McNair Scholars Research Journal

Volume 4 - Spring 2008

Featuring research of 2007 Boise State McNair Research Fellows
### Boise State University McNair Scholars

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- Helen Barnes - Academic Specialist
- Meredith Grubbs - Office Assistant
- Megan Stright - Graduate Intern
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- Dr. Sona Andrews - Provost and Vice President for Academic Affairs
- Dr. Diane Boothe - Dean, College of Education
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MESSAGE FROM PRESIDENT BOB KUSTRA

Congratulations to all of the 2008 McNair Scholars for your achievements over the past year. In particular, I want to acknowledge the hard work and accomplishments of the senior Scholars whose research is represented in the papers in this publication. The papers contained in this volume represent a remarkable breadth of scholarship and mark the culmination of an extensive research experience for these promising academic talents at Boise State. I also want to recognize and thank all of the faculty mentors who have worked with our McNair Scholars. It is your patience, guidance and encouragement that facilitates the transformation of these students into scholars.

The Ronald E. McNair Post-Baccalaureate Achievement Program honors the memory and achievement of the late Dr. Ronald E. McNair, a physicist and NASA astronaut. Its goal is to encourage undergraduates from underrepresented backgrounds to emulate the academic and professional accomplishments of Dr. McNair by facilitating their pursuit of doctoral degrees and academic careers in teaching and research. The research presented here signals the arrival of a new group of rising scholars who will carry their talents, enthusiasm and hard work ahead into graduate programs here and across the country. The research and other experiences you have had as undergraduates and McNair Scholars at Boise State University are your first critical steps on this path. As you graduate and move on, I hope that you will continue to aspire, achieve and pursue your dreams.

Again, congratulations and best wishes.

Sincerely,

Bob Kustra
President
May 2008

We are delighted to present the fourth edition of the Boise State McNair Scholars Research Journal. We first published this journal three years ago because we believed it was important, not only to engage scholars in undergraduate research, the primary goal of the McNair Program, but also to provide them an opportunity to get an early understanding of the critical role of publishing in graduate school and in future academic careers. This represents the first published piece for many of our students as they embark on the graduate school journey. In a sense, the McNair Journal is the final component of preparation the program provides to our undergraduates at Boise State University.

Now, toward the end of our fifth year as a program at Boise State University, we continue on this incredible journey of working with talented undergraduate scholars whose work you see produced in this volume. The research contained here demonstrates a significant accomplishment for each of these scholars and is the culmination of work that began approximately 20 months ago, with the bulk of research having been accomplished in the summer of 2007. Scholars worked hard. They spent considerable time with faculty mentors who provided important guidance during their research experience, consulted with them about numerous research issues, and helped them find academic conferences at which to present their work both regionally and nationally in order to lay a foundation for entering graduate school with confidence. The excellent research in this volume would not be possible without the involvement of these dedicated Boise State faculty.

Thanks are also in order to Memo Cordova, our dedicated Librarian, who gave incalculable library research guidance to our scholars; Meredith Grubbs, who kept us organized and edited and formatted the journal; Megan Stright, for her meaningful personal support of our students; and Helen Barnes, whose numerous contributions as our third professional staff member help make our program what it is, an excellent, life-changing program.

We are very proud to see how our students have grown as scholars and researchers. We believe the McNair Research Journal provides each of them a deserved recognition of their hard work.

Gregory Martinez
Director, TRiO College Programs

David Hall
Program Coordinator
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The Boise State McNair Scholars Program is supported by a $225,000 annual grant from the US Department of Education TRiO Programs.
Effects of Finite Layer Thickness on the Differential Capacitance of Electron Bilayers

J.J. Durrant: McNair Scholar
Dr. Charles Hanna: Mentor
Physics

Abstract

We have calculated the effects of finite thickness on electron or hole layers in double-quantum-well systems. In particular, we apply our model to calculate the Eisenstein ratio and the interlayer capacitance of a biased bilayer device; these are direct measures of the compressibility of the charge carriers in the layers. We show that our model agrees well with the experimental layer-occupancy data for a device of this type. We present results for the regime of negligible interlayer tunneling, zero applied magnetic field, and low layer densities, when the compressibility of one or both layers is negative.

Introduction

In this paper, we extend models of double-quantum-well electron or hole systems that have front and back gates and separately contactable layers to include finite-thickness effects. Previous theoretical models\(^1\text{-}^4\) have modeled the charge density in the quantum wells as two-dimensional electron gases (2DEGs). However, while the 2DEG model is an effective one,\(^1,^2,^5,^6\) it is also an idealized approximation, since the quantum-well confining potential of the 2DEG has a finite thickness, usually on the order of 15 nm.\(^5\) In this paper, we incorporate the effects of this finite-thickness by allowing the charges to have an additional spatial degree of freedom normal to the plane where the 2DEG is confined. Our approach is to derive the corrections to the 2DEG model based on the consequences of including this additional degree of freedom.

We present a pictorial overview of our model of a double-quantum-well system as follows. Figure 1 (below) shows the geometry of the device. The front (F) and back (B) gates are distances \(D_F\) and \(D_B\) from the two quantum wells, labeled 1 and 2, respectively. The two quantum wells are separated by an interlayer distance \(d\). Typically, real devices have dimensions on the order of \(D_B \sim 3 \mu m, D_F \sim 0.3 \mu m,\) and \(d \sim 15 \text{ nm}\). The gates and layers are charged by the application of the front-gate voltage \(V_F\) (between the front gate and layer 1) and the back-gate voltage \(V_B\) (between the back gate and layer 2). If the layers are separately contactable, then a middle voltage \(V_M\) can be maintained between the layers, otherwise the layers share a common ground.

Figure 1. Schematic illustration of a double-quantum-well device with front (F) and back (B) gates, two quantum wells (layers 1 and 2), and front-gate, middle (interlayer), and back-gate voltages \(V_F, V_M,\) and \(V_B\), respectively. The distances \(D_F, d,\) and \(D_B\) are the separations between the front gate and layer 1, layer 1 and layer 2, and layer 2 and the back gate, respectively.

Figure 2 (below) shows the electric fields produced by the charges on the gates and layers of the device. Earlier models treated the charges densities in the quantum wells (layers 1 and 2) as two dimensional,\(^2,^4\) but here we will focus on finite-thickness corrections to the two-dimensional models. The surface charge densities on the front and back gates are denoted by \(e n_F\) and \(e n_B\), respectively, and the surface charges densities on the layers are denoted...
by $-en_1$ and $-en_2$, respectively, where $e$ is the charge of an electron. Note that in a hole ($p$-type) system, the signs of the charges in the gates and layers reverse sign. A system of this type will be discussed in Section 3. The electric fields produced by the charges are denoted by $\vec{E}_F$ (between the front gate and layer 1), $\vec{E}_M$ (between layer 1 and layer 2), and $\vec{E}_B$ (between layer 1 and the back gate). Since the area of the gates and layers is on the order of 1 mm, while the separations between the layers are on the order of at most 10 $\mu$m, we approximate the electric fields as uniform.\(^7\)

Figure 2. Electrical charges on the gates and layers produce electric fields $\vec{E}_F$, $\vec{E}_M$, and $\vec{E}_B$, between the gates and layers, shown for electron ($n$-type) bilayers.

Having defined the parameters relevant to our model, we proceed to derive corrections to the 2DEG model based on finite-thickness effects in Section 2. We apply our model by calculating a theoretical fit to an experiment with a double-quantum-well device\(^5\) in Section 3. We also calculate the Eisenstein ratio\(^2, 4\) and the interlayer capacitance between layer 1 and layer 2 for this same device in Section 3. Finally, we discuss the implications of our results in Section 4.

**Theoretical Model**

In this section, we develop a theoretical model to describe the behavior of double-quantum-well devices. Our task is to extend two-dimensional models, derived by previous workers\(^2-4\), to include the effects of finite thickness. We present corrections based on finite-thickness to the expression for energy per area of a double layer system. From this result, we derive corrections to the chemical potential and the density of states. For simplicity, we assume that the charges carriers in both layers have no net spin polarization.

Our first consideration is the energy per area $U$ of a single layer of electrons (holes) in a double-quantum-well system. We can express this quantity as the sum of two terms

$$U = U_C + U_{QM},$$

where $U_C$ is the energy per area due to classical electrostatic interactions, and $U_{QM}$ contains both the energy per area arising from the quantum-mechanical exchange energy, and the kinetic energy per area of the electron (hole) gas. By assuming a 2DEG model -- i.e., that each layer has zero thickness -- expressions for $U_C$ and $U_{QM}$ have been derived\(^3, 4, 8\) that agree well with experiments\(^2, 6\). In the 2DEG model, these expressions are

$$U_C = \frac{e^2}{4\pi \varepsilon} \left( n_F - n_i \right)^2 d$$

and, in the Hartree-Fock approximation,\(^4\)

$$U_{QM} = \frac{\pi \hbar^2}{2m} n^2 - \frac{8}{3\sqrt{2\pi}} \frac{e^2}{4\pi \varepsilon} n^{3/2},$$

where $n_F$ and $n_i$ are the Fermi and impurity densities, and $d$ is the separation between the layers.
where $d$ is the effective separation between the 2DEGs, $m^*$ is the effective mass of the electrons (holes), and $\varepsilon$ is the dielectric constant of the semiconductor host. We also assume that each layer is independent of each other (no interlayer coherence); i.e., that $U(n_1, n_2) = U(n_1) + U(n_2)$.

The previous results are all obtained under the assumption of two-dimensional layer densities. We now derive corrections to Eq. (2) and Eq. (3) to include an additional degree of freedom normal to the plane of the 2DEGs; i.e., we allow the 2DEGs to have some finite-thickness within the quantum wells. For a single layer of density $n$, the correction to $U_{QM}$, which we call $\delta U_{QM}$, is given by

$$\delta U_{QM} = -\frac{8/3}{\sqrt{2\pi}} \frac{e^2}{4\pi \varepsilon} n^{3/2} \left[ G(k) - 1 \right].$$  

(4)

where $k = 2(\pi n)^{1/2}$ is the Fermi wave vector, and

$$G(k) = \frac{3}{2} \int_0^1 dx \ F(kx) \left[ \pi / 2 - \sin^{-1}(x) - x\sqrt{1-x^2} \right].$$  

(5)

Here $F(k)$ is the “form factor,” which depends on the envelope wave function $\zeta(z)$ that describes the density profile of the charges in the well, via

$$F(k) = \int dz \int dz' e^{-k|z-z'|} \left| \zeta(z-d) \right|^2 \left| \zeta'(z-d) \right|^2,$$  

(6)

where $\zeta(z)$ is the density-profile wave function of the well. Note that in the zero-thickness limit $|\zeta(z-d)|^2 \to \delta(z-d)$, and $F(k) \to 1$, so that $\delta U_{QM}$ vanishes and we obtain the 2DEG result. Using these results, it can be shown that the correction to the to $U_C$, which we call $\delta U_C$, is given by

$$\delta U_C = \frac{e^2 \tilde{n}^2}{2} \lim_{k \to 0} \left[ \frac{\partial}{\partial k} F(k) \right] = -\frac{e^2 \tilde{n}^2}{2} w,$$  

(7)

from which we define the thickness $w$ as

$$w = -\lim_{k \to 0} \left[ \frac{\partial}{\partial k} F(k) \right].$$  

(8)

We can now calculate the effects of finite-thickness based from the corrections expressed in Eq. (4) and Eq. (7), which is the topic of the next section. To calculate quantities of interests, we will also need the first and second derivatives of $U$ with respect to layer density $n$, which are the layer chemical potential $\mu$, defined as

$$\mu = \frac{\partial}{\partial n} U_{QM},$$  

(9)

and the thermodynamic length $s$, which is proportional to the density of states, and defined by

$$s = \frac{\varepsilon}{e^2} \frac{\partial \mu}{\partial n} = \frac{\varepsilon}{e^2 \tilde{n}^2 \kappa},$$  

(10)

where $\kappa$ is the electron compressibility. At low densities ($n \to 0$), the electronic compressibility becomes negative, which implies that
From Eq. (9) and Eq. (10), the finite-thickness corrections to $\mu$ and $s$, denoted by $\delta \mu$ and $\delta s$, respectively, are calculated to be

$$\delta \mu = -\frac{e^2 n}{\varepsilon} w + \frac{\delta U_{QM}}{n_f} + \frac{4e^2}{\varepsilon} \sqrt{\frac{n}{\pi}} \left[ -\frac{1}{3} - \int_0^l dx \int_0^1 F(kx) x \sqrt{1-x^2} \right],$$

$$\delta s = -w + \frac{2}{\sqrt{\pi} n} \left[ 1 - \int_0^l dx \int_0^1 F(kx) \frac{x}{\sqrt{1-x^2}} \right].$$

We are now in position to calculate the effects on finite thickness, based on the corrections to the energy per unit area, the chemical potential, and the thermodynamic length. These calculations are the topic of the next section.

### Results

In this section, we present some calculations based on the model developed in the previous sections. First, we discuss the assumptions used in our calculations. Second, we present a theoretical fit to an experiment conducted with a double-quantum-well device. Third, we present a calculation of the Eisenstein ratio. Finally, we present a calculation of the interlayer capacitance.

As discussed in the previous section, the finite-thickness corrections to the energy per area depend on the form factor $F(k)$, given in Eq. (6). For simplicity, we choose the ground-state infinite-square-well wave function for $\zeta(z)$, given by

$$\zeta(z) = \sqrt{\frac{2}{b}} \cos \left( \frac{\pi z}{b} \right),$$

Figure 3. Pictorial overview of our approach to choosing a form factor for our model.

The figure shows two quantum wells, with outer barriers of ~ 0.35 eV and an inner barrier of ~ 1 eV. Two infinite-square-well ground state wave functions occupy the wells, and their width is allowed to vary the full thickness of the well, subject to the constraint that the outer nodes of the wave functions must be located at the outer 0.35 eV barriers.
where $b$ is the “width” of the wave function. Using Eq. (6), the form factor is calculated to be

$$F(k) = \left[ 2 \left( \frac{bk}{(bk)^2 + (2\pi)^2} - \frac{1}{bk} \right)^2 \left( e^{-bk} - 1 \right) + \frac{2}{bk} \frac{bk}{(bk)^2 + (2\pi)^2} \right].$$

(15)

Note that in the zero-thickness limit $b \to 0$, one obtains $F(k) \to 1$; the finite-thickness corrections vanish, and we obtain the 2DEG model. Using Eq. (15) as our expression for the form factor, we can now calculate the energy per area of a double-quantum-well system, using Eq. (2), and adding in the finite-thickness corrections, Eqs. (4) and (7). We minimize the expression for the energy per area using a variational approach, under the following constraints, which are summarized pictorially in Figure 3 (above). The minimization is done with respect to the population of the first layer $n_1$, and the separation between the layers $d$ is left as a free fitting parameter. The value $n_1$ constrains the value for $n_2$ since the total charge of the layers $n_T$ is known and is given by $n_T = n_1 + n_2$, up to an overall constant. The constraint that the wave function be pinned to the outside of the well (see Figure 3) may be expressed as

$$d = 2a - b,$$

(16)

where $a$ is the distance from the middle of the barrier separating the wells to the outer barrier of one of the wells, and $b$ is the width parameter in Eq. (14). Eq (16) forces the wave function to vanish at the outer barrier, and allows the width $b$ of the wave function to vary from zero up to the width of the well. The precise value of $b$ is determined by choosing an appropriate $d$ to fit experimental data. It follows from Eq. (8) that

$$w = -\lim_{k \to 0} \left[ \frac{\partial}{\partial k} F(k) \right] = \left( \frac{12\pi^2}{4\pi^2 - 15} \right) b.$$

(17)
Figure 4 (above) shows data from Ref. 5. The figure shows an exchange-driven monolayer-bilayer-monolayer transition with increasing total density (decreasing $V_F$) in a $p$-type (hole) system. Using our variational approach, we minimized the energy per area to find $n_1$ and $n_2$ as a function of the front-gate voltage $V_F$, and chose $d$ to fit the data. A value of $d = 14.6$ nm gave the best fit for the 2DEG model, while $d = 21.25$ nm gave the best fit when finite-thickness corrections were included. Choosing $d = 21.25$ nm gives $b = 8.7$ nm, meaning that the wave function occupies 58% of a 15 nm wide well. Both models offer excellent agreement with the experimental data, with the finite-thickness corrections improving the agreement somewhat. Note that the 2DEG model overestimates the abruptness of the bilayer-to-monolayer transition, and that the finite-thickness corrections improve the agreement by softening this abrupt transition.

Another quantity of interest that can be experimentally measured is the Eisenstein ratio $R_E$. The Eisenstein ratio is defined as

$$R_E = \frac{\delta E_M}{\delta E_F} = 1 - \frac{\delta n_1}{\delta n_F}, \quad (18)$$

where $\delta E_F$ is the differential change in electric field between the front-gate and layer 1, $\delta E_M$ is the differential change in electric field between layer 1 and layer 2, and $\delta n_1$ and $\delta n_F$ are the differential changes in charge on the first layer and the front gate, respectively, and we have used the approximation of uniform electric fields and Gauss’s Law relate the electric fields to the charge densities. When the back-gate voltage is held fixed and the front-gate voltage is varied, then the Eisenstein ratio can be approximated as

$$R_E = \frac{s_1}{d + s_1 + s_2}, \quad (19)$$

where $d$ is the effective separation of the layers (as fit to the experimental data of Ref. 5), and $s_j(n_j)$ ($j = 1, 2$) are the thermodynamic lengths of layer 1 and layer 2. The thermodynamic lengths are calculated using Eq. (10) for the 2DEG case, and with the correction in Eq. (13) for the finite-thickness case.

Figure 5 (above), is a calculation of the Eisenstein ratio for the bilayer sample of Ref. 5. There are two discontinuities in the Eisenstein ratio at $V_F \sim 0.32$ V and $V_F \sim 0.54$ V. The discontinuities are due to the monolayer-to-bilayer transition at $V_F \sim 0.32$ V and the bilayer-to-monolayer transition at $V_F \sim 0.54$ V, which are abrupt in the Hartree-Fock approximation. Finite-thickness corrections and disorder soften the abrupt layer transitions, so the
corrections would also be expected to smooth out the magnitudes of the discontinuities in the Eisenstein ratio, which is what we find in our calculations.

Finally, we calculate the interlayer capacitance per area $C_{MM}$ as a function of the interlayer voltage $V_M$. When both layers are occupied, the interlayer capacitance can be expressed as

$$C_{MM} = \frac{1}{\epsilon/d} \left( \frac{d(n_e - n_l)}{dV_M} \right)_{V_f,V_g} \approx \frac{d}{d+s_1+s_2},$$

(20)

Figure 6. Interlayer capacitance per area $C_{MM} \approx \epsilon/(d+s)$, in units of the classical result $\epsilon/d$.

The solid line corresponds to the calculation with finite-thickness effects included, while the dashed line shows the interlayer capacitance for zero thickness. The dotted line is the classical ($s=0$) result, $\epsilon/d$. The effective separation $d$ is larger which lowers the value for the interlayer capacitance. This same effect also allows for a larger voltage range for $V_M$.

Discussion

We presented a calculation of the Eisenstein ratio that showed a softening of the discontinuities at the monolayer-to-bilayer transition and the bilayer-to-monolayer transition. This was expected since the finite-thickness corrections softened the layer transitions when the model was fit to the data of Ref 5. Including the finite-thickness effects also had an appreciable effect on the interlayer capacitance. The capacitance was lowered as a consequence of the wave functions being “pushed apart” since they have an additional freedom to explore. This gave a higher value for the effective interlayer distance, driving down the interlayer capacitance. However, the range on interlayer voltage was increased, this is to be expected since differential capacitance is defined as $C = dQ/dV$, and a decrease in capacitance corresponds to increase in voltage, if charge is conserved, as it is in our model.

By extending previous 2DEG models with corrections based on finite-thickness we were able to improve the models agreement with experiment. These results indicate that finite-thickness effects are important in modeling the physics of bilayer devices. For future work, we plan on expanding the results of this paper by allowing more variational freedom in the minimization of the energy per area. This would include relaxing the mirror symmetry restriction that is currently in place and allow the parameters of each well, such as wave function location and form, to vary independently. It would be interesting to see if doing so could yield new insights into the models of double-quantum-well systems.
Acknowledgements

The author would like to thank Professor Charles Hanna, the staff of the McNair scholars program (David Hall, Helen Barnes, and Greg Martinez), and especially his parents, John and Nancy Durrant, for all their mentoring and support.

References

The Relation between Attachment to Opposite Sex Parents and Attachment to Romantic Partners

Gary L. Grogan: McNair Scholar
Dr. Mary E. Pritchard: Mentor

Psychology

Abstract

This study examined the relation between attachment to opposite sex parents and attachment to romantic partners. Previous research has indicated that attachments to parents closely resemble attachments to romantic partners (Hazan & Shaver, 1987). However, little research has examined whether attachment to the mother or father is more predictive of attachment to romantic partners, and whether this varies by gender. The present study surveyed 236 college students about their attachment to parents, as well as romantic partners. We hypothesized that attachment to opposite sex parents would be significantly related to attachment with romantic partners. Results indicated that those who exhibit trust, communication, or alienation with opposite sex parents show significant positive correlations with fearful attachment styles to romantic partners. Furthermore, attachments to same sex parents showed similar results. This study can provide an important contribution to the understanding of how trust, communication, and alienation from parents influences adult romantic relationships.

Introduction

Attachment theory emphasizes the importance of strong affectional bonds across the life span (Bowlby, 1979). According to Ainsworth (1989), young people learn from interactions with their parents how to initiate and maintain satisfying relationships. Moreover, previous research has indicated that attachment styles with parents may be carried forward into adult romantic relationships (Carnelly, Pietromonaco, Paula, & Jaffe, 1996; LePoire et al., 1997). However, little research has examined whether the attachment style to the mother or father is more predictive of attachment styles to romantic partners, and whether this varies by gender. Although attachment styles to same sex parents will be analyzed, the purpose of the present study is to examine the relation between attachment styles to opposite sex parents and attachment styles to romantic partners as we expect attachment to opposite sex parents will be more predictive of attachment to romantic partners.

Attachment theory

Attachment theory was pioneered by John Bowlby, who observed behaviors in infants and young children that had been separated from their primary caregivers (usually mothers). Bowlby (1982) noticed that children separated from their primary caregivers proceed through predictable emotional reactions, such as protest, despair, and detachment. Bowlby (1969) asserted these behaviors are evolutionary as infants lack the ability to nourish and protect themselves. Hence, infants seek and maintain close proximity to select others, namely, primary caregivers. Furthermore, children who have available, sensitive, and responsive caregivers form secure attachment styles, and tend to explore their environment (Bowlby, 1988), whereas children whose caregivers are consistently unavailable, insensitive, and unresponsive become anxious, jealous, and insecurely attached. Insecurely attached children generally do not explore their environment and experience extreme distress in absence of an attachment figure. Bowlby (1989) observed that when attachment figures return from absence, insecurely attached children become anxiously ambivalent or avoidant, while children with secure attachment styles appear blithe. Finally, Bowlby (1979) believed attachment behavior learned in infancy characterize the individual from the “cradle to the grave” (p. 129).
Attachment transference

Individuals apply their working models of attachment to future romantic relationships; thereby transferring attachment styles from one relationship to the next (LePoire et al., 1997; Brumbaugh & Fraley, 2006). McElwain and Volling (2004) revealed that by age four, effects of attachment, security, and parental sensitivity experienced during infancy are manifested in friendship quality. Their research suggests attachment, security, and parental sensitivity are catalysts for development of trust, happiness, and communication experienced in future relationships. Those individuals who demonstrate more positive and loving relationships with parents experience more trust, comfort, and communication with romantic partners (Black & Schutte, 2006). In addition, interactions with parents help children form mental representations of self-worth and self-concept (Gabriel, Carvallo, Dean, Tippin, & Renaud, 2005; Park, Crocker, & Mickelson, 2004), playing a vital role in the development of social skills, relational competence, and adolescent emotional adjustment (Engels, Finkenauer, Meeus, & Dekovic, 2001). Furthermore, research has confirmed the effects of romantic involvement on attachment transfer from parents to romantic partners (Feeney, 2004), and suggests catalysts for attachment styles in infancy, such as trust, caregiving, and intimacy are positively associated with development of adult romantic relationships (Fraley & Davis, 1997).

