# UNIVERSITY OF CENTRAL OKLAHOMA Edmond, Oklahoma GRADUATE COLLEGE

# UNSUBSTANTIATED BIAS TOWARD FOSTER CARE VERSUS GROUP HOME PLACEMENTS FOR WARDS OF THE STATE

## A THESIS

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# UNSUBSTANTIATED BIAS TOWARD FOSTER CARE VERSUS GROUP HOME PLACEMENTS FOR WARDS OF THE STATE

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Running head: FOSTER VERSUS GROUP HOMES

Unsubstantiated Bias toward Foster Care versus Group Home

Placements for Wards of the State

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### Abstract

High number of placements for children in U.S. DHHS custody has led to class action lawsuits around the country. The current study proposes that social stigmatization effects in the form of family ideology drive foster home favorability over group home placements. Fifty-four students completed an Implicit Association Test, Go/No-Go Association Task, and self-report assessing associations of foster home and group home stimuli to either good or bad stimuli using three dependent measures: sensitivity (d'), hit RTs, and false alarms. Results revealed participants were more sensitive, faster, and had fewer erroneous responses when foster was paired with good or when group was paired with bad. Results supported hypothesis of a positive bias towards foster homes and a negative group home bias.

# Unsubstantiated Bias toward Foster Care versus Group Home Placements for Wards of the State

In any given day in the United States, the U.S. Department of Health and Human Services (U.S. DHHS) cares for around 500,000 children (U.S. DHHS, 2007a). Many of these children remain in the foster care system for only a short time (38% less than one year), but still many stay a great deal longer (36% stay over two years) with each year increasing the risks of placement instability (Bass, Shields, & Behrman, 2004; Anctil, McCubbin, O'Brien, & Pecora, 2007; U.S. DHHS, 2007b). With concerns arising to the treatment of families before and after children enter the foster care system, Congress passed the Adoption and Safe Families Act (U.S. DHHS, 1997). This specified the overall goals regarding children in custody. Through this legislature, the foster care system aspires to maintain three main goals: (1) safety, (2) permanence, and (3) wellbeing of the children in custody. Using the Adoption and Foster Care Analysis and Reporting system (AFCARS) a child in the foster care system can have four different criteria to be considered in a permanent placement: (1) reunification with the primary caregivers, (2) living with relatives, (3) legally adopted, or (4) living with a legal guardian (U.S. DHHS, 2007a).

Courtney (1995) reported that placement stability while in care was a contributing factor in whether a child was able to reenter their original family. A U.S. DHHS goal is having two or less placements for children in custody, making this a reporting mandate (U.S. DHHS, 2007b). Children in custody for less than 12 months have a much better chance of obtaining this goal than any other group with a median percentage of 83.3 percent (U.S. DHHS, 2007b). However, for children in custody 12 to 24 months it drops

to 59.4, and those who stay lasts longer than two years it falls to 32.3. Children that stay in custody longer have a much better chance of having multiple placements. Further reporting showed that 31 states declined in pursuance of this goal. Furthermore, statistics reveal children in custody having a mean of 28.3 months in custody, illustrating that this goal is hard to achieve (U.S. DHHS, 2007b).

Sometimes unclear guidelines leave children in foster homes until emancipation—staying in the foster care system until the age of eighteen. For example, under federal law, states are to evaluate termination of parental rights if a child has been in foster care for 15 of the previous 22 months, but do not have to seek termination, giving discretion in whether or not to recommend termination (Bass et al., 2004). For example, a child welfare worker believes that the birth parents are starting to make positive changes or feels that termination is not necessary (e.g., child is older and is in no danger of going home to the parents). While 25,000 children emancipate every year from the foster care system, it seems about 28 percent of those will have been in custody before the age of 12 (U.S. DHHS, 2007b).

## Child Welfare Workers

The person responsible for the care and placement of the children in custody are child welfare workers (also called social workers). The National Association of Social Workers (NASW) is the largest organization of social workers with over 150,000 members (NASW, 2009). Demographics reveal 79 percent are female and most jobs only require bachelor's degrees, with most majoring in sociology and psychology. The NASW also reports many of the problems facing the child welfare worker population such as turnover rates, lack of experience at the supervisor level, safety, salaries, and

qualifications (NASW). The irony is not lost on this job, which requires providing stability to children while child welfare workers themselves do not have a stable position. The national turnover rate is between 30 to 40 percent, but ranges from zero to 600 (NASW). Furthermore, the average tenure of a child welfare worker is less than two years, compared to the average stay of a child who on average stays over two years (NASW; U.S. DHHS, 2007b). This makes practicing the first of the ethical codes—

commitment to client—very hard to pursue (NASW).

#### Foster Homes

Foster homes hold the promise of being good temporary placements in the goal of finding a permanent home for children removed from the home. Referred to as family foster care, these homes bring children into families who have received some type of training, although this training varies across states (U.S. DHHS, 2007b; O'Sullivan & McMahon, 2006). Most of the time these act as temporary placements until successful reunification can occur, or until the child's permanency plan can be fulfilled.

Long-term foster care is a relatively new trend that keeps children in the foster home they are in, hoping no disruptions occur, until permanency or emancipation can occur. Bush and Goldman (1982) conducted a study consisting of 136 children in long-term foster care. Only asking children that could not legally return to their biological parents (82 percent of participants), given a choice, is adoption something they would prefer and only 44 percent of children said yes. The other 56 percent were asked why not and four themes emerged; keeping hope for reunification, too old to want or need another set of parents, would rather stay a foster child, and no ties just in case they want or need to leave at anytime. Two of those themes go against the whole point of placing them in

the foster home, ultimately giving the child a 'home setting.' If a child is reporting not wanting ties, or feeling that having parents was somehow detrimental, then it opposes the notion that every child wants or needs a family. In a similar study, Merritt (2008) observed that children who did not want the adoption or permanency were typically older.

