave 3 (end of second year
of college; end of sophomore year), Wave 4 (end of third year of college; end of junior year), and Wave 5 (end of fourth year of college; end of senior year) all contained these items; however, Wave 5 was deleted because the sample size was too small for LGM (n < 200; see Byrne 2010). This left Wave 2, Wave 3, and Wave 4 as the data points under study for the current chapter, with results in the very next chapter (Chapter 7). Since the previous chapter used this same dataset, the waves of data are called Waves 2, 3, and 4 even though Wave 2 was the initial/baseline data point for this chapter.

Recall that the original sample size was 851. However, this number was reduced when respondents with missing answers (mainly due to attrition) at all three waves regarding the key dependent variable of patriarchal ideology were deleted from the dataset. Thus, the initial sample size for Wave 2 was 578. That is, 578 respondents had at least 1 data point in which they responded to the key outcome variable of interest: patriarchal ideology. Table 6.1 summarizes the total sample size at each time point along with sample retention rates.

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1 Class level changes are not automatic from year to year if the appropriate credits are not met. However, the assumption was that most participants were making satisfactory progress from one academic school year to the next. While it is possible some may have made satisfactory progress towards graduation within 4 years and not made the expected, time-appropriate increase in class status, the time periods are at times referred to in relation to class-status (e.g. “end of sophomore year”). This was done mainly because of the generality and easy frame of reference that college-class level provides.
**Missing Data**

Recall that in the previous two-wave panel analyses there were three cohorts combined into one dataset as part of an accelerated-cohort sequential design. By combining all cohorts, the original research assumed cohort effects were not present, essentially employing a traditional longitudinal design. Table 6.1 provides clarity regarding the size of each cohort at each wave of data collection since there was data missing by design as well as data missing due to attrition. Cohort 1 was the only cohort that did not receive the items/indicators of patriarchal ideology across all three time points and for reasons not discussed by the original researchers, they only received these measures at Waves 3 and 4 (i.e. missing by design at the initial data point, see Little and Rubin 1989). When data were missing by design, they were treated as MCAR whenever LGMs were used (see Duncan, Duncan, and Strycker 2006). These missing cases, as well as those lost due to attrition, and those missing due to item non-response (< 5%) were later estimated using maximum-likelihood (ML).

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2 Like the panel data from Chapter 4, the MCAR assumption was supported by an independent samples t-test was performed comparing the mean level of patriarchal ideology among those that remained at all three waves and those that dropped out (at any point). There were no significant differences between the patriarchal ideology of those that were retained at all three waves and those that dropped out of the study.
Table 6.1. Sample Size for Valid Responses for each Data Point for Cohorts 1, 2, and 3

<table>
<thead>
<tr>
<th>Wave 2 End of Freshman Year</th>
<th>Wave 3 End of Sophomore Year</th>
<th>Wave 4 End of Junior Year</th>
<th>Average Retention Percentage</th>
<th>Retention Wave 1 to Wave 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1</td>
<td>0 (1991)</td>
<td>175 (1992)</td>
<td>120 (1993)</td>
<td>69%</td>
</tr>
<tr>
<td>Total Sample Size</td>
<td>398</td>
<td>450</td>
<td>298</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Notes: Retention percentages of total sample are not listed since these can be difficult to interpret since Wave 3 “retained” more respondents than those that were available at Wave 2. *Items were not given to Cohort 1 until Wave 3 (i.e. missing by design).
Many of the variable descriptions discussed below appeared in the earlier two-wave panel models. The descriptive statistics of these, however, differ from those in Chapter 4. This is because of the differences in: the number of cohorts used, the number of data points, and the data points used including the initial wave of data. Also, because of various issues regarding missing data, some variables were excluded from the previous chapter while some new variables were introduced.

OPERATIONALIZING PATRIARCHAL IDEOLOGY WITH VIGNETTES

Whether or not the use of vignette items to represent ideologies is "better" or "worse" than traditionally used "attitude/agreement" statements is a contested issue. Finch (1987:105) correctly discussed how challenging it can be to study ideologies when she stated, "The empirical study of beliefs, values and norms has always posed some of the most difficult methodological questions for sociology." Using an individual's actions as a reflection of their ideology is highly problematic for two obvious reasons. First, the psychological literature on cognitive dissonance tells us an individual's actions can be at odds with their ideology. Second, this can be tautological if trying to predict an individual's actions based on their ideology (when the ideological measures contain the very actions one is interested in, in the first place). Finch (1987) argued for the use of vignettes as one of the more reliable measurement tools to measure ideology. Note the less subjective and contextual components of attitudes/ideologies:

Vignettes move further away again from a direct and abstracted approach, and allow for features of the context to be specified, so that the respondent is being invited to make normative statements about a set of social circumstances, rather than to express his or her 'beliefs' or 'values' in a vacuum. It is a method which, in other words, acknowledges that meanings are social and that morality may well be situationally specific. (Finch 1987:105-106)
Finch's argument helps make the case for why vignettes might be preferred when researchers are specifically measuring ideological concepts. Specific to violence against women, research from Pease and Flood (2008) has echoed Finch. They argued against the use of attitudinal statements in saying, "ideology is more concerned with how individual character is shaped by social conditions and social consciousness" [emphasis added] (554). The use of vignette-style items in assessing patriarchal ideology appears to be just as reliable, if not a better measurement technique than traditional attitudinal items.

The vignettes described in this chapter represent a dimension of patriarchal ideology: rape myth acceptance. At first glance, this may appear to be quite limiting since four dimensions of patriarchal ideology were previously discussed (i.e. dominance/power over women, hostile masculinity, rape myth acceptance, acceptance of violence against women). Recall that rape myth acceptance overlaps considerably with acceptance of violence against women and dominance/power over women. This is because rape is viewed as intrinsically violent\(^3\). At the same time, rape is a direct form of dominance for the individual perpetrator and at times institutional responses to rape have resulted in the continued subordination of women (Caringella 2009; Sanday 2007).

\(^3\) These issues are highlighted by Caringella (2009) who notes changes in legal terminology, "Redefining rape as criminal violence, or replacing the rape-as-sex view with the notion of rape-as-violence, is designed to make rape and/or sexual assault offenses as serious, legally and sociologically speaking, as other offenses that are violent in nature." However, she further argues that not all sexual assaults are violent and the sexual nature of these crimes can sometimes be lost if one nuances these terms.
Whether rape myth acceptance should be treated as a dimension of patriarchal ideology or as an indicator of an existing dimension is still unclear. For the current study, it is the only component of patriarchal ideology that the vignettes measured. For these reasons, the combination of these six items might be considered a proxy measure of patriarchal ideology.

OUTCOME VARIABLES AND RELIABILITY

Dependent Variable: Patriarchal Ideology

Patriarchal ideology was operationalized using six vignette-style items in which male respondents were given the following scenario:

There are a number of circumstances under which some people think it is OK to have sex with a woman who didn’t want to (i.e., resisted verbally and/or physically). How likely is it you would have sex with a woman when she didn’t want to if each of the following happened? (White et al. 2002)

The vignettes were:

- You spend a lot of money on her.
- She’s had sexual intercourse with other guys.
- She previously had sexual intercourse with you.
- She is stoned or drunk.
- She gets you sexually excited.
- She said she’s going to have sex with you and then changes her mind.
Responses were based on Likert-scale items (0- Never, 1- Very Unlikely, 2- Somewhat Unlikely, 3- Somewhat Likely, 4- Very Likely).4

Q1: Are the Vignette-Based Items Reliable Measures of Patriarchal Ideology?

The six vignette-based items were scaled into composite variables called Patriarchal Ideology2 (at times shortened for space and clarity to PID2), Patriarchal Ideology3 (at times PID3), and Patriarchal Ideology4 (at times PID4) for each respective wave. When referring to this variable in general and not in terms of any specific wave, it is presented as simply, “Patriarchal Ideology.” Each of the time-specific measures of patriarchal ideology had strong levels of reliability as evidenced by their Cronbach’s α values: Wave 2 (α = .901), Wave 3 (α = .920), and Wave 4 (α = .966). The descriptive statistics for these dependent variables can be found in Table 6.2. As anticipated, the six-

4 Original response options were: 0- No Response, 1- Very likely, 2- Somewhat likely, 3- Somewhat unlikely, 4- Very Unlikely, 5- Never. Response options were re-coded from the original data so that higher scores would indicate a higher degree of patriarchal ideology and 0 would be the baseline, consistent with other variables. Non-response items were recoded into a 9-Missing and were list wise deleted when all items were combined into a scale.
item scale had a positive skew\(^5\). Therefore, the variable PIDln was created to induce normality, in which the \(ln\) function of PID was computed (+1 due to 0 starting point). This was done for each time period (i.e. PIDln2, PIDln3, PIDln4). Because the patriarchal ideology variable was skewed, only the \(ln\) version of the variable was used in any of the analyses from this point forward. So when "patriarchal ideology" is seen in any of the analyses in the remaining sections of this chapter, it is the \(ln\) version, even if it is not explicitly labeled as such. Based on the \(\alpha\) values for each composite scale, the answer to Q1 is simply: \textit{yes the six vignette-style items all scaled together to form one reliable construct at each data point.}

The previous chapter did emphasize the importance of checking for longitudinal measurement invariance (i.e. longitudinal CFA). Longitudinal measurement invariance was not assessed here, however, because such models make more sense to conduct when latent factors are used in subsequent SEM models. LGM does not typically use latent

\(^5\) Although Chapter 3 highlighted that patriarchal ideology is normalized (e.g. complicit masculinities), these measures were proxy measures and were really only one dimension of patriarchal ideology, rape myth acceptance. However, since the items were based on hypothetical scenarios in which individuals \textit{would behave}, most individuals were thought to report that they would not rape in almost any circumstance, hence the positive skew. Theoretically, however, we would expect these values to be less extreme (as they were in the previous chapter) if they were traditional "acceptance of rape myths"-type measures in which they accepted rape in general (e.g. not individualizing it, friends use of rape).
constructs (since the slope and mean are modeled as latent factors). Although it is possible to first create a latent variable CFA and then assess the slope and mean of the latent construct as second-order factors, these models are quite complex and are difficult to fit with data from relatively small samples such as the one currently being used. While this may seem limiting to some, requiring latent factors as outcomes and means as well as slopes as second order factors is not a common practice within the LGM literature. The primary focus of LGM is not latent psychometrics, but latent factors that represent the change in the outcome (Preacher et al. 2008).

*Covariates of Patriarchal Ideology: Relationship Violence*

Table 6.2 also includes measures derived from 9 questions asked at all 3 waves that assessed relationship violence perpetration as well as another 9 items that assessed relationship violence victimization. Both the perpetration and victimization scale items contained 5 items regarding verbal aggression and 4 regarding physical aggression. The individual items were ordinal in that respondents were asked, "How often have these things happened during the last year?" Responses were: 0- 0 times, 1- Once, 2- 2-5 times, 3- 6-10 times, 4- more than 10 times⁶.

⁶ These responses reflect the current coding scheme. They were re-coded from the original scheme of 0- No Response, 1- 0, 2- Once, 3- 2-5 times, 4- 6-10, 5- More than 10 times. This was done for ease in interpretation so that 0 would reflect never, 1 would reflect 1, and then the subsequent numeric values would represent their respective categories.
LGM requires that outcome variables and their covariates be continuous. Ignoring the censored-nature of ordinal variables by combining them into composite scales produces highly skewed variables and over exaggerates less-serious ideologies/behaviors (Osgood et al. 2002). Nonetheless, two variables for each wave were created in which the ordinal nature was ignored and all 9 items were combined. These scales for relationship violence were known by their variable names of Relationship Violence Perpetration (at times shortened for space and/or clarity to RVP, followed by numeric values of either 2, 3, or 4 for each respective time point) and Relationship Violence Victimization (at times shortened to RVV, followed by the appropriate value for the respective time point). As expected, these items were positively skewed. In order to reduce their skew, the \( \ln \) function of each was computed (+1 due to "0" starting point). These newly computed variables can also be found in Table 6.2 (i.e. RVP2ln, RVP3ln, RVP4ln, RVV2ln, RVV3ln, RVV4ln). The reason for treating these measures as continuous was done in an exploratory sense in order to see how these items would perform in the subsequent LGMs since no prior research has assessed individual patriarchal ideology over time while controlling for the covariance of relationship violence variables. A third pair of variables were created for each wave in regards to perpetration that were similar to those created in the previous chapter in which the 9 items were dichotomized (0- Never, 1- Ever) then summed into one composite scale. Hindelang et al. (1981) found this to be reliable when dealing with skewed self-reported delinquency since: it induced normality, the higher values reflected more serious offenses.
(ideologies in the present case), and it avoided potential problems with assigning metric values to ordered categories. These variables actually remained non-normal (skewness statistic > 1.0, albeit less skewed than the original measures) after items were dichotomized. Because these variables did not meet the assumptions of normality, they were not included in any of the analyses. They are mentioned here because it was one possible alternative to the ln transformation, which ignored the ordinal nature of these variables (i.e. RVPln and RVVln variables). However, the variables that ignored the ordinal nature of these variables were preferred because it is far less biased than including non-normal measures. All composite scales for relationship violence perpetration and victimization across all waves were indicative of reliability (Cronbach’s α ≥ .80).