Opposite sex parents and romantic partners

Hazan and Shaver (1987) successfully applied the theoretical framework of attachment theory to adult romantic relationships and explained romantic love as an attachment process. Their research suggests the prevalence of attachment styles in infancy, such as secure attachment, anxious/ambivalent attachment, and anxious/avoidant attachment are relatively the same as in adulthood. Moreover, results indicated romantic attachment styles are significantly related to experiences with parents. However, most significant for the present inquiry were the findings that respondents described their opposite sex parents more favorably, and same sex parents more critically. For example, women described their fathers as more loving and less critical, whereas men described their mother more loving and less critical. Finally, research supports the belief that individuals seek romantic partners who resemble their opposite sex parents both physically and emotionally (Collins & Read, 1990; Black & Schutte, 2006).

The present study

The purpose of the present study was to examine the relation between attachment styles to parents and attachment styles to romantic partners. A great deal of research has shown attachment styles are transferred from parents to romantic partners (LePoire et al., 1997; Brumbaugh & Fraley, 2006). However, little research has examined whether attachment styles to the mother or father is more predictive of attachment styles to romantic partners, and whether this varies by gender. The primary focus of this study is on attachment to opposite sex parents, as those relationships are expected to be more predictive of attachment to romantic partners than will attachment to same sex parents. The present study hypothesized that attachment to opposite sex parents will be significantly correlated with attachment to romantic partners, whereas attachment to same sex parents will not.

Method

Participants

Participants were 236 college level students. Participants include freshman (70%), sophomores (22%), juniors (5%), and seniors (3%). Participants consisted of 113 males and 125 females. Participants were drawn from the Introductory Psychology participant pool at a large public university in the Pacific Northwest. The majority of participants were Euro-Caucasian (85%), with smaller numbers of African American (2%), Hispanic (7%), Asian (2%), and ‘Others’ (4%). All participants were treated in accordance with the “Ethical Principles of Psychologists and Code of Conduct” (American Psychological Association, 2001). The Institutional Review Board approved all study procedures before data collection began.
Materials

Attachment to parents. Attachment styles to parents were assessed using the Inventory of Parental and Peer Attachment (IPPA) developed by Armsden and Greenberg (1987). For the purpose of this study, the IPPA was administered twice - once to assess attachment to the mother and once to assess attachment to the father. The IPPA is a self-report instrument containing 53 items measuring perceived attachment styles with respect to trust, communication, and alienation. Participants were asked to rate themselves on a 5-point Likert-type scale the degree to which the items describe their feelings experienced in close relationships, with (1) almost always or always true to (5) almost never or never true. The IPPA was scored by summing the totals of each of the three subscales: trust (10 items), communication (10 items), and alienation (8 items). In addition, reverse scoring was required for responses to negatively worded items. The IPPA attachment ratings show convergent validity with Family Environment Scale ratings (Moos, 1974), as well as Tennessee Self-Concept Scale ratings (Fitts, 1965). Moreover, internal reliabilities (Chronbach’s alpha) for the three scales are trust = .91; communication = .91; and alienation = .72.

Attachment to romantic partner. The Relationship Scales Questionnaire (RSQ) developed by Griffin and Bartholomew (1994a, b) specifically measures perceived attachment styles with romantic partners. The RSQ a 30-item self-report instrument measuring the four prototypical adult attachment patterns: secure (5 items), dismissing (5 items), preoccupied (4 items), and fearful (4 items). Participants rate the extent to which each statement best describes their characteristic style in close relationships on a scale from 1 = not at all like me to 5 = very like me. Scores for each attachment pattern are calculating by averaging the four or five items for that subscale.

Procedure

Participants completed the survey in a classroom outside of class time. Participants were informed that participation was voluntary, and if at any time they became uncomfortable with the questionnaire they were free to withdraw without penalty. Participants were informed results will be used for research purposes only. The anonymous 120 item questionnaire took 25–30 min. to complete.

Results

To examine whether attachment styles to both opposite sex and same sex parents are significantly correlated with attachment style to romantic partners, Pearson’s $r$ correlations were computed between each parental attachment dimension and each romantic attachment style. As will be discussed below, significant correlations were found between both attachment style to opposite sex parents and attachment styles to romantic partners and attachment style to same sex parents and attachment styles to romantic partners. These correlations are displayed in Table 1.

Male attachments patterns

There was a significant positive correlation between father-son trust and fearful attachment styles to romantic partners, but no significant correlations were found between father-son trust and secure, pre-occupied, or dismissive attachment styles. Furthermore, there was no significant correlation between mother-son trust and attachment styles to romantic partners. A significant negative correlation between father-son communication and secure attachment styles to romantic partners was found. In addition, there was a significant positive correlation between father-son and mother-son communication and attachment styles to romantic partners, such as fearful and pre-occupied. There was a significant positive correlation between mother-son alienation and dismissive or fearful attachment styles to romantic partners. Moreover, mother-son alienation displayed a significant negative correlation with secure attachment styles to romantic partners. Finally, researchers found a significant positive correlation between father-son and mother-son alienation and fearful or pre-occupied attachment styles to romantic partners.
Female attachments patterns

Women who exhibited trusting relationships with their fathers were more likely to possess fearful and pre-occupied attachment styles to romantic partners, but no significant correlations were found between father-son trust and secure or dismissive attachment styles. Furthermore, there was a significant negative correlation between mother-daughter trust and secure attachment styles to romantic partners. However, there was a significant positive correlation between mother-daughter trust and fearful attachment styles to romantic partners, but no correlation was found with pre-occupied or dismissive attachment styles. Father-daughter and mother-daughter communication was found to have a significant positive correlation with exhibiting fearful attachment styles to romantic partners. In addition, there was a significant positive correlation between mother-daughter communication and dismissive attachment styles to romantic partners. Results suggest there is a significant negative correlation between father-daughter alienation and secure attachment styles to romantic partners. Moreover, there was a significant positive correlation between father-daughter alienation and fearful attachment styles to romantic partners, but no correlation was found between father-daughter alienation and pre-occupied or dismissive attachment styles to partners. Mother-daughter alienation was found to have a significant negative correlation with secure attachment styles to romantic partners. Finally, there was a significant positive correlation between mother-daughter alienation and fearful, pre-occupied, and dismissive attachment styles to romantic partners.

Table 1. Correlations between Attachment to Parents and Attachment to Romantic Partners

<table>
<thead>
<tr>
<th></th>
<th>Secure</th>
<th>Fearful</th>
<th>Pre-occupied</th>
<th>Dismissive</th>
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</thead>
<tbody>
<tr>
<td><strong>Male:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father Trust</td>
<td>-0.16</td>
<td>.29**</td>
<td>0.06</td>
<td>0.07</td>
</tr>
<tr>
<td>Mother Trust</td>
<td>-0.08</td>
<td>0.17</td>
<td>0.15</td>
<td>0.10</td>
</tr>
<tr>
<td>Father Comm.</td>
<td>-.23*</td>
<td>.27**</td>
<td>0.05</td>
<td>.23*</td>
</tr>
<tr>
<td>Mother Comm.</td>
<td>-0.10</td>
<td>.21*</td>
<td>0.05</td>
<td>.20*</td>
</tr>
<tr>
<td>Father Alien.</td>
<td>-.27**</td>
<td>.37**</td>
<td>0.13</td>
<td>0.10</td>
</tr>
<tr>
<td>Mother Alien.</td>
<td>-.27**</td>
<td>.34**</td>
<td>0.08</td>
<td>.28**</td>
</tr>
<tr>
<td><strong>Female:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father Trust</td>
<td>-0.13</td>
<td>.20*</td>
<td>.22*</td>
<td>0.01</td>
</tr>
<tr>
<td>Mother Trust</td>
<td>-.18*</td>
<td>.23*</td>
<td>0.13</td>
<td>0.13</td>
</tr>
<tr>
<td>Father Comm.</td>
<td>-.11</td>
<td>.29***</td>
<td>0.06</td>
<td>0.18</td>
</tr>
<tr>
<td>Mother Comm.</td>
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<td>.30**</td>
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<tr>
<td>Father Alien.</td>
<td>-.38**</td>
<td>.37**</td>
<td>0.06</td>
<td>0.18</td>
</tr>
<tr>
<td>Mother Alien.</td>
<td>-.41**</td>
<td>.47**</td>
<td>.23*</td>
<td>.27**</td>
</tr>
</tbody>
</table>

Note: *p<.05, **p<.01
Discussion

The present research was conducted to examine the relation between attachment to opposite sex parents and attachment to romantic partners. We hypothesized that attachment to opposite sex parents would be significantly correlated with attachment to romantic partners, whereas attachment to same sex parents would not. The results demonstrated that attachment to both opposite sex parents and same sex parents play an important role in comparison to attachment with romantic partners. These findings taken with previous research (Hazan & Shaver, 1987) suggest that attachment dimensions, such as trust, communication, and alienation experienced between parents and their children are significantly related with attachment to future romantic partners.

Our hypothesis that attachment to opposite sex parents would be significantly related to attachment with romantic partners was supported by significant positive correlations between alienation experienced with parents and insecure attachment styles to romantic partners. These findings were expected as previous research has indicated that individuals form working models of attachments, and carry them forward into adult romantic relationships (Feeney, 2004; Fraley & Davis, 1997; LePoire et al., 1997). Hence, individuals experiencing alienation from parents would expect and fear alienation from romantic partners. However, to our surprise results also indicated a significant positive correlation between trust and communication experienced with parents and insecure attachment styles to romantic partners. For example, participants who demonstrated more positive and secure attachments to parents exhibited more negative and insecure attachments to romantic partners. This finding appears to contradict previous research as a negative correlation would be expected (Black & Schutte, 2006). One explanation for this aberrant finding is the majority of our sample exhibited insecure attachment styles to romantic partners, whereas previous research has indicated a majority identifying with secure attachment styles to romantic partners (Hazan & Shaver, 1987). Furthermore, contrary to our hypothesis attachment to opposite sex parents was not shown to be more predictive of attachment to romantic partners as same sex attachments showed similar correlations. In addition, whereas women were more attached to their opposite sex parent, men were more attached to their same sex parent.

Limitations

Although the present study contributes an important understanding of how trust, communication, and alienation from parents influences adult romantic relationships there are a number of limitations that need to be considered. First, participants were asked to recall previous attachments to parents, as well as romantic partners. Thus, it can be argued that memories of previous attachments are less than perfect, and not an entirely accurate representation of actual experiences. Second, external validity was diminished by utilizing the Introductory Psychology participant pool which ranged in age from 18-21. The narrow age gap of participants hinders the ability to generalize findings to the general population. Finally, the majority of participants (80%) were not currently in romantic relationships. Future research should replicate the present study utilizing a more diverse population, as well as more romantically involved participants.

Conclusion

The data revealed by the present study suggests that attachment to both opposite sex parents and same sex parents play an important role in the development of attachment styles to romantic partners. In this study, trust, communication, and alienation experienced between parents and their children seemed to have a negative impact on future adult romantic relationships. For example, men and women who experienced more trust, communication, or alienation with parents exhibited more fearful and insecure attachment styles to romantic partners. Consequently, early childhood attachment formations to parents are crucial to the individual’s self-esteem, happiness, and security experienced in future romantic relationships. Clinical implications include providing interventions to address the relation between attachment to parents and attachments styles to romantic partners. Moreover, by addressing parental attachments as correlates of attachment styles to romantic partner’s counselors may contribute to a reduction in the myriad of marriages ending in divorce.
References

Out of the Closet or Under the Rug:  
An Analysis of Same-Sex  
Domestic Violence in Idaho

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Lisa Bostaph, Ph.D.: Mentor

Criminal Justice

Abstract

To date, there have been a limited number of studies that focus on the events of terror and injury, identified as domestic violence, as it occurs within the lives of homosexual couples. Through a review of academic articles and an analysis of government statistical data, this paper will address the prevalence of reported incidents of domestic violence within same-sex couples in the state of Idaho as compared to those reported nationally. The incidents of same-sex domestic violence within the state of Idaho will also be compared to incidents within heterosexual couples at the state and national levels to access the prevalence of domestic violence within same-sex couples by using heterosexual couples as the “norm”. This should enable the reader to make comparisons that enable one to understand the magnitude of domestic violence. The prevalence of such events should be evaluated to enable the enactment of programs applicable to the homosexual community that will inevitably be of benefit to all of society.

Introduction

To date, there have been a limited number of studies that focus on the events of terror and injury, identified as domestic violence, which occurs within the lives of homosexuals. Through a review of academic articles and analysis of data obtained from the U.S. Bureau of Justice and the Idaho State Police, this paper will address the issue of intimate partner violence within same-sex relationships in the state of Idaho as it compares to that within heterosexual relationships on state and national levels.

In light of current public attention given to the life-styles and social make-up of same-sex couples, one must ask if a comparison can or should be made between the domestic violence within heterosexual relationships and that within same-sex relationships. Is there a similar rate of occurrence with similar intensity? What are the reporting rates and reasons for not reporting within same-sex relationships?

Review of Research

Definition of abuse

Analysis of the current academic literature has found a limited amount of research on the subject of domestic violence within same-sex relationships. Most of the research found in this area specifically focused on lesbian relationships or same-sex relationships in general with very few addressing violence within gay male relationships.

Over the years, the issue of violence within a relationship has been signified by various terms, such as wife beating, spousal abuse, and intimate partner violence. Though many researchers have utilized a variety of criteria to define violence within a committed relationship, a definition of domestic violence that includes physical harm, threats of physical harm, verbal harassment and insults, failure to provide medications, property damage, threats of outing, prohibiting contact with family and friends, and coerced sexual activity would appear to be the most comprehensive definition as applied to same-sex relationships (Burke, 1998; Burke & Owen, 2006; Burke, Jordan,
According to Claire Renzetti (1992), discussion of domestic violence must also include the issue of power, which she defines as “the ability to get others to do what one wants them to do regardless of whether or not they want to do it”, and the power imbalances that are considered a primary correlate of abuse within relationships (as cited in McClennen, Summers, & Daley, 2002, p.278).

Patterns of abuse

Similarities can be seen between the cyclical patterns of abuse within same-sex relationships and that of heterosexuals (E. Seelau, S. Seelau, & Poorman, 2003; Burke & Owen, 2006; Burke et al., 2002; Turell, 2000). Both tend to begin with a period of “tension building” that moves to “simple assault” that may escalate into “acute battering” before returning to a “calming stage”. This cycle of abuse continues to increase in intensity and frequency as the time between stages decreases and may eventually culminate in severe injury or death to the victim (Burke & Owen, 2006, p. 7).

Rates of abuse

While there do appear to be similarities in the pattern of abuse, the research is varied as to whether the rates of abuse are comparable. Several authors found the rate of frequency of incidents of violence within same-sex relationships to be about the same as that between heterosexuals (Kuehale & Sullivan, 2003; Mahoney, Williams, & West, 2001; Seelau et al., 2003; Turell, 2000; West, 1998). McClennen et al. (2002) also conservatively placed the lesbian victim count at approximately 500,000 per year (McClennen et al., 2002). Burke and Owen (2006), however, utilized a 2003 analysis of the National Criminal Victimization Survey as a basis for their assertion there is a higher rate of violence within same-sex relationships than that of heterosexual couples.

There appears to be some discrepancy in the research as to frequency rate comparability. Yet, there is agreement throughout the research on the similarities in the types of abuse, reasons for non-reporting, and perpetrator traits between incidents of domestic violence within lesbian couples and heterosexual couples. Though similarities have been found in the types of abuses suffered by victims in abusive same-sex relationships and that of victims in heterosexual relationships (Kuehale & Sullivan, 2003; Mahoney, Williams, & West, 2001; Renzetti, 1998; West, 1998; Worcester, 2002), Renzetti (1998) cautions, “in both lesbian and heterosexual relationships, the motivations underlying abusive behavior – manipulation, coercion, punishment, and control – are more important for understanding domestic violence than the form the abuse happens to take” (Renzetti, 1998, p. 118). To this, Worcester (2002) adds the call for identifying the motivations of abuse within the context of societal inequalities and gender roles that are promoted and perpetuated through violence.

Failure to report

Similarities exist between the reasons for same-sex victims’ non-reporting and heterosexuals’ failure to report. Both have the fears of retaliation and not being believed by authorities along with the sense of confusion as to whether or not to get their “loved one” in trouble, mixed with the belief that the incident is a private matter (Kuehale & Sullivan, 2003). Added to those are issues of control and power, fear, and a lack of safety (Worcester, 2002). However, the lesbian victim has several unique hurdles to overcome as well as the feelings of shame and fear that are associated with all abuse (Burke & Owen, 2006; Burke et al., 2002; Kuehale & Sullivan, 2003; McClennen et al., 2002; West, 1998; Worcester, 2002).

Lesbians must face social workers who often assume only men batter and are less likely to be supported by their own peers who often refuse to believe lesbians are capable of committing abuse (Johnson & Ferraro, 2000). They must face feminist assumptions that portray domestic violence as the result of patriarchy and misogyny that “often blinds feminist activists from the realities of abuse within lesbian relationships” (Ristock, 2002, p. 4). There also exists a fear of re-enforcing a homophobic society’s negative views of lesbian relationships.

Lesbians must deal with such issues of homophobia that are both internal and external. “Internalized homophobia occurs when lesbians and gay men accept heterosexual society’s negative evaluations of them and incorporate these into their self-concepts” (Renzetti, 1998, p. 122). Homophobia also may lead to isolation and an increased dependency as the couple spends an increasing amount of time and energy “hidden” from society, thus increasing feelings of powerlessness that can lead to an “obsessive” closeting of one’s sexual orientation. Renzetti (1998) contends, “partners’ relative dependency on one another has been found to be strongly associated with abuse in both heterosexual and homosexual relationships” (Renzetti, 1998, p. 122). Homophobia was also found by West
(1998) to be the most cited reason for the under use of mainstream community programs by homosexual victims and perpetrators of domestic violence (West, 1998).

Worcester (2002) points out that society perpetuates violence within lesbian relationships by sending “strong messages” that violence within heterosexual relationships are not socially acceptable, but there are no social implications for violence within socially unacceptable relationships (Worcester, 2002). Community laws also protect heterosexual victims, while at the same time failing to expressly address domestic violence within homosexual relationships (Seelau et al., 2003).

The possibility of having one’s sexual orientation exposed against one’s will or knowledge (“outing”) is another factor that affects a lesbian’s decision to report victimization. The threat of outing has been identified as a “dual edge sword” that is often used as a coercive tactic by abusers and inhibits some victims from seeking help (Ristock, 2002). Ristock notes, “it is still risky for some of us to be out and it can be dangerous to reveal abuse within an already oppressive context” (Ristock, 2002, p. ix).

Perpetrators

The personality characteristics of abusers in lesbian relationships have been found to be similar to the traits of heterosexual male abusers (Younglove, Kerr, & Vitello, 2002). Perpetrators share the characteristics of self-hatred, depression, insecurity, jealousy, low self-control, history of battering, tendency to blame the victim, and substance abuse (Basile, 2004; Burke & Owen, 2006; Burke et al., 2002; McClennen et al., 2002; Renzetti, 1998; West, 1998). Renzetti (1998) also places emphasis on the intergenerational transmission hypothesis, while Ristock (2002) states this is more of an excuse than a reliable predictor (Ristock, 2002). Farley’s (1996) qualitative study utilizing demographic profiles from 288 clients who had been referred for perpetrator treatment explored the prevalence of intergenerational abuse and self-abusive behaviors among homosexual abusers. He found a high level of previous mental health treatment with 1/3 reported as suicidal, 20% homicidal, and 80% reported their parents were also abused as children. Farley’s study noted the perpetrators varied in economic status, education, occupation, and race/ethnicity. These perpetrators also tended to see themselves as victims (Farley, 1996).

Worcester (2002) notes the core issues of abuse in both lesbian and heterosexual relationships are one of power and control. The most determinate factors in a person becoming an abuser appear to include “growing up learning how to be violent, having an opportunity to be violent, and choosing to be violent” (Merrill, G.S., 1996 as cited in Worcester, 2002, p. 1406). Worcester also notes, heterosexual women who use violence within a committed relationship are usually victims utilizing force to escape abuse and tend to use violence most often to end oppression aimed at them rather than as a means of control. Though some incidents of females abusing their male partner have been documented, the female perpetrator rarely evokes the same sense of fear in their victims as that expressed by female victims of male perpetrated violence (Worcester, 2002).

Problems

The current studies are seriously lacking in validity, as the studies to date have not allowed the measurement of “true prevalence”. This is attributed to the largely hidden population that makes it difficult to draw a large random sample, so the current statistics should be interpreted cautiously (Renzetti, 1998). Lack of uniform definitions of abuse across the various studies has also been identified a potential fault of current studies (Younglove et al., 2002; Renzetti, 1998; Ristock, 2002).

Seelau et al. (2003) points to a need for greater understanding of perception of abuse by police, prosecutors, judges, and the public as a method of ensuring all victims, regardless of gender role, fair treatment (Seelau et al., 2003). Burke and Owen (2006) also call for changes in domestic violence laws to include same-sex couples, adequate training of criminal justice personnel, resources for shelter and counseling, and the gay/lesbian community action (Burke & Owen, 2006). Gay/lesbian community activists’ time and energy are currently focused on fighting prejudice, discrimination, and hate crimes that are diverting attention from the problems of domestic violence within their own community and in effect, keeping the problem of same-sex domestic violence closeted (West, 1998).
Methodology

Hypothesis and research question

The purpose of this study was to show the frequency of domestic violence within same-sex relationships in the state of Idaho as it compares to similar incidents within heterosexual relationships as an attempt to answer the question: Does sexual orientation have an effect on the frequency of domestic violence incidents?. It was hypothesized the frequency of domestic violence incidents within same-sex relationships will be comparable to such events that occur within opposite-sex relationships.

Data Sources

Population data for this study was obtained from the 2000 United States Census, which was the first time same-sex households were included as a household option. The household choices offered on the 2000 Census for Unmarried-partner households included Opposite-sex partners with male householder, Opposite-sex partners with female householder, Same-sex partners with male householder, or Same-sex partners with female householder. Male and Female householder counts were combined within the categories of Opposite-sex partners and added to the total count for the category of Married-couple households to provide the count for Heterosexual Coupled Households. The totals from the categories Same-sex partners with male householder and Same-sex partners with female householder were combined to acquire the count for Same-sex Coupled Households. This method of identifying same-sex and heterosexual households was utilized on both the state and national levels.

The data used to calculate rates of incidents of domestic violence within the state of Idaho was obtained through an examination of reports issued by the Statistical Analysis Center of the Idaho State Police (ISP). The acts of violence against an intimate partner that were utilized in defining an incident were “physical injury, force, or threat of force, and includes the crimes of homicide, rape, sexual assault, robbery, intimidation, kidnapping/abduction, aggravated assault, and simple assault” (Kifer, 2005, p.3). This definition of an incident was also used in determining the number of incidents nationally.

National data was extracted from the United States Bureau of Justice Statistics’ compilation of data gathered through the National Incident-Based Reporting System (NIBRS) which collects data on each criminal incident reported to the police. Therefore, an incident for this report is limited to those events recorded by the police and reported through NIBRS.

Method of analysis

This study utilized an exploratory, descriptive analysis of data extracted from NIBRS to compare raw numbers, rates, and the percentage of change over time in domestic violence incidents same-sex and heterosexual relationships at the state and national level. A table format was used to present the data and most efficiently express a comparison between the state and national incidents reported.

Threats to validity

Threats to internal validity were brought about by the exclusive use of secondary data which did not afford the opportunity to structure questions directly addressing the fear of outing that may have prevented gays and lesbians from openly reporting an incident as domestic violence. There also exists a threat to the validity of the population count obtained through the U.S. Census in that it fails to account for those households that may not have felt safe or comfortable enough to disclose a same-sex relationship. Additionally, a threat to validity exists through the use of data collection based on the reporting officer’s perception of an event and does not allow for possible police officer bias in recognizing or identifying an incident as one between same-sex couples.
Results

Data section

Analysis of data from the 2000 U.S. Census showed a population of 1873 households in Idaho and 594,391 households nationally that self-identified as same-sex partners. There were also 615,674 households in Idaho and 59,374,609 households nationally that identified as heterosexual couple households. Data provided by the U.S. Census Bureau’s American Community Survey of 2004 estimated the population of same-sex households in Idaho to have been 2407 with a heterosexual household population of 649,435. This survey also estimated the national population of same-sex households at 707,196 with an estimated heterosexual household population of 60,357,211 (Table 1).