The argument against long-term foster care is that leaving children in a foster home for a long period increases their chances for disruption of placement (U.S. DHHS, 2007b), with instability of foster placements associated with increased mental health diagnoses persisting into adulthood (Anctil et al., 2007). The AFCARS reports that nine percent of children in custody (over 43,000) have long-term foster care as their case goal (U.S. DHHS). However, the report also notes that long-term foster care is not considered a permanent placement.

Contrary to the traditional foster home are therapeutic foster homes. Therapeutic foster care (TFC) has been a growing trend since the early 1990s, partly because the costs are much lower than residential group care and due to the "home setting" that TFC maintains (Curtis, Alexander, & Lunghofer, 2001). These are very similar to traditional foster homes but parents have gone under more training to deal with more emotional, behavioral, and mental health issues. Research regarding the benefits of therapeutic foster homes has shown mixed results when comparing to residential group care (Curtis et al.; English, 1993).

## Group Homes

Group homes are typically located in rural areas, house anywhere from eight to over 100, and are independent from one another (Curtis et al., 2001; Wooden, 2000;

McKenzie, 2006). Research on group home characteristics also varies across settings (Curtis et al.). A child placed in one group home might enjoy it, while another group home produces different results. These results vary due to a variety of reasons such as different regulations, freedoms, services provided, staff characteristics, etc (O'Sullivan & McMahon, 2006). Modern day group homes are distant relatives of the notorious orphanages that have met the scrutiny of the public.

Orphanages were a common practice, but through litigation spurred by numerous accounts of child abuse and neglect, most were shut down or changed their focus by 1960. (McKenzie, 2006; for a good review see Wooden, 2000). Another reason for the change was a trend that had been growing for over fifty years at the time—home placements being more favorable than institutional care (O'Sullivan & McMahon, 2006). This caused a change in focus for residential care (group homes) with a difference in how residents get to the home. Youth (not called "orphans" because most children in orphanages still had at least one living parent; McKenzie, 2006) were placed in orphanages as the primary placement prior to the late 1950s, but since then group homes have acted as an alternative to foster homes, causing group homes to act as temporary placements until successful reintegration into a family setting can occur (Baker & Curtis, 2006). A growing trend of long-term group care has been rising, but some question whether child welfare workers will use the long-term facilities properly or merely as a backup for those who fail family foster care (youth were previously sent to orphanages as a permanent placement and were sent there first; McKenzie, 2006; O'Sullivan & McMahon). Currently, group home statistics reveal children residing in residential care are placed there only after exhausting their foster home resources. Needell, CuccaroAlamin, Brookhart, Jackman, and Shlonsky (2002) revealed only eight percent of youth who emancipated from a group home were in their first placement, with over half of the group home population having five or more placements, while only about a fourth of foster home children experienced this outcome. If child welfare workers were accurately sending children best suited for foster or group homes to their appropriate setting, the number of placements would be equal across the groups. Furthermore, with far more foster homes than group homes, movement is easier between foster homes, which would reveal a higher number of placements. However, numbers show that youth in foster homes have fewer placements, which illustrates that children switched to residential care after failing the current foster home system (Needell et al.).

### Foster versus Group Homes

A debate has been going on for years on whether or not to bring back institutional care (O'Sullivan & McMahon, 2006). However, because of the problems mentioned earlier, comparing between foster or group home care is difficult. For example, some research (e.g., English, 1993; Chamberlain, 1990; Chamberlain & Reid, 1998) compares group homes versus therapeutic foster homes, instead of family foster care. English (1993) conducted a study that compared 154 children in residential group care to 66 children in TFC. There were no differences found on the number of prior placements, but demographic and prior abuse did differ between the groups. The trend that emerged was that residential group homes tended to house older males with histories of running away and TFC tended to house younger females with a history of neglect and abuse. The study also found that children in residential group homes were more likely to have prior contact

with the juvenile justice system. The debate between TFC and group home placements has many problems. Curtis, et al. (2001) state:

Little longitudinal research has been conducted comparing the effectiveness of group care and therapeutic foster care programs. The few available studies have produced mixed findings, are plagued by methodological problems, and have concluded that behavior improved during treatment, but did not persist post discharge (p. 385).

Chamberlain (1990) provides an example of the concerns. Sixteen seriously delinquent boys were matched between group homes and specialized foster homes. Results showed that one-half of the foster, and 15 out of 16 of the group were incarcerated. However, no randomization of participants to groups occurred. When randomization did occur in the literature (e.g., Chamberlain & Reed, 1998), results supported TFC over group home care. One thing to note is that these are seriously delinquent boys, and are not the population that proponents of modern day orphanages are presenting. Furthermore, Baker and Curtis (2006) displayed a systematically different focus on how children got to placements with children that were in TFC traditionally moving to a higher level of care, whereas residential group homes were getting children that were stepping down in care. This means that children found to be too problematic for family foster care are going to TFC, but children going to residential group homes are children that had more problems to begin with and are now 'stepping down' in care after showing some improvement. If this is the case, then randomizing youth to TFC or group homes provides little external validity.

Another pivotal point in the debate is while foster homes have proven to be temporary; orphanages have shown to have surprising success. McKenzie (1997) showed that although children that grew up in orphanages had slightly higher divorce rates; orphanage alumni were higher in every other target, measuring such things as socioeconomic status, health, education, and overall satisfaction with life. These alumni were better than the general White population, not just compared to foster home alumni. However, these results were from one orphanage in North Carolina. Furthermore, while the alumni were more successful, after hearing the hard life they lived it becomes impossible to argue for children to have the same experiences today (McKenzie, 2006). McKenzie (2003) completed an extension of this research, which included over 500 alumni from five different orphanages in the South and Midwest regions and again showed orphanage alumni outpacing their White population counterparts in most categories; however, the results were not as strong as the first study (McKenzie, 2003). Even so, nine out of ten alumni said they would prefer growing up in an orphanage rather than in foster homes. One possible explanation could be that 90 percent reported that a sibling went with them to the orphanage (McKenzie, 2003). However, a recurring problem of those advocating for modern day orphanages is showing success of alumni across all orphanages, because like present day group homes, they had many different focuses (O'Sullivan & McMahon, 2006).