**Time-Variant Measures**

The descriptive statistics for the time-variant measures described below can be found in Table 6.3.

*Dating Frequency.* Respondent’s frequency in which they dated was captured over each wave of data with the question, “Which of the following best describes your dating behavior during the past school year? By a date we mean a planned activity with a specific person.” Responses ranged from: 0- Never dated to 4- Dated Frequently⁷. This variable label was “Frequent Dater” so that positive values would indicate a higher

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⁷ See previous note regarding the coding of this variable.
frequency in dating. At times, this variable is presented simply as “Dating” due to space limitations (e.g. Table 6.6).

**Relationship Status.** Relationship status was captured over three waves. As expected, most respondents were either single or in some form of a relationship (e.g. dating someone exclusively, engaged, married, divorced/separated/widowed). Thus, this variable was dichotomized (0- Not Single, 1- Single) and was simply called: “Single” so that positive values would reflect one’s single-status.

**Sexual Assault Program Attendance.** Respondents were asked whether or not they had ever attended a sexual assault awareness program. The responses were dichotomized (0- No, 1-Yes). In reality, the only change one would expect in this variable (if any) would occur from “No” responses to a “Yes.” Respondents cannot undo the fact that they had attended a sexual assault program. Nonetheless, some respondent’s changed their responses from “Yes” to “No.” The decision was made to accept these changes under the assumption that a respondent that changed their answer from a yes to a no had not fully understood what a sexual assault program was in earlier waves of data collection. However, it is equally likely that they thought the question was in reference to the past year (despite no change in the wording of the question) or that they forgot about their earlier attendance. Statistically speaking, t-test results showed no significant differences in the average number of respondents attending a sexual assault program from wave to wave, justifying the assumption and not re-coding the variable. This variable name was, “Sex Assault Program” but at times is shortened due to space and/or clarity reasons to “SAP” (followed by a numeric value for each respective wave).
Time-Invariant Predictors

The following predictors’ descriptive statistics can be found in Table 6.4.

Race. Respondent’s race was dichotomized (0- Other, 1- White). Other racial groups were present in the original surveys, but since so few respondents were non-white dichotomizing the race variable seemed appropriate. “White” was given as a label since white was coded as 1.

Witnessed Domestic Violence. Whether or not the respondent ever witnessed domestic violence between their parents was captured with the question, “For an average month, indicate how often one of your parents or stepparents delivered physical blows to the other.” Responses were ordinal: 1- Never, 2- One to five times, 3- Six to ten times, 4-11 to 20 times, 5- Over 20 times. Due to an expected skew and the difficulty SEM and LGM have with ordinal variables, this variable was dichotomized (0- Never witnessed domestic violence, 1- Witnessed domestic violence). For simplification, this variable was labeled, “Witnessed D. Violence.” At times, due to space limitations and/or clarity purposes, this variable is labeled “WitnessDV.”

Childhood Abuse Experiences. Whether or not the respondent was abused by a parent was asked with the question, “Physical blows (like hitting, kicking, throwing someone down) sometimes occur between family members. For an average month, when you were growing up (i.e., ages to years), indicate how often one of your parents did this to you.” Responses were ordinal: 1- Never, 2- One to five times, 3- Six to ten times, 4-11 to 20 times, 5- Over 20 times. It was hypothesized that in a sample of college students, most would not have experienced child abuse. This was supported in that this variable had a positive skew. Because of the skew and the difficulty SEM and LGM has
with ordinal variables, this variable was dichotomized: 0- No, 1- Yes. This variable is labeled in most figures as "Victim of Child Abuse", but at times, in some tables (e.g. Table 6.6) is shortened for clarity and/or space to “CAbuse.

Religiosity. Religiosity was captured over three waves of data with the question, “How much of an influence would you say religion has on the way you choose to spend your time each day during this school year i.e. August to the present?” Responses ranged from: 0- No influence to 3- A great deal of influence. While religiosity was originally hypothesized to be time-variant, a paired samples t-test showed that the mean at each wave (Religiosity2, \( \bar{x} = 1.04 \); Religiosity3 \( \bar{x} = 1.05 \); Religiosity4 \( \bar{x} = 1.04 \)) was not significantly different from Wave 2 to Wave 3 nor from Wave 3 to Wave 4 (\( p > .05 \)). The lack of variability in the mean of religiosity justified the inclusion of it as an exogenous predictor variable, which was continuous.

Rapist Best Friend. Borrowing from the Koss et al. (1987) “Sexual Experiences Survey” there were 10 items assessing the respondent’s best friend’s use of attempted or completed coerced sex. Participants were asked how often (0- No, 1- One time, 2- Two times, 3- three to five times, 4- More than five times) their best friend engaged in various

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8 The original variable was coded with the same responses ranging from 1-4, but were changed in order to stay consistent with other variables, whose starting points were also 0.
Table 6.2. Descriptive Statistics of Key Outcome Variables

<table>
<thead>
<tr>
<th>Variable (Coding)</th>
<th>Wave 2</th>
<th>Wave 3</th>
<th>Wave 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean (SD)</td>
<td>Skew</td>
</tr>
<tr>
<td>Patriarchal Ideology (Range 0-24)</td>
<td>397</td>
<td>5.53 (6.43)</td>
<td>1.34</td>
</tr>
<tr>
<td>Patriarchal Ideologyln</td>
<td>397</td>
<td>1.38 (1.03)</td>
<td>0.07</td>
</tr>
<tr>
<td>Rel. Viol. Perpetration (Range 0-36)</td>
<td>567</td>
<td>2.72 (3.90)</td>
<td>2.49</td>
</tr>
<tr>
<td>Rel. Viol. Perpetration</td>
<td>567</td>
<td>0.91 (0.87)</td>
<td>0.49</td>
</tr>
<tr>
<td>Rel. Viol. Victimization (Range 0-36)</td>
<td>566</td>
<td>3.55 (5.07)</td>
<td>2.45</td>
</tr>
<tr>
<td>Rel. Viol. Victimizationln</td>
<td>566</td>
<td>1.04 (0.96)</td>
<td>0.40</td>
</tr>
<tr>
<td>Variable</td>
<td>Wave 2</td>
<td></td>
<td>Wave 3</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>--------</td>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>Mean (SD)</td>
<td>skew</td>
</tr>
<tr>
<td>[Range/Coding]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequent Dater (Range 0-4)</td>
<td>569</td>
<td>3.16 (0.97)</td>
<td>-0.74</td>
</tr>
<tr>
<td>Single (0- Not Single, 1-Single)</td>
<td>575</td>
<td>0.66 (0.48)</td>
<td>-0.67</td>
</tr>
<tr>
<td>Sex Assault Program Attendance</td>
<td>557</td>
<td>0.19 (0.40)</td>
<td>1.55</td>
</tr>
<tr>
<td></td>
<td>296</td>
<td>3.27 (0.96)</td>
<td>-1.06</td>
</tr>
</tbody>
</table>
Table 6.4. Descriptive Statistics of Predictors

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>Other Racial Group or White</td>
<td>189</td>
<td>32.8</td>
</tr>
<tr>
<td>0- Other</td>
<td></td>
<td>388</td>
<td>67.2</td>
</tr>
<tr>
<td>Witness D. Violence</td>
<td>Ever witness domestic violence between parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0- No</td>
<td></td>
<td>527</td>
<td>93.6</td>
</tr>
<tr>
<td>1- Yes</td>
<td></td>
<td>36</td>
<td>6.4</td>
</tr>
<tr>
<td>Victim of Child Abuse</td>
<td>Ever physically abused by parent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-No</td>
<td></td>
<td>412</td>
<td>73.2</td>
</tr>
<tr>
<td>1-Yes</td>
<td></td>
<td>151</td>
<td>26.8</td>
</tr>
<tr>
<td>Patriarchal Best Friend</td>
<td>Best friend ever attempt sexual assault</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0- No</td>
<td></td>
<td>341</td>
<td>76.3</td>
</tr>
<tr>
<td>1- Yes</td>
<td></td>
<td>106</td>
<td>23.7</td>
</tr>
<tr>
<td>Religiosity</td>
<td>Influence of religion in day to day life (0- No Influence, 1- Some Amount, 2-Fair Amount, 3- Great Deal). Collected at each wave (Range 0-4), then combined into one overall religiosity scale (Range 0-9).</td>
<td>296</td>
<td>3.09 (2.65)</td>
</tr>
</tbody>
</table>
coercive sexual acts since the age of 14\(^9\). Responses ranged from: “Has he engaged in sex play (fondling, kissing or petting but not intercourse with a woman when she didn’t want to by overwhelming her with continual arguments and pressure?” to “Has he engaged in sex acts (oral or anal intercourse or penetration by objects other than the penis) with a woman when she didn’t want to by threatening or using some degree of physical force (twisting her arm, holding her down, etc.)?”

Because the 10 responses reflected extreme forms of delinquency (i.e. attempted sexual assaults and completed sexual assaults), it was no surprise that these variables all had a positive skew. Since the measures were ordinal, the decision was made to use the technique previously employed in this chapter that Hindelang et al. (1981) found to be reliable regarding the combination of skewed, ordinal variables. Thus, all 10 items were dichotomized into (0- No, 1- Yes) and combined to form a composite variable of patriarchal best friend ($\alpha = .821$). This variable also had a positive skew (albeit not as

---

\(^9\) These items were asked during Wave 3. Their retrospective nature makes them appropriate to use as a constant variable. It was not known what the respondent’s best friend’s experiences with sexual assault were at the initial wave (Wave 2), nor was it known if more respondent’s friends engaged in sexual assault from Wave 3 to Wave 4. Thus, it was possible that more respondent’s best friend’s attempted or completed a sexual assault than what is captured here. However, this increase is not expected to be drastic since this retrospective measure is going all the way back to when their best friend was 14.
skewed as the original 10-item scale). Thus, the decision was made to go one step beyond the Hindelang et al. (1981) technique in order to best account for the lack of normality by dichotomizing the composite scale (0- non-rapist best friend, 1- rapist best friend). While this reduced the variation in this concept, it served as a proxy measure for an individual’s differential association with patriarchal male peers. Based on the positive coding of this dichotomous measure, this variable was labeled “Rapist Best Friend.” Some tables were limited regarding space (e.g. Table 6.6) therefore, “RapeBF” was used.

Although this proxy measure of patriarchal peer support is not what is traditionally used, it does provide some alternative benefits to assessing this relationship. Mainly, one’s best friend is thought to have a greater likelihood of influencing their patriarchal ideology since the relationship is more intense than other peer associations.

10 Although this is admittedly not the best indicator of male peer support, it was the only one available in the data that had enough valid responses for the data points currently used. As noted in Chapter 3, male peer support for violence against women has been one of the more developed theoretical concepts that should be included in a theory of violence against women. Thus, a proxy measure is preferred over no measure. Furthermore, treating this measure as a constant might be problematic because male peer support is thought to be dynamic, not static (Schwartz and DeKeseredy 1997). Nonetheless, patriarchal male peer support has never been considered as an independent variable predictive of individual patriarchal ideology and its inclusion can be the starting point for future research in this area.
Intensity of the relationship is a crucial component to social learning theory (see Akers 2009). Traditional measures of patriarchal male peers may be capturing the intensity of the relationships (assuming one’s best friend is among the peer group) and the frequency of exposure to male peer groups but the former is just an assumption. While the current measure used herein is measuring the frequency in which the respondent’s best friend did various patriarchal/sexually assaultive acts, the frequency of contact/learning from these best friends is not known. The fact that the questions are about one’s best friend, however, ensures the intensity of the relationship.