Table 1. Idaho and National Households

<table>
<thead>
<tr>
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<th>IDAHO</th>
<th>NATIONAL</th>
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<tbody>
<tr>
<td><strong>Year 2000</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same-sex Coupled</td>
<td>1873 (0.30% of</td>
<td>594,391 (0.99% of</td>
</tr>
<tr>
<td>Households</td>
<td>total Idaho</td>
<td>total national</td>
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<tr>
<td></td>
<td>coupled households)</td>
<td>households)</td>
</tr>
<tr>
<td><strong>Year 2000</strong></td>
<td></td>
<td></td>
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<tr>
<td>Heterosexual</td>
<td>615,674 (99.7%)</td>
<td>59,374,569 (99.01%)</td>
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<td>Coupled Households</td>
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<td><strong>Year 2004</strong></td>
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<tr>
<td>Estimated</td>
<td>2407 (0.37%)</td>
<td>707,196 (1.16%)</td>
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<td>Same-sex Coupled</td>
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<td>Households</td>
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</tr>
<tr>
<td><strong>Year 2004</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated</td>
<td>649,435 (99.63%)</td>
<td>60,357,211 (98.4%)</td>
</tr>
<tr>
<td>Heterosexual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coupled Households</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An analysis of data obtained in the year 2000 by the Statistical Analysis Center of the Idaho State Police revealed 23 incidents of domestic violence within same-sex relationships which translated to a rate of 0.08 incidents per 1000 same-sex households in the state of Idaho for the year 2000. Data for the same time period also showed 5649 incidents of domestic violence occurred within heterosexual relationships in the state which translated into a rate of 0.11 incidents per 1000 heterosexual households. National data obtained from the U.S. Department of Justice’s Bureau of Justice Statistics for the year 2000 recorded 1426 incidents of domestic violence within same-sex relationships and 109,959 incidents in heterosexual relationships. This translates into 0.42 incidents per 1000 Same-sex Coupled Households and 0.54 incidents per 1000 Heterosexual Coupled Households nationally for the year 2000.

The Idaho State Police in 2004 reported 42 incidents of domestic violence within same-sex relationships and 5983 incidents within heterosexual relationships. This translates into rates per 1000 population of 0.06 same-sex relationships and 0.11 for heterosexual relationships. The Bureau of Justice Statistics recorded 2837 incidents within same-sex relationships and 130,881 incidents within heterosexual relationships for the year 2004 which translates into 0.25 incidents per 1000 same-sex households and 0.46 incidents per 1000 heterosexual households (Table 2).
Table 2. Incidents of Domestic Violence

<table>
<thead>
<tr>
<th></th>
<th>IDAHO</th>
<th>NATIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reported Incidents</td>
<td>Incidents per 1000</td>
</tr>
<tr>
<td>Year 2000 Incidents within Same-sex Households</td>
<td>23</td>
<td>0.08</td>
</tr>
<tr>
<td>Year 2000 Incidents within Heterosexual Households</td>
<td>5,649</td>
<td>0.11</td>
</tr>
<tr>
<td>Year 2004 Incidents within Same-sex Households</td>
<td>42</td>
<td>0.06</td>
</tr>
<tr>
<td>Year 2004 Incidents within Heterosexual Households</td>
<td>5,983</td>
<td>0.11</td>
</tr>
</tbody>
</table>

Table 3 shows the percentage of increase or decrease in reported domestic violence incidents in the state of Idaho from 1998 to 2005 for homosexual and heterosexual relationships as recorded by the Idaho State Police. As indicated by the table, the changes in the actual number of reported incidents of domestic violence in the state of Idaho show very little to no variation between that reported for heterosexual couples and that reported for same-sex couples over the period. The table also indicates very minimal increases within the categories for the time period.

Table 3. Domestic Violence Changes in Idaho

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<tr>
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</thead>
<tbody>
<tr>
<td>Heterosexual Relationship</td>
<td>-0.07</td>
<td>0.06</td>
<td>0.04</td>
<td>-0.01</td>
<td>0.06</td>
<td>-0.02</td>
<td>-0.06</td>
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<tr>
<td>Homosexual Relationship</td>
<td>0.25</td>
<td>0.06</td>
<td>0.04</td>
<td>0.24</td>
<td>0.06</td>
<td>0.37</td>
<td>0.07</td>
<td></td>
</tr>
</tbody>
</table>
Conclusion

The study analyzed secondary data obtained from the 2000 U.S. Census, the Idaho State Police Statistical Analysis Unit, and the U.S. Department of Justice Bureau of Justice Statistics to answer the question; “Does sexual orientation have an effect on the frequency of domestic violence incidents?”

As evidenced by Table 1, those self-reporting as a same-sex household on the 2000 U.S. Census made up only 0.30% of the total households in the state of Idaho and less than 1% of the total households nationally. As the 2000 Census was the first time same-sex households were included as an option, it will be interesting to see if more same-sex couples will be willing to identify as such in future surveys.

Data reported through NIBRS was translated into a rate of incidents per 1000 households and displayed in Table 2. Analysis of this data concludes the rates of incidents of domestic violence per 1000 same-sex household was slightly lower than that of heterosexual households in Idaho and nationally. This directly contradicts earlier research by Burke and Owen (2006) that asserted there is a higher rate of violence within same-sex relationships than that of heterosexual couples and is consistent with previous findings by authors Kuehale & Sullivan (2003), Mahoney, Williams, & West (2001), Seelau et al (2003), Turell (2000), and West (1998).

The use of data gathered through the National Criminal Victimization Survey by Burke and Owen may account for the possible discrepancy in the findings, as that survey gathers data based on the perceptions of the victim rather than that of the reporting officer. Therefore, the results of this study should be cautiously interpreted to avoid the under counting of a significant portion of an elusive population.

Additional study would allow community leaders to accurately formulate policy to identify and address domestic violence issues within all segments of the community. Also, accurate portrayal of the gay community would afford the police the opportunity to provide the same level of protection as that provided to the mainstream. As all citizens are to be treated equally and fairly by those who have sworn to “serve and protect”, no victim should have to choose between coming out of the closet and sweeping their problem under the rug as has occurred with domestic violence throughout history.

The gay and lesbian community also must recognize the ugly truth that domestic violence does occur within same-sex relationships. Perhaps if the majority and the marginalized recognize their similarities in this issue, there would be an opportunity to envision other areas in common. All of society will benefit once the problem of domestic violence within any relationship is no longer swept under the rug or hidden in the closet.

Acknowledgements

The author wishes to express appreciation to Lisa Bostaph, Ph.D. of the Criminal Justice Department at Boise State University for the assistance and encouragement she provided as mentor for this project. Appreciation is also extended to the McNair Program staff at Boise State University, specifically Helen Barnes and David Hall, and to the cohort members for their patience and critiques. Finally, great appreciation is also extended to friends, family, and co-workers for their understanding and patience during the author’s periods of distraction while completing this research.
References

Books


Periodicals


Appendix A

Table 1

<table>
<thead>
<tr>
<th></th>
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<tr>
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<tr>
<td>Year 2000 Heterosexual Households</td>
<td>615,674</td>
<td>59,374,609</td>
</tr>
<tr>
<td>Year 2004 Estimated Same-sex Households</td>
<td>2407</td>
<td>707,196</td>
</tr>
<tr>
<td>Year 2004 Estimated Heterosexual Households</td>
<td>649,435</td>
<td>60,357,211</td>
</tr>
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</table>

Table 2

<table>
<thead>
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</tbody>
</table>

Table 3. Changes in Domestic Violence in Idaho, 1995 to 2005

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<tr>
<th></th>
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<td>0.37</td>
<td>0.07</td>
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</tr>
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23
Human Rights & Multilateral Development Banks: Evaluating Recipient Records & Lending Practices

Geneva J Román: McNair Scholar

Dr. Ross Burkhart: Mentor

Political Science

Abstract

This study examines the role of recipient human rights records in the loan allocation of multilateral development banks. Correlating the loan amounts awarded to recipients with their human rights environments determines whether or not human rights are a substantial consideration in multilateral lending practices. By analyzing the African Development Bank, African Development Fund, Inter-American Bank and the International Monetary Fund this study also sheds light on whether international financial institutions are upholding their legally bound human rights obligations. This study uses Ordinary Least Squares and General Least Squares regression models and finds that human rights have little effect on the lending process. Human rights are not a substantial consideration in multilateral lending practices and multilateral development banks are not fulfilling their international legal obligation to advance human rights. It is up to international political institutions to ensure that they do.

Introduction

Are human rights a substantial consideration in multilateral loaning practices? Multilateral lending has long been a strategy for helping to meet the extensive development needs of lesser developed countries, but our understanding of how multilateral development banks (MDBs) function is unclear. Many studies have focused on bringing clarity to the general tendencies of official development assistance (ODA) behavior by nation states, but it is only until recently that the research has focused on characterizing individual banks disparately. Offering an explanation for this focus are the humanitarian expectations that the international community has imposed upon international financial institutions (IFIs) since such financial giants are in a potent position to economically reward or punish varying human rights practices and therefore potentially improve the safety of millions of individuals across the globe. 1 Whether or not these expectations are being met is under question and the intentions and loaning practices of MDBs such as the International Monetary Fund (IMF), the World Bank and its regional counterparts have come under suspicion.

Providing an answer to this question not only helps to create a much needed degree of transparency into the economic centers of the international system, but also assists us in deciding whether their actions are congruent with the progression of international law. The Treaty of Westphalia in 1648 established the primary international subject and actor as the sovereign nation-state. Today the development of human rights is making the individual the new subject of international law. 2 While the nation-state is still the principal actor, this role has advanced to include all international organizations including international financial institutions (IFIs). 3 In respect to the evolution of international law, individuals are becoming the priority legal subject and IFIs including development banks are being assigned responsibilities for the protection of individual rights. 4

So to ask the question ‘Are human rights a substantial consideration in multilateral loaning practices?’, provides an opportunity to measure up MDBs to humanitarian values and assesses whether international economy is maturing slower, in line with, or faster than international law. The findings in this study suggest that human rights play a minimal role in multilateral lending practices. This holds humanitarian implications for either the IFIs or the recipient community, which will be reflected on at the end of this study along with what the results may imply about how international economic maturity measures up to international legal maturity.
Literature Review

This section identifies trends in the organization of previous ODA studies in order to highlight the most appropriate variables and summarizes the conclusions most commonly reached about ODA and loan practices.

A majority of the literature is bilateral – only observing development assistance from country to country. It wasn’t until the 1990s and 2000s that literature evolved as multilateral studies – observing assistance from institutions to countries. Previous scholars have produced mixed results, but most commonly concluded is that, for one, bilateral assistance, especially during the Cold War, served the political-strategic interests of donors and two, that multilateral assistance serves the basic economic, but not humanitarian, needs of loan recipients. Human rights are rarely significant and if they are there is an emphasis on political rights rather than civil or personal integrity rights.

Bilateral studies

The common organization for most of the ODA literature began by observing bilateral flows usually from the United States to other countries as done by Cingranelli & Pasquarello (1985). Common control variables used to reflect recipient need for aid included GDP per capita, population, and sometimes volume of trade. When human rights variables were included, an often narrow definition of human rights was utilized. In the study by Mckinlay & Little (1977), for example, the political stability and democracy variables do not include gender equality or freedom from political imprisonment. A positive reflection on the literature progressing into the 21st century is a gradual change in variables from strategic to humanitarian in nature starting, for instance, with Trumball & Wall’s study (1994) where infant mortality was included into the prospective determinants of ODA. By including this variable, the literature begins taking a more humanitarian tone.

Multilateral studies

The more recent multilateral literature such as by Neumayer (2003) is organized around aggregate ODA flows to all countries from IFIs. They continue to include the traditional control variables more contemporarily described as recipient need (GDP and population) and donor interests (political alliances, volume of trade, or strategic interests such as buying anti-communism).

In addition, human rights definitions are more inclusive by categorizing several degrees of rights. For instance Neumayer (2003) distinguishes political, civil, and personal integrity rights. An additional category – economic rights – would make human rights measures more realistic. Rights such as full employment are promoted by the United Nations’ Economic and Social Council and are distinct enough to fall outside these three categories. However, few data bases compile such information internationally.

There is evidence in the conclusions that two ideological camps compete – those that feel loan practices are humanitarian driven and those that feel they are strategically driven. Closer analysis reveals that the sum of the conclusions is not so dichotomous. Conclusions are mixed as to which set of variables best predicts loan behavior. Frequent results include, but are not limited to: bilateral U.S. ODA to other countries can be predicted by U.S. strategic interests as suggested by McKinlay & Little (1977); both bilateral and multilateral ODA can be predicted by political and civil rights as suggested by Trumball & Wall (1994), yet Wall (1995) found that such rights did not predict ODA in the long term; bilateral ODA from other countries to recipients can be predicted by basic recipient needs and extensive donor interests as suggested by Alesina & Dollar (2000); multilateral ODA is often predicted by recipients’ basic economic need and minimal humanitarian concerns as suggested by Neumayer (2003) or by material incentives and bureaucratic interests according to O’Keefe (2006).

Some may disagree with the presence of bilateral studies supplementing this literature review. Although differences between bilateral and multilateral behavior are expected, bilateral studies dominate the available literature, search for similar relationships among similar variables and therefore are appropriate preliminaries to multilateral research.

Most of the literature views development assistance as strategically driven. However, the summary of conclusions is not definitive enough to allow donor interests to be the exclusive determinant of loan awards by all MDBs. Because many development banks are regionally oriented, from the perspective of weak cultural relativism, it is expected that loan practices would be slightly different for each bank. Furthermore, there is a hefty rationale discussed in the next section for why human rights would be considered in loaning practices and this makes the dominance of donor interest all the more suspect. Therefore, a quantitative analysis on the behaviors of individual MDBs would offer more validity and is the goal of this study.
Theory

If MDBs are primarily economic and not humanitarian institutions then why would MDBs consider human rights in their loan practices? If an institution is capable of violating human rights then accountability is expected. What's more is it would be congruent with the international legal evolution discussed earlier where individuals have attained an international legal status and IFIs are expected to uphold their rights. At the least, customary international law binds IFIs to humanitarian responsibilities. Additionally, human rights considerations are not without benefits for the bank. The success of a development project often depends on the protection of local communities and much of the legitimacy of the bank can often depend on the good will of the people created by a positive bank image.

The theory that MDBs would take into account the human rights records of the countries with which they interact is first addressed by the legal nature of the humanitarian expectations of IFIs. It must be clearly understood that the people whose governments are at the receiving end of bank assistance are susceptible to human rights violations if no effort is made to account for the people, procedures, and progress involved in their economic project. As detailed by Jochnick:

“A great deal of attention has been devoted to the human rights impacts of IFIs like the World Bank and the International Monetary Fund (IMF)...the projects they fund often directly implicate violations of both civil and political rights (CPR) and ESCR [economic, social and cultural rights]. Their potential for violations is directly related to the tremendous influence they exercise over the economies of developing countries...Additionally, many of the development projects funded by the World Bank have involved gross human rights abuses, including forced evictions. Beyond the substantive impacts, IFI involvement in the development decisions often moves the locus of decision making further from affected communities, making policies less transparent, participatory, and accountable to traditional democratic processes.”

Mr. Fantu Cheru, an independent expert on the effects of development bank strategies on the enjoyment of human rights, shares Jochnick’s concerns over the potential for development banks to violate human rights. In reference to the IMF’s Poverty Reduction Strategy Papers (PRSPs) he writes:

“The lack of gender-disaggregated data is a general problem for all the PRSPs reviewed for this report...None of the I-PRSPs attempt to integrate major international human rights principles – namely the Convention on the Rights of the Child,” and others.

Cheru’s conclusion here is that the PRSPs – a strategy used by the IMF – is capable of aggravating human rights progress.

The aforementioned evolution of the application of human rights laws to IFIs is best exemplified by another of Jochnick’s comments, “The application of human rights laws to non-state actors is thus well supported under international law...the movement to apply human rights to these actors, though nascent, is already underway.” He goes on to note, “as international organizations they are at least responsible for not violating customary international law.” Taken as a whole, it would make more sense than not to expect economic institutions to have humanitarian responsibilities. An extract from Brigitte Hamm’s article on “A Human Rights Approach to Development” reinforces this legal justification:

“This obligation is laid down in the UN Charter and in some major human rights treaties, such as the ICESCR. It expands to international organizations and International Financial Institutions (IFIs), as states who are members of human rights treaties are also members of these organizations and influence the shaping of their policy...Making donor and recipient states accountable for how they consider human rights in their development policy and efforts will turn the understanding from that of a moral commitment to that of the acceptance of the legal obligation.”

Upon recognizing the benefits that human rights considerations could have for the IFIs themselves, it makes even more sense for MDBs to pay attention to the human rights records of the countries with which they interact. A disproportionate awarding of loans to gross human rights violators would not bode well for the public opinion of the banks and the success of their projects often depend on human rights protections. In his report, Cheru is worried that human rights concerns take a back seat to financial considerations. “Desired social and human rights objectives, such as equity, meeting basic needs, etc, need to be central to macroeconomic policy-making if a people-centered development,” is to be promoted. As an expert, Cheru believes that a successful people-centered development project depends on meeting human rights objectives. Reinforcing the idea that human rights efforts increase the likelihood that a banks project will succeed is Cynthia Hewitt de Alcántara’s reference to the 1980s and 90s when, “it became abundantly clear that no economic project was likely to succeed unless minimum conditions
of political legitimacy, social order and institutional efficiency were met.” Executing the type of political restructuring suggested by Alcántara in order to ensure that bank projects meet their economic goals will require human rights attention. Furthermore, it has been shown that human rights and economic development have a positive correlation. It is important for development banks to be mindful of this relationship as many communities may expect to see these developments occur simultaneously.

By and large there are appropriate reasons to believe that an economic institution would pay attention to human rights issues of the countries with which they interact. Still, however positive this rationale may be, whether observers of MDB behavior really expect a substantial human rights consideration to be present in development loan practices retains some doubt.

**Hypotheses**

Based on the literature thus far, it would be difficult for this study to hypothesize that human rights considerations are a substantial part of loaning practices. Although the previous theoretical section presented rationale to believe that they would be, the rationale often does not match up to bank behavior. The development of the hypothesis was not based on the evidence that there is an international legal obligation for IFIs to respect human rights because even member-states of the UN stray away from an, often times, unenforceable international law. Neither was it based on the rationale that human rights considerations benefit the banks since such large enterprises can often afford to sidestep the expectations of ground level citizens or produce good publicity of their own. Based on previous work, this study hypothesized that human rights would have little effect on a country’s eligibility for a loan and on the amount of the loan.

**Data**

The banks included in this study are: the African Development Bank (AfDB), the African Development Fund (AfDF) - which is a second loan source within the African Bank, but is funded only by the wealthier member countries, awards soft, not hard, loans, has a distinct loan frequency and therefore is different enough to be analyzed separately - the Inter-American Development Bank (IADB) and the IMF.

In accordance with much of the existing literature the variable sets here reflect human rights issues, recipient need, and donor interest. After examining the variations in loan amounts with the prospective determinants, a gate keeper dummy variable is used to observe the variations of access that some countries have or do not have to loans period. A Cold War dummy variable is used to account for a possible global systematic bias. Not all variables were used for every model due to irrelevance or an absence of data for that particular bank. AfDB and the AfDF did not provide data for the percent of shares, corruption data was not available for most countries and the Cold War variable is irrelevant since the African models account only for one year (2004). There is no gate keeping model for the IADB since all countries in the time-series had been awarded loans. The IMF models use all variables. Table 1 lists the variables, their descriptions, and their sources.

**Human rights variables**

The human rights variables in this model reflect the reality that there are different levels of citizen protection that are the obligation of any nation-state. The most immediate obligation is physical protection operationalized as personal integrity ratings. The obligation to protect personal characteristics and private activities is operationalized as civil rights ratings. The final obligation accounted for in these models is the protection of self-determination which is operationalized as political rights ratings. The intention to have a variable reflective of economic rights was abandoned. The difficulty of operationalizing economic rights can be accredited to the premature status of legal economic protections and a lack of data. Inequality measures were often incomplete and invalid.

Personal Integrity ratings came from Poe & Tate’s personal integrity data covering the years, 1976-1979 and from Dalton & Gibney’s political terror scale (PTS) covering the years 1980-2004. Each scale uses a rating from Amnesty International (AI) and a rating from the State Department Reports (SD). Political rights ratings came from the Freedom House *Comparative Survey of Freedom* covering the years 1976-2004. Civil rights were cut from the models due to multicollinearity.
Recipient needs variables

The variables within a majority of the previous literature that are the most consistently connected to recipient need are GDP per capita and population hence they are used here as well. Data for both variables were extracted from the Penn World Tables (PWTs) covering the years 1976-2004.

Donor interest variables

This set of variables predicts recipient country characteristics that signify different qualities of investment to the bank. Investment concerns are categorized as: the recipient’s economic ‘breathing room’ or the financial space not regulated by the government, the likelihood of repayment, good governance, and the member-state power relationships that exist behind the scenes of the bank.

The economic factors that operationalized financial ‘breathing room’ are: government share, investment share, and openness. All three are extracted from the PWTs. Likelihood of repayment is operationalized as the growth rate of GDP extracted from the PWTs.

Part of good governance is already accounted for by the human rights variables and is complete with the corruption variable, which is taken from the Fraser Index covering the years 1970, 1975, 1980, 1985, 1990, 1995, 2000-2004. Fraser’s variable 4D measures the difference between the country’s official exchange rate and black market rate. Many African countries are not included in the index so it is not used in the African models. Years are limited and the validity of the measure is questionable, however, a more effective measure of corruption was not available.

The percentage of voting shares that a bank member-state holds is interpreted as an indicator of influence and it is interesting to observe how member status affects loan award behavior. Although it is recognized that the degree of influence a member has is slightly more complex than voting share, elaborate power relations are not the focus of this study and the variable is still reflective of nature of the game in respect to bank behavior. 15

Dependent variables

In sync with the literature from studies such as Cingranelli & Pasquarello’s (1985), this study has differentiated between the decision to provide assistance and the decision of how much assistance to provide. Loan amounts are recorded directly from each bank’s website and the gate keeper is a dummy variable – 0 if no loan was awarded that year and 1 if a loan was awarded that year. The loan amounts recorded from the African banks had to be translated from units of account (UA) to US dollars. Approximately 1 UA = 70 cents. As previously mentioned no gate keeper model was used for the IADB.