If institutional care can provide an answer for the instability of temporary foster homes, why are the youth from current long-term group homes not presenting clear distinction from foster care alumni in overall outcomes like the orphanage alumni? One explanation is the improper use of long-term group care. Long-term group homes provide

stability, but youth that experience a plethora of instability before become at-risk for poor outcomes (O'Sullivan & McMahon, 2006; Brooks & Webster, 1999). With U.S. DHHS current policies, there is no distinct regulation that states when a child welfare worker should stop using foster home care and look towards group home care. This means a child could go to five, ten, or even twenty foster homes before the worker decides that residential treatment is preferable. This type of treatment is part of what is sparking the class action lawsuit filings all around the country (Children's Rights & National Center for Youth Law, 2007). While these lawsuits do point to the outliers of the child welfare system (i.e., by picking the children that have had the worst time in custody instead of a representative sample), they highlight problems faced by most with instability of foster home placements being a key element. These lawsuits are calling for total reform of the child welfare system; however, placements of children will remain a choice of foster or group home settings. In addition, even though the lawsuits are calling for more training for child welfare workers, what is to prevent these workers from coming to the same conclusion that home placements are better than group?

## Social Stigmatization

One explanation could be the emergent family ideology found in America. Wegar (2000) explains that the idea that most Americans hold about what is defined as a "true" family has stigmatizing effects on more non-traditional type occurrences. In this study, she was able to show how social stigmatization had large effects on adoption populations compared to biological families. In terms of group homes versus foster homes, group homes would receive social stigmatization effects due to being more distant from the family ideology. This would explain why a child welfare worker would place a child in

another foster home after the child has failed ten foster homes previously, because the worker's ideology would lead them to want a placement that is more similar to the traditional family. This resembles statements made by O'Sullivan and McMahon (2006) that posited home placements were more favorable than group home care.

Link, Yang, Phelan, and Collins (2004) introduced a theory of stigma that could explain the occurrence of the emergent family ideology affecting over placing children in successive foster homes. This theory contributes six facets of stigma that ensure its effects and prevalence: (1) aesthetics, (2) origin, (3) peril, (4) concealibility, (5) course, and (6) disruptiveness. Aesthetics define what is pleasing, origin is how it came to be, peril is the feeling of threat, concealibility is how obvious it is, course is whether it is reversible over time, and disruptiveness is how it affects interpersonal interactions.

Aesthetics and peril of group homes play on the notion that every child needs a family. This goes along with the family ideology framework, showing children in group homes could suffer effects of being in a non-traditional type setting. While concealibility, course, and disruptiveness are important factors pertaining to this population, they are beyond the scope of this research and will not be discussed further. Origin would play a large role in the stigma placed on children in group facilities, especially likening group homes to the traditional orphanages and how they grew to prevalence and the problems that surrounded them. A drastic increase in the number of orphanages in a short period, along with very tough economic times (post WWI), plagued orphanages with hundreds of thousands of children from parents that could no longer support them (O'Sullivan & McMahon, 2006). A great expansion, without proper oversight, led to very tough lives that the children once lived (McKenzie, 2006). This has led to the stigma placed on group

home facilities presently, and in the absence of many alternatives, foster homes have become the default placement for almost all children in custody. However, if stigmatization effects are influencing placement type, then how do you measure it?

The use of self-report measures of stigma are shown to have several potential confounds. Link et al. (2004) caution using a self-report measure, and instruct that it is best to use it in conjunction with a behavioral measure of stigma. With how stigma is generally measured, it is easy for a present state of the participant to become the outcome for stigma. For example, a participant is having a rough week and scores high on stigma. The measured stigma did not cause the participant to have a rough week, but the participant is explaining it that way. Link, et al. posit that using self-reports should only be used alone when behavioral measures are congruent with self-reports. Furthermore, Greenwald stated at an Association for Psychological Science conference that congruency is found in some areas, but usually when the attitude being measured was a decision that was made earlier in life (Erwin, 2007). For instance, a person being measured on political attitudes would show similar results for self-reports and behavioral measures, whereas a person measured for attitudes towards elderly would show noncongruent results for self-report and behavioral measures. This is because decisions that are made relatively early in life often change, but some facet of that early decision remains. Self-reports measuring early decisions are inaccurate due to this need to correct. Bias

Another way to conceptualize the social stigmatization is through stereotype theory. Banaji and Greenwald (1995) defined stereotypes as . . . "we regard stereotyping to have occurred whenever knowledge (accurate or inaccurate) about a social category is

used in judging an individual member of the category" (p. 183). Stereotypes that are associated with a group that cause someone to ignore individual characteristics defines reduced sensitivity. This is thought of as an in-group to out-group comparison with individuals being less sensitive to individual attributes of out-group members (Banaji & Greenwald). This would cause child welfare workers to be less sensitive to whether or not a child in custody would flourish in a family setting. Another facet of stereotypes is consistently shifting judgments of the individual to group characteristics, which defines bias (Banaji & Greenwald). An example is a child welfare worker that states that every child needs a family. However, a goal of U.S. DHHS is for the identification and correction of known biases (U.S. DHHS, 2007b).

Making a distinction between reduced sensitivity and bias is possible under signal detection theory (SDT; Green & Swets, 1966; Banaji & Greenwald, 1995). Through signal detection analysis, signals differentiate from noise in the form of hit and false alarm rates. This analysis then provides a threshold for a participant's ability to single out signal from noise, referred to as d' (a measure of sensitivity; Banaji & Greenwald). By measuring the sensitivity of a participant's ability to distinguish signal from noise (calculated as d' in SDT), researchers can compare the scores across blocks of trials to determine bias (Nosek & Banaji, 2001).