BIVARIATE STATISTICS

Paired-Samples Test

Table 6.5 shows the means comparisons for time-variant measures, which used paired-samples t-tests for repeated measures. These analyses compared each variable from Wave 2 to Wave 3, Wave 3 to Wave 4, and Wave 2 to Wave 4. A limitation in t-tests with multiple data points is that they only account for changes at two data points. Despite this, this preliminary test gave a decent understanding of the relationships to expect in the more complex multivariate analyses in Chapter 7. While wave to wave comparisons make the most inherent sense, the Wave 2 to Wave 4 comparisons help show differences from the beginning data point to the end data point.
### Table 6.5. Results of Paired Samples T-Tests for Mean Differences in Repeated Measures

<table>
<thead>
<tr>
<th>Variable</th>
<th>Wave Comparison</th>
<th>M (SD)</th>
<th>N</th>
<th>t</th>
<th>df</th>
<th>( \Delta M ) (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patriarchal Ideology ln</strong></td>
<td>Wave 2 - Wave 3</td>
<td>1.40 (1.00)</td>
<td>273</td>
<td>9.28</td>
<td>272</td>
<td>0.66*** (1.17)</td>
</tr>
<tr>
<td></td>
<td>Wave 3 - Wave 4</td>
<td>0.74 (1.08)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wave 2 - Wave 4</td>
<td>1.15 (1.08)</td>
<td>292</td>
<td>4.77</td>
<td>291</td>
<td>0.37*** (1.32)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.78 (1.10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.42 (1.05)</td>
<td>176</td>
<td>5.94</td>
<td>175</td>
<td>0.60*** (1.34)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.82 (1.12)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Relationship Violence Perpetration ln</strong></td>
<td>Wave 2 - Wave 3</td>
<td>0.89 (0.88)</td>
<td>436</td>
<td>-3.3</td>
<td>435</td>
<td>-0.15*** (0.97)</td>
</tr>
<tr>
<td></td>
<td>Wave 3 - Wave 4</td>
<td>1.05 (0.96)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wave 2 - Wave 4</td>
<td>1.07 (0.97)</td>
<td>286</td>
<td>1.68</td>
<td>285</td>
<td>0.10 (0.97)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.97 (0.92)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>0.85 (0.86)</td>
<td>285</td>
<td>-1.87</td>
<td>284</td>
<td>-0.11 (1.02)^a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.96 (0.92)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Relationship Violence Victimization ln</strong></td>
<td>Wave 2 - Wave 3</td>
<td>1.02 (0.97)</td>
<td>436</td>
<td>-0.80</td>
<td>435</td>
<td>-0.04 (0.96)</td>
</tr>
<tr>
<td></td>
<td>Wave 3 - Wave 4</td>
<td>1.06 (0.94)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wave 2 - Wave 4</td>
<td>1.07 (0.96)</td>
<td>289</td>
<td>-0.41</td>
<td>288</td>
<td>-0.02 (1.01)</td>
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<td>1.10 (0.98)</td>
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<td>0.98 (0.96)</td>
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<td>-1.8</td>
<td>286</td>
<td>-0.12 (1.10)^b</td>
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<tr>
<td><strong>Frequent Dater</strong></td>
<td>Wave 2 - Wave 3</td>
<td>3.12 (0.98)</td>
<td>441</td>
<td>11.86</td>
<td>440</td>
<td>0.80*** (1.41)</td>
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<tr>
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<td>Wave 3 - Wave 4</td>
<td>2.33 (1.31)</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Wave 2 - Wave 4</td>
<td>2.39 (1.31)</td>
<td>289</td>
<td>-11.03</td>
<td>288</td>
<td>-0.89*** (1.38)</td>
</tr>
<tr>
<td></td>
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<td>3.29 (0.95)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>3.10 (1.00)</td>
<td>291</td>
<td>-2.53</td>
<td>290</td>
<td>-0.16** (1.09)</td>
</tr>
<tr>
<td></td>
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<td>3.26 (0.97)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Single</strong></td>
<td>Wave 2 - Wave 3</td>
<td>0.33 (0.47)</td>
<td>452</td>
<td>-1.55</td>
<td>451</td>
<td>-0.04 (0.58)</td>
</tr>
<tr>
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<td>Wave 3 - Wave 4</td>
<td>0.37 (0.48)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wave 2 - Wave 4</td>
<td>0.39 (0.49)</td>
<td>297</td>
<td>-2.28</td>
<td>296</td>
<td>-0.08* (0.58)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.47 (0.50)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.33 (0.47)</td>
<td>297</td>
<td>-4.07</td>
<td>296</td>
<td>-0.14*** (0.60)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.47 (0.50)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sex Assault Program Attendance</strong></td>
<td>Wave 2 - Wave 3</td>
<td>0.20 (0.40)</td>
<td>431</td>
<td>1.93</td>
<td>430</td>
<td>0.05* (0.52)</td>
</tr>
<tr>
<td></td>
<td>Wave 3 - Wave 4</td>
<td>0.15 (0.36)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wave 2 - Wave 4</td>
<td>0.15 (0.36)</td>
<td>290</td>
<td>-3.51</td>
<td>289</td>
<td>-0.10** (0.49)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.25 (0.43)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>0.17 (0.38)</td>
<td>288</td>
<td>-3.00</td>
<td>287</td>
<td>-0.08** (0.47)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.26 (0.44)</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

***p < .001; **p < .01; *p < .05

Notes: Listwise deletion used for missing cases (analysis-by-analysis). ^a Approaches significance (p = .06). ^b Approaches significance (p = .07).
Inter-Item Correlations

Table 6.6 provides inter-item correlations (i.e. Pearson’s $r$) of all of the key variables of interest. Previously discussed measures that were not normally distributed are absent from the table. Like the t-tests, these help in understanding some of the basic relationships before controlling for more in multivariate analyses.

ANALYTIC STRATEGY: USING LATENT GROWTH CURVE MODELING TO ASSESS PATRIARCHAL IDEOLOGY OVER TIME

Byrne’s (2010:304-309) research served as a guideline for the latent growth curve models. LGM was used within the Structural Equation Modeling (SEM) framework using AMOS 21 for Windows. Maximum-likelihood (ML) estimation was used for missing values.

The LGM technique allowed for the assessment of change in patriarchal ideology within individuals (e.g. Level-1, intra-individual) as well as between individuals (e.g. level-2, inter-individual) (see Willett and Sayer 1994). Multi-level modeling can also be performed using hierarchical linear modeling (HLM). While it is typically one’s personal preference for using either HLM or SEM for multi-level modeling, there are unique instances in which one should be used over the other. In the present case, since data was collected for each participant at the same point in time (for each cohort that is), the SEM technique was appropriate. Moreover, the SEM approach was preferred since it can estimate covariance structures (see Raudenbush and Bryk 2002). Covariance, after all,
Table 6.6. Pearson’s $r$ Correlations for All Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. White</td>
<td>1.00</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2. WitnessDV</td>
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<td>1.00</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>3. CAbsuse</td>
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<td>1.00</td>
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<td></td>
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</tr>
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</tr>
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<td>-.01</td>
<td>-.10*</td>
<td>.01</td>
<td>1.00</td>
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<td>-.11*</td>
<td>-.04</td>
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<td>-.01</td>
<td>.01</td>
<td>.70***</td>
<td>.74***</td>
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<td>-.03</td>
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<td>.08</td>
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<td>-.03</td>
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<td>-.01</td>
<td>-.01</td>
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<td>-.02</td>
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<td>.25***</td>
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<td>.27***</td>
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<td>.07</td>
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<td>.19**</td>
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<td>.02</td>
<td>.03</td>
<td>-.07</td>
<td>-.03</td>
<td>-.10</td>
<td>.06</td>
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<td>.07</td>
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<td>-.01</td>
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<td>-.16***</td>
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***p < .001; **p < .01; *p < .05
is a crucial component of a theory of patriarchal ideology and violence against women since patriarchal ideology and relationship violence experiences were thought to change/vary together. This contradicts with much of the literature that suggests that relationship violence should predict patriarchal ideology. Recall, however, that the exact causal order is not well understood, with little to no research considering the feedback effects between relationship violence and patriarchal ideology. In such cases, then, covariates are preferred since they make no assumptions regarding a relationship's direction.

*Single-Domain Growth Curve Models*

The first set of growth-curve models assessed the significance and the direction of change in the three key outcome variables of interest: patriarchal ideology, relationship violence perpetration, and relationship violence victimization. The models that assessed patriarchal ideology provided answers to two of the general research questions presented at the beginning of this chapter:

**Q2:** Does patriarchal ideology change over time?

**Q3:** If patriarchal ideology does change, in what direction does it change (i.e. what is the trajectory of patriarchal ideology over time)?

The expected growth was assumed to be linear (a common assumption when using LGM, see Byrne 2010). Figure 6.1 represents the hypothesized LGM for patriarchal ideology.

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11 In order to challenge this assumption, a quadratic factor could be added to any of these models, but unfortunately quadratic LGMs need a minimum of four data points.
(In variables used), which was the same structural model used for the relationship violence perpetration and victimization variables. Although the key variable of interest is patriarchal ideology, it is important to independently assess the trajectories of relationship violence experiences in order to provide context for later analyses when they are simultaneously assessed. Essentially, the 5 key components of Figure 6.1 are:

1) \( M_i \), the mean of the intercept (i.e. the average initial level of each construct at the first wave of data to end of one’s freshman year).

2) \( D_i \), the variance of the intercept (i.e. the amount of variation in the average initial level for each construct).

3) \( M_s \), the mean of the slope (i.e. the average rate of change from the average initial level).

4) \( D_s \), The variance of the slope (i.e. the amount of variance in the average rate of change).

5) \( cov \), The covariance between the slope and the mean (i.e. assessing whether or not individuals who have high initial levels experience higher rates of change).

The 1’s in Figure 6.1 from the latent intercept to each repeated manifest variable represent the constant intercept value for all three data points. The parameters from the latent slope factor labeled 0, 1, 2 represent each time point (0 – baseline/end of freshman year, 1 – end of second/sophomore year of college, 2 - end of third/junior year of college). The two-headed arrow from the latent intercept factor and the latent slope factor represents the covariance between the latent intercept and latent slope.
Figure 6.1. Hypothesized LGM for Patriarchal Ideology

Notes: The same structural model was used for Relationship Violence Perpetration and Relationship Violence Victimization. All three models used the ln versions of the observed variables.
Figure 6.2. Multiple-Domain Latent Growth Curve Model

Notes: Observed measures are ln versions. $M_i$ – Mean of intercept; $D_i$ – Variance of slope; $M_s$ – Mean of slope; $D_s$ – Variance of slope.
Conditional Model(s)

After the multiple-domain LGMs, the analytic strategy was to then account for the expected variation in any of the key outcome variables by introducing predictor variables (e.g. time-invariant, exogenous measures), also known as conditional models. No figure is provided here since the exact model was not known until the results of the previous multiple-domain analysis was known. Essentially, these exogenous variables (i.e. White, Witness D. Violence, Victim of Child Abuse, Rapist Best Friend) were added to the multiple domain model in which all four variables co-varied with one another and each had regression parameters directly predicting the intercept and slope of each latent variable. In order to assess the covariance between these latent factors (which is not possible once predictors were added to the model), residual terms are added to each latent factor and covariances between the residuals serve as “proxies” for the variance of the latent factor intercepts and slopes (see Byrne 2010).

Time-Variant Covariates

After the multiple-domain LGM, either more time-variant measures could have been added to the model (as covariates, making no assumptions regarding temporal order) or the time-invariant predictors could be assessed. The analytic strategy was to do the latter because these exogenous variables were thought to account for inter-individual change. Also, time-variant measures add quite a bit of complexity to these models (i.e. one time-variant measure means 3 new manifest variables to the model), which increases the likelihood that the model fit indicators would suggest rejecting the models. Because of this, time-variant measures were assessed in an exploratory sense, with specifics
discussed in Chapter 7. Also, because of the exploratory nature of introducing time-variant covariates to the model and because the conditional model would determine the initial, best-fitting model, there is no hypothesized figure included here.