Dummy variable

To account for what Gomez (2007) identifies as global system effects on aid allocation, a Cold War dummy variable is used – 0 if the loan was awarded during a post-Cold War year and 1 if the loan was awarded during a Cold War year. As mentioned above this variable was irrelevant to the African models.
Table 1: Description of Data & Sources

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<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Sources</th>
</tr>
</thead>
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<td>Personal Integrity</td>
<td>Respect for the physical person; Personal Integrity Index 1976-9; Political Terror Scale 1980-2004; 1(most respect) 7(least respect)</td>
<td>Poe &amp; Tate (1999); Gibney &amp; Dalton (2006)</td>
</tr>
<tr>
<td>Political Rights</td>
<td>Comparative Survey of Freedom (2006); Ability to participate in political process 1976-2004; 1(most free) 7(least free)</td>
<td>Freedom House (2007)</td>
</tr>
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<td>GDP per capita</td>
<td>Real GDP per capita 1976-2004</td>
<td>Penn World Tables 6.2 (PWT)</td>
</tr>
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<td>Government Share</td>
<td>Government component share as a percentage of real GDP 1976-2004</td>
<td>PWT 6.2</td>
</tr>
<tr>
<td>Investment Share</td>
<td>Private Component share as a percentage of real GDP 1976-2004</td>
<td>PWT 6.2</td>
</tr>
<tr>
<td>Openness</td>
<td>Exports plus imports divided by CGDP is the total trade as a percentage of real GDP 1976-2004</td>
<td>PWY 6.2</td>
</tr>
<tr>
<td>GDP growth rate</td>
<td>Annual growth rate of real GDP per capita 1976-2004</td>
<td>PWT 6.2</td>
</tr>
<tr>
<td>Percent of Shares</td>
<td>Member-state’s percentage of all votes</td>
<td><a href="http://www.iadb.org/aboutus/IV/go_voting.com">www.iadb.org/aboutus/IV/go_voting.com</a>; <a href="http://www.imf.org/external/np/sec/memdir/members.htm">www.imf.org/external/np/sec/memdir/members.htm</a></td>
</tr>
</tbody>
</table>

Methodology

This study uses a quantitative method with a pooled dataset - both cross national and time series. Ordinary least squares (OLS) was used to estimate the models. Generalized least squares (GLS) was used to support the results using both fixed and random effects. GLS checks specifically for panel autocorrelation and heteroskedasticity, essentially controlling for their presence. No GLS was necessary for the African models since they were not in a time series. For the IADB model the countries in the samples share similar characteristics hence GLS fixed effects was used to estimate the model for disbursement. Again, there is no gate keeping model for the IADB. For the IMF models where the countries in the sample were less similar, GLS random effects was used to estimate the model for disbursement. Logistic regression random effects were used to estimate the model for gate keeping – a dummy dependent variable.
Five models were used during the course of this study. Each model represents an individual Bank to illuminate any contrasts in behavior. Country data was not available for a small number of countries, which were omitted from the models. The AfDB and AfDF models each have a sample of 53 countries and are limited models covering only the year 2003/2004, the IADB models have samples of 26 countries covering the years 1998-2004, and the IMF models have samples of 146 countries covering the years 1976-2004.

The equations are formatted as follows where: \( Y_1 = \text{Loan Amounts Received from AFDB & AFDF}; \) \( Y_2 = \text{Gatekeeping Dummy Variable for AfDB & AfDF}; \) \( Y_3 = \text{Loan Amounts Received from IADB}; \) \( Y_4 = \text{Loan Amounts Receive from IMF}; \) \( Y_5 = \text{Gatekeeping Dummy Variable for IMF}; \) \( x_1 = \text{Personal Integrity}; \) \( x_2 = \text{Political Rights (SD)}; \) \( x_3 = \text{Political Rights (FH)}; \) \( x_4 = \text{GDP/capita}; \) \( x_5 = \text{Gov’t Share}; \) \( x_6 = \text{Investment Share}; \) \( x_7 = \text{Openness}; \) \( x_8 = \text{Growth}; \) \( x_9 = \text{Corruption Rating}; \) \( x_{10} = \text{Voting Share}; \) \( x_{11} = \text{Cold War dummy variable}: \)

\[
\text{AFDB & AfDF (Eq.1a & 1b)} \\
Y_1 = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + e
\]

\[
\text{AFDB & AfDF (2a & 2b)} \\
Y_2 = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + e
\]

\[
\text{IADB} \\
Y_3 = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + b_9x_9 + b_{10}x_{10} + e
\]

\[
\text{IMF} \\
Y_4 = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + b_9x_9 + b_{10}x_{10} + b_{11}x_{11} + e
\]

\[
Y_5 = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + b_9x_9 + b_{10}x_{10} + b_{11}x_{11} + e
\]

A discussion of the results of the models is followed by case studies of loan awards in two countries (one from the African block and another from the Latin American block) for a rich description on loaning practices.

## Results

For the loan amount dependent variable, (Table 2a) human rights had little statistical significance. Only two out of the twelve relationships were statistically significant and they had opposing directions. Each of the two significant human rights variables for loan amounts are found in the IMF model and were surprisingly the top two determinants respectively. The Personal Integrity (AI) was optimistically negative. The Personal Integrity (SD) was contrastingly positive. The more encouraging Amnesty International variable was fortunately the stronger correlation of the two, but not by enough for these results to be anymore than speculative.
Table 2a: Parameter Estimates

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>AfDB</th>
<th>AfDF</th>
<th>IADB</th>
<th>IMF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Integrity (AI)</td>
<td>9954054.4</td>
<td>-2357933.325</td>
<td>16376703.362</td>
<td>-5879633</td>
</tr>
<tr>
<td></td>
<td>(.461)</td>
<td>(-.277)</td>
<td>(.858)</td>
<td>(-2.610)**</td>
</tr>
<tr>
<td>Personal Integrity (SD)</td>
<td>-29116061.0</td>
<td>13526.090</td>
<td>1022727.586</td>
<td>5329337.3</td>
</tr>
<tr>
<td></td>
<td>(-1.098)</td>
<td>(.001)</td>
<td>(.018)</td>
<td>(2.287)**</td>
</tr>
<tr>
<td>Political Rights</td>
<td>3439812.7</td>
<td>-4423282.508</td>
<td>3930444.884</td>
<td>898670.94</td>
</tr>
<tr>
<td></td>
<td>(.278)</td>
<td>(-.906)</td>
<td>(.089)</td>
<td>(1.030)</td>
</tr>
<tr>
<td>GDP per Capita</td>
<td>4317.146</td>
<td>-2605.166</td>
<td>1687.579</td>
<td>-475.012</td>
</tr>
<tr>
<td></td>
<td>(.699)</td>
<td>(-1.068)</td>
<td>(.193)</td>
<td>(1.822)*</td>
</tr>
<tr>
<td>Population</td>
<td>438.086</td>
<td>389.361</td>
<td>5183.151</td>
<td>-4.492</td>
</tr>
<tr>
<td></td>
<td>(.765)</td>
<td>(1.722)*</td>
<td>(3.503)**</td>
<td>(-.436)</td>
</tr>
<tr>
<td>Government Share</td>
<td>-253789.8</td>
<td>369749.133</td>
<td>8840246.532</td>
<td>-109888.4</td>
</tr>
<tr>
<td></td>
<td>(-.297)</td>
<td>(1.097)</td>
<td>(1.424)</td>
<td>(-.672)</td>
</tr>
<tr>
<td>Investment Share</td>
<td>439905.92</td>
<td>-396071.983</td>
<td>-3731211.037</td>
<td>-74464.471</td>
</tr>
<tr>
<td></td>
<td>(.164)</td>
<td>(-.373)</td>
<td>(-.438)</td>
<td>(-.316)</td>
</tr>
<tr>
<td>GDP Growth Rate</td>
<td>1175565.20</td>
<td>6772.729</td>
<td>-776194.585</td>
<td>-364367.0</td>
</tr>
<tr>
<td></td>
<td>(.549)</td>
<td>(.008)</td>
<td>(-.129)</td>
<td>(-1.519)*</td>
</tr>
<tr>
<td>Openness</td>
<td>-245387.1</td>
<td>-17665.062</td>
<td>-1887353.486</td>
<td>-20173.385</td>
</tr>
<tr>
<td></td>
<td>(-.476)</td>
<td>(-.087)</td>
<td>(-.991)</td>
<td>(-.581)</td>
</tr>
<tr>
<td>Corruption</td>
<td>--</td>
<td>--</td>
<td>54275645.611</td>
<td>582154.88</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2.349)**</td>
<td>(1.060)</td>
</tr>
<tr>
<td>Percent of Vote Share</td>
<td>--</td>
<td>--</td>
<td>75678919.283</td>
<td>347419.09</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(4.004)**</td>
<td>(.204)</td>
</tr>
<tr>
<td>Cold War</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-6721574</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(-1.586)*</td>
</tr>
</tbody>
</table>

Percentage of Variation Explained

<table>
<thead>
<tr>
<th></th>
<th>AfDB</th>
<th>AfDF</th>
<th>IADB</th>
<th>IMF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explained</td>
<td>13.3%</td>
<td>29.8%</td>
<td>68.9%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

N: 35  35  104  741

Figures in parentheses are t-ratios.

** Significant at .05
* Significant at .10
For the gate keeping dependent variable, (Table 2b) human rights had slightly more statistical significance. Three out of the nine relationships were statistically significant and they were all negative, meaning that as human rights conditions worsened, loan eligibility decreased, which is an optimistic result, but only for a third of the relationships. These optimistic relationships are found in the Personal Integrity (AI) for the AfDF and the IMF and in the Political Rights variable for the IMF.

Table 2b: Parameter Estimates

<table>
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<tr>
<th>Independent Variables</th>
<th>AfDB</th>
<th>AfDF</th>
<th>IADB</th>
<th>IMF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Integrity (AI)</td>
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</tr>
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<td>582154.88 (1.060)</td>
</tr>
<tr>
<td>Percent of Vote Share</td>
<td>--</td>
<td>--</td>
<td>75678919.283 (4.004)**</td>
<td>347419.09 (.204)</td>
</tr>
<tr>
<td>Cold War</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-6721574 (-1.586)*</td>
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</tr>
<tr>
<td>N</td>
<td>35</td>
<td>35</td>
<td>104</td>
<td>741</td>
</tr>
</tbody>
</table>

Figures in parentheses are z-scores.
**Significant at .05
* Significant at .10

32
Overall, the results confirm the hypothesis that human rights would have little effect on a country’s eligibility for a loan and on the amount of the loan awarded. A simplified review of the results is available in Table 3. This is followed by descriptions of the bank by bank relationships with the human rights variables and other strong determinants.

Table 3: Summary of Human Rights Effects

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>AfDB</th>
<th>AfDF</th>
<th>IADB</th>
<th>IMF</th>
</tr>
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<td></td>
<td>Loan Amount</td>
<td>Gate Keeping</td>
<td>Loan Amount</td>
<td>Gate Keeping</td>
</tr>
<tr>
<td>Personal Integrity (AI)</td>
<td>X +</td>
<td>X +</td>
<td>X -</td>
<td>! -</td>
</tr>
<tr>
<td>Personal Integrity (SD)</td>
<td>X -</td>
<td>X -</td>
<td>X +</td>
<td>X +</td>
</tr>
<tr>
<td>Political Rights</td>
<td>X +</td>
<td>X +</td>
<td>X -</td>
<td>X +</td>
</tr>
</tbody>
</table>

X=statistically insignificant; !=statistically significant; / = close to statistical significance; +=positive correlation; -=negative correlation; na=not applicable;

African Development Bank

Because the African models were formed from very little data compared to the IADB and IMF models, these results are relatively less reliable. Regardless, among the human rights variables for the AfDB there were no significant correlations with loan amounts or gatekeeping. Slope coefficients were usually positive (with the exception of the Personal Integrity (SD)), meaning that as human rights conditions worsened, loan amounts and eligibility increased. None of the relationships were statistically significant. Top determinants based on levels of significance included Personal Integrity (SD), population and GDP implying a recipient focus. This is logical result considering the direction of the AfDB is driven primarily by the borrowing member countries. 16

Human rights variables

For loan amounts human rights had some effect. Personal Integrity (SD) had a negative correlation, produced a t-statistic of -1.098, a significance of .282 and was the only human rights variables in the top three beta-weights with a result of -.332, making it the strongest but not statistically significant. Personal Integrity (AI) had a positive correlation, but a t-statistic of only .461, a significance of .649, and a moderate beta weight of .132. Political Rights had a positive correlation and an even weaker relationship with a t-statistic of .278, a significance of .783, and one of the lowest beta weights at .066.

For gatekeeping human rights had less effect. Personal Integrity (AI) and Political Rights were positively correlated while Personal Integrity (SD) was negatively correlated (in agreement with the loan amount model). Personal Integrity (AI), Political Rights, and Personal Integrity (SD) were all in the bottom half of the significance rankings at .383, .407, and .619 respectively.

Strong determinants

Outside of the Personal Integrity (SD) variable for loan amounts, the following determinants reflected an emphasis on recipient need. A positive population bias was evident with a t-statistic of .765, a significance of .451, and a beta weight of .165. There was also a positive GDP per capita bias with a t-statistic of .699, a significance of .491 and a stronger beta weight of .172. This shows that as income increases, loan amounts increase which may indicate a pattern of repeated investments where loans are potentially the most successful. As one of the younger regional development banks, the AfDB may be less inclined to venture into higher risk loan investments.

For gatekeeping the strongest determinants were economic donor-interests. There was a positive GDP per capita bias with a near significance of .065. Negatively correlated was Investment Share with a significance of .162. The decrease in eligibility with an increase in investment share is reflective of the overarching purpose of the World Bank – to supplement any lack of private capital. It makes sense that the Bank targets borrowing members with a lack of invested capital. Positively correlated was growth rate. Recipient GDP growth rates are important for recipients to potentially repay their loans, which is a source of Bank funding.
All together, the results suggest that personal integrity rights considerations are partially evident in their lending practices. Of course, Africa is a region where more egregious personal integrity violations can be found; hence they are more available to discriminate against. However, based on the results not much discrimination can be expected in African lending practices.

**African Development Fund**

No human rights relationships for the AfDF were significantly correlated, yet, one relationship was statistically significant – Personal Integrity (AI) in the gatekeeping model, but with a positive correlation meaning that as personal integrity conditions worsened loan eligibility increased. Slope coefficients were usually negative for loan amounts (with the exception of Personal Integrity (SD)) and positive for gatekeeping (with the exception of the Personal Integrity (AI)). Top determinants included population, Government Share, GDP and Personal Integrity (AI). The economic donor-interest variables having more of an effect than in the AfDB reflects the exclusive nature of the Fund’s supporting members – namely the wealthier member countries who are more likely interested in a healthy investment environment since they are using their own funding and do not require a specific development project for the loan to be awarded.

**Human rights variables**

For loan amounts human rights had little effect. Political Rights had a negative correlation, produced a t-statistic of -.906, a significance of .373 and a beta-weight of -.194. Personal Integrity (AI) had a negative correlation, but a t-statistic of only -.277, a significance of .784, and a low beta weight of -.071. Personal Integrity (SD) had a positive correlation and an even weaker relationship with a t-statistic of .001, a significance of .999, and the lowest beta weight at .000.

For gatekeeping human rights had a respectable effect. Personal Integrity (AI) and Political Rights were negatively correlated while Personal Integrity (SD) was positively correlated (in agreement with the loan amount model). Personal Integrity (AI) acquired statistical significance at .043. Personal Integrity (SD) and Political Rights did not at .237 and .503 respectively.

**Strong determinants**

For loan amounts awarded by the Fund the following determinants reflected an emphasis on recipient need and investment health. A positive and nearly significant population bias was evident with a t-statistic of 1.722, a significance of .097, and a beta weight of .334. The Government Share variable had a positive correlation meaning that as governments take up more financial space, loan amounts increased. It had a t-statistic of 1.097, a significance of .283 and a beta weight of .204. There was also a negative GDP per capita correlation meaning as income increased, loan amounts decreased, which demonstrates a bias towards the poor not evident in the AfDB.

For gatekeeping the strongest determinants were GDP per capita and Personal Integrity (AI). They were both negatively correlated and statistically significant. GDP per capita and Personal Integrity (AI) had a significance of .037 and .043 respectively. Openness was third in the line of gatekeeping determinants, was positively correlated, but did not quite acquire significance with .069.

Based on the results, as in the AfDB, there is some evidence that personal integrity rights play a role in AfDF lending practices, but not much consideration can be expected.

**Inter-American Development Bank**

From the human rights variable in the IADB model, Personal Integrity (SD) was weakly and positively correlated. All slope coefficients were positive. Additionally, no human rights variables were statistically significant or even in the top bet weights. Top determinants with strong significance included Percent of Voting Shares, population, and corruption. With these results, the IADB did the worst in human rights considerations.

**Human rights variables**

For loan amounts human rights had no effect. Personal Integrity (AI) had a positive correlation with a t-statistic of .858, a significance of .393, and a low beta weight of .073. Political Rights was also positive, with a t-statistic of only .089, a significance of .929, and a bottom beta weight of .008. Personal Integrity (SD) was also
positive with a t-statistic of .018, a significance of .986, and the lowest beta weight of .002. There was no gatekeeping model for the IADB.

Strong determinants

For loan amounts, determinants for IADB lending were extremely self-serving. Population factored in as the only recipient-oriented variable with any effect. Positive correlations for percent of shares and corruption were the strongest determinants in the model. Percent of shares produced a t-statistic of 4.004, a significance of .000, and the top beta weight of .458. Corruption produced a t-statistic of 2.349, a significance of .021, and a top beta weight of .150. There was an extremely strong tendency for loan funds to flow towards member countries of the largest size and with generous bank influence. This reveals serious power politics issues within the IADB – power politics that are evident in the region’s history of dictatorships and civil wars.

International Monetary Fund

All the human rights variables were significantly correlated positive. Slope coefficients were usually positive for loan amounts (with the exception of Personal Integrity (AI), which was fortunately positive) and a negative slope for gatekeeping (with the exception of Personal Integrity (SD)). Statistically significant relationships included Personal Integrity (AI) and Personal Integrity (SD) within the IMF loan amounts model (but with opposing signs). Also significant were the Political Rights and Personal Integrity (AI) in the IMF gatekeeping model. Top determinants included Personal Integrity (AI), Personal Integrity (SD) and GDP. More variation and distribution of significance was expected in this model. The large sample size and time period give more room for each variable to have an effect on the dependent variables. Still, there was a consistent rank of significance.

Human rights variables

For loan amounts personal integrity rights had a large effect, but political rights had little effect. Personal Integrity (AI) was negatively correlated, had a t-statistic of -2.610, a significance of .009, and the strongest beta weight of -.173. Personal Integrity (SD) was not far behind with a t-statistic of 2.287, a significance of .022, the second top beta weight of .159, yet was positively correlated.

For gatekeeping human rights had less effect. Personal Integrity (AI) and Political Rights were negatively correlated while Personal Integrity (SD) was positively correlated. Significance varied from .004 to .043 to .146 respectively. The negative relationships are fortunately the statistically significant relationships, which is less of a mixed result than the loan amounts model, but indefinite nonetheless.

Strong determinants

Along with the statistically significant yet contradicting personal integrity variables in the loan amounts model, GDP per capita closely approached significance with a t-statistic of -1.822, a significance of .069, and a beta weight of -.111. Also approaching significance, although not as much as GDP, were the Cold War dummy variable and GDP Growth Rate.

For gatekeeping the strongest determinants were mixed and inconclusive. GDP reached significance at .000, Personal Integrity (AI) at .004, Openness at .004, Corruption at .005, and Political Rights at .043. Overall, the IMF models produced mixed results and human rights played a minimum role.

Conclusion

Reflecting on the data, the question becomes why are human rights not a substantial consideration in multilateral lending practices. It could be that human rights environments have generally improved worldwide and need not be as much of a concern as some international groups might claim. However, I doubt that this is the case, given the continuous pressure on the Security Council to enforce human rights and given the human rights atrocities that are broadcast on international news.

It is encouraging to see that Personal Integrity ratings play more of a role than is suggested by previous studies. This is less surprising considering that cultural variations are less detectable among personal integrity rights. A majority of cultures believe in personal integrity and can more easily agree on their protection. However, based on the results, we can only conclude that IFIs are behind the evolution of international legal principles and are not meeting the expectations of the humanitarian community.
In the end I propose a compromise where the expectations of those groups are moderated in recognition that development banks are first and foremost economic institutions and it would be unrealistic to place them on the front lines in the fight against human rights violations. That is the responsibility of political organizations and NGOs such as the UN and Amnesty International. Yet I would never ignore the secondary, but grave role that needs to be played by International Financial Institutions; a role that I suspect is not being properly taken by development banks.

Notes


6 Donnelly p.32-35 / See Donnelly’s argument for weak cultural relativism.

7 Jochnick p.68-69


9 Jochnick p.64

10 Jochnick p.71


12 Cheru p.15


15 Dreyer & Schotter 1980

References


[40] *Universal Declaration of Human Rights*.
Do Self-Esteem and Parental Authority Influence Self-Reported Aggressive Behaviors?

Nicole Svenkerud: McNair Scholar
Mary Pritchard: Mentor

Psychology

Abstract

Aggression is a primary concern throughout the United States and over the last 40 years many researchers have tried to understand how aggression manifests (Tremblay, 2002). The present study examined the relations between self-esteem, perceived parental authority, and aggression. Two-hundred sixty participants were asked about their aggressive behaviors, self-esteem, and perceptions of parental authority. Results indicated that perceived authoritarian parenting was negatively correlated with hostility and physical aggression. Self-esteem was positively correlated with perceived authoritative parenting. Individuals’ who reported lower levels of self-esteem also reported higher levels of anger and hostility. The present study can contribute to understanding how an individuals’ perception of their parents can negatively influence their thoughts and behaviors.

Introduction

Over the last few years, aggression and violence levels have drastically increased among adolescents and young adults (Paternite, Simons, & Shore, 2001). The National Center for Education Statistics (NCES, 2006) reported 36% of students in grades 9-12 had been in at least one physical fight during the year 2005, which had increased from 33% in 2003. Moreover, from 1985 to 1991, homicide rates increased 154% among 15-19 year-olds (Dahlberg, 1998). It was reported that in 1999, over 1,700 adolescents under the age of 18 were arrested for homicide in the United States (Fox & Zawitz, 2001). Not surprisingly, an increasing number of children are being referred to mental health services for treatment of their aggressive and antisocial behaviors (Frick & Silverthorn, 2001). It is difficult to isolate an explanation for this increase; however researchers have been able to identify a variety of factors that correlate with aggressive behaviors.

Understanding how aggressive behaviors manifest is complex because of the many factors involved. For example, Hawkins et al. (1998) found a strong correlation between juvenile aggression and child maltreatment, poor family management, family conflict, separation from home, and residential mobility. According to Siegler, Deloache, and Eisenberg (2006), biological factors and parenting styles also influence the development of aggressive behaviors. In addition, the level of an individuals’ self-esteem has been extensively debated as another factor contributing to aggressive behaviors (Baumeister, Bushman, & Campbell, 2000; Cale & Lilienfeld, 2006; Coopersmith, 1967; Donnellan et al., 2005; Parker & Benson, 2004; Sprott & Doob, 2000). All of these factors may conceivably be narrowed down to the upbringing of a child and the child’s parental authority. The purpose of the present study was to examine the relation between perceived parenting styles and aggression, the relation between self-esteem and perceived parenting styles, and the relation between self-esteem and aggression.

Parental Authority and Aggression

Parenting styles are the behaviors and attitudes that set the emotional climate of parent-child interactions (Siegler et al., 2006). Parenting styles and behaviors are defined in two separate dimensions. The first dimension is the degree to which parents provide warmth, support, and acceptance towards their child; the second is the degree to which parents exhibit high levels of control and demands of the child (Maccoby & Martin, 1983). For the purpose of the present study, the focus will be on Baumrind’s (1971) research that defined authoritative, authoritarian, and permissive as three separate parenting styles.

Parents who exhibit an authoritative parenting style tend to be demanding, warm, and responsive toward their child (Baumrind, 1971). Typically, authoritative parents supervise their child’s behaviors, set very lucid standards, and exhibit consistency and confidence when punishing the child (Baumrind). Parents who utilize an
Authoritative style allow their child considerable autonomy within set limits and are able to reason with the child in a calm demeanor. Baumrind’s (1991) research indicates that children who experience authoritative parenting grow to be socially responsible, assertive, competent, and display self-control, resulting in less problematic behaviors. More specifically, research has demonstrated a strong correlation between authoritative parenting and low levels of antisocial behavior in the child (Sielger et al., 2006).

Authoritarian parents have the tendency to be bitter and unresponsive towards their child (Baumrind, 1971). Parents utilizing an authoritarian approach, exhibit high demands, high control, and expect the child to comply without asking questions. It is common for authoritarian parents to use threats and punishment to implement their parental power (Baumrind). Research has indicated that children who grow up with authoritarian parents typically develop low social competence, become very dismal and isolated, and experience low levels of self-confidence (Sielger et al., 2006).

Permissive parents are exceptionally lenient and are responsive to their child’s needs and desires (Baumrind, 1971). Parents who utilize permissive parenting tend to behave in a non-punitive and compliant manner towards their child’s impulses, behaviors, and requests (Baumrind). Typically, permissive parents do not demonstrate control over their child’s behaviors. Sielger et al. (2006) claim that permissive parents allow the child to behave inappropriately without monitoring their child’s behaviors. Research has indicated that permissive parenting correlate to children’s impulsive behaviors and low levels of self-control (Baumrind, 1991).