When measuring biases the distinction between explicit and implicit is dramatic. Measuring explicit bias comes under heavy scrutiny because a person can simply reply that they do not have any bias, especially towards a minority group. A more behavioral approach would be to measure implicit biases, bypassing participant want or need to be socially acceptable. To deal with the associated problems with self-reports Greenwald,

McGee, and Schwartz (1998) implemented the Implicit Association Test (IAT). The IAT measures response times of forced associations (e.g. associating spider with good versus associating spider with bad). Since its induction, the IAT has stimulated extensive research into implicit biases (Nosek, Greenwald, & Banaji, 2006).

The use of the IAT provides for a contrast between two variables. It does this by prompting participants to associate two targets (good/bad) with two concepts (foster home/group home). The IAT pairs a target with a concept (foster home and good) and assigns it to a keystroke, while the other target and concept are paired (group home and bad) and assigned a different keystroke. Stimuli appear one at a time and participants are prompted to categorize the stimuli as fast as possible. After finishing a block of those pairings, the pairings switch. Now a participant would have to choose whether the stimuli presented was either group home/good or foster home/bad. An implicit bias surfaces when participants take longer to categorize a block of trials over another and/or make excessive errors on one versus the other. A participant displaying a "true" family bias would take longer to associate the second block (foster home and bad/ group home and good) than the first block (foster home and good/ group home and bad). For example, participants with a positive foster home bias will be able to distinguish signals (FOSTER or GOOD) from noise (GROUP or BAD) more accurately than when FOSTER or BAD is the signal.

Another implicit bias measure is the Go/No-Go Association Task (GNAT; Nosek & Banaji, 2001). The GNAT is very similar to the IAT (it was built off the same structure as the IAT), but differs mainly by not making the participant choose between two target/concept pairs at the same time. Instructions of the GNAT prompt participants to

press the space bar when stimuli presented match one target or concept on the screen (gotrial), or not to press anything if it does not match (no/go-trial). A go-trial is recorded if a participant responds in the allotted time. However, if no response is given within the allotted time a no/go-trial is recorded. Participants are instructed only to respond when the target stimuli matches the desirable association. The GNAT measures implicit bias by measuring the sensitivity of being able to distinguish signals (targets) from noise (distracters) outlined in terms of SDT (Nosek & Banaji).

Social stigmatization effects in the form of family ideology drive foster home favorability over group home placements. The current study will measure bias with three different measures: IAT, GNAT, and self-report. Three dependent measures will be used to analyze the IAT and GNAT: sensitivity (d'), mean correct RTs (hits), and false alarms (erroneous responses). The self-report will include a rating scale of one (very negative) to seven (very positive). Congruent findings should be displayed for IAT and GNAT tasks, due to both measuring implicit bias. Results should point to a bias for associating FOSTER with GOOD and associating GROUP with BAD.

#### Method

## **Participants**

Fifty-seven students from an introductory psychology course at a large regional university in the central U.S. participated in partial fulfillment of a course requirement. Participants read and signed a consent form (Appendix A) and were treated in accordance with the American Psychological Association's (2002) *Ethical Principles of Psychologists and Code of Conduct*. Three participants made excessive errors (d'<0), their data were excluded, leaving 54 cases for data analysis.

#### Materials

Forty-eight potential target items became experimental, practice, and sample stimuli. The experimental stimuli were 18 target (FOSTER/GROUP) words or phrases plus 18 concept (GOOD/BAD) words. The target words and phrases were the same for the explicit task, the IAT, and the GNAT. Target word selection was done by asking 20 independent judges from the same participant pool to sort 48 alphabetized words and phrases relating to foster homes and group homes into the target categories FOSTER home or GROUP home (Appendices B and C). The initial pool contained 24 items relevant to foster homes and 24 stimuli relevant to group homes, all gleaned from published sources (McKenzie, 2006; Wooden, 2000; Needell et al., 2002). The left-right order of the FOSTER and GROUP response fields was counterbalanced across participants, so was the A-Z versus the Z-A alphabetical order of appearance of the stimuli in the sorting list. Items sorted into the same FOSTER or GROUP categories by 90% (18 of 20) judges became the experimental stimuli, resulting in nine stimuli for each (FOSTER/GROUP) category (Appendix D). Eight of the 18 retained items were sorted into the same categories by 18 judges, five by 19 judges, and five were sorted unanimously into their target categories.

The two implicit tasks (IAT and GNAT) also required a set of experimental stimuli to represent the concepts GOOD and BAD—the concept words were the same for the IAT and the GNAT. Concept words taken from Nosek, Banaji, and Greenwald (2006), from the Race IAT.

The practice stimuli for the implicit tasks were 18 words or phrases representing foster homes and group homes (nine of each) plus 18 words representing the concepts

"good" and "bad" (nine of each). The practice targets were foster home and group home items that had not made the cut as experimental stimuli. The practice concept words were generated by the experimenter. An additional five targets and concepts from the same sources became sample stimuli used during the instruction phase to demonstrate the procedure to the subjects.

Stimulus presentation was controlled with the DirectRT software (Jarvis, 2006a) which allows for measurement of response times (RTs) in milliseconds. MediaLab software program (Jarvis, 2006b) controlled the counterbalanced assignment of participants to conditions. All participants experienced one IAT, GNAT, and the explicit measure task. Task order was counterbalanced across participants.

#### **Procedure**

Each participant was escorted into a room of six typical office cubicles, each containing a standard computer-keyboard-monitor configuration. The participant sat (about) 50 cm from the monitor, so that a letter subtended a visual angle of about 22° horizontal and 50° vertical, and completed all three computerized tasks in one sitting. There were eight between-participants, counterbalanced conditions—the session began with the IAT, the GNAT, or the explicit task.