LIMITATIONS

There are some limitations with the data as well as with the analyses in this chapter. The data are limited in that the initial data point is the end of the respondent’s freshman year. There may have been influences of patriarchal ideology that occurred during that first year of college that are unknown in these analyses because pre-college measures of patriarchal ideology are missing. Additionally, the items that represent patriarchal ideology are a proxy measure or, at worst, just one dimension of patriarchal ideology. These limitations are duly noted, which is why it is important to re-iterate that some of the shortcomings in this Chapter are accounted for in Chapter 4 and vice versa. Both chapters, however, cannot account for the fact that this data is dated. It is important to acknowledge that findings could reflect male college students at this particular historical time period (1991-1995). Related to this, this sample is a convenience sample and findings could be a reflection of one particular group of male college students in one particular region of the country. Since no prior studies have looked at individual patriarchal ideology and how they change over time, this research should serve as the baseline to studying them. Thus, the only way to know whether or not the findings are a reflection of this historical time period or this particular social setting is to replicate the research and draw from more generalizeable samples in the future.
One way to account for time-period effects is to use a cohort-sequential (Baltes, Cornelius, and Nesselroade 1979) LGM that uses calendar year as the wave of assessment rather than year in college. The data could easily be reorganized to create this alternative metric of time, while controlling for age, however, doing so would make little theoretical sense. As Baltes et al. (1979:85) note, “The issue of trifactorial age-cohort-time of measurement confounds is only relevant if one assigns theoretical status to all factors.” The developmental model used throughout this chapter is based on the fact that participants are homogenous regarding age and that year of data collection (i.e. cohort) is less relevant than year in college (time period).

The LGM analyses have some limitations as well. These coincide with data limitations regarding sample size. That is, the complex models that include time-invariant and time-variant predictors of patriarchal ideology and relationship violence will include too many parameter estimates for this sample size. Some researchers believe the ratio in sample size to parameter estimates should be 20:1 (Jackson 2003), whereas others feel 10:1 is satisfactory (see Kline 2011). Thus, the LGMs will need to introduce certain variables one at a time rather than all at once while remaining cognizant of the relevant parameters needing to be estimated in relation to sample size and model fit.

Missing data creates some issues as well with LGM. Most missing cases are either missing by design (i.e. absence of baseline measures for Cohort 1) or attrition in subsequent waves. For these cases, ML will be used to estimate these responses, a technique that has been reliable for SEM in general and LGM specifically (Allison 2002; Preacher et al. 2008). The key outcome variable, however, is the only variable missing by design at the initial wave (for Cohort 1). This can create problems with internal
consistency when the data are not collected at the same occasion for all individuals (Preacher et al. 2008). The combination of all cohorts actually does meet the assumption that all individuals are measured at the same occasion (end of each academic school year). This is a redundant point that must be emphasized yet again since this dataset is quite complex regarding multiple cohorts, multiple waves, and multiple years. It also meets the assumption that “planned missingness” items be treated as MCAR (thus ML is appropriate) since this is a type of missing data that can be controlled (Duncan et al. 2006).

The ML function for the missing by design items at the baseline meets the assumptions of LGM and SEM, but the estimates could still be biased. For this reason, MGSEM will be used in which one group includes Cohorts 2 and 3 (complete data) and another group includes Cohort 1 (missing by design) (for a review see Duncan et al. 2006; Preacher et al. 2008). Doing this provides the best fitting model for both groups simultaneously. Keeping with this same technique, as a sensitivity analysis, all 3 cohorts will be partitioned using the MGSEM approach in order to check for potential cohort interactions. Cohort effects would suggest that the developmental model of patriarchal ideology proposed is insufficient and interactive, contextual, and ecological models are perhaps more explanatory than micro-level variables (Baltes et al. 1979).

CONCLUSION

This chapter provides an overview of how patriarchal ideology is operationalized in studying its change over time. Analyses are described that will use LGM to assess what the trajectories of patriarchal ideology look like over time. Additionally, details are
given regarding the appropriate LGM that will assess the covariation of individual patriarchal ideology and relationship violence perpetration and victimization. The last group of analyses involves an assessment of potential predictors of these key outcome variables using time-variant and time-invariant predictors. As is typical with SEM, the later models are less detailed and relatively unknown for now because SEM requires that the hypothesized, baseline model be trimmed in order to create the most parsimonious model. The results of the analyses in this chapter, in conjunction with those in Chapter 4, should provide a holistic understanding to how individual patriarchal ideology changes over time and what may account for these changes. These analyses will contribute to the theoretical development of patriarchal ideology in a theory of violence against women.
CHAPTER VII
RESULTS: INDIVIDUAL PATRIARCHAL IDEOLOGY OVER TIME, A LATENT GROWTH CURVE MODELING APPROACH

This chapter presents the results of latent growth curve models (LGM) aimed to assess the change in patriarchal ideology over three waves of data. The analyses performed had three major goals: 1) to assess the trajectory of patriarchal ideology and relationship violence experiences (independently and simultaneously), 2) to evaluate the rate in which individuals change over time regarding these variables, and 3) to evaluate potential predictors of these trajectories.

SINGLE-DOMAIN GROWTH CURVES

Patriarchal Ideology Trajectory

The first latent growth curve model assessed the average initial level of patriarchal ideology and how these levels changed across each data point. The results of this model can be found in Figure 7.1. As seen in the figure, the model fit indicators suggest this model fit the data extremely well ($\chi^2 = .520 \ [df = 1, p = .47]$).
Figure 7.1. Results of Single Domain LGM for Patriarchal Ideology

Notes: NS = Not statistically significant (p > .05). Values in bold are significant (p < .05). Ellipses for error terms are absent and values represent variance of each (all p < .05). All values are unstandardized except for r. Model Fit Indicators: $\chi^2 = .002 \ (df = 1, \ p = .965); \ CFI = 1.0; \ RMSEA = .00.$
The mean of the intercept of patriarchal ideology ($M_i$) was 1.44 (SE = .05, $p < .001$), which represents the average initial level of patriarchal ideology. The intercept variance was significant ($D_i = .49$, SE = .14, $p < .001$), indicating significant individual differences in initial levels of patriarchal ideology. The mean of the slope ($M_s$) represents the average rate of change in patriarchal ideology, which was -.36 (SE = .04, $p < .001$). The significance of the mean of the slope provides an answer to Q2, simply stated: patriarchal ideology does change significantly over time. The negative value indicates the answer to Q3 would be: the direction of change for patriarchal ideology is negative for the whole sample. More specifically, levels of patriarchal ideology declined over time at an average rate of .36 units. However, the slope variance ($D_s = .08$, SE = .08) was not-significant ($p = .31$) indicating there were no significant inter-individual differences in the rate of change in patriarchal ideology over time. Additionally, the covariance between the latent intercept and latent slope of patriarchal ideology was not significant [$\text{cov} = -.11 (r = -.57), \text{SE} = .09, p = .21$]. This indicates the rate of change in patriarchal ideology was homogenous for the whole sample. In sum, the trajectory of patriarchal ideology was negative and moderate over time for the whole sample, regardless of how high or low initial levels of patriarchal ideology were.

**Relationship Violence Perpetration Trajectory**

The results for the growth curve for relationship violence perpetration can be seen in Figure 7.2. As seen in the diagram, the model fit indicators were somewhat mixed. This was expected, with the RMSEA = .11, which is likely to show poor model fit with simple models that have few degrees of freedom (Steiger and Lind 1980, as cited in
Arbuckle 2012). In these cases, the CFI is preferred, which suggested this model fit the data quite well (CFI = .958). The $\chi^2$ was, however, showing poor model fit ($\chi^2 = 8.12$ [df = 1, $p = .004$]). The $\chi^2$, however, is not as reliable as the CFI, since relatively small sample sizes (at least for the second and third data points) are likely to produce non-significant $\chi^2$ values.

Figure 7.2 also shows the mean of the intercept ($M_i$) for relationship violence perpetration was .93 (SE = .04, $p < .001$), which represents the average initial level of relationship violence perpetration. The intercept variance was significant ($D_i = .49$, SE = .08, $p < .001$), indicating there were individual differences in initial levels of relationship violence perpetration. The mean of the slope ($M_s$) represents the average rate of change in relationship violence perpetration, which was .04 (SE = .03, $p = .125$). This indicates little change in relationship violence perpetration on average over time. Additionally, significance in the slope variance ($D_s = .13$, SE = .04, $p < .001$) suggests there were individual differences in the rate of change in relationship violence perpetration over time (i.e. inter-individual differences over time). Lastly, the covariance between the latent factors was significant [$cov = -.11$ ($r = -.46$), SE = .09, $p < .05$], suggesting individuals whose initial levels of relationship violence perpetration were high experienced higher rates of decline than individuals whose initial relationship violence perpetration levels were not high. In sum, the trajectory of relationship violence perpetration was stable over time for the sample as a whole, although some individual trajectories did change, specifically those whose initial levels were high (in which case they declined at higher rates than others).
Figure 7.2. Results of Single Domain LGM for Relationship Violence Perpetration

Notes: NS = Not statistically significant (p > .05). Values in bold are significant (p < .05). Ellipses for error terms are absent and values represent variance of each (all p < .05). All values are unstandardized except for r. Model Fit Indicators: $\chi^2 = .002$ (df = 1, p = .965); CFI = 1.0; RMSEA = .00.
Relationship Violence Victimization Trajectory

The last single-domain growth curve model assessed relationship violence victimization. Like the previous two models, the \( \ln \) of relationship violence victimization was used due to a positive skew. The results of this model are presented in Figure 7.3. As seen in the diagram, the \( \chi^2 \) statistic suggested excellent model fit (\( \chi^2 = .002, \text{df} = 1, p = .965 \)). Because this model was "just-identified", the CFI and RMSEA were not computed.

Figure 7.3 also shows that the mean of the intercept (\( M_i \)) for relationship violence victimization was 1.04 (SE = .04, \( p < .001 \)). The intercept variance was significant (\( D_i = .55, \text{SE} = .09, p < .001 \)), indicating there were individual differences in initial levels of relationship violence victimization. The mean of the slope (\( M_s \)) represents the average rate of change in relationship violence victimization, which was .03 (SE = .03, \( p = .27 \)). This indicates little change in relationship violence victimization on average over time. Additionally, significance in the slope variance (\( D_s = .10, \text{SE} = .05, \ p < .001 \)) suggests there were individual differences in the rate of change in relationship violence victimization over time (i.e. inter-individual differences over time). Lastly, the covariance between the latent factors was significant [\( \text{cov} = -.11 (r = -.46), \text{SE} = .09, p < .05 \)], suggesting individuals whose initial levels of relationship violence victimization were high experienced higher rates of decline than individuals whose initial relationship violence victimization levels were not high. In sum, the trajectory of relationship violence victimization was stable over time for the sample as a whole, although some individual trajectories did change, specifically those whose initial levels were high (in which case they declined at higher rates than others).
Figure 7.3. Results of Single Domain LGM for Relationship Violence Victimization

Notes: NS = Not statistically significant (p > .05). Values in bold are significant (p < .05). Ellipses for error terms are absent and values represent variance of each (all p < .05). All values are unstandardized except for r. Model Fit Indicators: $\chi^2 = .002$ (df = 1, p = .965); CFI = 1.0; RMSEA = .00.
MULTIPLE-DOMAIN GROWTH MODELS