The three parenting styles defined by Baumrind (1971; 1991) have been influential in understanding how parenting affects the developmental path of a child. Research has indicated that a lack of parental support, parental supervision, and parental involvement strongly correlate to behavioral problems and delinquency (Barber, 1992; Frick, 1993; Parker & Benson, 2004). Moreover, past research has found a negative correlation between parental involvement and behavioral problems such as aggression and violence (Corvo & Kimberly, 2000). Greenberg et al. (1993) argue that research focused on aggression and parenting practices such as discipline, socialization, and communication between the child and the parent have been clearly linked to child behavior problems and low levels of self-esteem.

Self-Esteem and Parental Authority

Self-esteem encompasses the approval or disapproval of oneself, and the degree to which one believes he or she is competent, successful, significant, and worthy (Rosenberg, 1965). Furthermore, Rosenberg claims that an individual with high self-esteem demonstrates self-respect and feelings of worth, whereas an individual with low-self esteem exhibits self-rejection, self-dissatisfaction, and self-contempt.

Previous research investigating the impact of parenting styles on the development of a child’s self-esteem has found a positive correlation between a child’s self-esteem and authoritative parenting styles (Coopersmith, 1967; Gecas, 1971; Gecas & Schwalbe, 1986; Maccoby & Martin, 1983; Openshaw, Thomas, & Rollins, 1984; Parker & Benson, 2004; Rosenberg, 1965). Researchers have suggested that supportive parental behavior influences a child’s belief that they are competent and worthwhile individual (Gecas; Openshaw et al.). Previous research has also indicated that children who are given freedom and autonomy are more likely to explore their surrounding world, facilitating their development of competence, thus positively influencing the child’s self-esteem (Gecas). Moreover, research has demonstrated that authoritarian parenting is linked to children with lower levels of reported self-esteem (Coie & Dodge, 1998; Coopersmith; Schwartz, Dodge, Pettit, & Bates, 1997). Recently research has argued that the level of self-esteem may influence aggressive behaviors (Bradshaw & Hazan, 2006.).

Self-Esteem and Aggression

Researchers have disputed the relation between self-esteem and aggression (Donnellan et al., 2005). On one side of the argument, the ‘threatened egotism model’ predicts that individuals with unrealistically high levels of self-esteem have a tendency to be aggressive or violent (Baumeister et al., 2000). On the other hand, research indicates that an individual who experiences real-world externalizing problems report lower levels of self-esteem (Fergusson & Horwood, 2002; Rosenberg et al., 1989; Sprott & Doob, 2000). For example, Rosenberg (1965) proposed that an individual with lower self-esteem establishes a weaker attachment towards society and as a result, the individual does not conform to social norms, thereby increasing delinquency and aggressive behaviors. Moreover, research has indicated that a feeling of low self-esteem and inferiority intrinsically motivates aggressive behaviors (Cale & Lilenfeld, 2006; Donnellan et al.). In addition, it has been suggested that hostility or anger towards others stems from displaced feelings of inferiority (Donnellan et al.). With the number of inconsistencies among the literature researchers cannot confidently claim that either high or low self-esteem predicts aggressive behaviors.
The Present Study

The present study investigated the relation between an individuals’ perceived parental authority, self-esteem, and aggressive behaviors that included anger, hostility, verbal, and physical aggression. It was hypothesized that individuals who perceived their parental authority to be permissive or authoritarian would be more aggressive than individuals that perceived their parental authority to be authoritative. Due to the many inconsistencies among the literature, it was also hypothesized that an individual who perceived their parents to be authoritative, would exhibit higher levels of self-esteem where an individual who perceived their parents to be authoritarian or permissive would display lower levels of self-esteem. Finally, based on previous findings it was hypothesized that there would be an inverse relationship between low self-esteem and aggression.

Method

Participants

A total of 260 participants completed the study (77.2% females and 22.8% males). Of participants who reported ethnicity/race, a majority of them were Caucasian/White (85.4%), with smaller numbers of Hispanic (4.0%), Asian (3.0%), and ‘Other’ (4.5%). The mean age of participants was 30.18 years ($SD = 11.29$). Participants were recruited from various undergraduate courses and an email list utilized through Survey-Monkey. The Institutional Review Board approved all procedures before data collection began.

Measures

Self esteem. Self esteem was measured with the Rosenberg Self-Esteem Survey (Rosenberg, 1965). This scale consisted of 10 items based on a four-point Likert scale ranging from 1 (strongly agree) to 4 (strongly disagree). The survey addresses the participants’ general feelings toward themselves, without referring to any specific quality or attribute. A self-esteem score was computed for each participant by summing responses for each question. Higher scores on this scale demonstrated higher levels of a participants’ self-esteem. This measure had adequate internal reliability in the present study ($\alpha = .87$).

Parenting styles. Perceived parenting styles were assessed with a modified version of John Buri’s (1991) Parental Authority Questionnaire. The original questionnaire was developed to measure Baumrind’s (1971) permissive, authoritarian, and authoritative parental authority prototypes. For the purpose of the present study, questions were condensed and written in the form of my mother/my father. Questions were base on a five-point Likert scale that ranged from 1 (strongly agree) to 5 (strongly disagree). Each participant was asked to respond to the questions regarding their own mother and father. The questionnaire consisted of 30 items that included 10 permissive ($\alpha = .82$), 10 authoritarian ($\alpha = .87$), and 10 authoritative ($\alpha = .92$) responses. The highest score for each of the three parenting styles indicated how each participant felt they were raised as a child.

Aggression. Aggressive behaviors were measured with the Aggression Questionnaire (Buss & Perry, 1992). This scale is a five-point Likert scale that contained 29 questions, which asked each participant to rate themselves on a degree that ranged from 1 (extremely uncharacteristic of me) to 5 (extremely characteristic of me). Each participant received an overall aggression score by summing their responses ($\alpha = .92$). Next, the questionnaire was broken down to four factors: hostility, anger, verbal aggression, and physical aggression. Each participant received a factor score by summing up the responses for each factor, with higher scores indicating more aggressive behavior.
Procedures

Participants completed the survey either online through Survey-Monkey ($n = 220$) or during their class ($n = 40$). The survey was collated presenting the self-esteem scale first, parenting questionnaire second, and the aggression questionnaire last. Participants were informed that participation was voluntary and completely anonymous. Participants were instructed that if they became uncomfortable at any time during throughout the survey, they were free to withhold their answers or withdraw without penalty. Participants were informed that results were used for research purposes only. The survey consisted of 72 questions and took about 15-20 minutes to complete.

Results

To examine whether perceived parenting styles significantly correlate to aggression and self-esteem, Pearson’s $r$ correlation was computed between perceived parenting styles and aggression; between perceived parenting styles and self-esteem; and between aggression and self-esteem. As will be discussed below, results indicated significant correlations between perceived authoritarian parenting and aggression and between authoritative parenting and self-esteem. Furthermore, results indicated a negative correlation between self-esteem and aggression.

Perceived Parenting Styles and Aggression

Participants who perceived their parental authority to be authoritarian displayed more overall aggressive behaviors (see Table 1). However, due to a small effect size ($r^2 = .03$) and to further understand aggression the sub-factors of aggression (anger, hostility, verbal aggression, and physical aggression) were also examined. Participants who perceived their parental authority as authoritarian reported characteristic behaviors of only hostility and physical aggression (see Table 2). In general, these results suggest that children who are raised by authoritarian parenting may in fact, have an increase in hostile behaviors and physical aggression.

There were no significant correlations found between participants who perceived their parental authority to be permissive or any of the four sub-factors of aggression. However, an unexpected positive correlation was found between participants who perceived their parental authority to be authoritative and verbal aggression. In addition, an unexpected negative correlation was found between authoritative parenting and hostility. These findings suggest that a child who is raised with authoritative parenting will exhibit an increase in verbal aggression but a decrease in hostile behaviors.

Perceived Parenting Styles and Self-Esteem

There was a significant positive correlation found between perceived authoritative parenting styles and reported high self-esteem (see Table 3). These results suggest that children who are raised by authoritative parents tend to develop higher self-esteem. However, there were no significant correlations between reported self-esteem and perceived permissive or authoritarian parenting styles.

Aggression and Self-Esteem

Results indicated a significant negative correlation between overall aggression and self-esteem (see Table 4), indicating that as an individuals’ self-esteem decreases their aggressive behaviors increase. However, due to the small effect size ($r^2 = .11$) and to gain a more complete understanding of aggression, the sub-factors of aggression were examined. A significant negative correlation was found between self-esteem and both anger and hostility, but not verbal or physical aggression (see Table 4). Overall, the results suggest that as an individuals’ self-esteem decreases, characteristic behaviors of anger and hostility increase.
The present research examined the relation between self-esteem, perceived parental authority, and self-reported aggressive behaviors. We hypothesized that an individual who perceived their parental authority to be permissive or authoritarian would exhibit more aggressive behaviors than individuals’ that perceived their parental authority to be authoritative. Results partially supported the hypothesis. A participant who perceived their parental authority to be authoritarian demonstrated more overall aggressive behaviors. Specifically, only those with an authoritarian parenting style exhibited positive correlations between parenting style and hostility and physical aggression. These findings support other research with similar results indicated that a lack of parental involvement and support positively correlate to aggressive behaviors (Barber, 1992; Corvo & Kimberly, 2000; Frick, 1993; Parker & Benson, 2004). Furthermore, our results are consistent with research that demonstrates parents who utilized physical punishment and strict disciplinary behaviors (authoritarian styles) tend to have a more aggressive child (Loeber & Dishion, 1984).

Similar to previous research (Coopersmith, 1967; Gecas, 1971; Gecas & Schwalbe, 1986; Maccoby & Martin, 1983; Openshaw, Thomas, & Rollins, 1984; Parker & Benson, 2004; Rosenberg, 1965), the second hypothesis that an individual who perceived their parental authority to be authoritative would exhibit higher levels of self-esteem was supported by a significant positive correlation.

Finally, our hypothesis that there would be an inverse relationship between low self-esteem and aggression was supported by significant negative correlation. Specifically, an individual with lower self-esteem tend to exhibit hostile behaviors and anger. Many researchers debate whether low-self esteem or high self-esteem is strongly correlated to aggression (Baumeister et al., 2000; Cale & Lilienfeld, 2006; Donnellan et al., 2005; Fergusson & Horwood, 2002; Rosenberg et al., 1989; Sprott & Doob, 2000). Our findings support the argument that individuals’ with lower levels of self-esteem tend to exhibit more aggressive behaviors (Cale & Lilienfeld; Donnellan et al.; Fergusson & Horwood; Rosenberg et al.; Sprott & Doob). However, as mentioned earlier, we examined the sub-factors of aggression and found that individuals’ with lower self-esteem tend to exhibit more anger and hostility, not physical or verbal aggression.

Limitations

Although the present study made contributions to understanding the relations between aggressive behaviors, perceived parenting styles, and self-esteem, a few limitations must be considered. First, participants were asked to recall and reflect their perceptions of parental authority. This may have been difficult since the average age for the participants was 30.18 years. Over time, perceptions change and may have been distorted. Future research should focus on adolescents to gain the best understanding of how perceptions play into thoughts and behaviors. Similarly, because the present study was based on self-report surveys, participants might have underestimated how aggressive they really are. Future research would greatly benefit by collecting the perceptions from the participants parents, siblings, as well as any close relatives to compare possible discrepancies within the self-reported data and to control for any possible confounding variables. Another limitation to consider is the number of female participants compared to the number of male participants. Future research may benefit from having an equal number of males and females. This factor would also allow future research to examine any possible gender differences. Lastly, self-report surveys always indicate the possibility of social desirable characteristics. It may be very difficult for a participant to report honestly about their levels of self-esteem, even when complete anonymity is guaranteed.

Conclusion

The present study results suggest that perceptions of parental authority play an important role in aggressive behaviors and self-esteem. In this study, perceived authoritarian parenting significantly correlated with hostility and physical aggression. Furthermore, the present study found that individuals’ who perceived their parental authority as authoritative also reported higher levels of self-esteem. This study also confirmed that individuals’ who reported lower levels of self-esteem also reported more characteristic behaviors of anger and hostility. Collectively, the results can be used to further understand aggression and how important individuals’ perceptions play into their thoughts and behaviors.
References


### Tables

#### Table 1. Pearson’s Correlation between Parenting Styles and Aggression

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<th>2</th>
<th>3</th>
<th>4</th>
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<td>.17*</td>
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<td>2. Permissive</td>
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<td>—</td>
<td>—</td>
<td>-.52**</td>
</tr>
<tr>
<td>3. Authoritarian</td>
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<td>—</td>
<td>—</td>
<td>-.39**</td>
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<tr>
<td>4. Authoritative</td>
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Note: *p < .05, **p < .01

#### Table 2. Pearson’s Correlation between Parenting Styles and Aggression

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<td>-0.52**</td>
<td>.14*</td>
<td>0.04</td>
<td>0.11</td>
<td>.20**</td>
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<tr>
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<td>—</td>
<td>.26**</td>
<td>-0.08</td>
<td>.15*</td>
<td>0.01</td>
<td>-0.15*</td>
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<tr>
<td>3. Permissive</td>
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<td>—</td>
<td>—</td>
<td>0.13</td>
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<td>0.13</td>
<td>0.06</td>
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<td>4. Physical</td>
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<td>—</td>
<td>—</td>
<td>—</td>
<td>.49**</td>
<td>.70**</td>
<td>.45**</td>
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<tr>
<td>5. Verbal</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>.54**</td>
<td>.35**</td>
</tr>
<tr>
<td>6. Anger</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>.56**</td>
</tr>
<tr>
<td>7. Hostility</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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</table>

Note: *p < .05, **p < .01

#### Table 3. Pearson Correlations between Perceived Parental Authority and Self-Esteem

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<td>.26***</td>
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<td>3. Authoritarian</td>
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Note: **p < .01, ***p < .001

#### Table 4. Pearson Correlations between Self-Esteem and Aggression

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<td>-0.11</td>
<td>-0.03</td>
<td>-.31***</td>
<td>-.57***</td>
<td>-.33***</td>
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<td>2. Physical Aggression</td>
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<td>.49***</td>
<td>.70***</td>
<td>.45***</td>
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<td>3. Verbal Aggression</td>
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<td>—</td>
<td>—</td>
<td>—</td>
<td>.54***</td>
<td>.35***</td>
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<tr>
<td>4. Anger</td>
<td>—</td>
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<tr>
<td>5. Hostility</td>
<td>—</td>
<td>—</td>
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<tr>
<td>6. Overall Aggression</td>
<td>—</td>
<td>—</td>
<td>—</td>
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Note: ***p < .001
Globalization and the American Income Gap: Assessing the Impact of Liberal Economics and Immigration on Inequality

Simon Tu: McNair Scholar

Dr. Ross Burkhart: Mentor

Political Science

Abstract

While enjoying the most rapid economic growth of all large industrialized nations, inequalities in the distribution of income have grown faster in the United States than in most developed nations since the late 1960s. Previous empirical analysis studying the effects of increasing globalization on income inequality defined “economic globalization” as international trade and capital flows. By excluding international labor flows from the definition of economic globalization, previous studies ignored an essential factor of production and assessed the effects of globalization on income disparities inaccurately. This study assesses the impact of increasing international integration on the American income gap through an empirical examination of trade, capital and labor mobility. The research relies on ordinary least squares regression to test the relationship between the three major modes of neoliberal economic integration—trade, foreign direct investment, portfolio investment—and international labor mobility—authorized and unauthorized immigration—on an income inequality ratio for the years 1980 to 2005. By expanding the definition of economic globalization to include international labor mobility, this work contributes to the literature on income inequality by extending the debate into the area of demographic change and the measurement of the unauthorized population in the United States.

Introduction

Income inequality in the United States deserves the attention of scholars and policy makers because it has grown during the recent period of strong economic growth. Despite enjoying the most rapid economic growth of all other large industrialized countries, inequalities in the distribution of income have grown faster in the United States than in most developed countries since the late 1960s (Burtless, 2003). While productivity gains have been at all time highs recently (Burtless, 2003), the level of inequality in the U.S. has increased, which suggests American workers may not be reaping the benefits of this economic expansion. As the economy has grown, increases in corporate profits and CEO earnings have increased exponentially as real wages for the majority of workers remain stagnant or fall. The income gap, therefore, suggests not only a measure of inequality but, perhaps more importantly, inequity in a society that has long celebrated itself as the most democratic, classless, and just in the world. During this period of increasing productivity and higher earnings among CEOs, the U.S. economy also became increasingly integrated into the world economy. Part of the purpose of this paper is to better assess the effects this increasing integration had on income inequality.

Graph I illustrates the development of income inequality in the United States by charting the ratio between the top 20% and bottom 20% of all income earners for the years 1947 to 2005. Although disparities in the distribution of income grew sharply during all eight years of Reaganomics, the most dramatic increase in inequality was during the Clinton administration, which advocated increasing global economic integration. In his 1999 State of the Union address, President Clinton (1999) asked the nation “to tear down barriers, open markets and expand trade.” Under the current regime, global integration means trade and capital are relatively free to move across national borders but the mobility of labor is restricted by the state. Despite efforts to enhance border security, however, international migrants continue to pour into the U.S.; the economic impacts of trade, capital, and labor flows on income distribution remain unclear.
How does the current era's economic globalization affect income distribution? What affect does immigration, both authorized and unauthorized, have on income inequality? Are critics correct when they charge that globalization is the major source of economic inequality? This study answers these questions by assessing the effect of economic globalization on income distribution in the United States for the years 1980 to 2005. Most income inequality scholars have defined economic globalization to mean the ease with which trade, foreign direct investment (FDI), and portfolio investments flow across international borders (Held et al. 1999; Reuveny and Li 2003). Consequently, previous empirical studies have examined the effect that "economic openness" or "economic globalization" has on income inequality by focusing only on the international mobility of goods and capital (Reuveny and Li 2003; Rudra 2004; Mahler 2004). However, by defining economic globalization narrowly and excluding international labor flows—immigration—from their analyses, these studies have neglected the impact the size and composition of the labor supply, an essential factor in economic production processes, has on income distribution. This study offers an empirical examination of the impact economic globalization, comprehensively defined to include trade, FDI, portfolio investment, documented immigration, and undocumented immigration, has on an inequality ratio between the top 20% and bottom 20% of all income earners in the US.

The remainder of the article proceeds as follows: the first section briefly discusses the importance of income inequality in the U.S.; the next section reviews theoretical and empirical scholarship on the subject; the third section describes the model's variables and methodology; and the last two sections present the model's results and offer concluding remarks.

The Problems of Inequality

Visiting America in the early 19th century, Alexis de Tocqueville (2000) remarked that the most striking characteristic of the citizens of the new democratic regime was equality of conditions. Equality of conditions, he argued, was the generative fact from which all other phenomena flowed. While the state of equality Tocqueville

**Figure I. Ratio of Share of Income Earned by Top 20 Percent of Income Earners to Bottom 20 Percent of Income Earners, United States, 1947-2005**

Source: U.S. Census Bureau
observed has given way to a state of rising inequality, Americans continue to cherish the idea of equality. Interestingly, equal conditions or outcomes have been replaced by the idea of equality of opportunity. Yet, equality of opportunity is difficult to realize in a market oriented democracy where income disparities preclude equal opportunity. The cleavages produced by “our economic system can comprise, hinder, and at times undermine the political equalities promised by citizenship” (Yashar 2005: 50). Whereas capitalism thrives on, and produces, inequality, democracy is strengthened most when individuals are equal in resources and power (Marshall 1963). In the absence of state redistributive policies, extreme economic inequality generally has multiple effects: it arrests the political and economic freedoms of country's majority while enhancing those of the elite.

In contrast to parts of Europe, the Scandinavian countries for example, where government social spending is institutionally well-entrenched, the prevailing societal and political norm in the United States is self-help; resorting to public assistance should be a last resort. Ideally, Americans rely on the value of their human capital in the market to obtain a wage and produce opportunity for themselves. According to this view, disparities in income and opportunity generally reflect individual initiative and effort. Yet, today’s American income gap reveals the richest 20% of income earners capture about half the national income while the bottom 80% divides the rest (see Table I). From the perspective of much of the American population, claims of “equality of opportunity” and “robust economic growth” may seem apocryphal and propagandistic. Domestically, then, the income gap highlights the gap between what Americans would like to believe about themselves and what the economic system reveals about the country’s priorities.

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<td>5.0</td>
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<td>5.5</td>
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<td>5.3</td>
<td>4.7</td>
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<td>4.3</td>
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<tr>
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<td>12.1</td>
<td>12.4</td>
<td>11.9</td>
<td>11.7</td>
<td>11.4</td>
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<tr>
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<td>23.7</td>
<td>24.0</td>
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<td>24.6</td>
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<td>22.8</td>
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<td>Highest 20%</td>
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<td>20.8</td>
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<td>21.1</td>
</tr>
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Source: U.S. Census Bureau, Historical Income Tables—Families (all Races)

Table I. Distribution of National Income by each Quintile, for years 1947-2005

What the American income gap portends for American politics and international relations is important. Economic inequality may lead to economic and political instability as the population becomes increasingly fragmented due to internal competition over scarce resources. In Politics, Aristotle (1984) argues a critical level of economic equality is necessary for a democracy to protect itself from internal destruction, and that stability could not be achieved when the multitude are overly poor. Instability, in turn, adversely affects the country’s ability to influence global developments and protect its sovereignty. If we accept the rhetoric of the current chief executive, whatever instability is produced by income inequality may only weaken the nation in a time of increasing external security threats from both nation-states and non-state actors.

Immanuel Wallerstein (1999) has argued that regimes of economic inequality ultimately fracture, especially when that inequality is based on group identity. Although income inequality consistently has worsened since the late 1960s, the American situation has not been complicated by racial and ethnic cleavages as in developing countries. However, the absence of politicized class identities should not be assumed. Although income inequalities may be ameliorated through state redistribution, the government’s competence and willingness to secure regime stability through equitable income distribution also must not be assumed.
The Related Literature

To assess how economic globalization may affect income distribution this study reviews the literature on trade, foreign direct investment, portfolio flows, and immigration.

International trade

While the relationship between global economic integration and income inequality has been the subject of much controversy recently, the theoretical debates about economic liberalization and income inequality abound in the economics literature (Meyer 1999), and to a lesser degree in the political science literature. Many scholars have cited the Heckscher-Ohlin equilibrium model of trade (1933), which considers the employment of skilled and unskilled workers in two countries and the trade of skill-intensive and labor-intensive goods between them (Wood 1994; Caves 1996; Meyer 1999; Kapstein 2000; Mahler 2004). The model has been used to predict patterns of trade in finished goods and the resulting impact of this trade on wages (Wood, 1994). The comparative advantage the U.S. has in skilled labor and capital relative to developing countries, and the comparative advantage developing countries have in unskilled labor, means the U.S. would rely on skilled-labor and capital-intensive production for its exports and import labor-intensive products. Cheap imports of unskilled and labor-intensive products would then harm the wages of unskilled, low-income workers in the US, and exacerbate income inequalities by depressing wages for the bottom quintiles of income earners. According to the model, increased trade among nations theoretically could explain much of the increase in inequality seen in the U.S. (Wood 1994; Blau and Kahn 1996).

According to Williamson (1998: 60), historical analysis supports the Heckscher-Ohlin theorem since the increased trade among industrialized nations from 1870 until World War I "led to rising wage/rental ratios in Europe, and falling wage/rental ratios in the New World." Consequently, inequality decreased in Europe and increased in the U.S. Relatedly, Reuveny and Li (2003) demonstrated increased trade during this era's economic liberalization hurt the income structure in developed countries and benefited it in developing nations. Despite these findings and the conventional wisdom on trade, which posits a clear and positive relationship between trade and income inequality (Reich 1992; Wood 1994; Hurrell and Woods 1995; Tonelson 2000), many scholars have produced empirical results that refute these claims and evidence.

Some studies assert trade has had relatively little effect on the wages of less-skilled workers since the 1980s (Borjas, Freeman and Katz 1992; Sachs and Shatz 1994). Others recently have produced results which seem to refute the Heckscher-Ohlin model's prediction of inequality in developed nations by empirically demonstrating trade does not adversely affect income inequality in developed nations (Mahler 2004; Rudra 2004). While demonstrating trade had no effect on wages in highly developed countries, Rudra also showed trade actually worsened inequality in developing countries. Clearly, the relationship between trade and income is far from settled.