Explicit Task. The explicit measure required that participants rate their positive associations toward the experimental stimuli (Appendix D). The stimuli and rating scale appeared in white on a black background, Times New Roman font. Stimuli appeared individually at center-screen. The rating scale appeared at the top of the screen, remaining visible throughout the 36 trials in which participants rated the stimuli on a 7-point Likert scale in which 1=very negative, 2=negative, 3=sort of negative, 4=neutral,

5=sort of positive, 6=positive, and 7=very positive. Participants rated all FOSTER, GROUP, GOOD, and BAD stimuli using the number pad. At the end of the task, an instruction screen appeared asking the participant to wait quietly for the experimenter's return. After an opportunity to ask questions, the next task, either a GNAT or IAT, began.

Implicit Attitudes Test. Each participant experienced one computerized IAT task consisting of 205 trials over six blocks. All stimuli, category labels, and instructions were of Times New Roman font on a black background. Stimuli and instructions were in white font and category labels were light blue. Each trial began with the category labels in the upper left and right of the screen, respectively. A stimulus word/phrase then appeared center-screen. The participant categorized the stimulus into either the left-hand category by pressing the "e" key or the right-hand category by pressing the "i" key as quickly as possible. Stimuli and category labels remained visible until the participant pressed the correct key. In the event of an incorrect response, a red "X" appeared below the stimulus and remained until a correct key press advanced the participant to the next trial after a 250 ms intertrial interval (empty black screen). Responses faster than 300 ms produced the message "Please wait for the stimulus to appear". Stimulus order was randomized within blocks.

The IAT included one block of 35 sample trials (2 untimed trials of each of the five block types and 5 timed trials of each block type), one block of 20 practice concept trials (BAD vs. GOOD), one block of 20 practice target trials (FOSTER HOME vs. GROUP HOME), one experimental block of 55 target-plus-concept trials (the first 15 trials were practice), one block of 20 practice target trials with the category labels switched (GROUP HOME vs. FOSTER HOME), and a second experimental block of 55

target-plus-concept trials with the category labels switched. Half the participants began the task with FOSTER-GOOD and half began with FOSTER-BAD. The GOOD/BAD and FOSTER/GROUP labels were left-right counterbalanced across participants. The deadline for the timed trials was 1500 ms. Responses exceeding the deadline produced the message "Please respond faster" in bold, red letters center-screen.

The initial on-screen instructions asked the participant to put their fingers on the "e" and "i" keys of the keyboard and gave helpful hints for doing well on the task: pay very close attention, go as fast as possible, keep your fingers on the "e" and "i" keys, avoid distractions, and not to worry about mistakes. The instructions stated that errors would produce a red "X" and that a correct response was required to continue to the next trial. An instruction screen describing the following trials announced each new block. At the end of the task, an instruction screen appeared asking the participant to wait quietly for the experimenter's return. After an opportunity to ask questions, the next task, either a GNAT or the explicit measure, began.



Figure 1. Examples from the counterbalanced experimental blocks in the IAT.

Go/No-Go Attitudes Test. Each participant experienced one computerized GNAT task consisting of 244 trials over four blocks. All stimuli, category labels, and instructions were of Times New Roman font on a black background. Stimuli and instructions were in white font and category labels were light blue. The GNAT included four blocks (single

target, single concept, and two target-plus-concept blocks). Trials were randomized within blocks, and block order was counterbalanced across participants. Stimuli were presented center-screen and remained visible for 1200 ms. The practice GNAT consisted of 28 trials. For the first eight trials, participants were given 3000 ms to respond. The next 20 trials required participants to respond within 1200 ms. For all other trials 1200 ms was allotted for the "GO!" trials and "1000 ms" for "No-Go" trials to prevent ceiling effects (Nosek & Banaji, 2001).

For the single concept (GOOD/BAD) and single target (FOSTER /GROUP) blocks, one label appeared at a time. For the two experimental blocks, a target label was paired with a concept label. A stimulus word/phrase then appeared center-screen. Participants were to quickly press the spacebar (Go!) if the word or phrase belonged to category labels, and to do nothing if not (No-Go). Target category labels remained on the screen during the trial. Trials were followed by a red "X" for errors or a green circle for correct responses. Stimulus order was randomized within blocks.

The GNAT included one block of 36 practice concept trials (18 BAD/18 GOOD), one block of 36 practice target trials (18 FOSTER HOME/18 GROUP HOME), one experimental block of 72 target-plus-concept trials (36 FOSTER HOME and GOOD/36 FOSTER HOME and BAD), and a second experimental block of 72 target-plus-concept trials (36 GROUP HOME and GOOD/36 GROUP HOME and BAD). Half the participants began the task with FOSTER-GOOD and half began with FOSTER-BAD. The GOOD/ BAD and FOSTER/GROUP labels were left—right counterbalanced across participants.

An instruction screen describing the target categories for following trials announced each new block. At the end of the task, an instruction screen appeared asking the participant to wait quietly for the experimenter's return. After an opportunity to ask questions, the next task, either an IAT or the explicit measure, began.



Figure 2. Examples of the counterbalanced experimental blocks in the GNAT.

Design

A  $2_w$  X  $2_w$  X  $2_w$  repeated measures design with four dependent variables. The independent variables were task (IAT/GNAT), target (FOSTER/GROUP), and concept (GOOD/BAD). Dependent measures were sensitivity (d'), false alarm rate, hit response times, and positivity rating.

Analysis

A 2(IAT/GNAT) x 2(FOSTER/GROUP) x 2(GOOD/BAD) repeated measures MANOVA was used to analyze the IAT and GNAT. Self-report was analyzed separately using a one-way repeated measures analysis of variance.

#### Results

Explicit Task. A one-way, within participants ANOVA indicated a significant effect of stimulus type on mean positivity rating, F(3, 51)=692.85,  $\eta^2$ =.98, p<.001. GOOD words (M= 6.52, SD=.41) were rated as more positive than BAD words (M= 1.53, SD=.49) dependent t(53)=44.47, p<.001. FOSTER words (M= 5.33, SD=.67) were rated as more positive than GROUP words (M= 3.95, SD=.66, t(53)=12.49, p<.001). There were differences between FOSTER words and GOOD words t(53)=16.46, p<.001 and GROUP words and BAD words t(53)=21.63, t(53)=21.63, t(53)=10.46 and GROUP words and BAD stimuli were indeed representative of those conceptual categories and that participants harbor a positive bias toward foster homes versus group homes.