The multiple-domain latent growth models were to originally include the three previously used variables simultaneously. A full multiple-domain model with all three, however, could not be performed. When the growth-curve model was assessed that included all three variables, fully-identifying all covariates (recall Figure 6.2 from the previous chapter) the $\chi^2$ could not be computed because the correlation matrix was "not positive definite." The most likely reason for this was the highly correlated relationship violence variables. This was not a surprise considering the previous chapter's correlation matrix suggested very strong correlations among the perpetration and victimization variables too ($r \geq .84$ at all three time points). Considering the use of the CTS to capture relationship violence perpetration and victimization, this was expected. The solution of combining two highly correlated variables into one higher-order composite variable (i.e. 2nd-Order Factor) might be one way to include both domains in such an analysis. Unfortunately, in this case, creating a broad variable called "relationship violence experiences" would have created too general of a concept and interpretation would have been quite difficult. Instead, the choice was made to drop the relationship violence victimization variable and keep the perpetration variable. While the CTS measures might minimize men's use of violence because they focus primarily on physical assaults, the victimization measures of the CTS tend to decontextualize men's "victimization" (Dobash and Dobash 1992; DeKeseredy forthcoming; Stark 2007). In other words, men's "victimization" is taken out of context since their reports do not distinguish between women's use of violence as primary aggressors (which is uncommon) versus women's use of violence as a form of self-defense (which is much more common).
After removing the victimization variable, the multiple-domain growth curve assessed the growth of two domains: patriarchal ideology and relationship violence perpetration, simultaneously. The initial model fully identified (not-pictured, but similar to the hypothesized model from Figure 6.2, with the removal of the victimization domain) all covariances between the four latent factors (i.e. two latent intercepts and two latent slopes) and met the necessary criteria for good model fit with the data ($\chi^2 = 11.64$ [df = 7, p = .113]; CFI = .981, RMSEA = .03). Despite good model fit, however, only two of the covariances (cov of the ideology intercept $\leftrightarrow$ violence perpetration intercept; cov of violence perpetration intercept $\leftrightarrow$ violence perpetration slope) were statistically significant (p < .01). Thus, the non-significant covariances were trimmed from the model. However, one non-significant covariance remained. Due to the importance of the within-domain covariance between the slope and intercept of patriarchal ideology, and because deleting non-significant covariates is not a necessity in linear growth-curve models (see Byrne 2010), this was the only non-significant covariate that remained in the model (see Figure 7.4., with results). The trimmed model had even better model fit than the fully-identified model ($\chi^2 = 13.34$ [df = 10, p = .205], CFI = .987, RMSEA = .02).
Figure 7.4. Results of Trimmed Multiple-Domain Latent Growth Curve Model

Notes: NS = Not significant (p > .05); All other values (in bold) p < .05. All values are unstandardized (SE) except for r. Model Fit Indicators: $\chi^2 = 13.34$ (df = 10, p = .205); CFI = .987; RMSEA = .02.
The results of the multiple-domain model can be seen in Figure 7.4. Regarding means estimates, all four were statistically significant (p < .05). The mean of the intercept (\(M_i\)) for patriarchal ideology and the mean for the slope of patriarchal ideology (\(M_s\)) were almost identical to the previous single-domain model. The mean of the intercept (\(M_i\)) for relationship violence perpetration and the mean for the slope (\(M_s\)) of relationship violence perpetration also had nearly identical estimates to its previous single-domain model (see Figure 7.2). The similarity in estimates is expected in LGM. More important, for now, are the goodness-of-fit statistics, which do suggest that the simultaneous assessment of the trajectories of both of these concepts is appropriate.

Regarding covariances, the within-domain covariances were almost identical to the prior single-domain estimates. That is, the covariance between the intercept and the slope of patriarchal ideology remained non-significant (p > .05). This, again, suggests that those with high levels of patriarchal ideology did not experience significantly higher rates of change. The covariance between the intercept and the slope of relationship violence perpetration (\(cov = -.12, SE = .05; r = -.46\)) remained significant (p < .05). This suggests that individuals whose initial levels of patriarchal ideology were high experienced higher rates of decline from these initial levels.

The only cross-domain covariance in the multiple-domain model was between the mean intercept of patriarchal ideology and the mean intercept of relationship violence perpetration. The covariance among the intercept mean (\(M_i\)) of patriarchal ideology and the intercept mean (\(M_i\)) of relationship violence perpetration was .14 (SE = .03; \(r = .29\)) and it was statistically significant (p < .001). Based on the size of the standardized coefficient, this suggests there is a positive relationship that is moderate in strength.
between average initial level of patriarchal ideology and average initial level of relationship violence perpetration.

In response to research question Q4: the average level of patriarchal ideology and the average level of relationship violence perpetration are related at the initial wave of data, but from there, the trajectories are unrelated to one another. More specifically, the cross-domain LGM suggests very little difference in individual growth curves for both concepts, compared to their previous, independent/single-domain LGM. The cross-domain covariance that was significant suggested initial average levels of both concepts were related, but the change in each was not related to cross-domain avg. initial levels or cross-domain rate of change.

Predictors of Change

The next step in the analytic strategy was to introduce time-invariant exogenous variables into the multiple-domain model (i.e. conditional LGM). The purpose of introducing time-invariant measures is to try and account for the variation in the key variables of interest (mainly slope variance). However, since the slope variance of patriarchal ideology was not significant, this means such models would not be very useful. However, there was significant variation in the slope of relationship violence perpetration. Thus, time-invariant predictors of change can be added to the multiple-domain model to explain the heterogeneity in relationship violence perpetration over time, while controlling for the trajectory of patriarchal ideology over time.

The first conditional model (not pictured) found that religiosity was not a significant predictor of the intercepts and slopes for both patriarchal ideology and
relationship violence perpetration. Therefore, religiosity was excluded from the final conditional model used, which included all four of the other predictor variables, predicting the intercepts and slopes of patriarchal ideology and relationship violence perpetration. Figure 7.5 shows the results of the conditional model. As noted therein, all of the predictor variables had regression parameters predicting the intercept and slope of patriarchal ideology and the intercept and slope of relationship violence perpetration (4 parameters per variable, fully identified). However, as the figure also notes, only the significant parameters are drawn in the model for clarity purposes. Additionally, all of the exogenous variables had covariance estimates among them, which are also left out of the figure for the sake of clarity. Further attempts to trim the model pictured in Figure 7.5 either did not improve the model fit statistics, made the model fit worse, or created models that made little theoretical sense. Thus figure 7.5 is the most parsimonious, theoretically significant predictor model.

As seen in Figure 7.5, the multiple-domain LGM with predictor variables had similar results to the previous non-predictor variable model regarding cross-domain covariances. The covariance between the residuals of the patriarchal ideology intercept and the relationship violence perpetration intercept showed that initial levels of both were positively and moderately related to one another ($cov = .09$, $SE = .03$, $r = .22$). This means that individuals with higher initial levels of patriarchal ideology had higher initial levels of relationship violence perpetration, a finding similar to the previous non-conditional model.
Figure 7.5. Conditional LGM with Domains: Patriarchal Ideology and Relationship Violence Perpetration

Notes: Model Fit Indicators: $\chi^2 = 18.91$ (df = 18, $p = .398$); CFI = .998; RMSEA = .01. NS = ($p > .05$); All other values (in bold) $p < .05$; Unstandardized (SE) values appear first unless $r$ or $b$. Included in the model but not pictured for clarity are exogenous covariances and NS ($p > .05$) parameters from predictors to each intercept and slope. Three covariances shown between residuals are the only three included in the model due to earlier model trimming.
**Predictor Variables.** Whites had average initial levels of patriarchal ideology that were 46% (B = .69, SE = .10, b = .46) higher than non-whites (p < .05), while controlling for the effects of patriarchal best friend, child abuse, and witnessing domestic violence. Additionally, the rapist best friend variable significantly predicted the average initial level of patriarchal ideology (B = .26, SE = .08, b = .25). In other words, having a patriarchal male peer for a best friend meant one’s average initial level of patriarchal ideology was 25% higher than those individuals who did not have a patriarchal best friend, while controlling for child abuse, witnessing domestic violence, and race.

Like earlier models, there was no significance in the slope variance of patriarchal ideology (residual variance = .03, SE = .07, p > .05). Essentially this means the rate of change was the same for the whole sample (as found earlier). The only significant predictor of the slope in patriarchal ideology was race (B = -.40, SE = .08, b = -.73), which was unexpected. That is, because the variance was not significant, this suggests there were no inter-individual differences in the average rate of change in patriarchal ideology, but the significant predictor of race on the slope suggests inter-individual differences. This creates some confusion since a variable is essentially predicting variable change, when the variation is not significant. This is one of the reasons why Byrne (2010) notes it would not make much sense to proceed with time-invariant models unless one is presented with evidence of inter-individual variability in the non-conditional models. In the current study, there was no inter-individual variability in the
slope of patriarchal ideology. So, this significant parameter is not very useful. Keep in mind, however, that although earlier tests revealed non-significance in the rate of change of patriarchal ideology, it was still valuable to assess the growth of the concept simultaneously with relationship violence perpetration while assessing other key parameters of interest. Also, since the conditional models were to address Q5, regarding predictors of patriarchal ideology over time, the simple answer is: the lack of significant variance regarding the slope of patriarchal ideology suggests predictors of individual change are not possible since there is no evidence of individual change in the first place.

Three of the predictor variables significantly predicted the average level of relationship violence at the baseline (p < .05). Experiencing child abuse was one of these (B = .26, SE = .08, b = .17). Individuals who were victims of child abuse had an average

1 Muthen (2002), however, suggests predictor variables are likely to produce better fitting models, showing significance in predictors. She too notes the confounding issues involved, but does not suggest the lack of significant variation in the slope means one should not proceed with conditional models.

2 Since there was evidence of variability regarding the intercept of patriarchal ideology, I made the decision to run a multiple-domain predictor variable model that included patriarchal ideology. This decision was made so that the key variables predicting change in relationship violence perpetration would be assessed while simultaneously the model would control for the significant covariance between initial levels of both of these key outcome variables (i.e. $M_i$ of patriarchal ideology and $M_i$ of relationship violence perpetration).
initial level of relationship violence perpetration that was 17% higher than those that were not victims of child abuse, while holding constant race, witnessing domestic violence, and patriarchal best friend. Witnessing domestic violence as a child meant one was 11% higher in their average initial level of relationship violence perpetration than those that did not witness domestic violence (B = .32, SE = .15, b = .11), while controlling for race, patriarchal male peers, and child abuse. Rapist best friend significantly predicted average initial level of relationship violence perpetration (B = .37, SE = .09, b = .22), where individuals who had patriarchal best friends were 22% higher in their average initial levels of relationship violence perpetration than those that did not have patriarchal best friends, while holding constant child abuse, witnessing domestic violence, and race. Race was the only exogenous variable that did not significantly predict the average initial level of relationship violence perpetration (p > .05).

None of the three significant predictors of average initial level of relationship violence perpetration significantly predicted the rate of change in these values (p > .05). However, the one exogenous variable that did not predict average initial level of relationship violence was the only predictor that significantly predicted (p < .05) the rate of change in these initial levels (B = .02, SE = .06, b = .02). Keep in mind, the rate of change (i.e. slope residual) was statistically significant (.13, SE = .04). Although significant, the regression parameter was not very large. Thus, whites were 2% faster in their rate of change in relationship violence perpetration than non-whites while controlling for child abuse victimization, patriarchal male peers, and witnessing domestic violence. Also, regarding change in relationship violence perpetration, the covariance between the residuals of the intercept and slope of relationship violence perpetration was
.10 (SE = .05, r = -.44, p < .05). Keep in mind that race did not predict initial level of relationship violence perpetration, just the rate of change. Thus, there was no significant variation in the average initial level of relationship violence perpetration between whites and non-whites, but over time, whites experienced a rate of change in relationship violence 2% higher than non-whites while controlling for child abuse, witnessing domestic violence, patriarchal best friend, and the average initial level of patriarchal ideology.

Introducing Time-Variant Covariates as Predictors

The introduction of time variant measures included the addition of the variables: Dating, Single, and sexual assault program attendance into the conditional model. This model, however, makes for one very complicated SEM, which can be problematic in general, but this is especially true when the sample size in comparison to the number of parameters to be estimated is beyond the 10:1 ratio (Kline 2006). The addition of time-varying models, as a result of these issues, produced very poor fitting models. One way around this was to introduce each of these one at a time, but that, too, produced poor fitting models. Time-varying measures were not included in any of the LGMs. Alternative procedures were used.
UNDERSTANDING THE DIRECTIONALITY OF THE RELATIONSHIP BETWEEN PATRIARCHAL IDEOLOGY AND RELATIONSHIP VIOLENCE

*Autoregressive Structural Models*

Because of the exploratory nature of these analyses, alternative models were created in order to get a better understanding of the directionality of the associations between patriarchal ideology and relationship violence. Essentially, if it could be determined that one has a stronger effect on the other in a non-recursive model, this could help justify the inclusion of a LGM that treats one of these two key outcomes as an endogenous variable and the other as a predictor. It is entirely possible that patriarchal ideology is a better predictor of relationship violence perpetration than the other way around, considering the lack of variation in the rate of change observed for patriarchal ideology.