Similar to the Heckscher-Ohlin model, the Stolper-Samuelson theorem (1941) predicted international trade would benefit the owners of abundant factors and reduce the incomes of the owners of scarce factors. Because developed nations are relatively well endowed with skilled labor and capital, its imports would hurt the incomes of unskilled domestic workers and, therefore, increase inequality in developed countries while decreasing inequality in developing countries (Wood 1994). Conversely, the theorem predicts U.S. exports would benefit the owners of capital and skilled workers. Relatedly, trade with less developed nations makes it easier for firms in developed countries to substitute low-skilled labor with cheap imported products, thereby reducing the ability of domestic labor to bargain for higher wages (Rodrik 1997). Although nothing prevents the "winners" of globalization from compensating the "losers" to reduce inequality, it is highly unlikely firms will voluntarily do so (Rodrik 1997; Salvatore 1998). However, some argue trade increases labor productivity, which then leads to increased wages and reduced inequality (Held et al. 1999). This would obviate the need for "winners" to compensate "losers" since, eventually, losers become winners through productivity gains.

Some freely admit international trade has adverse effects on income inequality, but argue such inequality incentivizes education and skill attainment, which increases the economic prospects of those hurt by globalization (Blanchard 2000). Others dispute the predictive power of the Stolper-Samuelson theorem by claiming the assumptions that underlie the model are so "extraordinarily demanding [that it] cannot be taken seriously" (Bhagwati and Dehejia 1994: 39). Moreover, some argue trade with less developed nations constitutes so little a share of a developed nation's economy that the impact of that trade on income inequality in developed nations is negligible (Galbraith 1998; Krugman 1995).
Foreign direct investment

Although considered as important as trade, the literature examining the impact of foreign direct investment (FDI) and portfolio flows on inequality is not as extensive as the trade literature (Mahler 2004). Generally lacking theoretical models of its own, the impact foreign direct investment has on income structures may be predicted through the same Heckscher-Ohlin model that many have used for international trade (Mundell 1957; Caves 1996). Simply, outbound capital investment hurts domestic workers and increases income disparities as these workers are deprived of work they otherwise would have. Inbound investment benefits the incomes of domestic workers for the opposite reason.

FDI arguably exacerbates the income gap in the host country as well. Some argue multinational corporations (MNCs) pressure host governments to crack down on labor unions that attempt to negotiate for higher wages (Reuveny and Li 2003). The possibility of MNCs leaving the host country also weakens the negotiating power of labor unions and depresses wages there (Nafziger 1997; Salvatore 1998). Moreover, MNCs are said to offer below market wages for labor-intensive work and push local competing employers to follow suit (Barnet and Cavanagh 1994; Held et al. 1999). By contrast, several studies argue MNCs provide host countries with capital and technology and push local industries to implement more efficient business practices (Reuveny and Li 2003). It also is argued the influence of MNCs on domestic producers improves productivity on all sides, and that this increased productivity stimulates economic growth in the host country (Organization for Economic Cooperation and Development 1994; Bolmstrom and Kokko 1996; Barta and Tan 1997).

Like trade, the empirical evidence of the impact of FDI on income inequality is conflicting. Reuveny and Li (2003) have found the impact of FDI on income inequality to be positive and statistically significant for both developed and developing countries, although producing higher levels of inequality in the former than in the latter. Mahler (2004) and Moran (1999) have found FDI is not statistically related in any way to income inequality. Rudra (2004: 691-692) found empirical evidence indicating "FDI was statistically significant [and increases inequality in developed countries], but since it is highly correlated with trade…it was dropped from the model to avoid collinearity problems." Echoing Caves (1996: 115), the "consequences of foreign investment [on inequality in developed countries] in the long run remain a strictly unsettled issue."

Portfolio investment

The effects of portfolio flows on inequality, again, are disputable. Theoretically, and without offering empirical evidence, Obstfeld (1998: 19) states it is "implausible" portfolio flows have played a prominent role in widening the American income gap since "the United States has been running substantial current account deficits since the mid-1970s," thus importing instead of exporting capital. While very little recent empirical analyses find the effect of outbound portfolio investment on income distribution to be statistically significant for the U.S. (Reuveny and Li 2003; Rudra 2004; Mahler 2004), the variable is included here to account for the impact portfolio investments may have on income structures through a more subtle method. By exporting capital, a country may experience a reduction in government social spending as a consequence of a reduction of the tax base (Meyer 1999). Moreover, as Mahler (2004: 1048) reports, there is "growing evidence that financial openness works to constrain governments' use of macroeconomic tools to stimulate the economy, affecting earnings distribution in the process."

Meyer (1999: 112) agrees that a loss in tax revenue as a consequence of portfolio flows may adversely affect wages "through a more subtle mechanism, namely a constraint on fiscal policy and thus on social insurance which would otherwise serve to ameliorate the distribution in earnings caused by globalization." Rodrik (1997: 53) argues increased portfolio flows "result in increased demands on the state to provide social insurance [to offset the pernicious effects of globalization] while reducing the ability of the state to perform that role effectively."

Unfortunately, labor is less able to escape taxation in the same way that firms do, and workers' incomes suffer as the middle class and poor pay an increasingly greater percentage of total social spending (Rodrik 1997).

Again, empirical results for international portfolio flows and its relationship to income disparity are as divergent as those for international trade and FDI. Reuveny and Li (2003) find outward portfolio flows increase income inequality in developed nations, but not in a significant way. These results should be considered with the understanding that "the rise in portfolio investment...is a relatively recent phenomenon...and may significantly affect income inequality in the future" (Reuveny and Li 2003: 588). In fact, Mahler (2004: 1040) produces results that indicate portfolio flows are significantly and negatively affecting income distribution in countries with few controls on capital mobility, which suggests "traditional mechanisms of international economic interaction, trade and investment, are less important than exposure to international finance." However, Rudra (2004) found portfolio flows had no effect on income earnings in either developed or developing countries. Clearly, the debate on the effects portfolio flows have on income inequality is far from settled.
Immigration

Immigration, particularly undocumented, is generally ignored when scholars consider the impact that economic globalization has on income distribution. Several obstacles, such as the lack of consistently reliable and valid data on undocumented immigration, continue to frustrate social scientists. Consequently, most studies on the relationship between international migration and its economic impact on the host country approach the question by distinguishing between skilled and unskilled immigration, and not necessarily through the documented/undocumented immigration lens. Several studies on the skilled/unskilled front help illuminate the relationship between increasing international migration and income distribution. Meyer (1998: 113) revealed that from the 1870 to 1913 time period, "immigration from labor-rich Europe to the land-rich New World reinforced the trends in income distribution which has come about due to trade in goods." Mass migration from Europe to the Americas increased the supply of America's unskilled labor and depressed wages (Williamson 1998). Although Census data routinely undercount the number of immigrants by approximately 10% (Meyer 1999), Meyer (1999: 113) presents evidence demonstrating "the presence of immigrant workers in the United States in 1998 increased the labor supply of high school drop outs by 25 percent while the labor supply of high school graduates increased by only 6 percent." Indeed, most immigrants from developing countries arrive in developed countries with only their human capital, which is relatively under-educated and unskilled (Dolmas and Huffman 2004). As unskilled, uneducated immigration increases, the wages of unskilled workers fall due to the increasing supply of unskilled labor.

Whether the decrease in wages for domestic workers is significant can be debated. Some argue the empirically demonstrable effect of contemporary international labor migration on wage structures has been insignificant and mixed (Borjas 1990, 1993; Ichino 1993; Reuveny and Li 2003). Yet Borjas (1994, 1995, 1999) later concludes the benefits of unskilled immigration on a developed country are minimal, and the costs on domestic workers can be large. Topel (1994) agrees, and argues immigration reduces wages by 10%, and at lower quintiles of income earners this percentage can be higher. Although the literature and empirical data on the impact of immigration on income is small comparatively speaking, Dolmas' and Huffman's (2004) experiments with general equilibrium models find that when income inequality is high, the rich will support unskilled immigration and the poor will resist it. Conversely, when inequality is low, the rich and lower income earners are indifferent to unskilled immigration, but the rich will resist highly skilled and capital rich immigrants (Dolmas and Huffman 2004). These experimental models, coupled with the wide income gap and high capital exports experienced today in the U.S., suggest immigration and economic globalization produce economic hardship either in perception or in fact, or both. Clearly, more empirical analysis using the current immigration data is needed.

Variables

Dependent variable: income distribution

**Income Inequality Ratio.** Unlike cross-national studies that use data generated by disparate governmental and non-governmental organizations, this study, by focusing solely on the US, was able to use one source for its income distribution data. U.S. Census Bureau’s income distribution data for families by quintiles was used for the years 1980 to 2005. Income inequality is operationalized by creating an inequality ratio between the top 20% and bottom 20% of income earners for each year. The model’s name for income inequality is IncomeRatio.

Independent variables: economic globalization

This set of five variables represents economic globalization, comprehensively defined as the flow of goods and services, capital, and labor across international borders. Again, the addition of international labor mobility into the definition of economic globalization is the novel component of this empirical research. The five independent variables and their variable names are: international trade (TRADE), foreign direct investment (FDI), international portfolio investment (PORT), authorized immigration (IMG), and undocumented immigration (UNDOC). Data for the years 1980 to 2005 are used. Given the effect of international trade, foreign direct investment and portfolio flows on an economy depends on the size of country’s economy, TRADE, FDI, and PORT are taken as a percentage of U.S. GDP. Similarly, a country’s ability to absorb an influx of foreign labor depends on the size of the total population. Therefore, IMG and UNDOC are taken as a share of total U.S. population. If detractors of globalization are correct, this set of variables should have a negative impact on income inequality in the U.S.
International Trade. TRADE is the sum of U.S. exports and imports as a share of its GDP for each year from 1980 to 2005. For the years 1980 to 2004, Penn World Tables data, which measures international trade as a percentage of GDP and relies on World Bank and United Nations reports, is used. For 2005, the model uses U.S. trade data as a share of GDP from the International Monetary Fund’s *Financial Statistics 2006 Yearbook*.

Foreign Direct Investment. This variable reflects the amount of capital exiting the U.S. in search of profits in the long-term. Data for FDI is taken from the United Nations Conference on Trade and Development (UNCTAD), which measures FDI as a percentage of GDP for each year.

International Portfolio Investment. PORT is the sum of portfolio investments abroad as share of GDP for each year. PORT is an important measure of an economy’s openness to short-term capital outflows. Like FDI, data for PORT are from UNCTAD.

Authorized Immigration. IMG is the total U.S. authorized population as a percentage of the U.S. population for each year. IMG captures the portion of international labor flows recorded by the government. Data for IMG are from the U.S. Bureau of Citizenship, the Immigration Services, and the U.S. Department of Homeland Security.

Unauthorized Immigration. UNDOC measures the undocumented population as a share of the total U.S. population for each year. Although conclusively valid data for this hidden population have not been gathered, and no government agency has begun to systematically count the undocumented population (K. Woodrow-Lafield, personal communication, July 17, 2007), a “residual method” has been developed to estimate the undocumented population. The method subtracts the legal immigrant population, which consists primarily of legal permanent residents and naturalized citizens, from the total foreign population and designates the residual as a source for estimating the undocumented population (Massey and Bartley 2005; Passel 2006). Data for the residual method are obtained primarily from the census and the Current Population Survey’s *Annual Social and Economic Supplement*, which is produced every March. To operationalize unauthorized immigration, this study relies on the Pew Hispanic Center, which uses the residual method.

Table II summarizes the model’s dependent and independent variables and their sources.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>IncomeRatio (dependent)</td>
<td>Inequality ratio between the top 20% and bottom 20% of all income earners for U.S. families for each year from 1980 to 2005.</td>
<td>U.S. Census Bureau</td>
</tr>
<tr>
<td>TRADE</td>
<td>The sum of U.S. exports and imports of goods and services as a share of GDP for each year from 1980 to 2005.</td>
<td>Penn World Tables &amp; International Financial Statistics 2006 Yearbook</td>
</tr>
<tr>
<td>FDI</td>
<td>U.S. long-term capital investment in foreign countries as a share of GDP for each year from 1980 to 2005.</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>UNDOC</td>
<td>Unauthorized population in the U.S. as share of the total population for each year from 1980 to 2005.</td>
<td>Pew Hispanic Center</td>
</tr>
</tbody>
</table>

Table II. Variable Description and Sources
Hypotheses

Based on the bodies of work in the areas of trade, capital mobility and immigration, this study hypothesizes increases in international trade, capital and labor flows exacerbates income inequality in the United States. Specifically, the model disaggregates the general hypothesis into five:

1) TRADE increases IncomeRatio.
   By relying on its comparative advantage, the US exports capital-intensive products and imports labor-intensive products. Cheap imports of labor-intensive products harm the wages of unskilled, low-income workers in the US, and exacerbate income inequalities by depressing wages for the bottom quintiles of income earners (from Heckscher-Ohlin).

2) FDI increases IncomeRatio.
   FDI increases income inequality because it deprives American workers of capital that would otherwise be invested domestically, which presumably would generate employment and income (Meyer 1999; Mahler 2004).

3) PORT has no effect on IncomeRatio.
   Heeding the work of past empirical analyses (Reuveny and Li 2003; Rudra 2004; Mahler, 2004). PORT is not expected to increase income inequality.

4) IMG has no effect on IncomeRatio.
   Relative to the entire U.S. population, the size of the authorized immigration population is small. Unauthorized immigration, therefore, is not predicted to be statistically significant in explaining income distribution.

5) UNDOC increases IncomeRatio.
   As the undocumented population increases, the increasing supply of unskilled labor in the US drives wages down in lower-skilled professions. As these kinds of wages fall, income inequality grows.

Due to the conflicting results in the trade and capital debate, as well as the limited work on immigration, this study has the latitude to predict increasing economic integration widens the income gap in a general way, but hypothesizes only TRADE, FDI, and UNDOC will be statistically significant.

Research Design

As mentioned previously, this study provides an empirical examination to determine the statistical relationship between five independent variables—TRADE, FDI, PORT, IMG, UNDOC—that measure economic globalization and our measure of income inequality in the U.S., IncomeRatio. The data form a time-series set covering the years 1980 to 2005, and were run through SPSS’s ordinary least squares regression statistical program. SPSS allows us to determine the general effect of the model's variable set for economic globalization on income inequality. SPSS also enables us to measure the individual impact of each independent variable on the dependent variable when controlling for all other independent variables.

The equation is as follows:
\[ Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + b_5 x_5 \]

where:
- \( Y \) = IncomeRatio, U.S. income inequality as a percentage of GDP
- \( a \) = constant
- \( b_1 \) = TRADE, U.S. international trade as a percentage of GDP
- \( b_2 \) = FDI, U.S. foreign direct investment as a percentage of GDP
- \( b_3 \) = PORT, U.S. portfolio investment as a percentage of GDP
- \( b_4 \) = IMG, Authorized immigration as a share of total U.S. population
- \( b_5 \) = UNDOC, Unauthorized immigration as share of total U.S. population

Results

Table III through VI summarize the SPSS results. The adjusted R-squared value of .855 indicates the model's R-square value (.885) was penalized 0.03 points for having five independent variables. Therefore, the number of independent variables in our model is not excessive. The adjusted R-square value demonstrates the model's five economic globalization variables explain at least 85.5% of the variation in the income inequality.
variable. The model's F statistic of 29.317 and Sig of .000 support the findings for the R-squared and adjusted R-square values by reinforcing the ability of the model's independent variables to explain the dependent variable's behavior. Looking to t-ratio values for each of the model's independent variables, Hypothesis 1 is confirmed at t-ratio of 3.655. Hypothesis 2, however, is rejected as the t-ratio value for FDI is -2.7. International trade increases income inequality, while FDI decreases it. As predicted, Hypotheses 3 and 4 are accepted at t-ratios of -0.703 and -0.577, respectively. Increased portfolio flows and authorized immigration do not affect income inequality in a statistically significant way. Interestingly, Hypothesis 5, which predicts unauthorized immigration increases income inequality, is rejected, but its t-ratio value of -1.905 is only 0.095 points from statistical significance.

The negative signs on the B and t-ratio values for FDI are interesting because they indicate FDI decreases income inequality in a statistically significant way. This finding is at odds with the literature and, as mentioned, hypothesis #2. Also, UNDOC has come very close to being statically significant at t-ratio -1.905 and Sig .072. As with FDI, the negative sign on UNDOC is at odds with the literature and hypothesis #5. "Wrong signs" suggest the possibility that some Error Term Assumptions have not been met. Indeed, the model suffers from multicollinearity.

Table III

<table>
<thead>
<tr>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.941</td>
<td>0.885</td>
<td><strong>0.855</strong></td>
<td>0.47936</td>
<td>1.055</td>
</tr>
</tbody>
</table>

Predictors: (Constant), TRADE, FDI, PORT, IMG, UNDOC
Dependent Variable: IncomeRatio

Table IV

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>33.682</td>
<td>5</td>
<td>6.736</td>
<td><strong>29.317</strong></td>
</tr>
<tr>
<td>Residual</td>
<td>4.366</td>
<td>19</td>
<td>0.230</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>38.048</td>
<td>24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table V

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>3.813</td>
<td>1.444</td>
<td>2.641</td>
<td>0.016</td>
</tr>
<tr>
<td>TRADE</td>
<td>0.413</td>
<td>0.113</td>
<td><strong>3.655</strong></td>
<td>0.002</td>
</tr>
<tr>
<td>FDI</td>
<td>-0.000006020</td>
<td>-0.379</td>
<td>-2.700</td>
<td>0.014</td>
</tr>
<tr>
<td>PORT</td>
<td>-0.000010382</td>
<td>-0.253</td>
<td>-0.703</td>
<td>0.491</td>
</tr>
<tr>
<td>IMG</td>
<td>-0.000241956</td>
<td>-0.060</td>
<td>-0.577</td>
<td>0.571</td>
</tr>
<tr>
<td>UNDOC</td>
<td>-0.000000281</td>
<td>-0.732</td>
<td>-1.905</td>
<td>0.072</td>
</tr>
</tbody>
</table>
Table VI presents the Variance Inflation Factor (VIF) values for the independent variables, and Trade, PORT, and UNDOC are all above the minimum of 5. Because these three variables are correlated, we are unable to definitively assess the individual impact of each variable on income inequality. Running a Correlations analysis confirms the Collinearity Statistics as Trade, PORT, and UNDOC are significantly correlated to each other (see Appendix).

The model also suffers from autocorrelation. The Durbin-Watson value for the regression is outside the safe range of 1.5 to 2.5 at 1.055. Because this error inflates t-ratio values and leads to Type I error, we employ Stata 9 Newey-West standard errors to correct for autocorrelation. If we correct for autocorrelation, the original SPSS t-values for TRADE and FDI increase in significance. Table IV presents the Stata results for TRADE and FDI, which are 4.99 and -3.68, respectively. Interestingly, the model’s UNDOC variable becomes statistically significant at -2.72 when corrected for autocorrelation. Again, the signs on our FDI and UNDOC are at odds with the literature and hypotheses #2 and #5.

Table VII

<table>
<thead>
<tr>
<th>IncomeRatio (dependent variable)</th>
<th>STATA 9 t-ratio</th>
<th>SPSS t-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRADE</td>
<td>4.99</td>
<td>3.655</td>
</tr>
<tr>
<td>FDI</td>
<td>-3.68</td>
<td>-2.700</td>
</tr>
<tr>
<td>UNDOC</td>
<td>-2.72</td>
<td>-1.905</td>
</tr>
</tbody>
</table>

Where multicollinearity is present, one would expect to see an exceptionally high R-square and no, or few, statistically significant variables. Therefore, the presence of both multicollinearity and statistically significant variables suggest the predictive power of TRADE, FDI, and UNDOC in explaining the behavior of IncomeRatio are so strong that these variables are able to overcome the circumscribing influence of multicollinearity. However, multicollinearity does prevent us from assessing the direction and magnitude of the relationship between TRADE, FDI, and UNDOC and IncomeRatio with certainty.

**Conclusion**

Does economic globalization increase income inequality in the United States? In an attempt to answer the question with greater accuracy than previous studies, this empirical examination offers a more comprehensive definition of "economic globalization." By operationalizing two distinct variables for international labor mobility, as well as the customary three variables for trade and capital flows, this unique model is better equipped to discover a relationship between globalization and inequality because its conceptualization of economic
globalization includes an essential but previously neglected factor of production. I find economic globalization does not increase income inequality in the U.S. in a systematic way. Out of five independent variables, three—TRADE, FDI, and UNDOC—affect income inequality in statically significant ways, but the results are mixed. International trade increases income inequality, while foreign direct investment and unauthorized immigration decrease inequality.

Ideally, the model's methodology allows us to disaggregate the general relationship between economic globalization and income inequality to assess the individual impact of each independent variable on the dependent variable, but the presence of multicollinearity prevents us from doing this definitively. This methodological limitation notwithstanding, the ability of the model's three statistically significant variables to overcome the potentially crippling effect multicollinearity has on them indicates these variables are truly significant in explaining income inequality. The question is whether these three variables impact the dependent variable in the direction revealed by the regression results. The opposite impacts international trade and FDI have on income inequality can be reconciled with previous empirical analyses, but determining the impact of undocumented immigration is problematic because the unexpected results can not be understood by reflecting on previous empirical analyses since little work has been done in this area. Therefore, a truly valid empirical assessment of the impact undocumented immigration has on income inequality in the United States escapes this study due to both measurement and methodological constraints.

To resolve the problem, I suggest two courses of action. First, an advanced research design is needed to overcome this model's methodological limitation. Although multicollinearity between international trade and FDI is a serious constraint that has affected other studies the limitation can be remedied through a variety of different approaches. Rudra (2004), for example, chose to drop FDI from her model because it was correlated to trade. A similar approach can be applied to international migration. Empirically examining the relationship between economic globalization, comprehensively defined beyond traditional neoliberal variables, required a full presentation of the regression results. Because the principal objective of this study is to expand the debate on economic globalization and income inequality into a nascent area of demographic change, superior methodological approaches are left to future research.

In addition to an improved methodology, this study highlights the need for government agencies and demographers to develop procedures that consistently and validly estimate the unauthorized population in the U.S. The indirect estimates used today will not suffice in an environment of increasing economic inequality and increasing external security threats, whether these threats are real or perceived. While the perceived significance of unauthorized immigration has waxed and waned throughout history, the issue's salience in a post 9/11 world requires informed debate based on valid and reliable data. Moreover, even if and when security fears recede, economic concerns threaten to re-politicize international labor flows. Therefore, it is in the short-term and long-term interests of social scientists and policy makers to have access to valid estimates of the unauthorized population in the U.S. Until valid and reliable measures of the unauthorized population are produced, we should attempt to improve the residual method.

While there have been numerous empirical studies examining the impact of global neoliberal economics on income inequality in America, surprisingly few have examined the combined impact of liberal economic processes and immigration on income. By examining the impacts the three major modes of neoliberal economic integration and international labor mobility have on income inequality in the U.S., this study improves our understanding of the relationship between economic globalization and income structures while responding to the claim that America benefits from globalization. In terms of the three major modes of neoliberal integration, the study produces conflicting results. The novel contribution, however, lies in the definition of economic globalization and the operationalization of undocumented immigration. Interestingly, the regression results find this population decreases income inequality. Despite its methodological limitation, this unique model largely achieves its objective by including international labor flows as a factor of production in the study of American income inequality.