A within-participants multivariate analysis of variance (MANOVA) of task (IAT/GNAT) by target (FOSTER/GROUP) by concept (GOOD/BAD) indicated no effects of task for sensitivity (d') Wilk's  $\Lambda$ =.97, F(1, 53)=1.59,  $\eta^2$ =.03, p=.21, or errors (false alarms) Wilk's  $\Lambda$ =.98, F(1, 53)=1.25,  $\eta^2$ =.27, p=.27. After no significant findings for task was found for sensitivity and false alarms, task was collapsed across participants for the sensitivity and false alarm rate resulting in a 2(target) X 2(concept) design.

Sensitivity (d'). The target (FOSTER/GROUP) by concept (GOOD/BAD) interaction was significant for sensitivity, Wilk's  $\Lambda$ =.38, F(1, 53)=86.46,  $\eta^2$ =.62, p<.001. Participants were more sensitive to the FOSTER-GOOD pairing (M=2.69, SD=.5) than to the GROUP-GOOD pairing (M=2.13, SD=.58), F(1, 53)=71.92,  $\eta^2$ =.58, p<.001. and less sensitive to the FOSTER-BAD pairing (M=2.05, SD=.62) than to the GROUP-BAD pairing (M=2.67, SD=.5), F(1, 53)=63.21,  $\eta^2$ =.54, p<.001. Participants were better able to

detect the FOSTER-GOOD and the GROUP-BAD associations than vice-versa, indicating an implicit positive bias toward foster homes versus group homes.

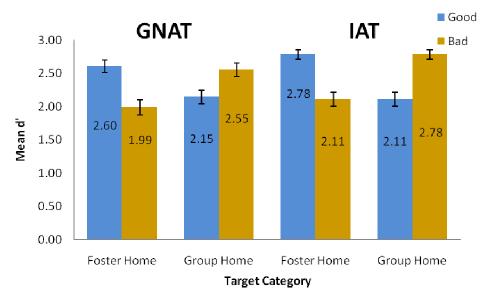


Figure 3. Mean d' scores (and standard errors) for the IAT and GNAT.

Hit response times. The task (IAT/GNAT) by target (FOSTER/GROUP) by concept (GOOD/BAD) was significant for correct RTs (hits), Wilk's  $\Lambda$ =.62, F(1, 53)=33.24,  $\eta^2$ =.39, p<.001. However, this significance is an artifact of task type because response times should be faster for GNAT trials because the participant does not have to choose between two keys to press, as they do in the IAT. This artifact is illustrated by a significant main effect of task with GNAT RTs significantly lower than IAT RTs, F(1, 53)=63.82,  $\eta^2$ =.55, p<.001.

The target by concept interaction was also significant for correct RTs, Wilk's  $\Lambda$ =.428, F(1, 53)=70.96,  $\eta^2$ =.57, p<.001. During IAT trials participants were faster to associate FOSTER with GOOD (M=741.2, SD=107.54) than GROUP with GOOD (M=923.52, SD=238.97), F(1, 53)=31.16,  $\eta^2$ =.37, p<.001, and faster to associate GROUP with BAD (M=752.06, SD=107.93) than to associate FOSTER with BAD (M=902.81,

SD=156.09), F(1, 53)=38.51,  $\eta^2$ =.42, p<.001. Participants were faster at associating FOSTER with GOOD and GROUP with BAD than vice-versa, indicating an implicit positive bias toward foster homes versus group homes. During GNAT trials participants were faster to associate FOSTER with GOOD (M=688.48, SD=43.67) than GROUP with GOOD (M=716.51, SD=56.22), F(1, 53)=7.78,  $\eta^2$ =.13, p<.01, and faster to associate GROUP with BAD (M=696.12, SD=47.16) than to associate FOSTER with BAD (M=728.02, SD=51.36), F(1, 53)=13.01,  $\eta^2$ =.37, p<.01.

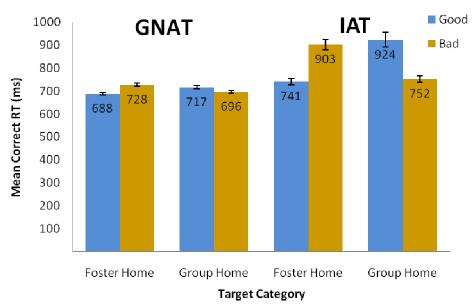


Figure 4. Mean correct response times (and standard errors) on the IAT and GNAT.

False alarms. The target (FOSTER/GROUP) by concept (GOOD/BAD) interaction was significant for false alarms (erroneous categorizations), Wilk's  $\Lambda$ =.472, F(1, 53)=59.19,  $\eta^2$ =.53, p<.001. Participants were more likely to erroneously categorize GROUP as GOOD (M=3.66, SD=2.09) than to erroneously categorize FOSTER as GOOD (M=2.19, SD=1.35), F(1, 53)=42.72,  $\eta^2$ =.45, p<.001, and were more likely to erroneously categorize FOSTER as BAD (M=3.44, SD=1.68) than to erroneously categorize GROUP as BAD (M=2.19, SD=1.31), F(1, 53)=28.87,  $\eta^2$ =.35, p<.001.

Participants were more accurate when asked to categorize FOSTER as GOOD and GROUP as BAD than vice-versa, indicating an implicit bias toward foster homes versus group homes.

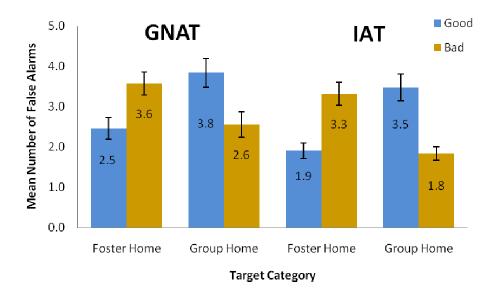


Figure 5. Mean number of false alarms (and standard errors) on the GNAT and IAT.