The first non-recursive model freely estimated the autocorrelations for the repeated measures of the two key variables of interest: patriarchal ideology and relationship violence. This model, with results, can be found in Figure 7.6. This is immediately followed by Figure 7.7, which placed equality constraints on the autoregressive parameters for each respective measure ($\beta_1, \beta_2$), since the assumption of stability was supported in the significance of the model from Figure 7.6. The likelihood ratio tests for the $\chi^2$, CFI, and RMSEA all suggested the constrained model fit the data better than the unconstrained model $\Delta\chi^2$. 
Figure 7.6. Fully Unconstrained Autoregressive SEM for Patriarchal Ideology and Relationship Violence Perpetration across 3 Waves

Notes: Model Fit Indicators: $\chi^2 = 8.61$, df = 4, $p = .07$; CFI = .982; RMSEA = .05. Dashed arrows and NS represent non-significant ($p > .05$) parameters. Significant parameters are highlighted in bold.

***$p < .001$; **$p < .01$; *$p < .05$
Figure 7.7. Autoregressive SEM for Patriarchal Ideology and Relationship Violence Perpetration across 3 Waves (Constrained Autocorrelations)

End of Freshman Year → Patriarchal Ideology2  
End of Sophomore Year → Patriarchal Ideology3  
End of Junior Year → Patriarchal Ideology4

Relationship Violence Perpetration2  
Relationship Violence Perpetration3  
Relationship Violence Perpetration4

β1  
β1  
β2

.14** (.05)  
.23NS (.15)  
.37*** (.12)

.15NS (.15)  
.37* (.15)  
.42* (.19)

Stability Index: Wave 3 = .09, Wave 4 = .06.

Notes: Model Fit Indicators: $\chi^2 = 10.30$, df = 6, p = .11; CFI = .983; RMSEA = .04. Dashed arrows and NS represent non-significant (p > .05) parameters. Significant parameters are highlighted in bold.
In short, there does not appear to be a reciprocal relationship between patriarchal ideology and relationship violence perpetration. This is evidenced in the non-significance (\( p > .05 \)) of patriarchal ideology \( \rightarrow \) relationship violence at Wave 3 (second data point) and the non-significance (\( p > .05 \)) of relationship violence \( \rightarrow \) patriarchal ideology at Wave 4 (last data point). At each wave, the opposite relationship is significant. These inconsistent findings in the non-recursive model as well as the LGMs suggested the need for further sensitivity checks with this data. The biggest of these was to reassess the two key outcomes and test the assumption of sample homogeneity.

LIMITATIONS

Many of the broader limitations to the data described in Chapter 5 are applicable to the analyses in this chapter. One consistency is the potential cohort interactions. One way to check for these interactions was to conduct a simple one-way ANOVA for each cohort at each data point for the key outcome variables.

*Cohort Interactions using One-Way ANOVA*

The original researchers used a cohort sequential design (i.e. accelerated longitudinal design) in which all of the cohorts were measured at the same time point (year), but at different levels of schooling (college class). The researchers made the assumption that the cohorts were homogenous because they were combined into one large dataset, which *assumed the time-related change was college class*. Even though past research has found true longitudinal designs produce similar results to cohort-sequential designs (Duncan et al. 2006), this does not mean every study should assume
homogeneity nor should they assume one hypothesized moment of change is the only period of variation. Thus, in order to test the assumption of homogeneity, two analyses were performed. First, patriarchal ideology and relationship violence were examined regarding significant variation in their means across cohorts using one-way ANOVAs. The second check reconsidered the data point for change from college class to year. That is, each wave or data point was changed from second year in college, third year in college, fourth year in college to 1992, 1993, and 1994 respectively. It may seem backwards to go from a much more reliable analysis of variance technique in the use of SEM to an ANOVA. In fact a multi-group SEM (MGSEM) would have been an excellent way to assess cohort interactions. However, this was not possible because of the lack of measures at Wave 2 for Cohort 1. MGSEM can use ML for missing cases, but when an entire wave of data is missing, MGSEM is not possible. This was why the ANOVA was used to see if there was evidence to suggest cohort interactions were present.

Table 7.1 shows the results of the ANOVA for patriarchal ideology and relationship violence perpetration regarding significant mean variation across cohorts. Essentially, Waves 2 and 3 (i.e. first two data points) suggest significant cohort differences in mean values for patriarchal ideology, but no differences at Wave 4 (final data point). Relationship violence perpetration showed significant cohort variation in the mean of patriarchal ideology at the middle wave, whereas Wave 2 and Wave 4 were homogenous. These results are enough to suggest there were cohort effects regarding these two key variables of interest.
The second ANOVA, which reorganized the data in which the time period of interest, was year rather than college course is not presented. Rearranging the data in this manner was useless. That is, the ANOVA had many confounding issues, and the later LGMs used to assess change in these outcome variables at these new data points produced very poor fitting models. So the ANOVA, along with other analyses throughout this chapter, tell us two things: 1) patriarchal ideology is likely variable from cohort to cohort and 2) the cohort sequential design was a reliable longitudinal technique to assess patriarchal ideologies over time.

This brings me to the first limitation from the LGM analyses: the inability to conduct LGMs on each cohort independently. For Cohort 1, this was obviously not possible since there were only two data points. However, Cohort 2 and Cohort 3 would not produce acceptable models of fit where the LGMs could even be conducted. Even after the data was rearranged to reflect calendar year, rather than college class as the metric of time these models fit poorly with this data (see Bollen and Curran 2006: 73-86 for a review on rearranging data for alternative metrics of time)\(^3\).

\(^3\) These two data points address period and cohort. The third most common time metric of age so closely aligns with cohort/college class in this sample (and in college populations) there is nothing to gain by re-arranging along this time metric. Moreover, as Baltes et al. (1979: 85) note, “The issue of trifactorial age-cohort-time of measurement confounds is only relevant if one assigns theoretical status to all factors.”
Table 7.1. One-Way ANOVA Assessing Cohort Differences in Patriarchal Ideology and Relationship Violence Perpetration (RVP)

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
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<tr>
<td><strong>Patriarchal Ideologyln2</strong></td>
<td></td>
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<tr>
<td>Between Groups</td>
<td>54.95</td>
<td>1</td>
<td>54.95</td>
<td>59.75***</td>
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<td></td>
</tr>
<tr>
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<td></td>
<td></td>
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<tr>
<td>Between Groups</td>
<td>74.96</td>
<td>2</td>
<td>37.48</td>
<td>39.26***</td>
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<tr>
<td>Within Groups</td>
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<td>.96</td>
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<tr>
<td>Total</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Patriarchal Ideologyln4</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
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<td>2</td>
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<td>1.08NS</td>
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<tr>
<td>Total</td>
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<td><strong>RVPln2</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>3.34</td>
<td>2</td>
<td>1.67</td>
<td>2.23NS</td>
</tr>
<tr>
<td>Within Groups</td>
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<td>.75</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>426.78</td>
<td>566</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RVPln3</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>15.32</td>
<td>2</td>
<td>7.66</td>
<td>8.51***</td>
</tr>
<tr>
<td>Within Groups</td>
<td>397.73</td>
<td>442</td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>413.05</td>
<td>444</td>
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<td></td>
</tr>
<tr>
<td><strong>RVPln4</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>3.76</td>
<td>2</td>
<td>1.88</td>
<td>2.27NS</td>
</tr>
<tr>
<td>Within Groups</td>
<td>239.28</td>
<td>289</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>243.04</td>
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</table>

***p < .001
While there are a variety of reasons why these models fit poorly, the most likely reasons are the fairly small sample size and the somewhat high levels of attrition from Wave 2 (69% retention from Wave 1) to Wave 3 (64% retention from Wave 2) for cohorts 2 and 3.

Considering alternative metrics of time as a sensitivity check (but also as an alternative theoretical explanation for change among the key outcomes) can add value to a study. However, the inability to produce appropriate models of fit for these alternative models does not negate the analyses performed in this chapter. In fact, poor model fit is not just the result of missing data. That is, poor-fitting models that considered year for each metric of time could have yielded poor model fit because this metric of time created even more heterogeneity than using the metric of time college class. After all, the empirical data did produce model fit that was acceptable for the college class metric. The next step would be to keep the original time metric, but use the aforementioned multi-group LGM approach for each cohort. As noted earlier, however, this leaves us with the earlier dilemma because we still have issues with the sample size of each cohort. In sum, the inability to use a multi-group LGM to test cohort effects in the most robust manner is a limitation of the current study. There is still something that can be learned from the empirical heterogeneity from these results, a point further discussed in the next chapter.

CONCLUSION

This chapter provided the analyses that addressed patriarchal ideology over three-waves of data, primarily with the use of latent growth curve modeling (LGM). Initial analyses using single-domain LGM assessed intra- and inter- individual differences in
average initial levels of patriarchal ideology and average rates of change across three-waves. This was followed by similar analyses assessing average initial levels and average rates of change regarding relationship violence perpetration. These two models were then combined, using multiple-domain LGM to simultaneously assess the growth in both constructs. In short, initial levels of patriarchal ideology and relationship violence perpetration were related to one another, but over time the trajectories of each took on different, unrelated shapes. The rate of change in patriarchal ideology was significant over time, but the variance for the rate of change was not, meaning there were no inter-individual differences (i.e. everyone's patriarchal ideology changed at the same average rate over time). Relationship violence perpetration declined over time, but the average rate of decline was not significant, while the variance for the rate of change was significant, meaning there were inter-individual differences in relationship violence perpetration over time. Additionally, the covariance was significant between the intercept and slope of relationship violence perpetration, meaning those individuals whose initial levels of relationship violence perpetration were high experienced greater rates of decline.

Conditional LGM was used to determine what predicted the variance in relationship violence perpetration (while controlling for the covariance of the intercept and slope of patriarchal ideology). The only significant predictor of the variance of the rate of change in relationship violence perpetration was race, albeit a very small effect size ($b = .02$), indicating whites' rate of change in violence perpetration was 2% higher than non-whites. Additional significant predictors of average initial level of patriarchal ideology and average initial level of relationship violence perpetration were found.
However, the most significant finding was few exogenous variables explained the variation in the rate of change for relationship violence perpetration. Additional analyses found evidence of cohort interactions and mixed support for a reciprocal relationship between patriarchal ideology and relationship violence perpetration. The next chapter discusses the findings in this chapter along with those from the initial two-wave panel data, making broader connections across each.
CHAPTER VIII
IMPLICATIONS AND CONCLUSIONS

This chapter discusses the findings from the previous four methods and analyses chapters. Discussions center on the major research questions addressed regarding: measurement of patriarchal ideology, predictors of patriarchal ideology, change/stability in patriarchal ideology, accounting for change/stability, and the covariation as well as the feedback effects of patriarchal ideology and relationship violence perpetration. Although data limitations were discussed in Chapter 4 and Chapter 6, broader limitations and directions for future research are discussed at the end of this chapter.

METHODOLOGICAL IMPLICATIONS

The attempt was made in this research to operationalize individual patriarchal ideology in the most consistent and accurate way, a point covered in Chapter 3. This is certainly not the first study of its kind to use attitudinal measures of patriarchal ideology (see Smith 1990, 1991). It is, however, one of the few studies to consider vignettes for measuring patriarchal ideology. Moreover, it is one of the few to use these measures in a longitudinal research design and is one of the only known studies to consider the origins of patriarchal ideology by including it as the main outcome variable of interest in various statistical models. Although the evidence was not strong in some areas, overall, the various measures used for patriarchal ideology were reliable. Methodologically, this research has some noteworthy implications for future research.

Looking at the first set of analyses, attitudinal measures of patriarchal ideology showed signs of measurement reliability and had mixed findings regarding longitudinal
measurement reliability. This lack of consistency in longitudinal measurement invariance was most likely due to one of three things. One reason could be that group-level influences affected the meaning and interpretation of the attitudinal measures over time for the whole sample. If so, the measures would need to be re-evaluated to see why the lack of consistency was found. However, the conceptualization in Chapter 3 was thorough and the measures were not entirely unique from past research (e.g. Smith 1990, 1991).