Acknowledgments

I thank Dr. Ross E. Burkhart, my research mentor, and Boise State University's Ronald E. McNair Program, especially David Hall and Helen Barnes, for providing intellectual, moral, and financial support throughout my research experience. I take special care here to recognize my wife and grandparents; their unwavering support for my academic pursuits and faith in my intellectual abilities are my inspiration.
References

### Appendix

#### Correlations

<table>
<thead>
<tr>
<th></th>
<th>IncomeRatio</th>
<th>Trade</th>
<th>Portfolio</th>
<th>Legal Imgt #</th>
<th>Undoc Res #</th>
<th>FDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>IncomeRatio</td>
<td>1</td>
<td>.830(**)</td>
<td>-.890(**)</td>
<td>.642(**)</td>
<td>.876(**)</td>
<td>.659(**)</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>59</td>
<td>55</td>
<td>26</td>
<td>56</td>
<td>26</td>
<td>36</td>
</tr>
<tr>
<td>Trade</td>
<td>.830(**)</td>
<td>1</td>
<td>-.962(**)</td>
<td>.732(**)</td>
<td>.964(**)</td>
<td>.785(**)</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
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** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
Refugee Integration Into Diasporic Society: A Case Study of Somali Bantu Refugees Living in Boise, Idaho

Fred Waweru: McNair Scholar
Steve Patrick: Mentor
Sociology

Abstract

For decades Somalia has been affected by catastrophic events that have left millions of its people displaced. Among the events that have caused these tremendous displacements of Somalis is the civil war that intensified in the early 1990s. Many of these displaced people still live in refugee camps across eastern African countries, notably Kenya. Some, however, have sought asylum and been accepted by many industrialized nations such as Canada, United States, Norway, and Australia. The resettlement of Somali refugees to these diasporic nations has come with extensive challenges related to starting over a new life. Difficulty in assimilation to their new society has widely been speculated as the cause of delay towards the process of becoming self-sufficient. This exploratory study intends to investigate the assimilation difficulties to contemporary American lifestyle faced by Somali Bantu refugees resettled in Boise, Idaho. This refugee population has not become self-sufficient even after being in the United States for a period of three years, in contrast to refugees from other countries who become self-supportive within as little as six to eight months.

Introduction

Migration around the world has increased over the last century. Various reasons such as avoiding persecution and seeking a better life have caused people to move from their homeland and reside in foreign countries. Theories such as assimilation theory explain the integration process of immigrants who migrated in large groups such as the waves of Polish immigrants, Irish immigrants, as well as Chinese immigrants among many groups. However, these integration theories fail to or only partially explain the integration process of minority groups (Healey, 1993).

Assimilation theory, as defined by Joseph Healey, is the process in which formerly distinct groups come to share a common culture and merge together socially (Healey, 1993). This theory states that as societies undergo the process of assimilation, differences among groups begin to decrease. Although the assimilation theory is a powerful icon in the Western society, especially the United States, it can be argued that its assumptions are not completely sound for several reasons. First, assimilation's major metaphor of melting pot suggests a process in which different groups come together and contribute equally to create common culture and a new unique society (Abrahamson, 1980). This melting pot notion has been perceived by many contemporary scholars as a one-sided process with an Anglo-centric flavor, which was designed to conform immigrants to the Anglo-Americanization (Schlesinger, 1992). This was to maintain the predominance of the white Anglo-Saxon Protestant tradition as well as the British-type institutional patterns that were created during the early years of American society (Healey, 1993). This theory of assimilation is not universally applicable since some groups—especially racial and ethnic minority groups, like the Somali Bantus, have largely been excluded from the melting process as their ethnic backgrounds differ from those of Anglo-Saxon Protestants.

Another theory of integration is based on the pluralistic model. In contrast to the assimilation theory which has been around for many decades, pluralism is a relatively new theory developed a few decades ago to accommodate the growing diversity in the US society. Although they are different, pluralism and assimilation theory are not mutually exclusive. In fact, they share some of the stages immigrants go through in the process of integration. One factor that distinguishes pluralism from assimilation is its multicultural emphasis (Healey, 1993). This focus reflects the everyday reality of increased social and cultural diversity and the impact of that reality on integration.

The pluralistic integration model is divided into two groups: cultural pluralism and structural pluralism. Cultural Pluralism exists when groups have not acculturated and maintain their own identity. They maintain this
identity by retaining their traditions in the form of religion, language, values and even living in enclaves (Healey, 1993). An example of this group would be the Native Americans or the Amish who have managed to maintain their traditional values and cultures for many years in isolated Reservations (Healey, 1993). Structural pluralism, on the other hand, occurs when a group becomes acculturated but not integrated. In other words, the group adopts the culture of the dominant group (such as Anglo-American culture), but their access to larger societies’ institutional resources is minimal. These groups may speak the dominant group’s language, eat the same foods, and subscribe to the same values and even live in the same neighborhoods (Healey, 1993). However, their organizational system of how they practice traditions is different from that of the dominant group. A good example can be observed in the Sunday services here in United States; churches seem not only separated by denomination, but also sometimes by race, ethnicity, and class (Healey, 1993).

Ultimately, disparity of integration among different groups is a global phenomenon that has both benefits and dreadful outcomes. For example, disintegration has been used as a tool of maintaining identities among many ethnic groups such as Native Americans and the Amish. On the other hand, lack of integration has also been a cause of many atrocities around the world, such as the differences that have caused conflict in the Eastern Europe, the ethnic cleansing in Rwanda and tribal wars in Somalia.

From Somalia to the United States: The Mystery Behind Somali Bantu Transition

Joining the minorities subjected to assimilation in the United States society are the Somali Bantu refugees. The journey that brought them to the United States started when civil war broke in Somalia in the early 1990s. During the war, various armed factions mercilessly attacked the largely agricultural—and largely defenseless Bantus. This war that collapsed the Somali government left over a million dead and over three million displaced. (Makepeace, pov). Of the displaced, thousands were the Somali Bantu who fled to the neighboring country of Kenya. For over a decade, many still remain in the refugee camps with the hopes of returning to Somalia after a peace resolution (which has not occurred in almost two decades). However a significant number of them have sought asylum in developed counties that host and resettle refugees such as United States, Canada, Australia, Sweden, Norway, Finland, New Zealand, Denmark, and The Netherlands (Beaman, 2006). Although the United States is among the string of countries that resettle refugees, the resettlement plan for the Somalis did not start until 1999. This late acceptance of the Somali refugees in the United States can probably be explained by the sour relationship the US has had with Somalia in the past (Makepeace, pov). In 1999 under the Clinton administration, the United States announced that it would resettle 12,000 Somali Bantu refugees who had escaped over the border into refugee camps in Kenya eight years before. This resettlement plan ceased after it was interrupted by the attacks of the World Trade Center on September 11th 2001, but resumed in 2003 (Makepeace, pov).

The migration and resettlement of Somali Bantu refugees to diasporic nations has come with many challenges that relate to starting a new life in contemporary industrialized societies. Although most refugee immigrants have some form of difficulty adapting to their new resettled countries, the case of the Somali Bantu is quite exceptional. Numerous studies done in industrialized areas where Somali Bantu refugees have resettled indicate a significant trend of difficulty in adapting to the mainstream society, such as the disproportionate adaptation patterns of Somali and Bangladesh women resettled in Britain (Summerfield, 1993). Most of these studies have also demonstrated disparity in integration processes between Somali Bantus and other refugees. Fuglerud and Engebrigtsen in their 2006 study of culture, networks and social capital of Tamil (from India) and Somali immigrants in Norway, argue that “Tamil families have a labor income far beyond those of an average immigrant’s population, while most of the income in Somali household comes from welfare.” (Fuglerud, et al, 2006). They support these assertions by indicating that 70% of Tamils owned their own homes, compared to 24 % of Somalis. This trend of labor and income differences between Somalis Bantus and other refugee groups has been observed in other areas such as Canada and United States (Fuglerud et al, 2006).

Although there are many broad explanations as to why the differences in integration of Somali Bantus exist, many factors that attribute to their difficulty in integrating are sometimes overlooked. Language, cultural differences, literacy, residential segregation, and resettlement processes are the key factors that lack attention. Many of these factors are intertwined since their effects are closely related. Language acquisition and literacy for example, share some common effects on the integration process of immigrants. As in many diasporic nations, including United States, immigrants who migrate to these places are expected to learn the country's dominant language. Although many immigrants manage to learn the new language with little difficulty, the majority of them face difficulty with language acquisition, particularly those less educated or the elderly. Many linguistic scholars agree that there is a correlation between literacy and the ease of acquisition of a new language. According to a study of Somali Bantu resettled in Canada, the level of language acquisition has a direct correlation with the level of literacy.
(Halcon et al, 2004). This study also shows that of the 338 participants from Somali aged 18-25 years, 66% had less than a high school level of education and 49% still had an English language problem even after having lived in Canada for five years. This study also points out that many Somali Bantu were unable to read or write even in their native language. (Halcon et al, 2004)

Residential segregation is another factor that contributes to the integration difficulty among immigrants. Borjas (2000) asserts that "a residential enclave has a negative impact on the assimilation of refugees." While refugees are housed within the same area for the purpose of support, this move carries a negative impact of segregating them from the mainstream community. Not only does this dissuade refugees from integrating with the rest of the society, it also limits their pressure do to so. Social network is another factor that plays a large role in accelerating the process of integration. This directly affects refugees in diverse ways. A resettlement study done by Borjas in 2000 indicates that the location of refugee resettlement in the United States is primarily determined by the previous resettlement of people who share the same background with the new arrivals. In other words, the resettlement agencies concentrate the new arrivals in areas where other immigrants whom they share background commonality have resettled. This resettlement strategy is mainly adopted due to its efficiency in establishing social networks that are essential to new immigrants. However, this crucial refugee resettlement procedure was not a determinant factor in the relocation area for the Somali Bantu due to several reasons. First as mentioned earlier, until few years ago there were few Somalis who had settled here in the United States. This caused the Somali Bantus to be relocated randomly as there were no Somali populations resettled in the United States to be paired with.

Methodology

This study explores the issues that are slowing the progress of self-sufficiency among Somali Bantus. Although this group has been in the United States for a period of over three years, there are very few signs of self-supportiveness as compared to other refugees who have been resettled here in Boise for a shorter period of time. This self-sufficiency factor is considered by the World Relief as the sign of successful integration and is measured through indicators such as employment, English acquisition level, and affordability of basic needs. The selected sample of 27 Somali Bantu households representing 157 participants was drawn from a total population of 300 Somali Bantu resettled in Boise as refugees in 2003. Given that United States did not start hosting Somali Bantus until the beginning of 21st century, the availability of studies done on their integration process is very limited. This shortage of previous studies caused the design of this study to be exploratory rather than hypothesis driven.

Since the goal of this project was to investigate the cause of delay in becoming self-supportive, the questionnaire was designed using self-supportive indicator questions. These questions encompassed many self-supportive measures such as employment, transportation, children’s progress at school and English acquisition level. Since refugees are a protected population, I could not obtain the authority to collect the data myself; I thus relied on World Relief case managers to collect the data. They designed the survey questionnaire with a central theme of measuring the settlement progress of their clients. Because English acquisition was very limited within this population, the case managers administered the survey by qualitative method through house to house visits with a help of a translator. For confidentiality purposes, the case managers assigned numbers to each case participant to avoid revealing their identities.

After the collection of data, I observed the patterns of responses and coded them with quantitative values that represented the trends of participants' responses. These values were then analyzed through a Statistical Program for Social Statistics (SPSS) software. Although this coding was very effective, it was limited due to inconsistency on some of the cases where respondents had either more than one response or one that was vague. Other reliability issues related to this study included the participants “saving face” to the data collectors while responding to questions that carry negative connotations. This was specifically an issue on questions that asked their satisfaction of services rendered to them by the resettlement agency—World Relief.

Since my input to the questionnaire design was very limited and because I was not the principle data collector, I heavily relied on review of literature. I approached this literature from three angles: the existing studies done on other Somali populations resettled in diasporas, my personal experience that I gained through living with Somali Bantus both in Kenya and in Tanzania, and interviews I conducted on those who render services to my target group such as the World Relief case managers.
Findings

Language (see appendix 1)

When the participants were asked in the questionnaire if they needed more English lessons and whether they would attend if the English classes were offered in their neighborhood, 74% reported needing more lessons with the majority of them responding that they would attend if lessons were offered closer to their homes. This was despite the fact that these participants have been in the United States for a period of over three years. Their response was also contradictory to the agency's expectations of learning English within 6 to 8 months. The agency employs these expectations based on the average refugee population they host such as Russians, Vietnamese, and Congolese who learn English within a short period of time. The Somalis continued demand of English instruction also differed from the assimilation method of integration which suggests that immigrant groups take less than one year to acculturate. The language issue was also consistent with finding from other studies done on Somali Bantus in other diasporic countries such as Canada and Norway.

Residential Segregation (see appendix 2)

When asked who they or their children associate with while they are not at school, 65% responded that they associate only with other Somali Bantus. This was more evident in the adult population, of whom over 50% responded they did not have any friends who were not Somalis. Although this social isolation can be tied to other factors, such as the language barrier, residential segregation seemed to play the biggest role. This is because World Relief places their clients in the same apartment complexes where they house refugees from other countries. This minimizes the Somalis chances of making friendships with non-Somalis.

Social Support (see appendix 3)

Although social support was not directly measured in the study, the trends of responses in the questionnaire indicated an interesting pattern that suggests that social support was indeed a significant factor in becoming self-sufficient. For example, families with both parents and those with many family members increasingly reported having either a car in the household or some one in the family having a driver’s license. This is a progress indicator of self-sufficiency, as public transportation is unreliable in Boise. Another significant observation that I made has to do with the participants’ responses when asked whom they would contact if they believed there was a drug or alcohol problem in the household. The majority of them responded that they would contact their tribal chief, a self-appointed leader who presents Somalis’ concerns to the community. This leader is highly respected by the Somalis as many responded they would turn to him for many of their social support needs. Interestingly, 79% indicated not knowing there were counseling services provided by community agencies for alcohol and drug problems.

Cultural Difference (see appendix 4)

To measure the cultural change variable, we asked questions such as "have you changed culturally since moving in United States, in terms of eating habits, entertainment, and clothing, etc.?" and “do you perceive those changes to be positive or negative?” This variable was specifically designed with assumption of assimilation theory which suggests that if they have changed culturally and adopted the American lifestyle then they must be integrating. Eighty four percent of respondents agreed they have at least changed culturally. Forty percent of them responded those changes being positive, 11% negative, and 33% claimed those changes to be both positive and negative. A closer look at these findings reveals that parents with teenagers were more likely to point to negative cultural changes. Two common items that made parents unhappy with their teenagers adapting to the American culture were the derogatory effects of pop culture, such as a lack of moral respect towards parents due to television influence.

Education

Apart from directly measured variables, other questions in the questionnaire reflected useful correlation. For instance, parents responses on how kids were doing at school was positively correlated with the response of whether school was beneficial to the family. This indicated a great finding that parents who perceived school being
beneficial to their children will likely support them in their education. Concurrently, parents who indicated high future goals for their children were 74% more likely to report positive remarks regarding the progress of their kids at school.

Employment: Appendix 4

The questionnaire was also used to measure other factors that can be indicators of self-sufficiency. Employment was the greatest indicator of self-support; however, of those who responded to employment questions, only 63% had someone in household who was employed. This low percentage of employment probably explains why 55.6% of respondents reported receiving food stamps. Approximately the same percentage reported not having medical insurance at all, and 33% were still on Medicaid. Further observations on the data revealed that even the majority of those with employment were still on some form of government assistance. Although many factors such as size and hours worked can be attributed to the dependability of external assistance, perhaps the best explanation is that those employed had low wage jobs that could not sustain them or their family without welfare assistance.

Discussion and Recommendations

The findings of this exploratory research, coupled with the integration models presented earlier, led to the discussion and recommendations for what can be done to assist Somali Bantu refugees living in Boise make swift transitions and ultimately propel them towards self-sufficiency.

First and foremost, given the characteristics of the assimilation model of integration, which asserts that immigrants are “melted” into the mainstream society within a short period after their arrival to United States, it is evident that the Somali Bantu do not fit to that model comfortably. This contradicts with the World Relief and the federal government’s expectations of integrating within six to eight months. In fact these very expectations might be negatively affecting their integration process in many ways. Overwhelming them with lots of information and big goals to attain such as learning the language, getting a job, learning the American system of living (within a period of six to eight months) may interfere with their emotional self-esteem essential to their process of becoming self-sufficient. In other words, by not meeting these goals despite of the pressure to conform may make them feel hopeless which in turn may hamper with their motivation to integrate. This was somewhat reflected in the questionnaire, when asked how they feel for being in the United States, 11.5% of respondents expressed frustration and even questioned the benefits of being in the United States.

Another cause of protraction towards integration that this study suggests should be taken into account is the social support factor. As mentioned in the literature review, many refugees are settled in cities where other refugees had previously been settled mainly for the purpose of social support. However, this was not the case for the Somali Bantus as the United States did not start hosting them until late 2003. In fact, the particular group of Somalis in this study was the first to be resettled in Boise, Idaho. This means not only did they have to establish new social networks in their new country, but they had to do so without role models who they could self-mirror with.

The locations and the demographics of areas that refugees are resettled also plays a big factor on their integration process. In Idaho for example where 95.5% of population is white and only .06% is black (quickfacts.census.gov) it is valid to propose that the Somalis have particular difficulties adapting because they differ from the dominant group on almost every social dimension such as color, race, language and cultural practices. Not only do Somalis experience race consciousness in a homogeneous state, but also their Muslims religion limits their external social support. These external social supports include churches, and other Christian based charity organizations.

Some of the hindrance to integration lies within the resettlement system itself. As observed from the findings, a significant number of participants responded associating with only fellow Somali Bantus. This can be pointed out as a result of residential segregation, a process where refugees are housed within the same apartment complex. Although the reasoning behind settling refugees in one area is clear such as the convenience of case managers to visit their clients in close limits, creating a social support among refugees, or even the limited property owners who accept tenants who do not have past economic history in the United States, its effects on integration process are tenfold. Namely, it reduces their interactions with the dominant community which in turn limits their pressure to reach out and seek friendships with other people whom they can potentially practice English with. Though some logic of resettling refugees in one location seems convenience than to spread them across the city, this study suggests using those apartments as stepping stone for refugees’ transition after their arrival in United States and not permanent homes.
To conclude, the findings and the recommendations of this study do not necessarily advocate for special treatment for refugees who come from minority groups, nor does it delineate all minority groups into one category, rather it recommends for some crucial observation on specific minority groups such as traditional ethos, literacy, and identity–rumination as indicators of how swiftly a group will integrate. It also calls for thorough observation on the assimilation and pluralism model of integration in order to determine which would best accommodate the refugee needs. These observations could also pave way in determining the amount and length of assistance specific groups will require.

In addition to these findings, due to the limited available research done on Somali Bantu refugees in United States, auxiliary research needs to be done to support the findings and recommendations or this study.

Bibliography


Appendix 1

Would you attend if the English Language Center held a class in your neighborhood?

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Who are your children's friends while they are not at school?

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Appendix 2

How many non-Somali best friends do you associate with?

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If there was an alcohol or drug problem who would you contact?

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### Appendix 4

Do you have medical insurance?

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Do you receive food stamps?

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The Construction of Poblano Identity in Colonial Art and Architecture: Talavera Pottery and Cathedral Architecture in Puebla, Mexico, 16th - 18th Centuries

Vivianne Sanchez: McNair Scholar

Dr. Janice Neri: Mentor

History of Art and Visual Culture

Abstract

During colonization in the 16th century both the Spanish and indigenous population underwent a dramatic cultural change. Puebla, Mexico is a unique city to discover the layers of identity because a different approach the Spanish decided to pursue to build its society. As Mexico's first industrialized city, it is also the first Mexican city that was not built upon existing indigenous civilization. Because of this difference in cultural assimilation, Poblanos consisted of indigenous people and Spanish encomenderos who were organized together at concurrent times. Through cathedral architecture and Talavera pottery, an ambiguous sense of this identity is created. Cathedral architecture offers a window into how the church used shared symbols of the sun and moon between Christianity and Aztec beliefs to peacefully assimilate the two cultures. This may have proven not to be the most effective method of converting the indigenous population but nevertheless offers the modern reader one of the methods used in merging the two cultures. Talavera pottery in Puebla becomes a staple of the city's art craft which holds its roots in both indigenous and Spanish production. What is underneath the Spanish decorative style is ancient pottery techniques that convey the message of two cultures fused together to create a distinct, Poblano identity. Visually, the styles are characteristic of Spanish Baroque, with an underlying subtle tribute to Mesoamerica's ancient past. This research takes a look into the possibilities of these two art forms presenting a communication bridge between two very different worlds with some shared roots.

Introduction

Art in Puebla, Mexico presents a rich history of what once was an uninhabited land to a culture overshadowed by Colonial New Spain. When the Spanish established the city of Puebla in 1531, it became a stopping point between Mexico's most important port cities, Veracruz and Mexico City. Puebla's founder was fray Julian Garcés who wanted to help improve the social conditions and eliminate Amerindian exploitation from the Spanish in Veracruz. Puebla was not built upon an existing indigenous community as Mexico City was, so its establishment brought together Spanish conquistadors and indigenous people to cultivate the land. As one of the first industrialized cities of Mexico, Puebla's colonial history is preserved within its downtown district where colonial architecture and its famous Talavera pottery are concentrated. These two elements identify Puebla as a dual-identified culture: neither indigenous nor European but both, a hybrid culture. This research will present several architectural elements that reflect this idea of a hybrid culture including the Nuestra Senora de los Remedios in Cholula, the Cathedral of Puebla and the Cathedral of Santo Domingo. Talavera pottery represents a hybrid culture in a more subtle way; its technique is specific to the area of Cholula where artisans made pottery the same way for many generations before the Spanish Conquest. Beneath the glaze and paint of Talavera pottery is where the indigenous art lies. Spanish painting techniques and the Talavera color palette decorate each piece to cover its indigenous origins.

Hybridity stems from the Edward Said's studies into the Orient and the Occident, or non-Western Europe and Western Europe, respectively. Said's research on the Orient is considered to be one of the founding theories in post-colonialism. Although his studies concentrate on the effects of Asia and the Middle East on Western culture, Orientalism can be broadened to many cultures around the world that experience imperialistic intervention. In Orientalism, we are reminded of the notion that the productivity of colonization left Europe with a stronger sense of its own identity set against the Orient. As a result, post colonization left Puebla a hybridized blend of these two
cultures, creating an uncertainty of whether Poblanos derive from indigenous roots or purely Spanish. Puebla during the 16th through 18th centuries has now become both Orient and Occident, constructing an ambiguous culture of identity seen in cathedral architecture and Talavera pottery of the 16th through 18th centuries. Poblano cathedrals and Talavera pottery create an eclectic identity amidst the ambiguity through evidence of subtle, indigenous beliefs about life and their ancient gods within a dominant Spanish culture.

According to Merriam-Webster's dictionary, the basics of identity mean several things: a sameness of essential or generic character in different instances or sameness in all that constitutes the objective reality of a thing. It has also been described as oneness: the distinguishing character or personality of an individual or as individuality being the relation established by psychological identification. A mathematical definition of additive identity is described in terms as an element (as 0 in the set of all integers under addition or 1 in the set of positive integers under multiplication) that leaves any element of the set to which it belongs unchanged when combined with it by a specified operation. This is to suggest that the Spanish Crown is the set 0 or 1 to be unchanged as it assimilated into Mesoamerican culture. This research is not intended to disarm the credibility of mathematical definitions of identity but rather to prove a point about the nature of identity in Puebla. While the intention was to force indigenous groups to assimilate into Spanish culture, what is seen in Puebla is a marriage of both. It is evident that Colonial Spanish culture dominates Poblano art through its cathedrals and pottery. However, there are subtle elements of ancient Aztec culture that can be seen primarily through architecture as well as Talavera pottery if the viewer knew its technique. This suggests that Spanish conquistadors quietly assimilated into indigenous culture as well as indigenous people into theirs.