Discussion

The results supported the hypothesis of a positive foster home bias. All three dependent measures displayed significant interactions for target by concept. Participants were more sensitive, faster at choosing correct stimuli, and had fewer false alarms when foster home stimuli was paired with good words, as well as when group home stimuli was paired with bad stimuli. Essentially participants found it easier to discriminate signal from noise when these associations were presented. While task type did have a significant effect for RTs, it did not have an effect for the other two dependent measures showing that it was due to a difference in task design, and not a product of target and concept associations.

The self-report also showed the same bias as the implicit measures. Participants significantly rated foster home stimuli more positive than group home stimuli. However, using the scale, participants rated group home stimuli as barely below *neutral* and foster home stimuli slightly above *somewhat positive*. The congruent findings between the self-report and implicit tests suggest participants did not feel the need to correct for a bias. Nosek, et al. (2006) explains that self-report measures usually have low correlations with the IAT, but have also found very high correlations.

There were a few limitations to this study. First, while a psychology student population is somewhat representative of the social work population (higher proportion of females), the test needs extension to actual caseworkers to see if they carry the same bias. As mentioned previously, decisions that are made later in life tend to have correlations between explicit and implicit measures. However, decisions about a family should happen early in life, thus, this correlation is not representative of past research (Nosek et al., 2006). Secondly, this research was conducted in a controlled environment, and should not be generalized out of this setting. Thirdly, because of a programming error inside of DirectRT, the researcher was not able to employ the recommended dependent measure for the IAT(Jarvis, 2006a; Nosek et al.). Lastly, this research was set up in the interest of revealing a bias and the researcher in no way advocates for group home care for all youth in the system; however, benefits could arise from identifying at-risk populations within the child welfare system. While all children in custody are considered at-risk, some populations within have a much lower prognosis than the rest. An example would be the population of youth that emancipate from the child welfare system. Reilly (2003) interviewed former youth of the welfare system three years after emancipating and

found 36 percent had been homeless, 24 percent sold drugs, 11 percent involved in prostitution, and 41 percent had been in jail with 7 percent incarcerated at the time of the study. This study contained 100 former youth, but over 240 former youth were identified to start the study, and even with a lot of help (e.g., social security numbers, newspaper ads, and lists of known contacts) only 44 percent were found, indicating results might be very conservative.

Extensions of this research should focus on using the IAT and self-report measures on a social worker population, who might feel the need to conceal such a bias, meriting an implicit test. Because GNAT and IAT both revealed the same bias, only one is needed, and the IAT has been shown to have better reliability across settings (Nosek et al., 2006). Furthermore, future experiments should look at using different dependent measures. Nosek, et al. supports the use of the algorithm (*D*), and instead of rating scale for the self-report, a set of questions exemplifying common situations to a social worker would be more appropriate.

These findings support the family ideology framework and reveal a bias that might be leading to over-placement of foster homes. Through policy reform, this knowledge could potentially keep some youth from a senseless over-placement into numerous foster homes.

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## Author Note

The author thanks his thesis committee: Drs. Mark Hamlin, Brenda Chappell, and Mickie Vanhoy for their guidance, insight, and support. He also thanks Janet Hart and Aaron Likens for their help with data collection and stimulus set generation, respectively. Address correspondence to David Melton c/o M. Vanhoy, Department of Psychology, 100 N. University Dr. Box 85, Edmond, OK, 73034.

Appendix A

Consent Form

Research Project Title: Unsubstantiated Bias toward Foster Care versus Group Home Placements for Wards of the State

Researcher(s) and contact information: David Melton (dmelton@uco.edu) and Dr. Mickie Vanhoy (mvanhoy@uco.edu) You may also contact the Research Administrator or Dr. Vanhoy at (405) 974-5707 or <a href="mailto:ucok-admin@sona-systems.net">ucok-admin@sona-systems.net</a>

A. Purpose of this research: Every year, over half a million youth are in the care of the United Stated department of health and human services (USDHHS). While in care, many of these children bounce from placement to placement, undermining one of the USDHHS outspoken goals: permanency. Every year in the system increases the likelihood of multiple placements. Around fifty years ago, most orphanages were shut down due to public outcries and horror stories, although some research has shown the positive effects of long-term group care. Orphanage alumni outpaced foster care alum in almost every category: education, quality of life, socioeconomic status, etc. However, group home placements today are only offered after foster home placements have been exhausted. Research investigating the family ideology of America offers an explanation; biases exist for the 'true' family (mother, father, son, and daughter) that lead to attaching stigma the farther things get from the original. The purpose of this research is to identify the popular opinions of foster homes and group homes.

B. Procedures/treatments involved: Research will take place in cubicles. Participants are asked to follo	W
on-screen instructions that will guide students in distinguishing foster home associations versus group	
home associations. The computer will record timed responses.	

C.	Expected length	th of partici	pation: No	more than	1	hour(	s)	)

Edmond, OK 73034

- D. Potential benefits: The benefits to both parties are significant: potential majors get to interact with more senior students in their field, all participants gain ownership of psychological research, and all participants get an active (therefore lasting) debriefing of popular myths about psychological research. General psychology students will be given credit for participation of any portion of the experiment. Experimental psychology students get hands-on research experience that supports their intellectual goals, they get to be mentored one-on-one by more senior students and faculty, and they incur the practical benefit of an entry on their résumés. Participants get to add to our scientific knowledge about people.
- E. Potential risks or discomforts: No harm or discomfort is anticipated in this research greater than that ordinarily encountered in daily life or during routine physicals or psychological examinations or tests.
- F. Medical/mental health contact information: If you would like to visit with someone regarding sensitive or special concerns about this project or other issues please feel welcome to visit the UCO Student Counseling Center at (405) 974-2215 or <a href="http://www.ucok.edu/student\_counseling">http://www.ucok.edu/student\_counseling</a> (Bruce Lochner, Ph. D., Director).
- G. Contact information for researchers appears above. You may also contact the Research Administrator at <a href="mailto:ucok-admin@sona-systems.net">ucok-admin@sona-systems.net</a>. Should you have any additional questions please contact the Chair of the UCO Institutional Review Board, Dr. Jill Devenport (405) 974-5479 or (405) 974-2526. Contact can also be made through mail addressed to Office of Research & Grants, Academic Affairs Campus Box 159

  University of Central Oklahoma

H. Explanation of confidentiality and privacy: Your name or identity will not be associated in any way with the research findings; information about you remains confidential and will not be kept after the semester ends. Your name or other uniquely identifying information will never be in any record that can be identified with you. We do not request student ID numbers either.