The second, and better, explanation for the lack of consistency in measurement reliability is that method effects were present. One of the problems with using dated secondary data is that despite communication with the original principal investigator, unless changes to the research design are explicitly stated, we are left to assume. The fact that Cohort 2 had reliable measures at Wave 1 (1991) but not Wave 2 (1992) could have been due to changes in the research design. Although various items were added and deleted throughout this study by the original researchers, for some reason the introduction of the vignette-based measures of patriarchal ideology seem to have influenced the attitudinal measures. These items first appeared in 1992 when patriarchal attitudes first had indications of unreliability. In 1992, when it was Wave 3 for Cohort 1, the new patriarchal ideology-vignettes were only given to Cohorts 2 and 3 (Wave 2 and Wave 1 respectively). Reliability in the attitudinal measures was lacking for Cohort 2 in 1992 as well as for Cohort 3. Thus, in 1992, the reliability of the vignette-based items was strong for each Cohort, separately and combined.

The third potential source for the lack of consistency regarding measurement invariance really relates to validity, experimenter bias or observer reliability. Since the
original researchers were accepting of the outside studies during their day that concluded patriarchal ideology was not a significant predictor of "sexual coercion", this could have impacted how these items were measured. They could have contaminated the items in some way, possibly by telling respondents to devote less time to them. They could have entered these items into their dataset inaccurately. Although there is no direct empirical support to these speculations, the principal investigator did mention that during the time of data collection, researchers accepted the assumption that attitudinal items were not important predictors for their outcome of sexual coercion. Whether or not significant relationships were found in past research, however, should not have affected the independent measures' internal reliability. Over time, if researchers were not as meticulous in presenting, collecting, or assessing the few attitudinal items about acceptance of violence against women, this may say more about researcher bias than any real problems with the long-term reliability of these indicators of patriarchal ideology.

This brings me to the first suggestion for future longitudinal research designs: when conducting longitudinal research over relatively short periods, or across relatively few data points, changes to the original testing measures should be minimal. The original

1 Jackie White, email correspondence, November 11, 2011. These researchers conducted their study in a thorough and detailed way with the utmost integrity. This discussion is merely provided to highlight the dilemmas researchers face in longitudinal studies. One of these involves decisions as far as altering measurement instruments so that we are collecting current concepts exogenous from the pre-test survey instruments, while also not giving up on the original measures or bombarding respondents with lengthy surveys.
researchers cannot be blamed for the removal of these attitudinal items when they were not a main variable of interest for their purposes. However, the original inclusion of them should have meant the researchers deemed them important at one point. Additionally, none of the meta-analyses produced around the time the data was being collected mentioned longitudinal research. As Lieberson (1985) put it, “Cross-sectional data are certain to be relevant only under special circumstances […] Conclusions based on cross-sectional data are not of equal merit to those based on longitudinal data […]” (180, 181). This is especially important considering very few longitudinal studies on relationship violence existed from the inception of domestic violence research until the 1990s when the original research was conducted. Future research designs should use great caution when changing/removing portions from the initial design. Justifications for the removal of “non-significant” constructs should be critically assessed, whether they are made theoretically, empirically, or both.

One weakness of the current measures of patriarchal ideology is that they were only tapping into portions of the concept. Chapter 3 made note that individual patriarchal ideology really consists of 4 major dimensions related to: dominance/power over women, hostile masculinity, rape myth acceptance, and acceptance of violence against women. To illustrate these dimensions, Figure 8.1 is provided. Thus, the second major methodological suggestion for future research is that studies in this area should include at least one indicator of each concept with more complicated designs (e.g. SEM, HLM) using multiple measures from each.

Lastly, vignette-based measures of patriarchal ideology consistent with rape myth acceptance/likelihood of rape are reliable proxy measures of patriarchal ideology. The
third suggestion for future research is that they should consider the use of vignette items for multiple dimensions of patriarchal ideology. This should be not just an alternative to attitudinal items, but as better measures for assessing ideology since context for the attitude/likely behavior is provided.

THEORETICAL IMPLICATIONS: UNDERSTANDING PATRIARCHAL IDEOLOGY IN A THEORY OF VIOLENCE AGAINST WOMEN

The fact that patriarchal ideology declined for the entire sample at equal rates is really quite remarkable. There is no doubt that individual patriarchal ideology is a concept that is real, valid, and important as has been argued throughout this research. These findings concerning change really question the significance of individual patriarchal ideology in a theory of violence against women. Thus, institutional patriarchal ideology, or at the very least some sort of meso-level, group-based patriarchal ideology is perhaps more important for a theory of violence against women. To see equal rates of change in patriarchal ideology suggests, first, that this is a reflection of the social institution in which this sample was composed. In a sample conducted within a university setting, a place where progressive ideals are arguably stronger than in other social institutions, it may not be too shocking to see declines in the rate of patriarchal ideology.
Figure 8.1. Dimensions of Patriarchal Ideology

Individual

Patriarchal Ideology

**Dominance/Power over Women**
- Underlying Power
- Control linked to sexuality
- Need to assert

**Hostile Masculinity**
- Distrustful of women
- Threatened by women’s gains
- Gratification in control of women

**Rape Myth Acceptance**
- Chivalry should be rewarded with sex
- Rape is woman’s fault
- Sexual promiscuity = entitlement

**Acceptance of Violence against Women**
- For stepping outside of expected role
- For infidelity
- As way to obtain control

Note: Bullet points are examples of indicators consistent with each dimension.
To others, however, this may be very shocking considering these results are essentially showing patriarchal ideology from the first, roughly 18 years of one’s life declines after just three years of college. It was interesting to find that before-college patriarchal ideology had no effect on patriarchal ideology at the end of one’s first year of school. Both longitudinally and cross-sectionally, some of the key relationships are discussed below.

_Social Learning Theory and Patriarchal Ideology over Time_

Many research studies (e.g. Brown 1987; Payne and Triplett 2009) have found childhood exposure to domestic violence as well as child abuse victimization to significantly predict adulthood domestic violence perpetration. These relationships are typically explained using social learning perspectives in that these boys are learning how to use violence within the family (DeKeseredy and MacLeod 1997; Payne and Gainey 2009). These social learning perspectives, however, have been somewhat short-sighted (DeKeseredy 2011; White and Smith 2009). This is especially true if we are considering the most noteworthy variant of social learning theory for criminologists, that which comes from Akers (2009). Unfortunately, the current research presents more questions and challenges than answers in regards to childhood exposure to domestic violence relating to patriarchal ideology and/or relationship violence. Nonetheless, these challenges are discussed below.

Many studies that assume adult batterers who come from violent households are “learning” how to be violent would find more specific support in the component of social learning theory of modeling/imitation. Thus, why do boys learn to imitate such violence,
whereas girls learn that familial violence is normal? If the answer is boys and girls
“learn” gender norms early in life and violence perpetration by men is one of these many
forms of gendered difference, then this is a weak explanation. For one, male violence
against an intimate partner, while more common and more serious than female violence
against an intimate partner, is not “normal.” It may be normal for men to be more violent
than women or to repress emotions, but it is certainly not the norm for men to use
violence against female intimate partners. Secondly, it cannot be concluded that
“modeling” is taking place without a discussion of reinforcement, or what Akers (2009)
calls “differential reinforcement.” Without reinforcement, we are left to assume that
coming from a violent household and being violent as an adult is a 1:1 ratio of
equivalence and that individuals inevitably and blindly follow others.

It might be better to explain the learning process as part of “differential
reinforcement.” This component of social learning theory notes that although
reinforcement can vary in many ways, social reinforcers are the most salient component
of differential reinforcement (Akers 2009). Thus, the link between witnessing domestic
violence to becoming an adult batterer should not be framed within the context of social
learning theory if reinforcers are unknown. How exposure to domestic violence during
childhood impacts one’s patriarchal ideology is more confounding since outcomes are not
as directly observable.

These findings do add to the research that suggests that any negative impacts of
childhood exposure to domestic violence can be overcome. Witnessing domestic
violence and even being the victim of child abuse did not significantly influence
patriarchal ideology in college (but was significant before college). This suggests that
protective factors are available later in the life-course. Whatever these protective factors may be is still unclear but with the transition from one major social institution (the family) to another (higher education), the mere change in social settings may be enough to offset the negative effects of such childhood experiences.

**Patriarchal Male Peers: Differential Association and Definitions**

Social learning theory notes that learned "definitions" can be broad as far as having a general attitude favorable or unfavorable towards criminality, with Akers (2009:28-29) often using the terms "beliefs" and "ideologies" interchangeably with definitions. Thus, if definitions are learned through symbolic interaction with those from primary groups (e.g. close peer associations, parents), then patriarchal ideology should be learned in a similar manner having similar origins. Prior to the start of college, there appears to be some support to suggest parental (i.e. father) influence on patriarchal ideology exists, since witnessing domestic violence was a significant predictor of having a higher level of patriarchal ideology. Once college begins, perhaps the increased frequency of differential associations with patriarchal male peers is why this variable significantly predicted the average level of patriarchal ideology whereas witnessing domestic violence and childhood abuse did not. Perhaps these findings give more weight to the learning process of modeling because all three of these variables predicted higher initial levels of relationship violence perpetration. The consistent dimension of social learning theory in predicting patriarchal ideology and relationship violence perpetration is "differential association."
Recall that the operational measure for patriarchal male peer associations was a proxy measure and it was not clear the exact frequency or intensity of the male peer association(s). Perhaps this is why this variable was not predictive of patriarchal ideology. The growth-curve models used a measure for male patriarchal peer associations that was definitely high on intensity since it was the respondent’s best friend’s likelihood of committing rape. In the growth-curve models, patriarchal peer associations were the only significant predictors of both patriarchal ideology and relationship violence perpetration. Thus, this study supports previous research findings (e.g. Schwartz and DeKeseredy 1997) suggesting male peer support influences violence against women. It adds to the research in providing support for male peer associations as one of the predictors of individual patriarchal ideology in college.

A final point on differential male peer associations regarding causal ordering is needed. Figure 5.4 from Chapter 5 showing the results of the cross-lagged panel model might speak to the earlier discussion concerning the causal order of male peers. The covariance of patriarchal attitudes and patriarchal peers and relationship violence was not significant at Wave 1, nor was the covariance of patriarchal peers with patriarchal attitudes. At Wave 2, these covariances were still not significant. However, the cross-lagged coefficients showed that Wave 1 patriarchal peers predicted patriarchal attitudes at Wave 2 but not relationship violence perpetration. These findings suggest that patriarchal attitudes are not related to male peer associations until college. The aforementioned causal ordering of patriarchal male peer associations in a theory of violence against women noted the larger debates in criminology regarding the “birds of a feather” argument compared to differential association perspectives for the origins of
definitions, or in this case patriarchal ideology. It appears that as individuals begin college, their patriarchal ideology is no longer influenced by sources of familial patriarchy (e.g. witnessing domestic violence) and instead these ideologies are influenced by social patriarchy (i.e. patriarchal male peers in college).

Race and Individual Patriarchy Ideology

The panel data using attitudinal measures of patriarchal ideology found non-whites had higher levels of patriarchal ideology. This was contrary to the growth-curve models using vignettes, which discovered whites had higher levels of patriarchal ideology over time. The panel data can perhaps best be interpreted within the context of social institutions. Connell and Messerschmidt (2005) argued individual patriarchal ideology is likely to vary in different social institutions, especially for racial minorities. The lack of power in various social institutions, mainly the economy and polity, might help explain why non-whites have higher levels of patriarchal ideology when using attitudinal measures, whose origins lie in the family. In fact, hooks (2000) argues the family is the one institution black men can expect to have domination.

Some have argued many of the negative stereotypes about black women in connection to familial patriarchy (e.g. "mammy", "matriarch") are created and maintained by dominant social institutions controlled by whites (Collins 2000). So while white institutions are likely to develop stereotypes about black women, individual white men are not likely to develop high levels of patriarchal ideology when measurement dimensions include items connected to familial patriarchy. Because intimate relationships are most commonly intraracial, individual white males' acceptance of
violence against women is likely capturing their acceptance of violence in their own personal lives. The same is true for African Americans, hence their higher levels on the patriarchal attitudes items. So why would African Americans have higher levels of patriarchal ideology after the first year of college, but not before? It is possible that once these individuals started at this new institution they were exposed to these negative stereotypes about black women, influencing their patriarchal ideology? The reason for this finding is not clear. Future research should consider patriarchal ideology as a multi-dimensional construct over multiple waves of data (i.e. more than two).

The growth-curve models suggest the opposite when it comes to the relationship between race and patriarchal ideology. Whites had significantly higher average levels of patriarchal ideology across all three waves. Additionally, the only significant predictor of the change in patriarchal ideology over time was race, indicating the rate of change was slower for whites than it was for non-whites. One explanation for this is that whites may feel a higher sense of entitlement than other racial groups. Again, level-2 variables were not available in this dataset, so group-level interpretations are not possible. While future research should be conducted using aggregate variables, we can also use past research to perhaps better understand these relationships.