In Orientalism, we can begin to understand that the Spanish crown had a will or intention to understand the indigenous culture as seen through such works of art as casta paintings (See Figure 1). Casta paintings are a series of paintings by Spanish artists depicting the various ‘racial’ intermarriages and the names given to the produced children. They were always displayed in a hierarchal order with Spanish-Spanish parents as its highest form, Spanish-Indian usually second, as so forth. The paintings were typically created as Spanish souvenirs to bring back to the Iberian Peninsula, in order to convey how the indigenous were assimilating to the Spanish and not reversed. As a contemporary academic tradition, we then analyze what these intentions were and how they affected Mesoamerica. What the mathematical definition has to offer to Post-Colonial theories is the possibility that Western imperialistic intervention may have hoped that the result is an unchanged set of Spanish colonial ideals. According to Post-Colonial theorists, the set in fact does change. Western Europe during the 16th century was developing its own ideas of what the Eastern and Western world were and one of the objectives of exploring the Americas was to preserve these societies by implementing European civilization. Thus, the desired result was to leave the Spanish (the set) unchanged, and Mesoamericans ‘civilized’ as Spanish citizens of New Spain. Puebla's identity then becomes characterized by these elements coming from the Spanish influence, Baroque architecture, indigenous pottery and European pottery decoration, as a hybridized, mixed identity. The set inevitably had to change and as a whole, the identity of architecture becomes that of ancient Aztec beliefs of their gods of the sun and moon and Christianity. Talavera pottery reflects these ideas in its ancient techniques decorated in the European style. Talavera’s connection with religion was Puebla’s monasteries and its initiation to bring European pottery decoration to Puebla and Cholula. It merges these two religious institutions and it is a hybridized religion that greatly identifies Puebla. Talavera pottery and Poblano architecture are connected with Christianity as it superimposes ancient beliefs and makes it seem as though Mesoamerica succumbed to Christianity. It leaves behind only a trace of a civilization that once worshipped and sacrificed to gods of the sun and moon and has now been overcome by a more powerful religion.

This particular type of hybrid identity does not necessarily apply to other parts of Mexico during the 16th through 18th centuries because Puebla began as an experimental colony, unlike Mexico City (ancient Technoitlan) that destroyed an existing Aztec city and superimposed a Spanish colony. Puebla was the Spanish Crown's solution to desired social change during a time when new Spanish settlers in Tlaxcala (a former stop-point between Mexico City and Veracruz, its main shipping port) were unsuccessfully adapting with the natives in the New World. The Spanish conquistadors were given encomienda, to satisfy their demands of receiving reward for conquering Mexico. As encomenderos they served as landlords to a group of indigenous people who cultivated the land and gave tribute to him in the form of goods and food, later in the next century, the tribute was to be paid with money. In subsequent to the physical development of Puebla, the city concentrated on developing a Poblano culture through its architecture and Talavera pottery in the 16th through 18th centuries.


2 Ibid.

A Brief History of Puebla

The most well renowned name in the conquest of Mexico is Hernán Cortés. In one of several voyages to the New World, Cortes marched his way through the shores of Veracruz, which would become Mexico’s most important port city in 1519 and remains so today. Traveling through the region of Tlaxcala, he encountered a community of indigenous peoples and acquired them as allies as his plans to march through Tenochtitlan (the capital of the Aztec empire) were underway. The conquest of the Aztec empire occurred mainly through the early 16th century and although the Spanish Crown would attribute this seemingly effortless conquest to their military strength, historians in recent studies have found more revealing information about the epidemic diseases that wiped out almost entire villages. Other research has contributed ideas of inter-tribal warfare as another factor.

Amidst the adventures of Cortés, the Crown left the region of Tlaxcala in disarray. Indigenous peoples were being exploited for labor, population was gradually suffering from illnesses, and the under rewarded Spanish conquistadors were taking over lands and the local food supply from the villagers. In light of these issues, the Dominican bishop of Tlaxcala, Fray Julian Garcés, formed the idea to bring a solution to the social problem of Tlaxcala: build an experimental colony to endow conquistadors encomienda over land and supervision of the Amerindians cultivating it and protect the Amerindians from Spanish exploitation. Garcés’ main desired outcome of establishing Puebla was to raise the status of Spanish vagabonds who were waiting for their reward by settling them in farms and segregate them from the Amerindians in Tlaxcala. According to this theory, the Spanish would then lose desire to return to Spain and become models for ideal colonization and assimilation between the indigenous community. 4

The beginnings of Puebla’s establishment proved to be worthwhile at first; its rich fertile lands were ideal for agriculture and it provided an alternative travel point to Tlaxcala between Veracruz and Mexico City. This would also in turn help resettle the indigenous community in Veracruz and relieve them of Spanish exploitation. Critics to Garcés’ proposal claim other reasons for establishing Puebla. Some claimed that this new, agriculturally based form of encomienda would try to replace more urban, economy-based forms. Others claim it was simply a way to protect the Mexico-Veracruz road from Amerindian threat. 5 These contradictory goals almost severed Garcés’ support for Puebla but in the end, Puebla would take its own course that proved to create a firm foundation for the new city (including a flood that nearly destroyed the city’s first settlers). Spain’s ideal views about creating a new colony would not take form in Puebla.

Nevertheless, Puebla’s founders and later historians would agree that the experiment to create a new colony consisting of a peaceful assimilation between the Spanish and indigenous culture was a success. It was in fact the success of encomienda that provided a reason for the conquistadors to remain in Puebla even after numerous natural disasters and New Spain’s insistence on increasing the benefits to both conquistador and Amerindian. Silver mining and Puebla’s quick change to city status after the floods were other factors that contributed to the increase in population and settlements. Fray Garcés would take part in bringing Spanish architects to build the city in a Spanish colonial style that is preserved to the present day and still function as government buildings, restaurants, hotels and museums.

Post-Colonialism/Race and Puebla’s Identity

Talavera pottery presents itself as a stronger element of Poblano culture because it has become an element of the city that one can take with you. While it is uncertain how Talavera functioned as a souvenir in the 16th through 18th centuries, Talavera pottery today is as kitsch as a keychain with an image of an Aztec god. Due to the nature of Talavera pottery and its use for monasteries and gifts to the Spanish kings, it is most likely that its purpose was both practical and material. What sets Talavera apart from most souvenirs is that they are hand-made according to a blend of ancient pottery making traditions and European visual styles. Robert Young suggests when an original culture is superimposed by a colonial or dominating culture, it transcends itself into a condition of ambiguity, uncertainty, creating an otherness within. 6 Since Puebla was not established within an existing indigenous community, why then do Poblanos today consider their city as part indigenous by using ancient pottery techniques

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5 Ibid. pp 3.

with European decorative styles? A hybridized, split existence is created through Talavera pottery throughout Puebla as it establishes itself as two different cultures living at once. Objects, in this case, are able to create ideas about identity to the modern viewer that supplement the social and political history of Puebla.

What this research intends to provide for the reader are the possibilities that Poblano architecture and Talavera pottery reflect this ambivalence and uncertainty of the condition of their identity. The provided images will convey the message to a sense of otherness dwells within Puebla. Images throughout this research will concentrate on the architecture of Puebla's cathedrals to further exemplify the indigenous and Baroque influences. Talavera images will also be discussed below to establish a larger scheme of Puebla's identity as a hybridized, split existence of two cultures living at the same time: indigenous and European of the 16th - 18th centuries.

In Figure 2, the image is of Nuestra Senora de los Remedios Church in Cholula, Puebla. It was built on top of the Great Pyramid of Cholula in the late 16th century by the Spanish. Demonstrating the influence and domination of Christianity over indigenous beliefs, it reflects a great history of power. It would mean something different if the church was built beside the pyramid, as a way of accepting old beliefs and placing the church in a location as another option. What the Spanish demonstrate is that Christianity dominates and controls the area by building the church on top of the pyramid, seemingly as a victory over the indigenous. Despite the intentions of converting all residents to Christianity, the Spanish actually created a sense of a double-identity existence. By building the church on top of the pyramid, they did not rid the local indigenous people of their ancient beliefs, but rather exuded a sense of keeping their ancestral past, only masking it with an imposed European culture. The result is that Puebla has both indigenous and European roots that identify as Orient and Occident. By changing one's sense of place in an environment, the West transforms the indigenous culture into a new, hybrid culture of indigenous and European religious beliefs.  

Architecture

Cathedrals in Puebla carry the height of Spanish Baroque architecture. In them, a style of vastly ornate altars and ceilings cover most cathedrals across the city. Few major works were actually developed in Spain in the 16th century, suggesting that Spanish Baroque architecture flourished in the cities of Mexico where a promising nation was developing. It was the style of Spanish architecture from the past that influenced many of Puebla's cathedrals. Other than richly carved fronts, Spanish architecture gave less emphasis to the outside facades to concentrate on its interior architecture. Cathedrals such as the Puebla cathedral and Santo Domingo give insight into how Spanish architects approached cathedral architecture to give the structure its Baroque identity while including images of the ancient Mesoamerican past such as the sun and the moon; images that allude to the gods the Aztecs worshipped prior to colonization. It is uncertain to reveal the exact intentions behind using these images. Perhaps since these images are widely known to Biblical references to the Christians may be one possibility. Another is to pose the idea that since the Spanish came to Mexico not to simply conquer but to assimilate, providing the indigenous people with subtle references to their ancient religion would have been seen as less threatening to a people whose lives had been dramatically changed.

The idea of Spanish Baroque architecture gaining its own national style during the 16th century is one of complex layers. The Moors conquered the Spanish during the 8th through 11th centuries, which had undoubtedly left behind a profound influence of cultural assimilation and artistic movements in the southern regions of Spain. During the 16th through 17th centuries, what is considered to be the national style of Spain was in fact a fusion of outside influences blended together. Emphasis on area of the cathedral, which many in Puebla reflect, is one influence the Moors left on the Spanish. Other influences include a central lantern placed above or in front of the high altar, little to no stained-glass windows, facades face in various directions as opposed to many cathedrals in Europe that tend to face similar directions (typically the East), and the notion to build upon old temples in order to preserve a continuity of religious experience among the people. The latter influence is an important instrument in understanding the complexity of the continuity of ancient religious practice among the indigenous people because Puebla was not built upon any existing civilization. It therefore becomes evident that in order to preserve any type of past, images of the sun and moon were used in its place to allude to ancient religious practices that once dominated Mesoamerica. Puebla's ambiguous identity within their architectural past is another example of how the society believed itself to be both indigenous and Spanish and not exclusively one or the other.

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9 Ibid. 33
Figure 3 is the Puebla Cathedral that resides in the city's zocalo (the very center of a city's downtown area in which all streets radiate from). A Spanish-born architect who constructed the cathedral in a late Renaissance style built it in the late 16th century. The outside is built mostly by a dark, reddish stone featuring several sculptures of saints prominent to New Spain such as Santo Domingo and San Francisco. Two large bell towers frame the façade that are topped with Talavera tiled domes. The images on the domes are of the sun and moon. See Figure 4 for an example of these images on the outside of a dome. Aside from the main façade and west façade, the remainder of the cathedral is built with cement, painted in a pale orange and pink color. To the far right of Figure 3, an image of the sun is sculpted into the dark stone. This is an original characteristic of the cathedral since it is sculpted directly from the stone, dating the sun image to also have been constructed in the 16th-17th century. I believe it is the intention of the architect to include these images of the sun and moon throughout the interior and exterior of the cathedral because of the significance of its symbolic reference. As discussed above, the sun and moon provided a great sense of insight into both the Aztec and Christian religions. Both shared a similar symbolism in which the sun conveyed a powerful being, a life-giving entity central to their core cultural values. The inclusion of its imagery is not as prominent in most cathedrals of Western Europe because the imagery emphasized was that of Christ, his disciples and the Virgin Mary. Although the Virgin Mary is the most commonly seen figure in Mexican religious art, images of the sun and moon as seen here at Puebla Cathedral present a powerful fusion of the intermixing of ideas and religious symbols of ancient Mesoamerica and Spain.

Only a few blocks east of Puebla Cathedral is another cathedral on a smaller scale; Santo Domingo. Figure 5 shows the inside of a dome located on the west wing of the cathedral. Santo Domingo had three of these chandeliers in the Baroque style with curvature that resembled intertwining vines. The main altar of Santo Domingo holds a ceiling-high altar of gilded wood with niches about three feet wide running along every inch of the altar. Each niche carries a sculpture of a patron saint significant to Mexico's founding. The middle niche holds the Virgin Mary and Christ as the center of all saints. The frame of Figure 5 is only a fraction of what can be seen when standing in the aisle of the chapel. The entire hall is decorated in very ornate gilded wood that literally covers every inch of ceiling and wall space. The only area not covered is the floor in which the benches and aisle are. The windows in the dome are the only natural light that enters this area so one can only imagine the chapel's full potential when all its candles were lit in the evening. The primary style in this chapel is Baroque and almost Rococo. Rococo was a brief period towards the end of the Baroque era that often describes a style almost too ornate. It was mainly a style that French royalty adopted around the time of Louis IV in the mid to late 17th century. This suggests that this wing of the cathedral was built much later than the main structure, which was built earlier in the late 16th century. This would also explain why this chapel looks different from the main aisles that are more of the late Renaissance style. Figure 5 is of the center of the dome that has an image of the sun surrounding the oculus. Unlike the oculus in the Pantheon in Rome, the center does not let in light, only the windows directly below. It is implied instead that the symbolism of the sun gives the church its light. The importance of the sun in this image is much like that of the sun images at Puebla Cathedral. The sun represents a fusion of religious ideas between the Aztecs and Christian Spanish colonies. Since most indigenous people were forced (or persuaded as many Spaniards may argue) to convert to Christianity among the colonies, this became a symbol to convey a message of brotherhood among them. The Spanish in Puebla did not overturn an indigenous civilization because there was not an existing settlement in the area. Bringing in various groups of people to live in Puebla including Spanish officers, vagabonds and indigenous people meant that it was more important to find a way to coexist peacefully rather than destroying a culture and building a new one on top of it. Images of the sun and moon were a subtle way to imply a peaceful marriage between the various cultures living in Puebla.

Talavera Pottery

A brief history of Talavera pottery

Author Jenaro Blacio claims Talavera is a less precise term to describe the pottery since its production technique is indigenous. Mayolica describes the pottery in the more general sense as a folk art of the people with metallic enamel. The term is derived from Spain which describes a type of glazed earthenware and implies its type as distinctly Spanish. The term Mayolica is used both in Spain and Mexico and is also known as loza or talavera. One interesting note to the reader is that the author uses talavera in only a few places in his book, as if Talavera implied the Spanish domination in Mexico. The term Mayolica is implied to be more indigenous to the author to suggest that the indigenous technique has been superimposed by the European technique and therefore the author uses this term prominently throughout the text.

The first father to head the church in Spain was San Francisco de Asis under Pope Adriano VI (1522-1523). He brought with him head friar, Martin de Valencia and 12 other companions to commemorate the 12 apostles of
Christ. The friars lived very simply among the locals and found a style of pottery of red clay and black decoration made from crude oil found in the area. These were used to cook with and the friars adopted these tools for their use. After admiring the pottery and discovering the many ways the indigenous people adorned them, they brought the pottery to the Provincial Father to propose that they make more. They then proposed the idea to the head General Father in Spain, who was astonished at the beauty and originality of the examples sent that he brought them to the Royal Spanish family in the city of Talavera de la Reina, which translates to 'Talavera of the Queen'. The royal family also admired the pottery for its aboriginal qualities so permission was granted to the friars in New Spain to learn the secrets of fabrication in the workshops of Talavera de la Reina in order to implement their decorative technique and superimpose them onto the pottery techniques of the indigenous people.10

Procedures for Talavera pottery

Local dirt from Puebla is treated in a bath and filtered for usable clay in structures all made from wood, ceramics, or other natural materials. Metallic utensils are not used at any point during the process. A filter bag filled with a form of powder or talc is used to line the boxes where the dirt is bathed. A soft, almost liquid form of clay is then bathed and filtered again with smooth river rock to form the more commonly seen clay that is nearly solid yet soft enough to form.

At chest-high level, the turntable is built into a wider table. A rod that is attached to another turntable near the floor is used to spin the clay with the master's bare feet; no electrical devices are used during any part of the pottery-making process. After the clay is spun into moldings of either plates or saucers (cups, vases, and jars are created in certain canons but are slightly individualized since they do not have molds), They are dried for a period 3 days and after wards dipped into a solution that will turn the pottery an off-white color, which is the base color for all genuine Talavera pottery.

The dried, white pottery is then taken to a large oven where temperatures reach around 300 degrees Celsius (almost 600 degrees Fahrenheit). They are fired for several hours and then cooled for 48 hours. The pottery is now ready for the artisans to create original artistic representations onto each piece. No two pieces are exactly the same because they are all hand-painted. The pottery is then glazed with faience or plomo, which is a lead-based metal. Plomo gave the pottery a much more brilliant look but when used for cooking and eating, slowly gave people lead poisoning. Today, very few trivial amounts of plomo can be found in authentic Talavera that is not harmful. Imitation Talavera pottery does not contain this ingredient and therefore would not earn the official stamp, DO4, which recognizes Talavera pottery as official and authentic.11

Figure 7 is of a large Talavera jug from the collection of Jose Luis Bello in the Bello Museum in Puebla, Puebla. It stands about three and a half feet tall and about two feet at its widest section. The mouth of the jug is smaller, most likely used to hold water rather than for a flowerpot. Although it is currently displayed among other flowerpots, other jugs of the same size are placed inside the museum either near water sources or as decorative elements in a room. Its beige background color confirms its authenticity as true Talavera and small chips reveal the native clay used to create the piece. The royal blue color is used as part of the official canon of Talavera and is thickly painted onto the jug. This style of using only the blue colors resembles more commonly known ceramics from Holland and China. If one asks a local, they will tell you that Puebla created the all blue style first and Europe came after. It is uncertain where the style derived exactly, however it can be assumed that the technique is European. The images reveal several depictions of a bird, possibly a swan, intertwined with floral and small vine leaves that nearly cover the entire negative space. Around the mouth of the vessel is a geometric square pattern as those seen in Greek pottery of the Geometric Period. Ancient Mesoamerican pottery also reflects geometric patterns such as in Figure 8, seen around the edge of the plate. The square pattern resembles that of the Talavera jug, implementing ancient patterns into a more decorative, European style. Similar geometric lines are seen at the bottom rim of the jug with less emphasis on ancient patterns.12


11 The workshops are often also galleries that display the Talavera pottery and can sell for as little as $10 USD for very small pieces to as much as $400 USD for a large flower pot. Authentic Talavera pottery is much more expensive than imitation because of the lengthy and handmade process. There are two elements that the observer can use to determine if the piece is authentic: The DO4 stamp is found on the bottom that may or may not be accompanied by the official sticker of the government and the base color is off-white, almost beige as oppose to pure white.

12 Indigenous patterns include several gods and geometric patterns; the more ornate meant that it was made for the wealthy, Simple patterns were used for the poor of the pueblo. Cholula has examples of many of these as they are the closest indigenous village to Puebla. A mural in the Museo Amparo depicts this change in artist renderings from right to left of the canvas.
Figure 7 shows a set of decorative plates from the collection of the Museum Gonzalez. An officer in Puebla, Jose Luis Gonzalez, collected these plates and other Talavera pottery items. The most visually striking piece in the set is the oval plate in the center row depicting a woman in a colonial dress set on a yellow background. She carries a purse and wears a shawl around her shoulders. The purse may indicate that she is of a middle ranking class to imply that she has items of value in the purse. She is not wearing a bodice, which usually implies that she cannot afford one as a high-class ranking woman can. In comparison to many casta paintings, the woman in the plate may be an indigenous woman who is married to a middle class man. As in seen in Figure 9, she resembles the woman, known as the China Poblana in this scene. The China Poblana is a local story of a young woman in early colonial Puebla who came as a servant, later marrying a wealthy man of Puebla. The legend says that she created the style of dress as seen in her portraits, drawings, and in the oval Talavera plate from the style of dress of her native home, India. The woman in the plate stands in a full portrait with her head turned at one quarter angle with a modest and calm demeanor.

In Figure 10, a piece of small tile from the Museo Bello depicts a woman playing a guitar in similar colonial fashion to that of the China Poblana. Due to these similarities, it is to my understanding that the figure in the tile is the China Poblana. As seen in both Figures 8 and 9, the hair is pulled back similar fashion and the dress seems to be of a middle class status. Women were typically not depicted in this type of art form unless it was either the Virgin Mary or the China Poblana. Resources are unable to confirm the woman in the Talavera tile but we can see through her dress and similar hairstyle, it may well possibly be of the China Poblana. Images of the China Poblana playing the guitar have not come across my research which may suggest this may be the only image of the China Poblana in this style.

Conclusion

I have come to understand a great deal about the history of multicultural Mexico throughout my research. Colonization left an incredible complex history throughout the nation and in Puebla it represents something different than what it left in Mexico City. Mexico City’s metropolitan cathedral in its zocalo is the largest cathedral in Mexico. What many would almost overlook if you were not from the area are the ruins of a great temple of ancient Mesoamerica it sits upon in ancient Tenochtitlan. Mexico City once was a land of various temples and plazas that covered the area with one of the greatest civilizations that ran the city. The Spanish then came in the 16th century and destroyed almost every inch of ancient history it carried. The land was nearly transformed into an area unrecognizable to its ancient inhabitants. I believe a stronger sense of ambivalence existed here where indigenous people carried a love-hate relationship with the Spanish and greatly resisted the change. In Puebla, a more peaceful approach to assimilation developed here. When the idea to build a new colony near Tlaxcala emerged by friar Julian Garcés, the Spanish under Cortés’ guidance decided peacefully reorganize the settlement to Puebla, a colony built from the ground up.

Although the way in which Mexico City and Puebla were established differ in resettling the indigenous peoples, both share a common goal in conveying a sense of religious continuity. Many of Mexico City’s temples lay just under the modern city’s grounds that convey this continuity, which recent archaeological digs have been able to reveal. It also displays the message of the Spanish visually and militarily conquering the Aztec empire. In a slightly different view, Puebla incorporates images and ideas from Aztec religious beliefs and practices in their cathedral architecture and Talavera pottery. Religious continuity is shown in a rather subtle way because there was no ancient civilization to build upon. Since Poblanos of the 16th through 18th centuries were continuously resettled and grouped to live in Puebla, the art reflects a sense of assimilation rather than military conquest. A fusion of these cultures is seen in cathedrals, mainly through the use of sun and moon images, which help the indigenous people and Spanish encomenderos coexist and gradually assimilate in a Christian society.

Through Talavera pottery, it is noticeable in the technique behind its production than it is seen visually. Talavera techniques developed in the Spanish colonial period but the production of fine pottery was established among the indigenous people in the surrounding Puebla areas such as Cholula. The example of Talavera pottery production in Puebla further establishes the idea of Poblano identity being both Orient and Occident, a fusion of an indigenous culture assimilated with the Spanish Crown of the 16th through 18th centuries. The notion that the Spanish blended these cultures rather than deplete their existence (as what was happening in North America) speaks volumes of the differing ideas of colonization between the Spanish and other European countries such as England. Existing anti-Spanish sentiment throughout Europe generally consisted of the idea that the Spanish were lazy and

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cruel to the indigenous inhabitants. I find irony in some of these ideas as the same colonial period in North America reflected that of military conquest and non-cultural assimilation to the Native Americans in that area.

Ambiguous identity throughout Puebla’s history is spoken within these visual entities of cathedral architecture and Talavera pottery because of the confusion of what is exclusively Orient and Occident. Puebla inherits both of these qualities and therefore creates an ambiguous identity of a complex nature. As Puebla is both an indigenous and Spanish-rooted culture, its identity consists of complex layers that are better understood through observation of its architecture and Talavera pottery. A thorough understanding of these art forms will reveal a more peaceful approach to how the Spanish conquest affected the area of Puebla as opposed to that of Mexico City, for example. Puebla’s importance in Mexico’s history is further increased by the fact that the city acts as a stopping point between Veracruz (the main shipping port) and Mexico City. It serves as a cultural window and imperial communication bridge between two of Mexico’s most important cities which become part of its complex identity.

References


Images

Figure 1. Casta painting, unknown artist, 18th century. “6. De Espanol y Negra, Mulato” translates to “Of Spanish and Black, Mulato.”

Figure 2. Nuestra Senora de los Remedios church on top of the Great Pyramid of Cholula.

Figure 3. Puebla Cathedral, Puebla, Mexico. 16th-18th centuries.
Figure 4. Puebla Cathedral, side view with central dome.

Figure 5. Santo Domingo Cathedral, west chapel, 17th-18th century.
Figure 6. Large Talavera jug from Museo Bello.

Figure 7. Set of Talavera Plates from Museo Gonzalez.

Figure 8. Ancient Mesoamerican ceramic plate. Aztec Culture.
Figure 9. Nineteenth century drawing of the China Poblana.

Figure 10. Talavera tile of woman and guitar from the collection of Jose Bello, 18-19th century.