Results are reported only about groups of people or by a number that conceals your identity. All results are reported in summary form, except on occasion when an individual example may be given, at which time no name or other identifiable information will be given. Anonymous data are stored in electronic or hard copy form by individual researchers. Only the student researchers and their instructors have access to the data.

Most psychology journals expect that researchers retain data for five years following publication. Individual researchers destroy anonymous data after the standard retention period (see above) has passed. Records (separate from research data) regarding which students completed their participation assignments are purged from electronic sources or shredded by individual instructors/researchers after final grades are recorded.

The fact that you did or did not participate in a specific experiment or study is part of a record available to your Psychology instructor. Psychology instructors have to know which studies you completed in order to know how much research participation credit you earned (in order to determine whether that course requirement was satisfied). They do not need nor do they receive any other information.

I. Assurance of voluntary participation:

### AFFIRMATION BY RESEARCH PARTICIPANT

I, being at least 18 years of age, voluntarily agree to participate in the above listed research project and further understand the above listed explanations and descriptions of the research project. I also understand that there is no penalty for refusal to participate or to refuse to answer any question, and that I am free to withdraw my consent and participation in this project at any time without penalty. I have read and fully understand this Informed Consent Form. I sign it freely and voluntarily. I acknowledge that a copy of this Informed Consent Form has been given to me to keep.

Participant's Printed Nar	ne:		
Participant's Signature: _		]	Date

- J. For more information: If you would like more information about the results of this study, you can get the complete details after we have collected all our data. There are three ways to do this:
  - 1) Attend the annual Oklahoma Research Day conference or the annual meeting of the Oklahoma Psychological Society and see the research presentation in person!
  - 2) Ask your Psychology instructor for access to this semester's study summaries.
  - 3) Request that the researcher email/snail-mail you the study results.
  - 4) Make an appointment for a telephone or in-person visit with the researcher.

## Appendix B

Z-A sorting task with foster homes on the left.

Please sort the following words and phrases into which category you feel that they belong best. There is no right or wrong answer and you will not be graded on this in any way. Please sort all words into either relating to foster homes or relating to group homes. Only use each word once.

Wards of State Stranger Residential Care Neighbor Kinship Care Grounding Foster Father Dorm Children Bed Room	Ward Staff Playground Long-Term Isolated Area Friends Foster Child Director Boys' Town Backyard	Front Door	Therapeutic Short-Term Orphanage Lights Out Guests Front Desk Facility Community Room Boys' Home	Temporary Reunification Neighborhood Level System Guardians Foster Mother Emergency Client Bed Time
FOSTER HOMES			GROUP HOMES	
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## Appendix C

A-Z sorting task with foster homes on the right.

Please sort the following words and phrases into which category you feel that they belong best. There is no right or wrong answer and you will not be graded on this in any way. Please sort all words into either relating to group homes or relating to foster homes. Only use each word once.

Adoption Boys' Ranch Counselor Family Front Desk House Living Room Permanent Siblings Visitors	Backyard Boys' Town Director Foster Child Front Door Isolated Area Long-Term Playground Staff Ward	Bed Room Children Dorm Foster Father Grounding Kinship Care Neighbor Residential Care Stranger Wards of State	Bed Time Client Emergency Foster Mother Guardians Level System Neighborhood Reunification Temporary	Boys' Home Community Room Facility Friends Guests Lights Out Orphanage Short-Term Therapeutic
GROUP HOME	ES		FOSTER HOM	IES
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	<del></del>			

# Appendix D

The target and concept stimuli for all three tasks.

GROUP HOMES	FOSTER HOMES
STAFF	FOSTER MOTHER
FRONT DESK	FOSTER FATHER
DORM	FOSTER CHILD
BOYS' RANCH	FAMILY
FACILITY	BEDROOM
DIRECTOR	GUARDIANS
BOYS' HOME	HOUSE
COMMUNITY ROOM	NEIGHBORHOOD
VISITORS	BACKYARD
GOOD	BAD
JOY	AGONY
LOVE	TERRIBLE
PEACE	HORRIBLE
WONDERFUL	NASTY
PLEASURE	EVIL
GLORIOUS	AWFUL
LAUGHTER	FAILURE
НАРРҮ	HURT
CHEERFUL	PAIN

### Appendix E

The demographic survey given to participants.

Please indicate your an	swer to the follo	owing quest	tions in the spac	e provided:
Sex (M/F)	Age			
Do you wear contact le	nses (Y/N)?			
Do you wear glasses (Y/	′N)?			
How many IATs or GNA	Ts have you pre	viously com	npleted?	
Are you right-handed, l	eft-handed, or a	ambidextro	us?	
Are you a native speake	er of English?			
Rate how familiar you a	ire with the fost	er care syst	em	
1 2 3	4 5	6	7	
Not Familiar			Very Familiar	
How would you describ	=	ncestral/cu	Itural backgroun	d? (Please check at
least one, but check all	шас арргуј			
African				
Asian				
Caucasian				
Hispanic				
Native American				
Other (Please Exp	plain in one or tw	wo words) _		

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Appendix F

Raw Data