Sanday's (2007) research found that some white fraternity members bonded together through sexism and racism, especially when they felt powerless. Her research also discovered that many young, white college fraternity members felt entitled to women's bodies in various scenarios. Some individuals in her study even noted how in college they sought out male peers who could provide emotional support for the challenges presented in college, including support for when they failed to live up to their
monikers of “powerful” and “successful” white men. It is possible that white males develop patriarchal ideologies higher than racial minorities before college, but that these ideologies are not positively reinforced in the same manner as they are by male peer groups in college. These peer groups are likely to be stronger and more influential since the family is less present in everyday life for these men, hence less frequent. Also, these men may have stronger patriarchal ideologies throughout college because of backlash. That is, college is likely the most diverse institution to date these individuals have come in contact with. Perhaps patriarchal ideology is higher for whites because their sense of entitlement is challenged by women’s gains, something they become aware of once they are in college.

These findings may even support the earlier argument that vignettes, which can take into consideration context better than attitude-agreement items, are perhaps better at capturing ideology. This may explain why the current study’s findings are different from past research. Suarez and Gadalla’s (2010) meta-analysis on rape myth acceptance reported that among men research has found, overall, that non-whites have higher levels of rape myth acceptance than whites. Recall the discussion in Chapter 6 regarding Pease and Flood (2008) who were cited regarding their argument that ideology is rooted in “social conditions and social consciousness” (554). If ideologies are better captured by scenario-based vignettes that can contextualize various beliefs and attitudes rather than recording level of agreement with various statements, then perhaps this explains the differences from past research. Perhaps past studies assessing rape myth acceptance with attitudinal measures have fallen into the trap of “abstracted empiricism” (see Mills 1959). When these researchers find white males have lower rape-myth acceptance attitudes than
minorities, these findings reinforce the "matrix of domination" (see Collins 2000). Chapleau and Oswald (2013) found that white men were less accepting of rape myths in scenarios where victims were of high status and perpetrators were of low-status. Historically, this can be seen in stereotypes of the "black male rapists" and aggressive prosecutions of black men accused of raping white women. Researchers need to consider context specific measures of rape-myth attitudes in order to better assess their purpose and their meanings, especially in regards to race. Beyond the ability to assess context in assessing rape-myths, a theory of violence against women should take the lead of Chapleau and Oswald (2013) in determining the purpose of these myths. While the current research treated these items as proxy measures, or a dimension of patriarchal ideology, they can also be used in a more general sense to address questions like: how are they used to reinforce the status quo in regards to violence against women?

*Relationship Violence and Patriarchal Ideology*

Chapter 3 reviewed and criticized the literature suggesting "patriarchal ideology" was not predictive of relationship violence perpetration. It was discussed that individual patriarchal ideology does not need to be directly predictive of violence against women to have significance in a theory of violence against women. Initial bivariate correlation coefficients for the two-wave panel design suggested positive, weak, but significant correlation coefficients for each time period regarding the links between patriarchal attitudes and violence perpetration. The growth-curve data suggested bivariate correlations between patriarchal ideology and relationship violence perpetration for each respective time period to also be positive, weak and significant. These effects, however,
were absent when controls were considered in the MIMIC models. These preliminary findings suggested relationship violence was not predictive of patriarchal ideology. However, since these models were cross-sectional, it would be erroneous to assume this was the end of the story and that no relationship between the two existed. It was entirely possible that the time-lag, which was not known in the cross-sectional analyses, was too short to see any effect. Thus, the cross-lagged and reciprocal models tell us more about the lagged effects of relationship violence perpetration and patriarchal ideology than any previous study in this area.

Although findings suggested no reciprocal relationship between the two, results did show how the two were significantly correlated at the initial wave (i.e. end of freshman year). While controlling for their autocorrelations, the next wave of data suggested relationship violence was predictive of patriarchal attitudes, while the opposite was true in the final wave. This suggests a dynamic causal process may be taking place over time. While patriarchal ideology may not always predict relationship violence and relationship violence may not always predict patriarchal ideology, they definitely have direct and indirect effects on one another. Thus, the finding that these two had significant covariation in their average initial levels, but that their rates of decline were not significantly related to one another (and one had between individual declines while the other had within individual declines) means the simultaneous changes in each are still not accounted for. The goal for future research studies is to develop longitudinal growth-curve or hierarchical linear models that take into consideration the covariation of relationship violence perpetration and patriarchal ideology, while controlling for second-order predictors of each.
The major focus of this study was the assessment of patriarchal ideology over time, using a sample of college males. Combining all analyses, change in patriarchal ideology can be summed up in the following:

1) Patriarchal ideology is stable from the beginning of the first year of college to the end of the first year of college.

2) Patriarchal ideology declines from the end of one's freshman year of college to the end of their junior year of college.

3) Despite significant differences within individuals, overall, the entire sample had the same rate of change in patriarchal ideology over time.

The results in regards to change in patriarchal ideology over time tell us first that individual patriarchal ideology is not a static “trait” as some role-theorists may believe. Despite the fact that only a short period of time was covered in this research, observed declines were still seen. It is entirely possible that these declines were reflective of the sample, college men. While certainly college men should not be reflective of all men, Chapter 4 did mention some of the unique qualities college male samples hold in considering various aspects related to violence against women. The fact is, we should expect patriarchal ideology to decline over time for college men, but the degree of this seemingly inevitable outcome is likely to be small when not specifically targeted by college institutions. However, as the few institutional patriarchy examples illustrated in Chapter 2 showed, colleges and universities often employ symbolic change while lagging behind in any real, progressive reforms or policies aimed at changing patriarchy within the institution.
The lack of inter-individual change in patriarchal ideology over time suggests group-level variables account for the observed declines rather than individual variables. Thus patriarchal ideology as a “pathological, static trait” as seen by some is not true. The exact source of the equal rates of decline is unknown since aggregate-level variables were not available in this research. Connell and Messerschmidt’s (2005) suggestion that micro-level psychological dynamics should be considered in their theory of hegemonic masculinity might need to be reassessed. While certainly individual traits can determine one’s patriarchal ideology, patriarchal ideology is far more likely to change at macro or meso levels rather than at micro levels.

Future research examining individual patriarchal ideology in a theory of violence against women would need to consider level-2 variables when it comes to their change over time. They might also benefit from considerations of level-2 variables that assess the origins of patriarchal ideology. These variables should consider important characteristics of the institution as well as general group-level factors important in all social institutions (e.g. percent minority, SES, regional characteristics). Institutional variables to consider for educational institutions would include controlling for various rates of violence against women as well as types of and numbers of institutional programs that address violence against women, or more generally women’s subordination.

Solutions to violence against women that focus on attitudes towards women, patriarchal ideology, or just sexism in general almost always have the same policy solutions. Generally speaking, they typically note how the solution is to address these “learned” characteristics through some sort of education program. While these solutions are often appropriate, they fail to produce radical change because they treat violence
against women or more generally "sexism" as individual problems. The fact that changes in individual patriarchal ideology occur at the group-level, not the individual level, suggests these solutions are perhaps misguided. Violence against women courses in universities do not treat these issues as individual problems, but the institutions that house such programs and course offerings do so by not making these mandatory.

Some researchers have suggested these programs become university requirements (Payne and Triplett 2009; York 2011). While most universities have some sort of freshman seminar course meant to ease students into college life, these courses pay very little attention to some of the most serious issues like violence against women. If not entire courses on violence against women, this should at least be a main topic covered in these mandated freshman seminar courses. Qualitative research with students enrolled in these courses has shown students have an interest in knowing more about experiences with alcohol and violence (Davig and Spain 2004). Others suggest combining alcohol abuse prevention programs (something widely discussed on college campuses) with sexual assault prevention programs (Payne, Ekhomu, and Carmody 2009). Sexual assault prevention programs in college have been shown to be effective (Langhinrichsen-Rohling et al. 2011). Yet, when these programs are not mandated, those who might need the

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2 The current study had no significant findings in regards to sexual assault program attendance in reducing patriarchal ideology, but this was most likely a selection effect. That is, this question did not make it clear if respondents attended a sexual assault awareness program out of obligation (e.g. course requirement, mandate from the university, a court mandate) or because they were generally concerned about this topic.
programs the most are highly unlikely to enroll on their own free will. Universities that mandate such courses send the message to young men that the institution and those in power take these issues seriously, as they should (for similar discussions, see Payne, et al. 2007; Schwartz and DeKeseredy 1997). It may seem like it is asking much to mandate such courses, but as Payne and Triplett (2009) have pointed out, the state has no problem mandating training in programs like homeland security awareness, despite a very low likelihood of ever coming into contact with such social phenomenon. Certainly there are far more instances of men raping women on college campuses than there are of any Al Qaeda-sponsored terrorist networks.

It is also important that the content of these courses remain woman-centered and that they keep the focus on the broader social impacts of patriarchal ideology and patriarchy in general. As hooks (2000) notes, men's groups like those focusing on male-role strains, "run the risk of overemphasizing personal change at the expense of political analysis and struggle" (74). Similarly, batterer intervention programs have been shown to be effective at reducing men's future acts of violence. Although these programs have had significant decreases on men's violence, these decreases have been minimal. Such programs tend to overemphasize individual pathology. Instead, group-based approaches that show individual offenders that violence against women is not just wrong, but that the wider society, including men, will not tolerate such behaviors, should be encouraged. They are not likely to work, however, when men's collective patriarchal ideology (e.g. men that choose to attend a sexual assault awareness program are most likely to have lower levels of patriarchal ideology).
disagrees. The starting point is to target men's patriarchal ideology at the group level first.

CONCLUSION

This research has responded to recent calls by feminist researchers to “resurrect” patriarchy in theories of violence against women (Hunnicutt 2009). The case was made that patriarchal ideology has not been well-developed or well-understood in theories of violence against women. Chapter 2 conceptualized and provided historical examples of institutional patriarchal ideology. Chapter 3 conceptualized individual patriarchal ideology and gave a review of the research relevant to violence against women that has largely ignored, misinterpreted, or failed to address the role individual patriarchal ideology plays in a theory of violence against women. Chapters 4 and 5 provided one of the few analyses to consider attitudinal measures of individual patriarchal ideology longitudinally and as outcome variables using traditional test/re-test panel data and traditional, attitudinal operationalizations of patriarchal ideology. Chapters 6 and 7 used vignettes to operationalize patriarchal ideology, assessing how they change over time in various latent growth-curve models. The methods chapters (4 and 6) highlight the limitations to this study. This final chapter has attempted to make the most sense of the results, while noting the challenges faced with little precedence in this area since no prior research has considered longitudinal analyses of patriarchal ideology.

The conclusion of the opening chapter of this research highlighted six main goals of this research. To repeat, they were:

1) To accurately conceptualize patriarchal ideology.
2) To explore the reliability of operational measures of patriarchal ideology.

3) To investigate potential etiological variables related to patriarchal ideology.

4) To better understand how patriarchal ideology changes over time.

5) To uncover how patriarchal ideology fits in feminist theories of violence against women.

6) To consider potential social policies that might effectively target patriarchal ideologies.

The front-end of this dissertation laid-out a clear definition of patriarchy and patriarchal ideology, differentiating between institutional patriarchal ideology and individual patriarchal ideology. The operational use of attitudinal measures of patriarchal ideology had every indication of acceptable reliability, with the only evidence to the contrary leaning more towards research strategy rather than something inherently wrong with these measures. The vignette-based items, too, were reliable and might be preferred for future research going forward wanting to quantify any sort of “ideology.” While there was not overwhelming support for the origins of patriarchal ideology, some findings suggest that they lie in demographic characteristics (i.e. race) as well as aspects of familial patriarchy (i.e. witnessing domestic violence). Patriarchal ideology appears to be fairly stable within individuals from before they start college to the end of their first year of college. After that, patriarchal ideology declines over time at equal rates for this sample of college men. Feminist theories of violence against women should consider patriarchal ideology as a group-level variable, rather than a “trait” that resides within individuals. Thus, macro-level programs and policies that are aimed to reforming
patriarchal ideology at the group level should be given precedence over those that target individual-level patriarchal ideology.
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277


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286


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